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Ohio Retirement Study Council

Independent Review and Evaluation of the Highway Patrol Retirement System

March 2011

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EXECUTIVE SUMMARY

INTRODUCTION

The Ohio Retirement Study Council (ORSC) retained Hewitt EnnisKnupp to conduct an independent review and evaluation of multiple aspects of the Highway Patrol Retirement System's (HPRS) investment program. The firm, which specializes in reviewing and structuring large institutional investment portfolios and governance frameworks, was selected through a competitive bidding process. Hewitt EnnisKnupp also has extensive experience working with public retirement systems.

HPRS is a statewide retirement system for state highway patrol troopers. HPRS operates under the guidelines of Ohio Revised Code Chapter 5505 and is legally separate from and fiscally independent of state and local governments. Oversight responsibility is held by the Retirement Board (the Board). The Board is supported by an Executive Director/Chief Investment Officer (CIO) and a dedicated staff in fulfilling its fiduciary duties.

PURPOSE

The purpose of this review was to evaluate the organizational structure, policies, and practices of HPRS and its investment program and compare them to both common industry standards and best practices in order to provide HPRS, ORSC, and/or the Legislature with recommendations for improvement. A "common industry standard" is a generally accepted way of doing business at other public systems. A "best practice" is an experience-tested or emerging optimal practice.

The best practice for an organization is determined by examining how a particular function is carried out and then assessing whether a different course of action or methodology would enhance the process. The optimal practice for one organization may not be appropriate for another. Each practice must be tailored to suit a particular organization. To appreciate the importance of best practices it is essential to understand the difference between a function merely being performed adequately and a function being performed in the most effective and efficient manner.

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

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

EXECUTIVE SUMMARY

SCOPE OF WORK

The Scope of Work for this review covered the topics listed below:

- Section 1: Board of Trustees
- Section 2: Staffing and Organizational Structure
- Section 3: Governance Policies
- Section 4: Investment Consultant
- Section 5: Asset Allocation
- Section 6: Investment Management Structure
- Section 7: Manager Selection and Monitoring Processes
- Section 8: Investment Related Activities

METHODOLOGY

Hewitt EnnisKnupp conducted the following review from September 2010 to January 2011, using the following process:

- Document review – Hewitt EnnisKnupp submitted document requests to ORSC and HPRS staff. The reports, policies, statutes, and other documents we reviewed are listed in the Appendix.
- Interviews – After reviewing the documents referred to above, Hewitt EnnisKnupp interviewed HPRS Board members, key staff members, and select service providers. We interviewed certain individuals numerous times. The list of interviewees is also found in the Appendix.
- Findings – The pertinent facts relevant to HPRS' governance, organizational structure, policies, procedures, and actual practices were based on documents received and confirmed with staff and outside service providers.
- Analysis – The Hewitt EnnisKnupp team of consultants met internally and debated issues, challenged assumptions, discussed alternatives, and incorporated the firm's best thinking into our analysis.
- Recommendations – The Hewitt EnnisKnupp team and the peer reviewers discussed preliminary recommendations for each area under review. We made sure recommendations were consistent and could be implemented.
- Drafting – A draft of the report was reviewed by all members of the Hewitt EnnisKnupp team and the facts were checked with the appropriate and relevant sources. A draft was submitted to the ORSC for review and comment.
- Presentation of the report – Hewitt EnnisKnupp made refinements to the draft and this final report will be presented at a date determined by the ORSC.

REPORT ORGANIZATION

This Report contains the results of the independent review and evaluation and is supplemented by a summary of recommendations and an appendix. In each Section of the Report, we provide background information to explain the importance of the topic under review, followed by our findings and analysis where we compare current practices and policies to best practices. Finally, we set forth our conclusions and make recommendations, if warranted. Recommendations state our independent advice about policy or practice improvements that HPRS should consider.

OVERALL CONCLUSIONS

After reviewing the topics listed in the scope of work, we conclude that those areas of HPRS are fundamentally sound and the organization follows many practices that are in line with common practices of other large institutional investors. We did not find any areas where we believed a breach of fiduciary responsibility had occurred or was imminent. We did, however, find room for enhancement as detailed in our recommendations. The four most critical recommendations, in order of priority, are listed below.

1. Hire an internal auditor who will report to the Executive Director on an administrative basis and have direct access to the Audit Committee or Board. (Recommendation #68)
2. Establish a total fund policy benchmark that is a passive reflection of the target allocations of the fund as they have changed over time. (Recommendation #56)
3. Carefully re-evaluate the merits and risks of directly held real estate in the portfolio. (Recommendation #55)
4. Develop a policy that establishes the frequency, method, and criteria for an investment consultant evaluation and issue an investment consulting RFP in the near term. (Recommendation # 40)

A complete list of the recommendations resulting from this review is included in Section 9 of this Report. A priority and cost level have been assigned to each recommendation. Also indicated are the parties that would be involved in addressing each recommendation. Recommendations in Section 9 are shown in the order they appear in the Report, not in order of priority. The recommendation key is provided on page 7.

We encourage HPRS to address the recommendations made in this Report and either formally accept, modify, or reject them based upon what is in the best interest of members and beneficiaries of the System. Upon doing so, the HPRS Board should report to the ORSC within a reasonable amount of time how or if each recommendation will be addressed.

A brief overview of some of the key findings in each area reviewed is included below.

Board of Trustees

The overall size and composition of the HPRS Board of Trustees is appropriate and consistent with what is found at other public retirement systems. The Board has broadly defined authority in the statute; however, there are several areas where the Board's authority is limited, which is not consistent with best practice. ***It would be best for the Board to have authority over all investment related functions, including the hiring and termination of outside counsel, an independent financial auditing firm, and its custodian bank.***

In other regards, the Board does have sufficient authority over its annual budget, and has the ability to allocate financial resources according to its priorities. The Board's overall operating budget is reasonable and in line with those of the other Ohio public retirement systems. HPRS' costs per member are higher than those at the other Ohio systems, which is not surprising given the fact that it has a much smaller membership base across which to spread costs.

Staffing and Organizational Structure
The defining characteristic of the HPRS organizational structure is its size. With nine employees, the HPRS staff is considerably smaller than that of the four other state-wide retirement systems in Ohio. Given its fund and membership size, however, its small staff is not surprising or unusual. A small staff has both benefits and challenges. The benefits include open lines of communication among all staff members, ease of information flow, and opportunities for staff members to have exposure to many different areas of retirement system management. Challenges include limited upward career progression and considerable "key person" risk.

Given these challenges, we believe HPRS would benefit from updating position descriptions and further documenting processes and procedures associated with critical System functions. In the event that an employee of the System was to leave, this would aid in a smooth transition. The HPRS Executive Director/CIO is already in the process of reviewing the responsibilities assigned to each staff member to ensure proper and efficient work flow. Continuation of this effort is recommended. Related to this topic is the Executive Director's authority to hire and terminate all HPRS employees. This authority should be clearly expressed through a standing statement of delegation from the Board or through statutory clarification.

Given the important role of the Executive Director, it is critical that the Board establish an annual performance evaluation process and criteria. The goal should be to provide meaningful feedback to the Executive Director regarding objectives, successes, and weaknesses. A best practice is for the entire Board to be involved in developing a consensus view to share with the Executive Director. Considering the HPRS Executive Director also serves as CIO, it is equally important that the specific CIO responsibilities are documented and reviewed as well.

Governance Policies
HPRS has several key governance policies in place, including an investment policy, an ethics policy, and a training and expense policy. These help guide the Board and staff and ensure actual practices conform to common and best practices. The Board is meeting best practice by maintaining such policies and periodically reviewing them. We found that some enhancements to the existing policies could be made and that additional governance policies that further define responsibilities and expectations have some merit and should be considered.

Investment Consultant
An investment consultant plays an important role when interacting with boards and staffs of public retirement systems. HPRS is meeting common and best practice by having an investment consultant with no apparent conflicts of interest to assist in making investment decisions. The current investment consultant was hired through a competitive bidding process nearly five years ago.

Documentation regarding the evaluation criteria that were used in the investment consultant's selection over other candidates is not maintained in the file. Given this fact, and that the investment consultant has not been evaluated since 2007, we believe it would be prudent to not only create a policy that establishes the frequency, criteria, and process to be used for an annual evaluation of the investment consultant, but to also competitively re-bid for investment consultant services within the next 12 – 18 months. Re-bidding services will reveal whether capabilities, fees, and services remain competitive within the market place.

Asset Allocation
HPRS follows best practice by conducting asset liability modeling and asset allocation studies on a periodic basis. It would be best to codify this practice in a written governance policy. The results of these exercises are then used to establish an asset allocation that is suitable for HPRS given its circumstances. The asset classes in which HPRS invests (U.S. equities, international equities, fixed income, alternatives, and real estate) are appropriate and prudent for a pension fund like HPRS.

The asset allocation targets HPRS has established for equities and alternatives are higher than those of peers, while the allocation to fixed income is lower than that of peers. Given the funded status of HPRS, however, we find these target allocations to be reasonable. Fluctuations from the Board's approved asset allocation introduce risk into the portfolio, and therefore, we recommend that a rebalancing policy be adopted.

In another effort to monitor and understand risk, the Board may want to consider using risk budgeting tools. Further, taking a global approach to investing in public equities (rather than segregating U.S. from non-U.S. equities) could potentially reduce expected risk and improve expected return.

Investment Management Structure and Fees
HPRS' investment management fees are lower than peer averages when compared by asset class. Low management fees are attributable to HPRS' dedication to invest System assets in a cost conscious manner.

Evaluating the investment management structure on a formalized, routine basis is a best practice. HPRS' investment consultant is required, per contract, to periodically provide an investment management structure review, but one has not recently been completed. Completing such a review would allow the Board, Investment Committee, and staff an annual or bi-annual opportunity to review current manager allocations, style biases, exposure to active and passive management, and fees, as well as consider alternative structures. A review of each manager's contribution to risk in the portfolio could also be included in this type of review, which would benefit HPRS.

HPRS directly owns and manages two properties within the real estate portfolio and this exposes HPRS to certain risks. We believe HPRS must review the appropriateness of direct real estate ownership given the processes and controls that need to be in place to prudently manage the inherent risks associated with direct equity real estate investing.

HPRS has asset class and total portfolio benchmarks against which to measure performance. The current total fund policy benchmark is not appropriate as it does not include an allocation to alternative investments (real estate, private equity, or real assets) despite these being included in the portfolio. Excluding these components may be informative for select purposes (for example, measuring the value added or detracted from the portfolio by investing in alternatives versus public markets), but does not represent the asset allocation that the Board has selected. It is common and best practice to measure total fund performance against a passive representation of the asset allocation targets as they have changed over time. The total fund policy benchmark should be modified as soon as possible.

Manager Selection and Monitoring Process
The roles that HPRS has adopted for the Board, Investment Committee, staff, and investment consultant are consistent with what other boards have adopted, and represent an appropriate delegation of responsibility. HPRS utilizes a formal request for proposal (RFP) process for most of its investment manager selections. This is consistent with common practice and a reasonable approach. In 2010, HPRS documented the factors that will be used in manager selection going forward. The criteria include reasonable and prudent factors, and HPRS is meeting best practice by having them in writing.

The selection criteria that were used in past searches is not easily discernable because the written search reports provided by the consultant do not include a thorough description of the evaluation criteria or the corresponding analysis for the Investment Committee to use in making manager selection decisions. Best practice is to require the investment consultant to provide more in-depth search reports that include their independent assessment of candidate firms and their suitability for the portfolio.

HPRS relies, in part, upon the investment consultant to perform on going monitoring of the investment managers used within the portfolio. The investment consultant has manager research professionals on staff and reported to us that they engage in ongoing monitoring of the firms used by HPRS. The documentation (as provided to us) evidencing this monitoring is weak. It is best for investment consultants to provide relevant updates to staff and the investment committee regarding their assessment of the investment managers in the portfolio, and an analysis of any factors that would indicate that the manager may or may not continue to be appropriate for the portfolio.

The HPRS staff also conducts manager monitoring. The staff-produced manager monitoring report that we reviewed provided an analysis and assessment of evaluation criteria and was comparable to the good quality of written manager monitoring that we would expect.

Investment Related Activities
HPRS is meeting best practice by hiring a third party to conduct trade execution analysis on its behalf. The results of that analysis indicate that the overall domestic equity brokerage trading program is cost efficient.

HPRS' custodian bank arrangements are determined by the State Treasurer. It is best practice for a retirement system to have control over the hiring and termination of its custodian bank, but it is not unusual for this authority to be vested in another state agency. Absent this control, it is best for HPRS to provide feedback to the State Treasurer regarding the performance of the custodian bank, which it currently does. The fees charged by the custodian bank are reasonable for the size of the fund and the services provided.

Internal controls and investment accounting processes are critical functions for public retirement systems. Recently, HPRS senior management has begun an initiative (which should be continued) to better document internal controls and accounting processes, as well as ensure all employees are cognizant of the internal controls that are associated with their job responsibilities. It would be best for HPRS to go even one step further and formalize a process to identify, document, and classify risks facing the organization.

EXECUTIVE SUMMARY

In 2004, the statute required that HPRS hire an internal auditor. HPRS currently does not have one, but is pursuing hiring a contract internal auditor. Internal auditors fulfill an important role, and having one is a best practice, whether or not it is required by the statute. Since 2004, in recognition that they did not have an internal auditor, HPRS has had the external financial auditor complete a review of certain internal controls as well as test and sample selected calculations and transactions. Once an internal auditor is hired, it would be best to create an internal audit manual and ensure sufficient focus is placed on reviewing internal controls especially those related to the directly held real estate properties.

RECOMMENDATION KEY

Priority Level	Explanation
Urgent	Recommendation addresses an actual material breach in fiduciary responsibility that must be addressed immediately.
High	Recommendation addresses a material issue that could cause fiduciary problems for HPRS.
Medium	Recommendation addresses a current practice that falls short of best practices
Low	Recommendation presents an alternative approach to current practices that may benefit HPRS.

Cost Level	Explanation
High	Involves significant HPRS internal resources and/or significant service provider input and cost.
Medium	Involves moderate internal resources and/or modest service provider input and cost.
Low	Involves some internal resources and/or low outside service provider input and cost.

ACKNOWLEDGEMENTS

Hewitt EnnisKnupp thanks ORSC, HPRS, and outside service providers for their time and effort in answering questions and providing materials for this review. We relied heavily upon them for information. We received prompt responses to our questions and requests. We especially want to thank the HPRS Executive Director, and the Chief Financial Officer, for being very accommodating in meeting with us, participating in conference calls, and verifying facts and current practices.

DISCLAIMER

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

Our findings and recommendations were based upon information we received from others – such as the HPRS staff, investment consultants, and the ORSC. We did not independently verify all facts; however, we did request that sources review the facts we relied upon for our analysis.

The opinions and recommendations expressed herein reflect our independent judgment. No one associated with HPRS or ORSC unduly influenced the findings, analysis, conclusions, or recommendations expressed in this Report.

INTRODUCTION

The governance and authority of public retirement systems are ordinarily established through state laws, administrative regulations, and internal policies created by the systems. The laws and regulations generally impose fiduciary duties of loyalty and prudence on the governing bodies to act solely in the interest of the retirement systems' beneficiaries and to act as an expert would act in carrying out their responsibilities. The internal policies usually clarify how the responsibilities are to be handled by the boards.

Boards that govern retirement systems are not expected to have the expertise to perform every function, particularly in the investment area. They are, however, expected to operate at a policy level, carefully delegate to those with the appropriate expertise, and prudently monitor those delegations.

Well-run public retirement systems and private sector corporations are dependent upon sound governance. Boards of trustees, like boards of directors, are responsible for the organization's governance. In a general sense, "governance" refers to the method by which an entity is directed and controlled. Research has shown that poorly governed corporations typically underperform, whereas corporations with good governance practices have stronger performance. The same can be said for public retirement systems. [3]

The importance of sound governance for public retirement systems today cannot be overstated. The memberships, legislatures, and general public deserve to know that business is being conducted in a fair, open, and efficient manner and that those on the boards and staff take their responsibilities seriously. Best practices are to incorporate accountability, transparency, legal compliance, effectiveness, and efficiency into a governance framework.

SCOPE OF REVIEW

This Section of the Report is focused on the following areas related to the Board of Trustees:

I. Composition
II. Responsibilities
III. Authority
   A) Fiduciary Standards
   B) Board Delegation of Authority to Committees
   C) Legal Limitations to the Board's Authority
IV. Operating Budget
V. Sufficiency of Information
VI. Education and Training

[3] A study published by Rotman International Journal of Pension Management found that better governed pension systems outperformed poorly governed systems by 2.4% per annum during the 4 year period ending 12/2003. A similar study for the period 1993-1996 found a one percent annual good governance performance dividend. Capelle, Ronald, Lunn, Hubert and Ambachtsheer, Keith, "The Pension Governance Deficit: Still with Us" (October, 2008), Rotman International Journal of Pension Management, Vol. 1, 2008, at SSRN: http://ssrn.com/abstract=1280907.

I. Composition

Background

"The composition and functioning of the governing board are the first and main determinant of the fund's performance."[4] While there is no model for the optimal size or make-up of public retirement boards, it is common for them to include trustees from the retirement systems' most significant stakeholders: the members, beneficiaries, and their contributing employers. Importantly, asset size doesn't matter; the functions and fiduciary nature of a board and its trustees are the same, whether overseeing a system with millions or several billion dollars in assets. The most effective public retirement boards have members with diverse views, knowledge of institutional investment practices, an understanding of benefits administration, an appreciation for fiduciary responsibility, a commitment and ability to act prudently and solely in the interest of members and beneficiaries, and the willingness to avoid, or at least manage, actual or perceived conflicts of interests.

The board of trustees is typically selected in a variety of ways: (1) elected by members of the system;[5] (2) appointed by a government official or governmental entity (e.g., the governor, the legislature, the mayor); or (3) by being an ex officio member as a result of holding a particular public office (e.g., treasurer, attorney general, secretary of state). In rare instances the highest fiduciary body is a sole trustee instead of a board.[6]

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

Exhibit 1.1 - NASRA Survey Results – Board Size

Average Number of Trustees	Median Number of Trustees	Highest Number of Trustees	Lowest Number of Trustees
10	9	19	5

Exhibit 1.2 - NASRA Survey Results – Board Composition

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

[4] Yermo, J. (2008), "Governance and Investment of Public Pension Reserve Funds in Selected OECD Countries", OECD Working papers on Insurance and Private Pensions, No. 15, OECD Publishing. doi:10.1787/244270553278
[5] Members can include active members in the system or retirees.
[6] Examples include New York, North Carolina, Michigan, and Connecticut.

Boards of the major Ohio systems[7], excluding the Highway Patrol Retirement System (HPRS), demonstrate similar make up when compared to those represented in the national survey.

Exhibit 1.3 - Ohio Systems (excluding HPRS) – Board Size

Average Number of Trustees	Median Number of Trustees	Highest Number of Trustees	Lowest Number of Trustees
10	10	11	9

Exhibit 1.4 - Ohio Systems (excluding HPRS) – Board Composition

Percent of systems with one or more **appointed** Trustee(s)	Percent of systems with one or more **elected** Trustee(s)	Percent of systems with one or more **ex officio** Trustee(s)	Percent of systems with at least one of each type of Trustee
100%	100%	50%	50%

<u>Findings and Analysis</u>

The HPRS Board of Trustees ("the Board") consists of eleven members.[8] The size of the Board is in line with both national and peer Ohio systems, both with an average of 10 board members. HPRS Trustees reported satisfaction with the current Board size, particularly as it relates to populating committees, and on the whole, they see it as a well-functioning Board with efficient decision making processes.

The membership of the Board consists of the Superintendent of the State Highway Patrol, two retiree members, five active members who are current State Highway Patrol employees, one investment designee appointed by the State Treasurer, one Governor appointed investment designee, and one investment designee jointly appointed by the Speaker of the House of Representatives and the President of the Senate.[9]

The appointed investment designees must be experienced investment experts as defined by statute[10], residents of the State, and have had no professional ties to HPRS, Ohio Public Employees Retirement System (PERS), State Teachers Retirement System (STRS), School Employees Retirement System (SERS), or Ohio Police & Fire Pension Fund (PFPF) in the three years preceding appointment. In addition, the State Treasurer's investment designee must not be a current employee of either the State or a political subdivision of the State. This diversity of Board membership is common and can be a strength.

The number of elected and appointed members on the HPRS Board is consistent with the median number of elected and appointed members for the pension systems surveyed. Similar to the other Ohio retirement boards, HPRS' board composition includes three appointed investment experts.

Investment experts were added to the Board in 2004 when Senate Bill 133 became law. Since that time, HPRS Trustees have reported an enhanced level of sophistication in Board discussions and decision making. They appreciate and value the type and depth of questioning that

[7] Ohio Public Employees Retirement System, State Teachers Retirement System, School Employees Retirement System, and Ohio Police & Fire Pension Fund
[8] Ohio Revised Code § 5505.04
[9] Ohio Revised Code § 5505.04
[10] Ohio Revised Code § 5505.04

investment expert Trustees bring on investment matters when interacting with the investment consultant and managers.

Relative to the other Ohio retirement systems, HPRS has a unique potential problem because it is a single employer system. In this situation, superiors and their subordinates in the day-to-day workplace will serve on the Board at the same time as Trustees. As fiduciaries, it is particularly important that Trustees act as equals when serving the System and share diverse viewpoints regardless of reporting relationships outside of the Board room.

In our view, if all trustees are acting as fiduciaries, it should not matter whether they are active members of the system (with or without a superior/subordinate reporting relationship), retirees, elected officials, or individuals outside of the system. Best practices are simply that they act in the best interest of the retirement system and for the sole benefit of its members.

All Trustees serve four year terms with the exception of the one statutory member, the superintendent of State Highway Patrol, who serves as long as he or she is employed in the designated position. Terms of service are staggered, which is a best practice. Generally speaking, there are no term limits, with the exception of a statutory restriction[11] which prevents Trustees who served during one or more fiscal years from 2000 through 2002 and averaged more than $10,000 in reimbursable travel expenses from reappointment or reelection. The four year terms and the ability to serve the System without term limits are consistent with common and best practices.

Although the HPRS Board is only statutorily required to meet at least once annually,[12] it has been meeting six times per year on average over the past five years. A survey[13] of public retirement boards states that they generally meet between four and fifteen times per year, with the average being nine. The number and length of the meetings varies among the boards because of the scope of responsibility, the issues to be addressed, degree of delegation to the staff, the use of committees, and the efficiency of the meetings. For example, those boards using investment committees have less need for meeting time with the full board on investment matters.

Due to the nature of the business involved, it is commonly accepted that the governing bodies of public retirement systems should meet no less than four times per year. We find that best practice is for the number of meetings to be decided by the boards themselves based on the volume of work and their goals.

Some other boards of public retirement systems have regularly scheduled offsites for educational sessions and long range planning. We find such offsites to be very valuable for trustees and staff. HPRS has had offsites to discuss investment performance and review investment managers. HPRS may also want to consider additional offsites to address governance related issues and strategic planning. For example, a meaningful offsite meeting could include the following topics: fiduciary training, governance, board evaluation, executive director evaluation, review of accomplishments from the prior year, planning for the coming year, as well as committee work plans.

[11] Ohio Revised Code § 5505.049
[12] Ohio Revised Code § 5505.04 (A) (2)
[13] NASRA 2003 Survey on Board Meeting Frequency

From January 1, 2005 through December 31, 2009, attendance has been reasonable with, on average, less than one absent Trustee at each meeting. Never during this period has there been an instance where a statutorily defined quorum[14] could not be reached. In 2005 and 2006, there were two Trustees who were present at just over half of the meetings. In more recent years, the absence of any particular Trustee has not been an issue. Best practices are to be clear about expectations for meeting attendance. Other governing bodies of public retirement systems have dealt with these issues through statutory provisions that require a certain level of attendance, such as 80%, and provide for removal of members whose attendance falls below the stated standards.

The law[15] states that the Board is to elect a chairperson and vice-chairperson from among its Trustees annually, which is consistent with common practice. This practice usually works better than having the chair and vice-chair appointed by an outside party. In our experience, terms for officer positions are often one year, sometimes with term limits imposed. In a few instances the terms of the board chairs are longer, such as two or three years. It is not uncommon for an effective board chair to be re-elected by the board to serve for a number of years. In these instances, a long-serving board chair can benefit the organization.

In a minority of situations the board chair is a rotating position and everyone on the board takes turns serving in that role. This is not optimal because some individuals are not comfortable with the added responsibilities nor are they well suited to lead the board and run the meetings. The method HPRS uses to elect its officers is reasonable and works well for the System.

Conclusion

The overall size of the HPRS Board is appropriate and does not appear to have caused inefficiencies in decision making. In our experience, boards of HPRS' size are large enough to represent diverse points of view, but not so large as to be inefficient in conducting their business.

The number of appointed and elected members of the HPRS Board is consistent with what is found at the other Ohio retirement systems and other public retirement systems in general. Although Trustees contribute in different ways, their fiduciary responsibility to the members and beneficiaries of HPRS is identical.

The inclusion of three appointed investment experts is not typical for a public retirement board, but is commendable. The currently appointed investment experts satisfy the stated statutory requirements and each has significant investment experience. We find that boards with this level of additional expertise, either through individual trustees or by having expert advisory committees, although atypical, are becoming increasingly common. The advantage of having investment experts is that other trustees without investment expertise benefit from their insight and ability to ask relevant, probing questions.

The HPRS Board is meeting slightly less often than other public retirement boards; however meeting frequency does not appear to be a deterrent to the Board transacting business in a timely manner. While the HPRS Board has not held annual offsites for long-range planning purposes, it has had, as recently as 2008, an offsite for education about investment managers.

[14] Ohio Revised Code § 5505.04 (A) (2) defines a quorum to be at least 6 Trustees.
[15] Ohio Revised Code § 5505.04 (A) (2)

Board meeting attendance has not been an issue in recent years; however, addressing attendance related issues (e.g., expectations regarding attendance and consequences for failure to meet those expectations) via statute would be consistent with best practice.

Recommendations

Rec#	Recommendation	Priority Level	Cost	Parties Involved
1	Consider whether it is necessary to have a statutory provision that removes Trustees for poor attendance.	Low	Low	Legislature, Board, Staff
2	Determine whether annual Board offsites would be valuable for the System.	Low	Low	Board, Staff

II. Responsibilities

Background

Generally, the responsibilities of public retirement boards, their officers, and individual members are only briefly, and often incompletely, stated in governing statutes. In some systems, written board charters are established to reflect the boards' consensus about their scope of responsibilities and operating procedures.

A fiduciary board has the authority to be involved in any decision it deems necessary. When a board involves itself in operational or management decisions, its role is that of a "working board." Some small organizations, such as non-profits or foundations, may have a working board. At times, public retirement boards have temporarily become working boards involved in management details after a serious problem has arisen, but generally this is not the case. Most public retirement boards operate at the policy level. "Policy boards" set the long-term direction of the organization, provide a fresh perspective, and offer guidance to senior management. We believe this policy role for a board is best practice for most public retirement systems.

Findings and Analysis

The statute clearly states that the general administration and the management of HPRS and its investments are the responsibility of the Board.[16] Because HPRS is an independent instrumentality of the State with the privileges of a corporation, and not a typical state agency, the highest governing body is the Board.[17] This is a common governance structure and one that makes sense for pension assets held in trust.

The statute broadly defines the Board's investment related duties as the adoption of policies, objectives, and criteria for the operation of the investment program, that include asset allocation targets and ranges, risk factors, asset class benchmarks, time horizons, total return objectives, and performance evaluation guidelines. It grants the Board rule-making authority, specifies how elections will be held, and provides the parameters for interacting with members covered by various benefits programs.

The statutes do not provide any detail about the responsibilities and authority of Board officers or individual Trustees, which is not unusual. Board-created position descriptions usually work better than statutes to document the role of Board officers and non-officer members. Any position descriptions cannot exceed the authority set in statutes or otherwise violate legal restrictions. In some cases, they incorporate relevant statutes by reference.

[16] Ohio Revised Code § 5505.06 (A)
[17] Attorney General opinion 1996-032, rendered May 30, 1996, held that the Inspector General did not have jurisdiction over the five Ohio retirement systems because they are not state agencies.

It is best practice to document the board's responsibilities as they relate to many important areas, including:

- Governance
- Fiduciary responsibilities
- Investments and funding
- Benefits administration
- Financial operations and accounting
- Actuarial matters
- Human resources
- Communications

It is also best practice to develop a position description for individual trustees. Such documentation may include the trustees' responsibilities as they relate to attendance, committee service, interaction with other trustees and staff, preparation, and education. Best practice is for a position description to be carefully conceived and drafted to succinctly communicate to existing trustees, as well as to external stakeholders, the expectations for individual trustees.

It is particularly beneficial for documentation concerning a board's responsibilities and a trustee position description to be provided to any individuals seeking election or appointment to a public retirement board. Doing so can help align a candidate's expectations with the realities of what it means to serve on the board (e.g., subject to fiduciary standards, open meetings and ethics laws). Furnishing documentation to appointing authorities and including it as part of the election packet for prospective candidates is a best practice.

The role of board officers differs among public retirement systems. Sometimes the chair is very involved in setting the board meeting agendas, conferring with the executive director between board meetings, and serving as a sounding board for policy development and management issues. At other systems, the roles are more limited and responsibilities basically include running board meetings. Either way can work well.

The extra time commitment required of a board chair ranges from minimally more time to substantially more time than that required of other trustees, depending upon the customs at the system and the expectations of the board. Best practice would be to codify HPRS Board officer responsibilities in position descriptions.

While each board officer is charged with ensuring the integrity of the board's decision making processes, facilitating discussion, and motivating the board to be as effective as possible in fulfilling its responsibilities and duties, position descriptions could also include:

Board Chair

- Reviewing the board meeting agendas created by the executive director and ensuring that the timing for each discussion item is appropriate
- Presiding over board meetings and running them in an orderly way
- Monitoring the pace of the meeting and ensuring discussions stay focused and within the allotted time
- Encouraging all trustees participate fairly in discussions and consider different points of view
- Helping the board “speak in one voice” to best represent the membership as a whole
- Addressing ethical issues that have been brought up by the board, staff, or others in accordance with statute and board policy
- Representing the system to external groups and the media, as requested by the board
- Conveying annual performance evaluation results to the executive director with the participation of the vice-chair
- Appointing trustees to serve on the board’s standing committees and establishing ad-hoc committees, as needed
- Certifying any actions taken by the board, when required, and executing documents on behalf of the board

Board Vice-Chair

- Staying abreast of the major activities of the system so that he or she is able to take the place of the chair if necessary
- Serving as chair of the board when a motion involving the chair is being discussed
- Serving as the chair of the board if the person elected to that position has resigned or cannot serve in that capacity
- Performing all the duties listed in the chair’s position description if called upon to do so
- Collaborating with the chair on a regular basis regarding the meeting agendas and system related issues
- Participating with the chair in conveying the performance evaluation results to the executive director on an annual basis

Conclusion

State statutes address the Board’s responsibilities in the following areas: fiduciary responsibilities, investment responsibilities, ethics, education, elections, and benefits administration, among others. Based on our interviews, it appears that the HPRS Trustees generally understand their responsibilities and duties. They also share similar expectations about what individual Trustees are required to do to be part of a well-functioning board.

Recommendation

Rec#	Recommendation	Priority Level	Cost	Parties Involved
3	Develop and adopt a Board responsibilities document, Board officer position descriptions, and a Trustee position description.	Medium	Low	Board, Staff

III. Authority

A) Fiduciary Standards

Background

In the best circumstances, the laws that create the public retirement systems clearly impose the fiduciary duties of loyalty and prudence on the members of the boards of trustees.

- *The duty of loyalty.* Trustees are required to act solely in the interest of the retirement system's members and beneficiaries, rather than in the interest of themselves, their constituent groups, appointing authorities, the taxpayers, or the public at large. This duty has been very strictly interpreted by the courts to mean that fiduciaries are to "wear only one hat" when acting on retirement system business.
- *The duty of prudence*. The "prudent expert" standard under federal law,[18] which governs private sector pension plans and is the model for many public plans, calls for trustees to either be "experts" or hire experts if they lack the relevant expertise. This prudent expert standard, a best practice, prevails in Ohio.

Fiduciary liability can result from a violation of the duties of loyalty or prudence. Additionally, personal liability can attach through co-fiduciary liability. In determining the prudence of a trustee's action (or inaction), a court will look not only to the reasonableness of the process that the trustee followed, but also to the process that comparable public retirement system trustees follow in similar circumstances.

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

Findings and Analysis

State law vests full power for investing HPRS assets with the Board, outlining specific investment and fiduciary duties.[19] The law literally refers to a "prudent person" standard; however, the language in the Ohio statutes parallels the "prudent expert" standard found within the Employee Retirement Income Security Act of 1974 (ERISA).

The "prudent expert" standard has been interpreted to mean that when it is unreasonable to expect the trustees themselves to have the expertise to perform a function, the function must be delegated to someone with the appropriate expertise. The prudence language in HPRS statutes is best practice because there is a deep body of case law interpreting the same language found in ERISA which gives guidance on the ever evolving fiduciary standards.

While best practice calls for clarity in identifying fiduciaries and the standards to which they will be held, equally important are the consequences for failing to uphold those

[18] Employee Retirement Income Security Act of 1974
[19] Ohio Revised Code § 5505.06

standards. State statute[20] wisely provides that the Attorney General may pursue civil action against a trustee for a fiduciary breach.

Application of co-fiduciary liability is another important element of fiduciary law. State statute[21] presently applies liability not only for a trustee's own conduct, but that of any other fiduciary of the system to the extent the fiduciary is knowledgeable about the act and fails to take reasonable efforts to remedy the breach. This, too, is consistent with best practice.

Given the possibility of co-fiduciary liability caused by the conduct of fellow trustees, some systems have taken additional measures to ensure that each trustee is aware of the seriousness of fiduciary breaches and potential consequences. Examples include conducting annual fiduciary and governance training and performing an annual board self-evaluation. The board of one large public retirement system has even prepared a code of conduct that outlines the professionalism, ethical behavior, and commitment to which trustees agree to adhere. This document, signed by each trustee annually, serves as a reminder for the trustees to be as diligent as possible in fulfilling their duties.

State statute[22] also provides that "every fiduciary of the system shall be bonded or insured to an amount of not less than $1 million for loss by reason of acts of fraud or dishonesty," and that "[the] Board may secure insurance coverage designed to indemnify trustees and employees for their actions or conduct in the performance of official duties, and may pay required premiums for such coverage from the expense fund." [23] This means that all fiduciaries to the System, both internal and external, must have appropriate fiduciary coverage.

We reviewed the Board's fiduciary liability insurance policy, and found that it meets the statutory requirements in that it covers not only for Trustees, but also the staff. It is applicable to a violation of fiduciary responsibilities, obligations or duties as well as any act, error, or omission in connection with the performance of certain administrative duties or activities, which is appropriate. Investment managers' compliance with this provision is addressed in Section 7 of this Report.

State statute[24] provides that, "[in] exercising its fiduciary responsibility with respect to the investment of the funds, it shall be the intent of the board to give consideration to investments, including those provided by minority and women owned businesses (MWBE), that enhance the general welfare of the state and its citizens where the investments offer quality, return, and safety comparable to other investments currently available to the board." Such "in-state" and MWBE focused investment language is not unusual, and it is understandable why the Legislature sees a benefit in it.

The fiduciary duty of the Board, as the trustee for the pension fund, is to act in the best interest of the fund and the members and retirees covered by it. This is a far narrower duty than the duty of statewide elected officials or legislators who serve the general populous or broad constituencies of the State. The in-state emphasis sets up a

[20] Ohio Revised Code § 109.98
[21] Ohio Revised Code § 5505.061
[22] Ohio Revised Code § 5505.061(E)
[23] Ohio Revised Code § 5505.05 (C)
[24] Ohio Revised Code § 5505.06 (B)

secondary consideration for fiduciaries that are bound by general trust law principles to have no other purpose than to act solely for the benefit of the fund and its beneficiaries.

As written and as interpreted, the statute has not caused actual problems because it references "consideration" and is not a requirement. In addition, the Ohio Retirement Study Council (ORSC) performs an independent investment performance evaluation twice annually, which is a good practice. Problems could arise, however, if this language is not read in the fiduciary context and it is misinterpreted as a mandate instead of an encouragement.

With regard to reporting investment performance, the law[25] states that the Board must comply with standards set by the "association for investment management research", which is a best practice. This organization was renamed the Chartered Financial Analyst (CFA) Institute in 2004. Updating language in the statute that refers to the CFA Institute's policy is a minor technical amendment that would make the reference technically correct.

Conclusion

The Board's authority is broadly defined in statute, as are the fiduciary responsibilities with which it is charged. The statutory encouragement to consider the investments of in-state and women and minority owned businesses has not been problematic for HPRS because it calls for the Board to use the basic risk and return factors that a fiduciary would use in prudently selecting investments.

The statutory language that calls for bonding or insurance, as interpreted, is not just for outside service provides but for internal fiduciaries as well. We conclude that a proper fiduciary insurance policy is in place that conforms to statute. It covers not only the Board but the staff as well.

Recommendations

None

B) Board Delegation to Committees

Background

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

Committees are a systematic way to focus in-depth on important issues. Boards that use committees do so to make full use of trustees' expertise and accommodate their interests. Many public retirement trustees believe that smaller groups working in less

[25] Ohio Revised Code § 5505.06 (B)

formal settings can be very effective and save valuable time for the full board. Further, if each committee is able to focus on a particular subject, over time the committee members are likely to develop greater expertise. Commonly used committees include investments, budget, benefits, personnel, legislative, and audit. The types of committees used are somewhat dependent upon the scope of responsibility imposed upon the board.

Findings and Analysis

A public retirement system's committees are sometimes set in statute, but often the establishment of committees is left to the discretion of the board or board chair. The board chair typically appoints the members of the committees, taking into account the need for expertise, diverse views, and time commitments, as is done at HPRS. The chairmanship of committees is sometimes determined by a vote of the committee members; this is the practice of HPRS. Most often the committee chairmanship is determined through appointment by the board chair. The important point is that each committee has a chair to lead it.

While trustees generally have an understanding of the work that has been assigned to the various committees, we sometimes find controversy with regard to the way committees operate. Frequently boards do not live by the committee delegations they have made, and they repeat committee discussions at board meetings. Sometimes boards find fault when committees have shirked their responsibilities. Other times boards believe the committees have been overreaching and acting outside of the mandate they were given. Occasionally, the activities of two committees overlap.

Because of these problems we believe that comprehensive committee charters and annual committee work plans can improve governance practices at public retirement systems.

The best written committee charters detail the following:

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

While HPRS has not adopted Committee charters, it does have brief outlines of the scope of responsibility for each Committee. The Committee meetings have written agendas, but they do not have annual work plans that guide the Committees over a longer term. Typically, work plans are developed by staff, and presented to the committee for input and approval.

HPRS' four standing committees are: the Investment Committee, the Health, Wellness and Disability Committee, the Administration Committee, and the Audit Review Committee. When special needs arise, the Board has made efficient use of ad hoc committees, such as the committee put in place to address the System's solvency plan. The Board's committees do not take final action on matters before them, but rather make recommendations to the full Board for its final action. This is consistent with common practice.

Through our interviews, we found that most HPRS Trustees have a favorable impression of the Committees' functioning and efficiency. Committee meetings tend to be very inclusive and non-committee members may sit in for educational purposes and participate, but not vote. This type of culture is good because it enhances transparency and gives the opportunity for Trustees to gain exposure to the various aspects of System business without having to be an official member of all committees.

Conclusion

The Board's delegation of authority to its Committees is currently working well. The types of Committees, number of members on each, method for appointing members, and culture of inclusiveness is consistent with common practice.

Recommendation

Rec#	Recommendation	Priority Level	Cost	Parties Involved
4	Adopt Committee Charters and annual work plans.	Medium	Low	Board, Staff

C) Legal Limitations to the Board's Authority

Background

Public retirement boards and staffs need to have autonomy when selecting outside service providers, including legal advisers, independent financial auditors, and custodian banks. This assures that the professionals receiving delegations can be directed, supervised, evaluated, and held accountable by those serving as fiduciaries.

While it is not unusual for state law to give elected officeholders (e.g., attorney general, state auditor, state treasurer) the responsibility for providing specific services to a public retirement system, it is not best practice. The independence and loyalty of a service provider can be compromised if that person answers to an entity or individual other than the board of trustees.

Findings and Analysis

By law[26] the State Attorney General is the legal adviser to HPRS and somewhat controls which attorneys the system may use. The law also says that the State Auditor serves as the auditor to the System[27] and as such the State Auditor selects the auditing firm and determines the scope of HPRS' annual audit. The law[28] also says that the State Treasurer is HPRS' designated custodian and, therefore selects the custodian bank for HPRS. When fiduciaries cannot select their important advisors and agents, this is not consistent with best practice.

Attorneys who advise public retirement systems on investment matters must be knowledgeable in the interpretation and application of the governing laws and fiduciary standards; experienced in reviewing and negotiating contracts with investment managers, consultants, and other service providers; familiar with the legal issues surrounding complex investments in private equity and hedge funds; and able to oversee class action litigation. While many state attorneys general bring wide and diverse experience and knowledge on subjects such as labor law, open meetings laws, and administrative law, they may not have expertise, available resources, or time to advise the board on specific investment matters.

This is not to say that a public retirement board should never have access to a state attorney general's office. To the contrary, in a best practice environment, the attorney general remains an option for a public retirement board when seeking legal advice. The important distinction is between a board that may use the attorney general's office and one that must use them.

While statutes provide very limited circumstances[29] under which the HPRS Board has the authority to retain outside counsel, the Attorney General has on occasion granted the Board's request to do so. This has been in the rare instance where the Attorney General's office lacked the time or specific legal expertise required for the assignment.

To facilitate the selection of outside counsel, the Attorney General maintains an approved list of firms. The HPRS Board can access the services of the same outside counsel without making a new request each time so long as the scope of work is within the originally outlined dollar amount.

Similar to legal representation, it is essential that an organization's external auditor is independent and objective and works for the board. Government Auditing Standard 3.29[30] states that "auditors need to be sufficiently removed from political pressures to ensure that they can conduct their audits objectively and report their findings, opinions, and conclusions objectively without fear of political repercussions." It is best for public retirement systems to be able to hire their own external auditors and establish their scope of work, staffing, and fees.

[26] Ohio Revised Code § 5505.23
[27] Ohio Revised Code § 117.11 (A)
[28] Ohio Revised Code § 5505.03 (C)
[29] Ohio Revised Code § 109.98
[30] Government Audit Standard 3.29. Nonaudit Services That Impair Independence

The law states that HPRS may participate in the selection of the external auditor;[31] however, the discretion to hire solely rests with the State Auditor. Consistent with statute, in the most recent selection which was performed through a competitive bidding process, HPRS Trustees and staff were invited to review a ranked list of responding firms and identify their preferred candidate. As it turned out, HPRS' preferred candidate also received the highest ranking by the State Auditor's staff.

Currently the State Auditor recognizes the fiduciary responsibilities of HPRS; however, unless statutory change is made, the fiduciary discretion of the HPRS Trustees is not guaranteed. Best practice is for a board to be vested by statute with the authority to hire, evaluate, and change independent financial auditors.

Finally, it is essential that a custodian bank be held accountable to the fiduciaries for whom it is performing services. Currently HPRS has no rights regarding the selection of the custodian bank,[32] the changing of custodian banks, the selection criteria to use, the type of services to be provided, or the management of the account. This is inconsistent with prudent practices. Those having daily interaction with the custodian bank and bearing a fiduciary responsibility for the operational and investment results should have the freedom to select this important service provider.

Any involvement of HPRS regarding custodian banks is at the discretion of the State Treasurer as the legal custodian of the funds. Thus, the HPRS Board has no way to ensure that it is receiving the highest quality services. To the credit of the current State Treasurer, HPRS has been able to offer input into the selection process of its custodian bank. Again, unless statutory change is made, the fiduciary discretion of the HPRS Trustees is not guaranteed. Best practice is for a board to be vested by statute with the authority to hire, evaluate and change its custodian bank.

Conclusion

The statutory provisions that govern the HPRS Board's authority to select legal counsel, an independent financial auditor, and a custodian bank are not consistent with best practice. We commend the Attorney General, State Auditor, and State Treasurer for establishing workable short-term solutions for HPRS that both honor statutory roles and recognize the importance of the Board's fiduciary responsibilities.

[31] Ohio Revised Code § 117.3.04
[32] Ohio Revised Code § 5505.06 (C)

Recommendations

Rec#	Recommendation	Priority Level	Cost	Parties Involved
5	Seek a legislative change to allow the Board the discretion to use the Attorney General's office or other legal counsel.	Medium	Medium	Legislature, Board, Staff
6	Seek a legislative change to allow the Board the discretion to use the State Auditor's office or select an independent financial auditing firm.	Medium	Medium	Legislature, Board, Staff
7	Seek a legislative change to allow the Board the discretion to select its own custodian bank.	Medium	Medium	Legislature, Board, Staff

D) Operating Budget

Background

Operating budgets for public retirement systems are either appropriated by legislatures or set by boards themselves. In nearly all situations, the operating budgets are supported directly from the assets of the trusts and not from operating funds of state governments. Legislative control of the operating budgets is still common; however, best practice is for the board, as the highest level fiduciary, to set the budget.

If non-fiduciaries (legislative and executive branches of a state) impose unreasonable restrictions on the budgets, they can hinder or even prevent boards from fulfilling their fiduciary obligations. While the potential for this type of occurrence may seem minimal, the ability to unreasonably cut budgets is inherently present. Retirement boards may find themselves constrained in supporting an infrastructure to meet the high fiduciary standards of prudent investors required by law, and with little available recourse to remedy the situation. This may be particularly evident in times of fiscal crisis.

Findings and Analysis

HPRS' operating budget is prepared by the Executive Director and staff, submitted to the ORSC for review, and then sent to the HPRS Board for discussion about its reasonableness and approval. This is consistent with common practice. The assets of the System, not the general revenue of the State, pay for the operating budget.

This budgeting process, which allows the Board to have discretion over the allocation of resources to fulfill its responsibilities, is consistent with best practice. As a transparent exercise, subject to open meetings and open records laws and readily accessible to all interested parties, it is also consistent with best practice and is to be commended.

HPRS' total 2010 operating budget is shown in the table on the following page.

Exhibit 1.5 - HPRS 2010 Budget

HPRS 2010 Budget[33]	
Expense Category	Amount
Personnel	$869,536
Professional Services	$378,471
Communication Expenses	$31,804
Other Operating Expenses	$169,126
Occupancy Expense	$65,923
Total Operating Budget	$1,514,860

To determine if operating expenses are reasonable, the first step is to consider costs relative to peers. The budget comparison submitted to the ORSC[34] for the five Ohio retirement systems (HPRS, PFPF, SERS, STRS, and PERS) is shown in Exhibit 1.6.

Exhibit 1.6 - Ohio Retirement System Budget Comparison FY 2010[35]

Expense Category	HPRS	PFPF	SERS	STRS	PERS
Personnel	$869,536	$12,230,128	$15,143,948	$62,540,300	$54,515,429
Professional Services	378,471	4,622,330	8,559,783	9,575,600	18,881,301
Communication Expenses	31,804	586,012	1,302,925	3,478,800	3,593,611
Other Operating Expenses	169,126	1,811,358	2,331,443	10,065,100	10,602,129
Net Building Expense	65,923	1,270,110	792,795	2,670,200	3,927,530
Total Operating Budget	$1,514,860	$20,519,938	$28,130,894	$88,330,000	$91,520,000
Total System Assets[36]	$594,502,398	$9,161,747,608	$8,261,576,077	$52,679,078,295	$50,251,446,769
Total Membership[37]	3,053	56,210	200,445	476,287	935,963
Operating Expense Per Total Member	$496.19	$365.06	$140.34	$185.46	$97.78
Operating Expense as a percent of total assets (bps)	25.5	22.4	34.1	16.8	18.2

33 Budget figures gathered from budget as presented to the ORSC in 2009.
34 Comparative chart prepared by Ohio Public Employees Retirement System accounting personnel.
35 Budget figures gathered from the Ohio retirement system budgets as presented to the ORSC in 2009.
36 Market values based on 6/30/2009 Evaluation Associates performance report. Includes only defined benefit assets for each plan.
37 Based on 2008 total membership figures

Conclusion

The manner in which HPRS budgets are developed and approved is consistent with best practice. HPRS staff and its Board have the ability to allocate financial resources according to their priorities. The ORSC, as an oversight body, serves as a double check to ensure that expenses are carefully thought through and are reasonable.

As it relates to the reasonableness of HPRS' operating budget, we find a budget of 25.5 basis points[38] to be in line and reasonable compared with that of its in-state system peers. While its cost per member figure looks much higher than its state system peers, HPRS has a much smaller membership base across which to spread the cost.

Recommendations

None

[38] A basis point is one-hundredth of a percentage point (0.01%). There are one hundred basis points in one percent.

IV. Sufficiency of Information

Background

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

Determining the right type and amount of information to give to a board can be difficult. Giving too little information can expose the board to fiduciary risk if a critical issue is not addressed. On the other hand, giving too much information that is not explained well can also expose the board to similar risk. Some boards have rather formal procedures including annual work plans with timelines that specify what topics will be discussed at each meeting and what reports will be distributed. This works well for the routine matters but when it comes to issues that are not routine, the executive director must use his or her best judgment regarding what information should be distributed.

Findings and Analysis

HPRS Trustees forward any agenda items they would like addressed by the Board to the Executive Director. Board meeting agendas are set by the Executive Director and Chair, posted at least a week in advance on the HPRS website, and forwarded to all active members through the State Highway Patrol's "Virtual Roll Call" system. Board meeting materials are usually made available to the Trustees approximately six to seven days in advance via email as well as through a Trustee confidential login section on the HPRS website.[39] This style of electronic distribution is consistent with best practice and typically gives the Trustees adequate time to review the material prior to the meeting.

Based on Trustee interviews and our review of the Board packets, the material provided is relevant, comprehensive, well organized, and sufficient with the exceptions we note in Section 7 of this Report related to reports of the investment consultant. Board actions are captured through meeting minutes. Draft minutes are forwarded to the Board/Committee members within one week of the corresponding meeting. Once approved by the Board, meeting minutes are posted on the HPRS website for public viewing.

Since the Board meets on average six times per year, it can take 60 days or longer for meeting minutes from one meeting to be approved at the next. To accommodate members' needs for more immediate information on meeting deliberations, HPRS staff prepares a meeting summary which is sent to all active members by email and posted to the HPRS website within two to five days after each Board meeting. It includes an overview of the topics discussed, captures Board directions on a high level basis, and identifies topics for future Board or Committee discussion. This is a good practice as it provides relevant and timely

[39] Confidential member medical records related to disability applications are only supplied to Trustees via the confidential area of the HPRS website, and are not emailed.

information for members and stakeholders without compromising the Board's duty to review and ensure the accuracy of meeting minutes.

The current meeting minutes could be enhanced to better align with best practices by documenting the rationale and commentary around investment decisions and actuarial matters. In addition, the minutes could be improved by reflecting when individual Trustees leave and reenter a meeting before its adjournment.

We believe the process HPRS is using for posting its agenda, providing materials to Trustees in a manner that affords a sufficient period of time for advanced review, capturing Board actions through meeting minutes, and posting minutes on its website, to be sound. The staff's detailed procedural document that guides the process of meeting notice, and the distribution of meeting materials and minutes is also sound.

Between meetings, the HPRS Executive Director is in communication with the Chair and the Board on an as needed basis. This includes distributing information as issues arise and alerting the Trustees of educational items of interest such as conferences and research papers. This is consistent with common practice.

Examples of information sources that trustees at other public retirement systems receive to help them stay abreast of the ever changing public retirement arena include "NASRA[40] News Clips," which is a common publication for public retirement system trustees, and IFEBP's[41] "Weekly Headlines" for updates on relevant news and opinions regarding pension benefit programs.

Conclusion

Based on our review, we conclude that the Board meeting material is comprehensive, valuable to the Trustees, and provided in a timely manner. Included in the Appendix B of this Report is a sample listing of reports that the Board may find useful to review, at least on an annual basis. Using a secure website to deliver Board meeting materials is consistent with best practice and much more efficient than a common mailing process or even email. The meeting minutes are thin in certain areas and could be enhanced to better align with best practice.

Recommendations

Rec#	Recommendation	Priority Level	Cost	Parties Involved
8	Enhance meeting minutes by documenting the rationale for decisions on investment and actuarial matters.	High	Medium	Staff
9	Identify in meeting minutes when individual Trustees leave or reenter a meeting prior to adjournment.	Low	Low	Staff

[40] NASRA: National Association of State Retirement Administrators
[41] IFEBP: International Foundation of Employee Benefit Plans

V. Education and Training

Background

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

The need for "appropriately qualified, experienced individuals" as part of a board's composition is endorsed by the Stanford Institutional Investors' Forum in its *Committee on Fund Governance: Best Practices Principles* report.[42] According to the report, ideal trustees possess knowledge of institutional investment practices, understanding of benefits administration, an appreciation of fiduciary responsibilities, and the ability to manage actual or perceived conflicts of interest. Lack of experience and knowledge can be a concern if trustees become overly reliant on consultants or staff and do not apply adequate oversight, because it could potentially lead to liability. While it is not necessary for all of the trustees to be experts in all areas, collectively the board should possess the necessary skills to carry out its duties and responsibilities.[43]

Whether trustees have relevant experience or not, most will not have had exposure to all aspects of a complex public retirement system. For this reason, best practices among public retirement systems now include much more intensive new trustee orientation than ever before for all new members, regardless of their backgrounds.

Findings and Analysis

Orientation

The law[44] requires that the Board have an orientation program. Furthermore, it requires that the five Ohio retirement systems create a joint trustee orientation curriculum that all new Trustees must complete no later than ninety days after commencing service. New trustee orientation and annual training is an evolving best practice in the public retirement industry. That HPRS and the other public retirement systems in the State have embraced this practice is noteworthy and commendable.

HPRS Trustees participated in the statutorily required trustee orientation when they were new to the Board. Any Trustees commencing service off-cycle (i.e., at a time other than when the statutorily required training was available) have completed the required training by watching it remotely via video and reviewing the associated hard copy materials. The Executive Director is and has been responsible for tracking compliance with this statutory requirement. Additionally, the Executive Director has made new Trustees aware of several other external

[42] The Stanford Institutional Investors' Forum: Committee on Fund Governance: Best Practice Principles. Peter Clapman, Chair. (Published May 31, 2007 in cooperation with the Stanford Law School, Stanford Program in Law, Economics and Business, the Rock Center for Corporate Governance, and the Stanford Law School Fiduciary College).
[43] Ibid.
[44] Ohio Revised Code § 5505.064 and Ohio Revised Code § 171.50

orientation programs, such as those sponsored by the Wharton Business School of the University of Pennsylvania. While an internal system-specific orientation program has not been formalized, several Trustees had informal one-on-one meetings with the Executive Director when they were new to the Board. At that time, the Executive Director delivered a policies and procedures manual and addressed such topics as ethics related disclosures and responsibilities. This supplement to the high level information (e.g., investments, actuarial, fiduciary responsibilities, benefits, healthcare) provided through the joint trustee orientation program is valuable.

Internal orientation programs should be standardized so that all trustees have the opportunity to cover the same topics. It is also wise for orientation requirements to be outlined in a governance policy. The best orientation programs are comprehensive, held before the trustees take their seats, and customized for the particular retirement system and the individuals' knowledge base. Many trustees also find it helpful to have a follow up session several months after they join the board in order to ask questions and clarify issues that they have encountered.

While new HPRS Trustees have had several external orientation opportunities, including the joint orientation program for Ohio public retirement systems,[45] best practice would be for HPRS to deliver a tailored, customized orientation that relates the high level topics to System specific issues. This becomes even more important for HPRS Trustees who begin their service off-cycle, at a time when attending the joint trustee orientation program in person is not an option.

Continuing Education

State statute[46] requires each Trustee to attend continuing education programs no less than twice per year. Per the Board's Training and Expense Policy, the Executive Director monitors available training and recommends that which is appropriate for meeting the Trustees' continuing education requirements. In addition, the Executive Director tracks Trustee attendance throughout the year to verify that each individual Trustee complies with statutory provisions. Periodic ethics training is also provided to the Trustees. This is a best practice

Based upon our interviews, we found that the HPRS Trustees take their responsibilities very seriously and attend educational sessions on investments offered by the staff and consultants. The Executive Director has made it a practice to intentionally build educational sessions into regular Board meetings throughout the year. Additionally, Trustees attend conferences[47] where trends in the investment arena are discussed among other trustees and industry experts. An assessment of the Board's Training and Expense Policy and related practices is included in Section 3 of this Report.

[45] The HPRS Board attended the joint orientation program for Ohio public retirement system trustees in 2004 and 2007.
[46] Ohio Revised Code § 171.50
[47] It is best practice to evaluate conference quality and cost.

Education Expenses

We reviewed the Board's 2009 fiscal year education and travel expenditures for reasonableness given the parameters of the Board's Training and Expense Policy. The Policy calls for transparency and conservatism in approach, and appropriate Board approval, which is a best practice. On average, expenses amounted to just over $600 per Trustee for fiscal year 2009, with individual Trustee expenses ranging from under $500 on the low end to just over $3,000 on the high end. Attendance for all educational related conferences was approved in open meetings by the Board prior to the dates of the events.

In addition, HPRS' budget for Board expenses also includes funds allocated to membership fees in various associations. Some of these associations are national organizations that indirectly represent public pension systems. These organizations usually sponsor training programs or produce informational material that is used by HPRS.

We reviewed the expenditures for subscriptions and memberships in the 2009 fiscal year budget. An average of approximately $290 per Trustee per year was spent on memberships and subscriptions. Expenditures for memberships were approved in the manner set forth in the Board's Policy on Memberships in Organizations.

Conclusion

HPRS is meeting the statutory requirements regarding Trustee education. It could benefit from formalizing an internal new trustee orientation program that logically fits with the orientations offered to all Ohio public retirement system trustees and other opportunities available externally. The Board's 2009 fiscal year expenditures for educational opportunities are reasonable, appear to have been made according to the parameters of the Board's Training and Expense Policy, and have been reported in a transparent manner.

Recommendation

Rec#	Recommendation	Priority Level	Cost	Parties Involved
10	Formalize an HPRS specific new Trustee orientation program, document the curriculum in a Policy, and offer a follow-up orientation after Trustees join the Board.	Medium	Medium	Board, Staff

INTRODUCTION

Sound personnel practices are essential to the success of an organization. The most important practices include methods for staffing, training and development, performance management, motivation, and personnel effectiveness. An organization is more likely to flourish if it has adequate staffing levels and an effective organizational structure.

Some public retirement systems face unique challenges related to personnel practices, such as constraints on hiring, compensation, budget, and procurement authority imposed by other arms of government, such as governors or legislators. As a result, the boards of trustees and executive directors are sometimes hampered in their ability to obtain sufficient staffing to carry out the retirement system's mission and goals.

Other public retirement systems have few constrains and wide latitude in establishing the best staffing and organizational structure to properly carry out their business. Even in these situations, public scrutiny is ever present.

The fiduciary duties of prudence and loyalty require boards to be diligent about maintaining a qualified and well organized staff, while also incurring only reasonable expenses in the operation of the system.

SCOPE OF REVIEW

This Section of the Report is focused on the following areas related to staffing and organizational structure:

I. Organizational Chart and Reporting Lines
II. Size of Staff
III. Roles and Responsibilities of Staff
IV. Qualifications
V. Performance Evaluation Process
VI. Compensation Philosophy, Process, and Ranges

I. Organizational Chart and Reporting Lines

Background

Appropriate staffing involves attracting, organizing, and retaining an adequate number of employees with the necessary skill sets to accomplish the work in an effective and efficient manner. Inappropriate staffing exposes an organization to a variety of otherwise controllable risks, including governance risk and implementation risk.

An organizational chart is an important management tool that depicts the roles and reporting relationships between individuals and functions. Usually categorized by function, an organizational chart provides a framework for how work gets done, communications occur, and items get approved. It serves as a helpful point of reference for new trustees, staff, and other key stakeholders.

Findings and Analysis

The most important delegation a public retirement board makes is to the individual primarily responsible for the implementation of its policies and the day-to-day administration of the system. Typically, a board maintains ultimate authority in hiring and firing of the most senior management official, the executive director. Best practice is for statutes to be clear about the relationship between a board and an executive director.

HPRS has an organizational chart which it publishes each year as part of its annual report. It shows that the Executive Director/CIO reports directly to the Board of Trustees, and depicts all other staff reporting up to the Executive Director in either a primary or secondary manner. This type of structure is common practice; however, the organizational chart is inconsistent with the provisions outlined in State statute.

State statute[48] permits the HPRS Board to employ a secretary[49] as well as secure the services of employees for the transaction of System business. In addition, it permits clerical procedures required in the operation of the System to be performed by the staff of the secretary appointed by the Board.[50] The Board also has the responsibility to designate a Chief Investment Officer (CIO), per statute.[51] This can be interpreted to mean that the Board is charged with hiring all employees of the System.

These statutory provisions do not conform to best practice because there is not a clear delineation between the Board's governance role and the Executive Director's day-to-day management role. It is best for day-to-day personnel issues to be handled by the Executive Director. Inconsistencies between statutes, the organizational chart, and position descriptions may interfere with the Executive Director's ability to motivate and manage staff.

The Board made a statement of delegation to the Executive Director in June 2010 in an attempt to remedy this issue and clarify where authority rests for hiring and firing all System

[48] Ohio Revised Code § 5505.07(A)
[49] Internally, HPRS refers to the secretary position as "Executive Director".
[50] Ohio Revised Code § 5505.07(B)
[51] Ohio Revised Code § 5505.065

staff besides the Executive Director. This delegation ended on December 31, 2010, however, the Board expects to renew its delegation in an upcoming meeting.

Having the Board make annual statements of delegation to the Executive Director, or one statement that persists at the pleasure of the Board provides a workable interim solution. While we understand that undergoing statutory change is a complex and time intensive process, best practice is for the statute to clearly state that the Executive Director has the authority and responsibility for hiring and terminating employees of the System.

Through the same statutory provision, the Board is vested with the authority to designate a CIO. We find such a direct reporting relationship between a CIO and a board to be atypical. It is much more common, and more practical, for a CIO to report to an executive director, who reports to the board. This fosters continuity of personnel practices and also allows the executive director to play a role in overseeing the quality and veracity of the information provided to a board from the CIO.

Since the HPRS Executive Director also serves as CIO, this provision of separate reporting lines is not a current issue. Should the employment of a separate CIO be warranted in the future, best practice calls for a clear reporting line to the Board through the Executive Director. Regardless of who serves as CIO, it is also best practice for the expectations and responsibilities of the CIO to be defined by taking into account the asset size, portfolio complexity, and the intended reliance on consultants.

In addition, the statute's use of the word "clerical" to refer to the operations of the System does not give credence to the fact that important System functions such as benefits administration and investment accounting require judgment. Best practice would call for modernizing the language in the statute.

Conclusion

The statute governing the HPRS Board's delegation of authority to staff presents several areas of concern: (1) it is unclear regarding the Executive Director's authority to hire/terminate System staff, (2) it mandates an atypical organizational structure where the CIO reports directly to the Board, and (3) it refers to some System business as "clerical" which it is not. Over the short-term there may be workable solutions that are available to the Board; however, modifications to the statutes ought to be considered at an opportune time. It would be best for the Executive Director to have authority to hire and terminate all system employees, including the CIO, should a dedicated CIO position ever be required.

Recommendations

Rec#	Recommendation	Priority Level	Cost	Parties Involved
11	Delegate the authority for hiring all staff to the Executive Director.	Medium	Low	Board
12	Incorporate major Board delegations of authority into the Executive Director's and Chief Investment Officer's position descriptions.	Medium	Low	Board, Staff
13	Seek statutory change to place the responsibility for hiring and firing all personnel with the Executive Director.	Low if #11 suffices	Medium	Legislature Board, Staff

II. Size of Staff

Background

There is no set number or ratio to determine the “right” staff size for a public retirement system. Generally, as the assets and complexities within the portfolio and number of members grow, so do the number of staff supporting the investment and benefit functions. Another factor that contributes to staff size is the level of a system’s reliance on outside service providers. In fulfilling its governance role, public retirement boards need to see that adequate staffing exists year after year to diligently fulfill the fiduciary responsibilities with which they have been charged.

Findings and Analysis

Over the years, the HPRS staff has evolved from an internal department of the State Highway Patrol organization into a separate entity that has dedicated pension and investment professionals, mirroring its sister retirement system organizations. As is the case with HPRS, best practices are for a retirement board to have autonomy in prudently setting staff size regardless of layoffs, hiring freezes, or furloughs imposed upon other public employees who are not serving in a fiduciary capacity.[52]

Since optimal staffing is more often a journey than a destination, it is prudent to periodically review staffing against a board’s service philosophy, actual workload experience, and other factors. A prudent process is to set staffing levels by identifying the tasks that must be performed and the time required to perform each task. Indicators of whether staffing is adequate involve assessing (1) how often deadlines have to be extended; (2) how well communication is handled with the Board; (3) whether processes and procedures are followed or cut short; (4) whether proper documentation of the investment process is maintained; (5) whether accurate benefits are consistently paid to members on time; (6) whether employees express concerns about their workloads; (7) how frequently outsourcing has been necessary; (8) how often employees have to work extended hours; and (9) whether employees defer or forfeit annual leave.

From our interviews, we understand that the Executive Director and Board have been in the process of reviewing staffing levels and making adjustments to better suit the needs of the System. This resulted in the elimination of a benefits position in June 2010, and the work being redistributed across the remaining staff, including the Benefits Specialist, Administrative Assistant, and Executive Director. Staff reported to us no lapse in service levels.

Currently HPRS has a staff of nine professionals.[53] In comparing HPRS staff size to that of its peers, we looked to a national survey by Greenwich Associates conducted in 2009.[54] Public retirement systems of comparable size to HPRS with a similar investment management structure (all assets externally managed) and benefits administration responsibilities have a combined average staff of 8.3 individuals dedicated to investment and benefits related

[52] Those charged with fiduciary responsibility are held to a different standard than those who are not, the highest standard under law.
[53] HPRS Staff includes one of each of the following; ED/CIO, CFO, Benefits Specialist, System Accountant, Trading Analyst, Executive Assistant, Building Administrator, as well as two Building Maintenance Assistants.
[54] Greenwich Associates – 2009 Investment Consulting Business – Market Characteristics Report.

functions.[55] For purposes of comparison, we did not include any non-investments or non-benefits related staff, such as the three HPRS staff (2.25 full-time equivalents, which includes 0.25 of the Administrative Assistant) which support the administration or maintenance of the buildings that HPRS owns.

As indicated in Exhibit 2.1, HPRS has 5.5 staff positions devoted to selecting and supervising external investment managers, and providing investment and benefits administrative services. This figure is less than the 8.3 individuals of the peer group average with assets between $501 million and $1 billon.

Exhibit 2.1 – Staff Size

	Select and Supervise External Investment Managers	Provide Investment Administrative Services	Provide Benefit Administrative Services
All Public Systems	3.8	3.9	18.6
State	5.3	6.5	49.0
Municipal	2.6	2.2	6.4
Over $5 billion	6.8	7.3	70.3
$1-5 billion	1.9	1.9	11.5
$501 million-$1 billion	1.8	2.3	4.2
HPRS[56]	**0.5**	**2.0**	**3.0**
$500 million and under	1.3	1.2	1.2

Within the area of investment manager selection, the survey reveals that retirement systems of comparable size to HPRS have an average staff of 1.8 full-time employees, which is more than HPRS' staff of approximately 0.5 full-time employees, as represented by the Executive Director's responsibilities as CIO. While this figure may seem lower than peers, consideration must be given to the duties delegated to the investment consultant. We further address the level and prudence of the current delegation to the investment consultant in Section 4 of this Report.

The Executive Director fulfilling the role of CIO appears to be working well and to the satisfaction of the Board, however, it does pose key person risk. Key person risk can be an issue when staff size is concentrated. Organizations manage this risk in different ways. They can choose to "overstaff" in the area that poses the most risk by bringing in other personnel, such as an investment analyst in this instance. Alternatively, they can take measures to ensure that outside service providers not only have the capability, but the contractual obligation to step in and serve as staff on an interim basis when necessary. While HPRS

[55] It is important to note that this figure does not reflect total staff. It only covers the investment supervisory, investment administrative and benefits administrative related system staff.

[56] This assumes Executive Director spends half (50%) of his time selecting and supervising external investment managers and a quarter (25%) of his time supporting the benefit administrative services function and a quarter of his time on general system administration activities. This assumes the Chief Financial Officer's time is allocated half to investment administrative functions and half to benefits administrative functions. This assumes the System Accountant is allocated equally between investment administrative and benefits administrative functions. This assumes the Trading Analyst is fully dedicated to providing investment administrative services. It also assumes the Benefits Specialist is fully dedicated to providing benefits administrative related services. And finally, this assumes the HPRS Administrative Assistant is allocated on a part-time basis (75%) to supporting the benefit administration. All information on staffing equivalents was provided by HPRS Staff.

does not have a need for a full-time CIO at this time,[57] it is prudent for the Board to pay attention to this primary organizational risk.

In investment administrative services, HPRS has approximately the same number of staff (2.0 full-time employees) as its peer group average (2.3). Within benefit administrative services, the survey indicates that retirement systems comparable in size to HPRS have an average staff size of 4.2 full-time employees. In comparison, HPRS allocates three staff, including one dedicated benefit specialist. The Executive Director, Chief Financial Officer, System Accountant, and Administrative Assistant also lend support in this area. While this number may seem lower than peers, HPRS staff reported no backlogs in benefit processing or its ability to provide a satisfactory level of member outreach and education. Our interviews with the HPRS Trustees and staff indicated that there are very few member complaints regarding service levels and responsiveness.[58] HPRS staff reported a current initiative to create a formal complaint log that will aide the Board and staff in monitoring individual inquiries and trends.

In many instances, handling a single employer's volume of retirements, disabilities, survivor benefits, and refunds of contributions is more manageable than a similar volume in a multi-employer environment. Equally as impactful in creating staffing efficiencies is the type of technology used and the number of routine functions that are automated. The HPRS staff introduced and integrated new benefits calculation technology in 2010 that has streamlined the process and reduced the amount of time it takes to calculate benefits while maintaining accuracy. Both of these factors contribute to a need for less staffing in this area relative to peers.

Presently, it appears that HPRS has sufficient staff to support its benefit administration function. The Executive Director and Administration Committee of the Board communicate regularly regarding staff levels and the System's continued ability to give satisfactory service to its membership, which is a best practice.

To determine whether service is satisfactory and reflects a board's desired service levels, some larger systems perform benchmarking and baseline analyses of specific activities (e.g., number of retirement applications received per month, number of member phone calls received per month) in order to better project staffing needs. Some also conduct member surveys to identify the value members place on various services (e.g., newsletters, personalized benefits statements, the type and quality of information on a system's website). These types of exercises are useful in informing a board as it establishes and adjusts its member service philosophy, but can also be expensive. In smaller systems, the trustees often receive feedback informally from members and retirees about the system's services. This has been the case with HPRS. In addition, HPRS has established a feedback mechanism through its website, which provides an accessible and cost-effective way to solicit member and retiree viewpoints.

Best practice calls for a formalized approach to assessing member and retiree satisfaction. At a minimum this could include a short questionnaire, performed every two to three years, on

[57] Our assessment does not mean that HPRS will never have a need for a full-time CIO. An increase to portfolio complexity or change in the level of investment consulting services provided or internal staff capabilities would necessitate a review.
[58] In the past year four to five member complaints were received. These complaints were primarily regarding health care provider issues. Staff assisted these members in resolving their issues with the healthcare provider.

satisfaction levels of certain services provided by the System, accessible via the member secure login and promoted through normal member and retiree communications pathways.[59] This could provide meaningful baseline and continual measurement information to the Board upon which improvements and adjustments can be made. As we understand, HPRS conducted such a survey in 2003 but since that time has only surveyed the membership on individual issues.

Conclusion

While the HPRS staff is slightly smaller than its public retirement system peers in the areas of selecting and supervising external managers, investment administration, and benefits administration, the Trustees reported confidence that critical system functions are being performed, and staff has not reported an unmanageable workload.

The Executive Director is performing the role of CIO for the System, while also providing benefits administration support. This is not unprecedented for a fund the size of HPRS; however, it poses key person risk which needs to be addressed and managed.

Recommendations

Rec#	Recommendation	Priority Level	Cost	Parties Involved
14	Identify the best approach to managing key person risk (Executive Director/ CIO) to the System.	High	Medium	Board, Executive Director
15	Survey the membership regarding satisfaction levels.	Low	Low	Staff

[59] Normal member and retiree communication pathways include the quarterly newsletter and the State Highway Patrol's Virtual Roll Call system.

III. Roles and Responsibilities of Staff

Background

Public retirement systems are complex and highly visible organizations. Generally, they are charged with managing large pools of assets according to strict fiduciary standards. Given these standards, it is imperative that roles and responsibilities of those both inside and outside the organization are comprehensive enough to cover all essential functions and tightly coordinated to maintain efficient operations. A slight overlap in responsibilities is acceptable, but a gap creates operational risks.

Responsibilities for retirement systems are usually set forth in statutes in a general manner. Beyond that, administrative rules, organizational charts, board policies, statements of delegation, written position descriptions, guidelines, procedures, strategic goals, and meeting minutes are used to more precisely define and assign responsibilities.[60] The clear assignment and documentation of proper roles and responsibilities help make the organization run more efficiently and mitigate risk.

Findings and Analysis

HPRS presently has position descriptions for all staff functions, but they are less than optimal. Of the nine total positions, some, including descriptions for the Executive Director and Chief Financial Officer have not been updated since the late 1990s. Others, including documentation for the System Accountant and Trading Analyst positions, resemble a procedural listing of weekly, monthly, and annual tasks rather than a traditional position description. A position description typically includes the purpose of the position, a listing of key responsibilities, standards of performance, required knowledge and skills, reporting relationships, and the types of decisions the employee will be expected to make.

The position of Trading Analyst, in particular, is mislabeled when compared to actual duties. Typically a trading analyst's role is part of a public fund's internally managed equity or fixed income portfolio. This position generates trade orders placed on equities, options, and index options through registered representatives. He or she will also research and resolve trade related issues, and typically possess a General Securities Representative (Series 7), Uniform Securities Agent (Series 63), and Trader (Series 55) licenses. The HPRS Trading Analyst does not perform these functions.

The duties contained in the HPRS Executive Director's[61] position description encompass oversight of day-to-day activities of the system, staffing, communication with stakeholders, advising the Board on policy related matters, and documenting operational processes and procedures. Only one sentence is devoted to investment related duties which is insufficient given the Executive Director's role as CIO.

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[60] In Section 1, we recommend that the HPRS should expand its meeting minutes. See recommendations #8 and #9.
[61] Duties based upon review of HPRS Executive Director's most recent available position description, dated January 1995.

Best practice would be to identify a distinct set of responsibilities for the CIO position, including the statutorily required[62] supervisory and securities transactions duties.

- Asset allocation: plan, coordinate, and implement investment programs for the fund
- Investment manager selection and monitoring: coordinate investment consultants and oversee internal staff resources in the diligence of external investment managers
- Performance reporting: ensure appropriate monitoring of the performance of investment managers against peer groups and benchmarks
- Compliance monitoring and reporting: monitor the fund's investment activities to ensure compliance with all applicable laws, rules, regulations, stated policies, and guidelines
- Contracts: negotiate and prepare all investment related contracts and fee schedules
- Strategy development: assess the appropriateness of new investments and investment products for inclusion in the fund's portfolio
- Policy development: work with the board, consultants, and investment staff in developing appropriate policies and procedures

Having two distinct sets of duties for the HPRS Executive Director and the HPRS CIO would still allow one individual to serve both roles as is presently the case. Whether the CIO duties for HPRS are documented in a separate position description or folded into the Executive Director's position description is at the discretion of the Board. Clearer delineation of responsibilities by job function would provide an approach consistent with best practice in measuring performance and ensuring compliance with statute.

We found the majority of the HPRS position descriptions are outdated.[63] Over the past decade, the System has experienced little turnover. Changes to responsibilities have been taken on by existing staff without a need for documenting the institutional knowledge or reasons why a specific process occurs. This presents both a benefit and a disadvantage, as it is often easy to de-emphasize the need for documentation when business is running smoothly. We understand that an initiative is presently underway to update all position descriptions, compile existing process guidelines, and identify areas where further process and procedure documentation is necessary. Staff anticipates a second quarter 2011 completion date.

HPRS does not have a staff succession plan which is inconsistent with best practice. While it's true that senior System staff (i.e., the Executive Director and Chief Financial Officer) are still relatively new to their positions, it is important to identify and assess how critical System functions will be performed in the event of unexpected turnover. This is particularly the case given the level of key person risk.

[62] Ohio Revised Code § 5505.065
[63] The HPRS position descriptions were last updated on the following dates: Executive Director (06/1996), Chief Financial Officer (10/1997), Trading Analyst (03/2010), Benefits Specialist (03/2010). The Administrative Assistant, Building Administrator and Maintenance Assistant position descriptions do not indicate any revision dates.

Conclusion

While the System has experienced very little staff turnover, having accurate, current position descriptions which include statutorily required duties and critical operational processes and procedures is almost more important at HPRS than at a larger system where more staff can backup and support key functions.

Because of the unique circumstance where the Executive Director is performing many core functions (i.e., Chief Executive, CIO, Chief Benefits Officer), position descriptions should also reflect those duties that other staff must assume in case of an emergency where the Executive Director is unavailable. Even without regard to emergency situations, it is best for CIO responsibilities to be fully documented and included in the Executive Director's position description, or in a separate position description.

Cross-training or assigning out-of-specialty responsibilities to staff may be appropriate so that key functions can be better managed with lower risk in a time of change.

Recommendations

Rec#	Recommendation	Priority Level	Cost	Parties Involved
16	Update all staff position descriptions for accuracy and appropriateness with an emphasis on identifying the minimum requirements for each position.	Medium	Low	Staff
17	Continue to document processes and procedures associated with critical System functions.	Medium	Low	Staff
18	Discuss staff succession planning and address ways to mitigate the risk of unexpected turnover.	Low	Low	Staff

IV. Qualifications

Background

The complexity in the pensions, investments, and healthcare arena has grown dramatically over the past several decades. Trustees, as a system's ultimate fiduciaries, must be assured that qualified professionals are capable of carrying out the necessary system functions in a way that meets fiduciary standards. Thorough documentation of minimum required qualifications for each staff position – typically a combination of education, certifications, and prior years of experience – is important to achieve this outcome. Other critical aspects include the forums and venues where talent is sought when needed and the recruitment process to be used.

In an optimal situation, the staff remains qualified by staying abreast of industry topics and best practices in all areas of the organization. To do this, staff must continually expand their knowledge base and focus on professional development. It is also important for staff to network with other systems in order to build relationships and exchange beneficial, practical information. Failure to provide staff training and networking opportunities exposes an organization to operational risk because staff may not know of evolving best practices. Therefore, ongoing training and continuing education are critical factors in maintaining qualified staff and guaranteeing an organization's overall success.

Findings and Analysis

As mentioned previously, HPRS has position descriptions for each staff position; however, they are outdated. Some position descriptions we reviewed identified necessary knowledge and experience to adequately perform the role, but all were silent on required education, certifications, or prior years of experience.

As previously discussed, HPRS staff is presently working to build out and update the position descriptions for all staff. Best practices and increasingly common practices are for investment staffs at larger systems to be comprised of individuals with advanced degrees or professional certifications. Minimum required qualifications for these individuals typically include a bachelor's degree from an accredited university and for senior level positions, an MBA, or a professional certification (e.g., CPA, CFA, CAIA),[64] and some prior experience in a position directly related to the function being performed.

The same holds true with benefits administration staff. Minimum required qualifications for these individuals at larger systems typically include a bachelor's degree from an accredited university, a professional certification (i.e., CEBS, CRC, GBA, RPA[65]), and some level of prior experience in a related position. For smaller systems like HPRS a requirement to have advanced degrees and/or professional certifications may be preferred but unrealistic because of the nature of the work or the level of pay.

[64] MBA: Master of Business Administration; CFA: Chartered Financial Analyst; CAIA: Chartered Alternative Investment Analyst; CPA: Certified Public Accountant
[65] CEBS: Certified Employee Benefit Specialist, CRC: Certified Retirement Counselor, GBA: Group Benefits Associate, RPA: Retirement Plans Associate

The senior level investment and benefits positions at HPRS are the Executive Director/CIO and Chief Financial Officer positions. The individuals serving in these positions more than meet the minimum requirements. The Executive Director has a law degree and a CPA and over twenty-five years of experience, ten with HPRS. The Chief Financial Officer has an MBA, is also a CPA, and has over ten years of experience, one with HPRS. In addition, the statute[66] sets forth requirements for the CIO as a licensed state retirement system investment officer which the Executive Director presently meets.[67]

HPRS' size may be a limitation in attracting staff, but its location is an advantage. The presence of other public retirement systems and financial institutions (e.g. banks, foundations, endowments, insurance companies) translates into more locally available talent with pensions, investments, and healthcare related experience. While turnover has been relatively low at HPRS, staff reported no difficulty in attracting qualified candidates for open positions. For example, the search process used for the most recent hire (i.e., Chief Financial Officer) resulted in nearly 200 interested applicants. The position description was posted in the local newspaper as well as online[68] at various websites where senior level candidates would naturally look for available opportunities.

The Executive Director prescreened the applications based upon an informal criteria set of minimum qualifications, and conducted telephone interviews with seven candidates. Three candidates were identified for in-person interviews. The Executive Director invited the Administration Committee of the Board and any other interested Trustees to participate in the interviews. This resulted in the identification of a final candidate, who prior to hire, submitted to a reference and background check. Even when an executive director has full authority for hiring all positions within the system, it can be reasonable to solicit input from the board on senior level candidates that will interact with the board or the board's committees.

The HPRS recruitment process used recently is an example of common and best practice for a system of this size. We understand that the Board, through the Administration Committee, is currently in the process of formalizing and documenting a Recruitment Policy which will govern the organization's hiring process going forward. This will be beneficial to current staff administering the process and prospective candidates. Due to the nature of the topics addressed (e.g., how positions will be posted, the interview formats that may be used, the types of reference and background checks to be conducted, the applicable ethics laws to be followed) this policy may be better suited as a management policy and not a Board policy.[69]

Another key aspect of staff qualification is continuing education. It is imperative for boards to know that senior staff stays abreast of the constantly changing industry practices and strive to strengthen their management skills. For senior level positions, having continuing education requirements as part of the annual performance evaluation objective setting process is a best practice. To create an organizational culture where qualification through education is valued by a board, it is also best practice for continuing education programs, and reasonable career paths given the size of the organization, to be offered to all staff members.

[66] Ohio Revised Code § 5505.065 (A)
[67] We verified the Executive Director/CIO license with the Ohio Department of Commerce.
[68] An increasing number of candidates are looking online instead of in newspapers for job opportunities. Online job websites can effectively and efficiently provide broad based exposure to candidates locally, statewide, regionally, and even nationally.
[69] We address the difference between management policies and Board policies in Section 3 of this Report.

Based on interviews, we found that staff has training and professional development opportunities. They are allowed to belong to professional organizations and they attend various outside conferences, seminars, meetings, symposiums, and workshops for educational purposes. The Executive Director and Chief Financial Officer attend, on average, five to six[70] conferences/training sessions every year, outside of the regularly scheduled one-hour educational sessions that are offered through Board meetings. Other staff members typically attend two to three conferences/training programs per year.

The conferences/training opportunities in which staff participates are well-known some of which include the Investment Forum sponsored by the Ohio Public Employees Retirement System,[71] the State Auditor's Anti-Fraud Conference, OPAL Public Funds Forum, and the Public Pension Financial Forum Conference. It is best practice to evaluate conference quality and cost. For-profit conference organizers sometimes present repetitive sales pitches at their conferences rather than objective educational content.

Although the travel for staff to attend training or continuing education conferences is addressed in the Board's Training and Expense policy, and membership in professional organizations is covered by the Board's Membership in Organizations Policy, there is no policy which specifically addresses reimbursements for advanced degree tuition or certifications for staff.

By current practice, the Board Chair approves all staff travel and education expenses, which seems to be a management function rather than a governance function. Typically boards handle only the executive directors' travel requests and the executive directors handle other staff travel and education expenses within certain budgetary limits approved by the board. A report of expenditures is then usually provided to the board and this allows the board to monitor expenses and fulfill its oversight function. The Board receives a quarterly report on travel and education expenses.

Conclusion

Ideally, position descriptions clearly communicate what is required to do the job, and help in making sure that employees either have or acquire the knowledge and experience necessary to perform the functions of the position. HPRS is making strides in formalizing its position descriptions, and policy development.

We conclude that the training and education opportunities available to the Executive Director and staff are consistent with the common practices of public retirement systems. Making relevant training and certification opportunities that are aligned with each position's job functions available to the staff may encourage staff to seek additional education. Obtaining pertinent education will further develop the skill sets and performance of the staff.

[70] Only one of the conferences would necessitate out-of-state travel.
[71] The Investment Forum is an annual event sponsored by the Ohio Public Employees Retirement System (OPERS). OPERS staff and industry experts present information and moderate panels on relevant investment topics.

Recommendations

Rec#	Recommendation	Priority Level	Cost	Parties Involved
19	Discuss the benefit of having a policy that addresses staff tuition reimbursement for college degrees and certifications.	Low	Low	Board, Executive Director
20	Delegate approval of staff travel and related expenses to the Executive Director.	Low	Low	Board, Executive Director

V. Performance Evaluation Process

Background

Performance evaluations are a fundamental management tool used to assist staff in developing their skills and to assist supervisors in assessing work performance. To reflect best practices, evaluations should be performed at least annually. Evaluations give each employee an assessment of their performance relative to expectations and progress toward meeting their objectives. Evaluations are also an appropriate time to communicate directly with the employee regarding whether the priorities of the organization have changed.

The performance evaluation process need not be lengthy or complicated. To work well it often includes a self-evaluation performed by the employee and an evaluation performed by the supervisor/manager. Predefined criteria that are achievable and measurable should be used when evaluating employees. The criteria needs to be tailored to the employee's particular functions and reflect expected results. The best performance evaluation processes allow an employer to track an employee's quality of work and performance improvements, and also provide feedback in a productive manner. It often strengthens staff relationships with supervisors and positively impacts retention. The evaluation process should also open an opportunity to discuss any additional education, training, and resources required for an employee.

Findings and Analysis

Executive Director/CIO Evaluation

The most important delegation a public retirement board makes is to the individual primarily responsible for the implementation of its policies and the day-to-day administration of the system. Best practices call for the executive director's performance to be reviewed on at least an annual basis, based on an established written policy that includes predetermined rating criteria, allows the executive director to submit a written self-evaluation, and affords each trustee with the opportunity to provide input.

Examples of general evaluation criteria for a system's executive director include the following:

- Leadership
- Management of the organization
- Policy development and implementation
- Customer service
- Staff development
- Communication
- Interaction with the board
- Progress toward strategic goals
- Legislative efforts

The evaluation criteria currently used for the HPRS Executive Director includes the categories of leadership, business and financial management, interaction with the Board, communication, policy development and implementation, and customer service. The scale is values based (e.g., very good, adequate, needs improvement).

When an executive director also serves as CIO, best practice would be for a board to distinctly evaluate both roles. The current process does not enable the Board to perform a full evaluation of investment related duties, including those that are statutorily required.[72] This is insufficient given the HPRS' Executive Director's dual role as CIO.

Beyond ensuring statutory compliance, examples of general evaluation criteria for a system's CIO include the following:

- Leadership: includes demonstrating a thorough knowledge of the institutional investment industry, latest investment research, and good judgment in investment issues
- Management: includes working with the Board to enhance the decision making process, following up on Board directives to ensure proper implementation, and establishing, following, and documenting internal due diligence procedures for all investments
- Communication: includes providing the board and investment committee with clear, direct, objective comments, advice, and recommendations
- Policy Matters: includes compliance monitoring, regularly reviewing all investment policies and making recommendations for changes to the investment committee and board

The evaluation form from the State of Ohio Performance Review System typically used for Captains and Majors in the Highway Patrol has been used for past evaluations of the HPRS Executive Director. [73] This is not unexpected since the former Executive Director was previously employed (and retired from) the State Highway Patrol. It does not appear that the performance evaluation included an assessment of the Executive Director's CIO responsibilities.

We understand that in the past, the Administration Committee, rather than the full Board has completed the Executive Director's performance evaluation, and discussed the results with the Executive Director in executive session. The Committee's assessment and recommendation regarding compensation were presented to the Board and any Trustee had the opportunity to provide feedback. In this process the ratings were averaged and comments were summarized. No formal policy for evaluating the Executive Director exists and the process to be used was reported to us as relatively undefined. Since the current Executive Director is new to his position, his first performance evaluation has not yet occurred.

We believe that it is important for everyone on a board to participate in an executive director's evaluation collaboratively and reach consensus on the ratings for preestablished criteria. This encourages a board to "speak in one voice" and keeps the individual trustees from sending mixed messages. Using the averaging approach, one extreme rating can dilute or inflate the rating in such a way as to misstate the majority view of the board. Reaching consensus through a group discussion is preferable.

A growing trend among public retirement boards is to use outside facilitators when reviewing the executive directors. Facilitators do not influence the performance ratings; rather, they smooth the process, help the board to stay focused on the performance within the specified evaluation period, encourage candid discussions of differing opinions of performance, and

[72] Ohio Revised Code § 5505.065 contains notification requirements by the Board to the division of securities of the department of commerce as to its designation of CIO, and also specifies required responsibilities for the CIO of the HPRS.
[73] Evaluations reviewed were for annual periods from 1998 to 2007.

guide the board toward consensus. The use of a facilitator has been valued by boards and executive directors alike because it enhances communications between the two.

HPRS Staff Evaluation

The HPRS Board has a policy that calls for the Executive Director to evaluate hourly staff no later than May 15th of each year, and submit to the Board a written summary report of the evaluations. The policy also calls for the Executive Director to develop the form that will be used for the evaluations. The form is entirely qualitative in nature and addresses the broad categories of job knowledge and skills, quality and quantity of work, adaptability and initiative, dependability, courtesy and interpersonal relations, and progress and self-improvement. It includes sections for the supervisor to identify areas where further improvement is necessary, and a section for the employee to provide a response.

Each category of the performance evaluation form is rated based on these general measures. Following the completion of the forms, a discussion is held between the supervisor and the employee to review the performance evaluation. Each employee also completes a self-evaluation prior to the performance evaluation. The Executive Director provides a final review of all completed forms. Compensation is not directly tied to the rating, and the process of objective setting has, over the years, fallen out of practice.

Regardless of whether or how performance is linked to pay, goal setting is a best practice and valuable exercise in engaging employees. Done within the context of career development, it aligns individual staff goals with that of the organization in a way that produces a desired outcome for both parties.

Conclusion

The Executive Director's performance evaluation process should be improved. The following are some of the improvements we believe will add value to the process: (1) formalizing an approach in a policy, (2) streamlining and enhancing the form that is used; (3) having the entire Board, rather than just a committee of the Board, participate in the evaluation; (4) having the evaluation discussion result in a consensus on performance, and (5) having the Chair and Vice Chair deliver the ratings and messages both in writing and verbally at the conclusion of the meeting. There has not been an evaluation of the Executive Director's responsibilities as CIO, which reflects a deficiency given the importance of the role.

Performance evaluations for general staff are conducted annually, which is adequate. The general staff evaluation process is more of a formality than a constructive tool for career development, since the practice of objective setting is not used.

To align with best practice, the evaluation process should be based on realistic, attainable objectives that are adjusted when unforeseen events intervene. It should also include a process that allows staff to improve their skill sets. Being candid about staff performance is the best way to praise strengths, identify areas for improvement, and discuss ways to address these areas. Having a meaningful staff performance evaluation process in place that identifies expectations and sets employee goals, improves the effectiveness and efficiency of the organization as a whole.

Recommendations

Rec#	Recommendation	Priority Level	Cost	Parties Involved
21	Formalize and document in a policy the approach to evaluating the Executive Director, including his or her duties as CIO.	Medium	Low	Board
22	Improve the annual staff performance evaluation process.	Medium	Low	Board, Executive Director

VI. Compensation Philosophy, Process, and Ranges

Background

Compensation is a major component of staffing that can help or hinder an organization's ability to attract and retain qualified talent. Public retirement systems must determine what to pay their staff, the frequency with which payment will be made, and whether to offer performance based pay rewards. They must also take into consideration the going market rate for different types of talent, and continually stay abreast of changes in competitive compensation practices.

Findings and Analysis

Turnover Rate

There has been minimal turnover at HPRS for the last four years. The former Executive Director retired in 2009, and the Chief Financial Officer at that time was promoted to Executive Director/CIO after an open search was conducted. Subsequently, a search was performed for a new Chief Financial Officer, who was hired in January 2010. In June 2010, the Benefits Director position was eliminated due to reduced workload levels and volumes.

Consequently, it does not appear that staff retention is an issue. However, since HPRS has a small staff size with each member performing distinct functions, any turnover would seriously affect the organization. As mentioned previously, it is important to document the Board's Recruiting Policy, and address succession planning and cross-training practices. Equally important is periodically assessing the compensation levels of staff and making adjustments where appropriate.

Compensation

The HPRS organization has evolved over the years from being a staff largely contained within the State Highway Patrol organization to being an independent organization and staff of pension and investment professionals. During its infancy, many of the policies, practices, and procedures mirrored that of the parent organization. As HPRS matured, certain policies and practices were reviewed and adjusted to better fit a retirement system environment. This activity has been particularly evident since the hiring of the current Executive Director.

Compensation practices have been some of the last to undergo this change. The HPRS Board is presently focused on understanding how its staff compensation compares to its retirement system peers. The System Chief Financial Officer recently conducted an internal compensation study of all staff positions against peer information retained by the Bureau of Labor and Statistics (BLS) Occupational Employment Statistics.

The internal study, completed in October 2010,[74] contained comparative data for similar benchmark positions[75] on a national, statewide, and citywide basis, with public sector data

[74] All wage estimates used were reported as of May 2009; HPRS staff determined the data still relevant due to national wage stagnation.
[75] Benchmark positions are positions commonly found in the marketplace. The benchmark job comparisons were based upon job description, not job title, which is appropriate.

isolated at the national level.[76] In addition, the Executive Director's compensation was compared against the other Ohio system's executive directors.

We found the study used a reasonable methodology in comparing HPRS staff's hourly wages against the mean hourly wage, median, and various other hourly rate percentiles (e.g., 10th percentile through 90th percentile). The results of the study should be very useful in informing the Board on compensation levels and developing a Compensation Policy.

The best compensation policies articulate a board's desired compensation philosophy about how to pay competitively, specifically within the local public retirement system market, in order to attract and retain staff. Policies often establish minimum, midpoint, and maximum salary ranges for each position. It is best practice to identify a desired frequency for future compensation reviews and analyses (e.g., annually, biannually) to ensure that a system's compensation structure is fair and effective. The parameters of these board-level decisions can then be communicated during the performance evaluation process to all staff.

Merit Salary Increases

Another key part of compensation, particularly as it relates to motivating and retaining staff is the ability for an employee to be financially rewarded because of above average performance. HPRS has been giving staff annual pay increases. Each employee has received the same percentage amount of annual increase, regardless of performance. As we understand, this is a practice similar to what occurs within the State Highway Patrol for its personnel.

While it is true that HPRS exists for the benefit of the State Highway Patrol active and retired members, and their beneficiaries, HPRS is a retirement system and not a law enforcement agency. It has different operations with its own unique goals and objectives. Allocating the same percentage of annual increase to all staff is not consistent with a merit-based approach commonly used by public retirement systems. It dilutes the motivation for individual staff to perform above average, because high performance results in no special reward, financial or non-financial.

In a merit-based approach, the board and executive director determine an annual budget for staff increases.[77] The executive director, in concert with supervisors, determines the individual percentage allocated to each employee, based upon the employee's performance against pre-established and agreed upon criteria. In any given year this means that a poorly performing employee may receive no increase, and those who exceed expectations would receive different increases based upon that performance.

[76] Statewide and citywide compensation data did not distinguish between public sector and private sector compensation data.
[77] Under certain circumstances, there may be no budget dollars allocated to staff increases. The best policies outline situations like these, setting the expectation that the board may use its discretion in determining whether staff increases are appropriate given system funded status and other key factors.

Performance Bonuses

A performance based incentive compensation program or bonus is typically developed for purposes of attracting and retaining investment professionals at systems with internal asset management and/or complex, high risk external strategies. HPRS does not have a performance based bonus program.

<u>Conclusion</u>

HPRS is making strides to better understand its staff compensation levels relative to peer data. Given the lack of turnover and the information we obtained during the interview process we do not believe that staff retention is an issue at HPRS. The approach to awarding staff automatic annual salary increases is not consistent with common or best practice. HPRS does not use a performance based bonus program, which is appropriate given the structure of its investment program.

<u>Recommendation</u>

Rec#	Recommendation	Priority Level	Cost	Parties Involved
23	Document in a policy the Board's compensation philosophy, including whether or not the practice of automatic salary increases will be continued.	Medium	Low	Board, Executive Director

INTRODUCTION

The most critical policies, procedures, and practices related to the oversight of a public retirement system ensure that the boards and staffs fulfill their fiduciary responsibilities of prudence and loyalty. The prudent expert standard, which is imposed upon the fiduciaries of the HPRS,[78] is not only a common standard for public retirement systems, but is also the optimal standard. It is stricter than the prudent person rule[79] that merely requires fiduciaries to invest assets of others as they would invest their own.

The prudent expert standard says that the actions of fiduciaries will be judged by the care, skill, and diligence that a person acting in a like capacity and familiar with such matters would use under the same circumstances. Essentially this means that the contemporary best practices of other public retirement systems and relevant institutional investors are the appropriate standards. This standard of prudence is parallel to what is required by federal law[80] of those who manage assets of pension funds in the private sector.

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

SCOPE OF REVIEW

This Section of the Report is focused on the following areas related to governance policies:

I. Existing Governance Policies
   A) Investment Policy Statement
   B) Ethics Policy
   C) Training and Expense Policy
   D) Contact with Vendors During the Hiring Process Policy
   E) Purchasing Policy
   F) Membership in Organizations Policy
   G) Agents Policy[81]
   H) Management Policies and Procedures
II. Other Policies
III. Governance Manuals
IV. Policy Reviews and Compliance
V. Policies and Procedures as Required by Statute

[78] Ohio Revised Code § 5505.06
[79] Restatement of the Law, 3rd, Trusts
[80] Employee Retirement Income Security Act, 29 U.S.C. §§ 1001-1461 (1974)
[81] The portion of this policy related to the selection of investment managers is reviewed in Section 7 of this Report.

I. Existing Governance Policies

A) Investment Policy Statement

Background

An Investment Policy Statement (IPS) is one of the most important documents of a retirement system's governance framework. The purpose of the IPS is to give clear direction for investment program structure and management. It should reflect the investment goals and risk tolerance that the board has agreed upon for the fund as well as take into account the system's financial and actuarial characteristics.

In most jurisdictions, the law does not specifically require pension funds to have a written IPS; however, there are some municipalities and states, including Ohio, that do require a written IPS for public pension funds. For private sector pension funds, ERISA[82] does not require a written IPS, but the Department of Labor (DOL) strongly encourages pension fund fiduciaries to create and adopt these statements.

Having a well-crafted IPS is a best practice for all pension plans, both public and private. There is no uniform standard for the content and no absolute model to follow but clarity and coverage of key areas are important. Public retirement industry organizations have provided guidance[83] with regard to crafting an IPS commensurate with best practices.

Findings and Analysis

HPRS is required by statute[84] to set policies, objectives, or criteria for the operation of the investment program that include asset allocation targets and ranges, risk factors, asset class benchmarks, time horizons, total return objectives, and performance evaluation guidelines. HPRS has complied with this requirement by adopting Investment Objectives, Policies, and Guidelines (collectively referred to in this Report as the Investment Policy Statement or IPS), which were last revised in April 2010. While it is not common for an IPS to be required by statute, it is not a burdensome requirement for HPRS given the importance of this document.

In the chart on the following page we compare the System's IPS against a best practice checklist. We have noted with a checkmark (✓) those elements that are included. Where a given item is not already included, the IPS could be enhanced with clarification related to the specific subject. Best practice is not necessarily for a standard phrase or language to be in the document, but rather that a process or definition is clearly stated and understandable to all interested parties.

[82] Employee Retirement Income Security Act, 29 U.S.C. §§ 1001-1461 (1974)
[83] See for example, The Government Finance Officers Association (GFOA) Recommended Practice, Committee on Retirement and Benefits Administration "Investment Policy Checklist for Pension Funds" 2003 or the GFOA's "Creating an Investment Policy" 2010.
[84] Ohio Revised Code § 5505.06 (B)

Exhibit 3.1- Investment Policy Statement Subject Areas

Introduction	Included in the HPRS IPS
Reference to state law creating the plan with specific reference to investment related sections of the law	Partially included
Reference to the Board's right to have an investment committee and to set policy	Not included
Description of intended beneficiaries of the plan (e.g., the plan is created for certain employees and their beneficiaries)	Partially included
Scope (e.g., limited in application to pension fund assets or may include other assets)	Not included
Statement of Purpose and Duties	
Description of the sole or fundamental purpose of the retirement system	✓
Language describing that plan fiduciaries must act in the sole interest of members and beneficiaries and for the exclusive purpose of providing benefits	✓
Reference of the duty to incur only reasonable expenses	Not included
Investment Goals	
Preserving the actuarial soundness of the plan in order to meet benefit obligations	✓
Obtaining a long-term rate of return (one or two market cycles), net of fees, equal to or in excess of the policy benchmark	✓
Clarification of how investment risks will be managed	Partially included
Establishment of the risks that may be taken to achieve return goals	Partially included
Definition of the total fund policy benchmark	✓[85]
Identification of Roles and Responsibilities	
Board of Trustees – general and investment related duties	✓
Investment Committee – scope of authority, review and reporting requirements, etc.	Not Included
Internal staff – general and investment related duties, reporting lines, and expectations, particularly as among the Executive Director/CIO, and any other senior investment-related staff (e.g., Legal Counsel, Internal Auditor)	Not Included
Investment consultant(s) – duties, reporting lines, expectations regarding the frequency of communications, and acknowledgement of fiduciary status	Not Included
Investment managers – duties, acknowledgement of fiduciary responsibilities, and frequency of communication; could incorporate their contractual mandates	✓
Custodian bank – role as custodian or trustee, and role regarding cash management, performance calculations, etc.	Not Included
Description of other service providers' duties, such as proxy voting or securities lending[86]	Not Included

[85] The total fund benchmark is adequately described in the IPS; the appropriateness of this benchmark is discussed in Section 6 of this Report.

Asset Allocation	Included in the HPRS IPS
Acknowledgement of its importance	Not Included
Recognition of the allocation's purpose, such as to provide an optimal mix of investments to produce desired returns and meet current and future liabilities, with minimal volatility	✓
Description of frequency and methodology of asset liability modeling and allocation resetting	Not Included
Description of permissible asset classes as well as minimum, maximum, and target ranges	✓
Standards regarding diversification, including limits to a single issuer, single asset class, economic sector, or country	✓
Asset Class Guidelines and Benchmarks	
Definition of each asset class and rationale for inclusion in the portfolio	Not Included
Listing of selected benchmarks and statement of who sets them	✓
Description of any prohibited investments (e.g., short selling, margin, investments precluded by law)	✓
Overview of allowable credit risk in the portfolio (e.g., minimum credit rating for any fixed income investment as determined by a nationally recognized credit rating agency)	✓
Rebalancing Policy	
Statement of the purpose of rebalancing (i.e., to ensure that the investment program adheres to its strategic asset allocation)	Not Included
Description of the method used to rebalance (e.g., most cost effective manner, use of excess cash, index strategies as a source, or liquidation of over-funded managers)	Not Included
Description of how often the portfolio will be reviewed for rebalancing and whether a fixed threshold or proportional threshold will be used	Not Included
Monitoring and Reporting	
Statement of purpose for monitoring and reporting (i.e. to ensure compliance with the IPS and applicable law, to manage risk, and assess manager performance)	Included in the Investment Process Document[87]
Description of quarterly reporting for external investment managers; can include an outline of current strategy and investments, performance vs. benchmark, and portfolio composition relative to the asset allocation policy	Included in the Investment Process Document
Purpose and scope of annual and more frequent reporting	Included in the Investment Process Document

[86] Should vendors ever be hired in these roles, it may be beneficial to describe their responsibilities in the IPS or another governance document.
[87] The Investment Process Document includes Part I (Organize and Formalize), Part II (Manager Search, Selection and Monitoring) and Part III (Implementation). The first two sections were approved by the Board in August 2010, updates to Parts I and II and the new Part III were adopted in December of 2010.

Shareholder Activities	
Description of the proxy voting policy and how votes are cast and recorded	Not Included
Statement of the circumstances under which the board will sign on to or initiate a shareholder proposal	Not Included
Optional. Statement of how (or if) a focus list of underperforming companies will be identified and what communication the board takes to engage companies in dialogue	Not Included
Optional. Description of the process of opting in and out of shareholder class actions	Not Included
Optional. Identification of core principles of corporate governance (board independence, executive director compensation, access to the proxy, audit committee, etc.)	Not Included
Other	
Requirement to annually review IPS	✓

The introduction of the IPS addresses the fundamental investment objectives of HPRS. The section could be enhanced by specifically describing the intended beneficiaries (i.e., troopers and communication personnel) and outlining the scope of assets under management (i.e., employees savings fund, employer's accumulation fund, pension reserve fund, survivor benefits fund, income fund, and expense fund). A reference to the duty to only incur reasonable expenses might also be beneficial to emphasize prudent administration.

As is best practice, the IPS clearly outlines the investment goals of the plan. This section could be enhanced, however, by including clarification of how investment risks such as transitions within the fund are managed and what risk level is allowed (i.e., risk budgeting).[88]

The IPS addresses the distinction of responsibilities between the investment managers and the Board. The references to staff responsibility are limited to manager selection; however, in practice the staff's responsibilities for the portfolio are broader than that. The roles of the Investment Committee, investment consultant, custodian bank, and other service providers are not discussed. A cross reference to other documents that further define responsibilities may be beneficial.

The System's IPS defines permissible asset classes and minimum, maximum, and target ranges for those asset classes. The IPS also defines appropriate diversification standards for the asset classes. Rebalancing requirements and activities are not addressed, which is a significant omission from the IPS. The best investment policies designate when rebalancing is to occur, and the method by which it is to be implemented.

Proxy voting is not addressed within the IPS. Proxies are considered plan assets and as such they are to be managed prudently. Votes must be cast so as to maximize the economic value of the plan holdings. Proxy policies are designed to set boundaries for

[88] Risk budgeting is discussed in Sections 5 and 6 of this Report.

the management of proxies and other corporate actions. These policies take into consideration applicable laws, statutes, regulations, program objectives, and business plans. They also define the authority and delegation with respect to managing, casting, and reporting proxy votes. If the Board has delegated proxy voting responsibility to the investment managers, it is best to state that in the policy.

Conclusion

Overall, the System's IPS addresses many of the fundamental elements of institutional investing. As noted in the preceding chart, there are several aspects of the IPS that are commensurate with best practices. In some areas the inclusion of additional information or clarification would be of benefit and bring the IPS more in line with best practice.

Recommendation

Rec#	Recommendation	Priority Level	Cost	Parties Involved
24	Further enhance the current IPS with special attention given to those items noted in Exhibit 3.1.	High	Medium	Board, Staff, Consultant

B) Ethics Policy

Background

The purpose of an ethics policy is to define guidelines the board and staff are to use when conducting business for the system. Best practices in this area are clear – fiduciaries are to avoid conflicts of interest (actual or perceived) if possible. If avoidance is not possible, they are to disclose conflicts promptly and recuse themselves from discussing or voting on matters where conflicts exist. They are to manage conflicts to the best of their ability.

Written policies should clearly state ethical expectations. In our experience, many policies adopted by public retirement systems tend to be stricter than the policies of other industries due to the public scrutiny and fiduciary nature of boards.

Policies often contain restrictions on gifts from parties with whom the system does business. For example, some policies allow trustees and staff to accept gifts in limited amounts, while others expressly prohibit gifts in their entirety in order to avoid even the appearance of undue influence.

A best practice that highlights the importance of ethical conduct is to require annual affirmations from trustees declaring that they have reviewed, understand, and agree to comply with the ethics policy. In some policies, outside service providers (investment managers and others who serve the system) are required to affirm they have complied with the system's ethics policy. They may be asked to specifically list and value all gifts, entertainment, and meals they have given to trustees and employees over the course of a year. While this is not a widespread practice, we consider it a best practice and one that service providers have become accustomed to.

Findings and Analysis

The HPRS Ethics Policy (the Policy), adopted in August 2004, sets forth the general parameters of ethical conduct for the Trustees and employees and requires them to follow all ethical standards and disclosure requirements contained in statute.[89] The Board's Ethics Policy is submitted to the Ohio Ethics Commission for approval as well as to the Ohio Retirement Study Council for review.[90]

The Policy, among other things, requires that Trustees and employees conduct themselves in a way that avoids favoritism, bias, and the appearance of impropriety. While not required by the Policy, Trustees are provided an overview of ethics as it relates to HPRS when they join the Board, which is consistent with best practice. They also receive ethics training as part of the joint trustee orientation program required by law.[91]

By statute[92] the Board is required to ensure all employees of the Board receive training. There has not been consistent and formal ethics training provided to the HPRS staff; however, the Executive Director and CFO are in the process of developing staff training sessions based upon curriculum already established by the Ohio Ethics Commission. Also, a training session for staff and the Board is planned for the February or April 2011 Board meeting. Staff will be required to acknowledge in writing that they have read and understand all of HPRS' policies, including the Ethics Policy, after the completion of the Policies and Procedures Manual.[93]

The Policy restricts Trustees and employees from accepting anything of value from anyone doing business with the Board or System. Some public retirement systems include a broader statement which prohibits the acceptance of anything of value from potential service providers of the system. The acceptance of gifts has been an issue that has resulted in reputational damage for many other public retirement systems, and therefore, it is best to clearly articulate what is and is not acceptable.

The Policy does not specifically require the disclosure of conflicts of interest during Board meetings, nor does it prohibit Trustees from participating in decisions/actions where conflicts exist. It is best for any such disclosures to be made in meetings, and recorded in minutes and for the person with the conflict to leave the meeting during discussions and voting.

The Policy requires Trustees and employees to file an annual financial disclosure statement with the Ethics Commission every year, consistent with the statutory requirement.[94] As of the production date of this Report, staff has reported that HPRS has not received final filings of all of the Trustees' disclosure statements for 2010. It is important for Trustees to meet the disclosure requirements and therefore, it would be

[89] As described in Ohio Revised Code Chapters 102 and 2921
[90] Ohio Revised Code § 5505.063
[91] Ohio Revised Code § 171.50
[92] Ohio Revised Code § 5505.063
[93] Staff is currently compiling all policies and procedures into a manual.
[94] Ohio Revised Code Chapter 102.02

best if a designated individual on staff tracks whether or not the appropriate forms have been filed and notifies those individuals who have not submitted them.

Investment managers and other service providers are asked to submit a disclosure form related to anything of value they may have given to employees during the prior audit year,[95] but they are not required to disclose whether they have given anything of value to Trustees. Such a practice including both employees and Trustees serves as a double check for ethical compliance and is a best practice. It is best for the Ethics Policy to describe this requirement, which it does not do currently.

The Policy, as required by statute, must be reviewed biennially. Any changes must be approved by the Ethics Commission and reviewed by the Ohio Retirement Study Council. It does not appear that the Policy has been reviewed since 2004; however, it is scheduled for review by June 2011.

The Policy states that if Trustees or employees do not abide by the Policy, discipline, which may include dismissal, may result. The Ohio Revised Code specifies the process by which a Trustee may be removed from the Board.

Conclusion

HPRS is in line with best practice by developing a customized Ethics Policy, and by providing ethics training to the Trustees. Staff training on ethics has not been consistently offered, but developing a training program is a current initiative of senior management. The HPRS practice of asking vendors for disclosure regarding gifts provided to employees is a good practice. Adjusting the requirement to include Trustees would bring the current practice fully into line with best practice. Establishing protocols for documenting and disclosing conflicts of interest during Board meetings would enhance transparency.

Recommendations

Rec#	Recommendation	Priority Level	Cost	Parties Involved
25	Establish annual ethics training for staff.	High	Medium	Staff, Ethics Commission
26	Enhance the Ethics Policy to address those items identified in this Report.[96]	Medium	Low	Board, Staff

[95] Any vendor that provides over $7,500 in services is asked to provide information directly to the external auditor.
[96] Required vendor disclosures, Trustee and staff gift disclosures, protocols for disclosing conflicts of interest during Board meetings, and compliance mechanisms, and frequency of Policy review.

C) Training and Expense Policy

Background

The purpose of a travel and expense policy is to promote accountability and transparency and establish guidelines for when and how expenses are to be paid. It is common practice for public retirement systems to address travel and expenses in a written policy. A clearly defined and well-reasoned policy serves as a protection for the trustees and staff, as well as the system. While such policies have long existed in the public retirement arena, recent news articles regarding board and staff travel and expenses have caused many to revisit their existing policies and adopt stricter requirements.

The travel policies of public retirement systems must support the training needs of the board. Training includes initial orientation for new trustees as well as on-going education. Thorough orientation is critical since trustees of public retirement systems assume full fiduciary status as soon as they are elected, appointed, or hold a designated ex officio public position. The common law governing trusts does not recognize a “sliding scale” of fiduciary responsibility. New trustees are not allowed more latitude for mistakes or poor judgment than more experienced trustees. Best practices among public retirement systems now include much more intensive new trustee orientations than ever before.

The best education policies set forth recommendations for certain educational sessions, a list of in-house training programs on a variety of topics, an evaluation process for board input on training, and materials for self-study. We believe that annual training on fiduciary responsibility greatly benefits most public retirement boards and prevents inadvertent breaches by those who are unfamiliar with the legal requirements.

Findings and Analysis

The HPRS Training and Expense Policy, which applies to both the Board and staff, was established in 1985 and was most recently revised by Board action in November 2005. The Policy specifies requirements for expense reimbursements, orientation, and on-going education.

Expenses

The Policy references Ohio Revised Code § 5505.07 (B) which states that expenses of the System will be paid from the System’s assets, and § 5505.07 (A) which requires the submission of itemized expenses. The Policy states clearly that expenses necessary for the Board and staff to meet their fiduciary responsibilities will be paid by HPRS, which is a best practice. The Policy also highlights the importance of efficiency and cost effectiveness, which speaks to good stewardship of the fund’s assets.

The Policy specifies, consistent with the Ethics Policy, that Trustees and staff are not allowed to accept payment or reimbursement for travel expenses, including lodging, food, and beverages, from any source other than the System's expense fund. This is a best practice which serves to prevent conflicts of interest or the appearance of conflicts of interest. All out-of-state travel[97] requires prior approval by the Board, which is a reasonable practice.

The Chair is responsible for approving expense reimbursements for the Trustees and the Executive Director, which is an appropriate practice. The Board also receives a quarterly report on expenses incurred and reviews staff's training expenses. We view the approval of staff's expenses as an executive director's responsibility, which the HPRS Executive Director has and currently performs. Oftentimes, the audit committees of public retirement systems also have responsibility for ensuring compliance with the expense policies. To the extent that the external auditor completes audit testing on expense reports, the Audit Committee also ensures compliance with expense policies.

Orientation

The Policy requires that new Trustees receive, prior to their first meeting, a Trustee's Manual and other reports and information to help them become acquainted with their Trustee position. The Trustee's Manual includes policies, procedures, relevant statutes, and administrative rules. Trustees, per the Policy, are also to meet with the Executive Director to be given an overview of the System. The HPRS' orientation practices are better than most.[98]

On-Going Education

The Policy specifies that training opportunities for Trustees will be determined by current circumstances, which is a best practice. This ensures flexibility and customization. Trustees are limited to two out-of-state training sessions per year, which is a reasonable limitation especially given the fact that the Board may approve additional travel for special circumstances.

A good feature of the Policy is that training during the first year of a Trustee's service is emphasized so that Trustees receive valuable information early in their tenure that will enable them to be good decision makers.

The Policy does not specify whether Trustees are required to receive annual training on fiduciary responsibility, which would be a best practice because the fiduciary standard is the highest standard imposed by law and is fairly complicated. Appropriate fiduciary training covers the following topics:

- Understanding who is a fiduciary
- The common law of trusts
- The duties of prudence and loyalty
- The duty to follow plan documents and statutes
- Identifying and managing conflicts of interest
- Delegation of duties and due diligence required
- Monitoring and oversight of delegated duties
- Co-fiduciary liability
- Examples of fiduciary breaches at other public retirement systems

[97] Except in the case of emergency, at which times the Board Chair may approve out-of-state travel.
[98] The orientation received by the HPRS Board is discussed in greater detail in Section 1 of this Report.

These sessions are often several hours in length and can involve Attorney General's representatives, consultants, and outside fiduciary counsels for the systems. Fiduciary responsibility training is part of the joint trustee orientation program, which most of the HPRS Board members attended in 2004 and 2007. The next joint trustee orientation program is scheduled for 2011.

Many trustees of public retirement systems find it helpful to have access to industry subscriptions or periodicals (e.g., the Wall Street Journal, Pension & Investments, Plan Sponsor). It may be beneficial to identify in the Policy whether any subscriptions will be available to the Trustees and paid for by the System.

In accordance with the Policy, a travel file is maintained by the Executive Director to record the training, expenses incurred, and evaluation reports of any educational sessions attended. The evaluation reports are useful in determining which educational opportunities are worthwhile and represent a good value.

The Policy assigns responsibility to the Executive Director for identifying appropriate educational opportunities for Trustees, which is a reasonable delegation. For-profit conference organizers often have a disjointed lineup of marketing representatives at their conferences and do not give the same thoughtful attention to structuring programs as do non-profit industry groups such as the National Association of Public Pension Attorneys (NAPPA), the Association of Public Pension Fund Auditors (APPFA), National Conference on Public Employee Retirement Systems (NCPERS), the National Association of State Retirement Administrators (NASRA). Other organizations that offer high quality trustee and staff training opportunities include, the Institute for Fiduciary Education, the International Foundation of Employee Benefit Plans (IFEBP) and the Public Pension Financial Forum (P2F2). This is not an all inclusive listing. Consideration of the quality and cost of educational opportunities is important.

Some public retirement systems require trustees to acquire a minimum number of continuing education hours every year. Others have a minimum set in statute, which is less common. Proponents of establishing minimum requirements believe it will help to ensure that trustees are knowledgeable about relevant issues and may make it easier to "enforce" policy compliance or issue sanctions for non-compliance. Others argue that it is difficult to ascertain each trustee's knowledge level, which can be impacted by a host of other factors besides attendance at a certain number of conferences or educational sessions. While there is no proven link between a minimum number of education hours attended, and the ability to make effective, sound decisions, most would argue that on-going education is vital to meeting the fiduciary duty of prudence.

<u>Conclusion</u>

HPRS is in conformance with best practice by having a Training and Expense Policy. The Policy covers many important elements, but could be enhanced with minor adjustments. Also see our earlier recommendation regarding new Trustee orientation.[99]

[99] Recommendation #10

Recommendations

Rec#	Recommendation	Priority Level	Cost	Parties Involved
27	Expand the Training and Expense Policy to require annual fiduciary training for Trustees and to specify the subscriptions for which the System will pay.	Medium	Low	Board, Staff
28	Modify the Training and Expense Policy to include Audit Committee responsibility for verifying expense reimbursements are made in accordance with the Policy.	Low	Low	Board, Staff

D) Contact with Vendors During the Hiring Process Policy

Background

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

These policies have become increasingly common over the last several years as a heightened sensitivity to transparency and ethics has spread across the industry. Some organizations include quiet period requirements in their investment policy or in their communications policy; others maintain them as a stand alone policy, or state them in the RFPs they issue.

Findings and Analysis

The HPRS Contact with Vendors During the Hiring Process Policy was adopted by the Board in October 2000. The Policy requires that Trustees and staff refrain from one-on-one contact with vendors who are or may be part of the hiring process, which is consistent with best practice. The Policy does not make allowances for one-on-one contact between the staff person responsible for the search activity and staff in general. It may be beneficial to clarify that a designated staff person is allowed to contact service providers in order to conduct the search.

The Policy also clearly defines the quiet period as being from when a search is approved to the approval of a contract with a specific vendor. Clarity is important so inadvertent violations of the Policy do not occur. The Policy also requires that vendors be notified of the policy requirements, which is a good way to prevent service providers from unintentionally violating the Board's policy.

Conclusion

HPRS is meeting best practice by establishing a policy that limits contact between potential service providers and the Board and staff during a search process.

Recommendation

Rec#	Recommendation	Priority Level	Cost	Parties Involved
29	Modify the Contact with Vendors During the Hiring Process Policy regarding allowable contact between a designated staff person and service providers during a search.	Low	Low	Board, Staff

E) Purchasing Policy

Background

Purchasing or procurement policies often set out the process by which vendors will be selected (competitive bidding vs. sole sourced) as well as the purchasing discretion of executive directors. Some public retirement systems must follow the procurement processes used by state agencies. At other systems the executive directors are given some level of discretionary authority to purchase goods and services and execute contracts without specific board approval. Above a given level, the board, or a committee of the board, typically must authorize the purchase or procurement.

Findings and Analysis

The HPRS Purchasing Policy was approved by the Administration Committee and the Board in 2010. The Policy specifies that any contract that is expected to be greater than $5,000 must be competitively bid. It is common practice in the public sector to competitively bid purchasing. In certain circumstances, a sole sourced contract may be in the best interest of the System. The dollar limit of $5,000 seems unduly low for a retirement system the size of HPRS. A limit of $10,000 to $20,000 may be more reasonable. The Policy does not specify whether the Executive Director has authority to enter into a contract below a set amount.

The Policy does not specify whether it applies to the selection of investment managers and investment service providers. If it were interpreted to apply to them, then all investment manager contracts would have to be competitively re-bid every five years. While this is a fairly common practice in contracts with actuaries, investment consultants, and custodians, it is not a common or good practice to automatically re-bid investment managers every five years without a valid reason for doing so. Investment managers should be re-bid when specific issues regarding performance, risk, or organizational changes are identified as concerns.

Conclusion

The HPRS Purchasing Policy contains the Board's expectations about how goods and services will be procured and communicates the System's practices to potential vendors. The requirement to competitively bid low-dollar amount contracts appears to be overly restrictive. Sole-sourcing contracts may be appropriate if the services are unique and only one provider has the true capabilities to perform the services. The best policies allow for such flexibility.

The Policy does not authorize the Executive Director to enter into contracts of a set amount, a practice which many other public retirement systems find beneficial.

Finally, we do not believe contracts with investment managers should be automatically re-bid every five years, which the Policy appears to require.

Recommendations:

Rec#	Recommendation	Priority Level	Cost	Parties Involved
30	Consider modifying the Purchasing Policy to increase the dollar limit for sole-sourced contracts.	Low	Low	Board, Staff
31	Consider whether the Purchasing Policy should allow for the Executive Director to enter into contracts of a maximum amount without the approval of the Board.	Low	Low	Board, Staff
32	Specify within the Purchasing Policy that the automatic five-year re-bidding requirement does not apply to investment managers.	Medium	Low	Board, Staff

F) Memberships in Organizations Policy

Background

Public retirement systems are frequently members of many industry organizations. Such memberships can present valuable networking and educational opportunities, as well as research, surveys, and information on common and best practices of peers. Memberships usually represent a cost to the system, and not all memberships are of equal (or any) value. The decision regarding memberships must be made prudently and with knowledge of how it will affect the budget. Having a dedicated policy specific to this issue is somewhat unusual, but is not detrimental and could be helpful.

Findings and Analysis

HPRS adopted the Membership in Organizations Policy to establish the rationale for joining industry organizations and to establish the process by which memberships will be considered. There are many industry organizations in which membership can be beneficial. These include, but are not limited to, the National Association of Public Pension Attorneys (NAPPA), the Association of Public Pension Fund Auditors (APPFA), National Conference on Public Employee Retirement Systems (NCPERS), the National Association of State Retirement Administrators (NASRA), the Institute for Fiduciary Education, the International Foundation of Employee Benefit Plans (IFEBP), and the Public Pension Financial Forum (P2F2). The Policy ensures that a process is in place to estimate annual cost of memberships and include them in the operating budget.

Conclusion

While the Ohio law does not specifically require a policy regarding memberships in organizations, it does require the Board to annually estimate the annual expenses of the fund. Memberships in industry organizations will have an impact on the budget so the current Policy of HPRS is reasonable.

Recommendations

None

G) Agents Policy

Background

Aside from investment managers, brokers are another group of “agents” who perform necessary functions for institutional investors, including pension funds. Brokerage commissions are a plan expense and, therefore, a board is responsible for monitoring them and ensuring they are reasonable. Investment managers should be required to use those brokers who can achieve “best execution” (best trade based on share price, commission, available research) on all trades. It is best for policies covering brokers (agents) to establish a process to monitor and report on brokerage commissions and practices.

Findings and Analysis

HPRS has adopted the Selection of Investment Managers and Agents Policy in accordance with the statute.[100] The Policy was most recently reviewed and updated in December 2010. The Policy addresses the selection process of brokers who buy and sell securities on behalf of the System. The Policy specifies the criteria by which agents will be selected, which includes commission costs on a per share basis and in the aggregate, trading execution efficiency, execution speed, and settlement capabilities. The Policy also specifies that HPRS’ brokerage program is based on execution-only, and thus brokers are not evaluated on the nature and value of their research. This is a sound practice.

The statute[101] also requires HPRS to report information on Ohio broker utilization to the ORSC annually. HPRS is in compliance with this requirement. The report, last submitted in September 2010, is the responsibility of the HPRS Executive Director.

[100] Ohio Revised Code § 5505.068 (C). The investment manager selection portion of this policy is reviewed in Section 7 of this Report.
[101] Ohio Revised Code § 5506.068 (E)

The Policy requires that a third party will periodically evaluate each broker's execution based on the stated criteria. Most recently, Global Trading Analytics was hired to review trade execution. A review of Global Trading Analytic's findings and the HPRS processes related to reviewing trade execution is included in Section 8 of this Report. It is a best practice to periodically complete an independent trade-execution analysis.

The Policy also specifies that equal consideration will be given to minority and woman owned firms, which is a common practice for many public retirement systems and corresponds to HPRS' statutory requirement.[102] While it is common to have this type of policy or statutory requirement, hiring outside service providers should never be done in a way that violates fiduciary duty, which calls for the best interest of the fund, members, and beneficiaries to be paramount in any decisions.

Conclusion

HPRS has met its statutory requirement by adopting a policy addressing the selection of brokers. Even when a statute does not require such a policy, having one is a best practice. The agent selection criteria are in alignment with best practice.

HPRS is in compliance with the statute that requires annual reporting of Ohio broker utilization to the ORSC

Furthermore, HPRS is acting prudently by engaging a well-qualified firm to analyze its trade execution.

Recommendations

None

H) Management Policies and Procedures

Background

Beyond a board's governance policies, it is important for an organization to establish, periodically review, and update management policies that guide the operations of the system. In a public retirement system, it is the executive director's responsibility to ensure such policies are in place, that they reflect common or best practice, and that they are followed by the staff. Having internal management policies helps to institutionalize good practices and facilitates a common understanding of what is expected.

Findings & Analysis

HPRS is in the process of creating a "Policies & Procedures Manual" (the Manual). The Manual is a compilation of staff policies and procedures. Board policies that apply to the staff are included in the Manual, too. The procedures cover four areas, including 1) Organizational, 2) Benefits, 3) Security, and 4) Accounting.

[102] Ohio Revised Code § 5506.06 (B)

It is anticipated that when the Manual is complete the employees will sign an acknowledgement that they have read, understand, and agree to abide by the provisions outlined in the Manual, which is a good practice.

Some of the management policies are approved by the Board (Use of HPRS Equipment Policy, Sexual Harassment Policy, Performance Evaluation Policy) which is not a bad practice but probably not necessary. In most well-run systems it is not necessary for a board to approve management's organizational policies and procedures.

Conclusion

HPRS has undertaken the large task of documenting and compiling the management policies and procedures of the organization into one manual. This is a good practice and will serve the organization well. The HPRS Board should feel comfortable assigning the Executive Director responsibility for management policies, while retaining the right to oversee actions of the Executive Director in this regard.

Recommendations

None

II. Other Policies

<u>Background</u>

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

- Audit
- Legislative
- Funding
- Communication
- Customer service
- Board self-evaluation
- Strategic planning
- Executive director evaluation[103]
- Whistleblower
- Placement agent
- Outside business activities

A brief description of the purpose and content of each policy can be found on the following pages.

Audit

Regardless of whether a public retirement system has an audit committee of the board, an audit policy can be beneficial. The purpose of an audit policy is to document the board's approach to risk management and to see that essential audit functions are clearly defined and assigned to internal staff, external auditors or a combination of both. It helps ensure that assessments are performed on a reasonable, planned frequency to protect the system from risks. Ideally, the audit policy should set forth procedures and processes that are in place to identify, manage, and control the relevant risks.

Some audit policies address:

- Board/staff financial disclosures, expense reimbursements, conflicts of interest, and ethics compliance
- Compliance with state and federal statutes and governing codes
- Fees and expenses of investment managers and other outside service providers
- Contract compliance with all service providers
- Benefits overpayments/underpayments, and eligibility for survivor or disability benefits
- Employer and employee contributions, including purchases of service credit
- Data supplied from the employers on salary, work schedule, and eligible compensation
- Data supplied by the retirement system to the actuary for valuations and experience studies
- Investment performance calculations and reports for the Board and staff
- Responsibility for the contents of the Comprehensive Annual Financial Report (CAFR)
- Efficiency and cost of staff functions

[103] An executive director evaluation policy is discussed in Section 2 of this Report and is not re-addressed here.

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

Legislative

The purpose of a legislative policy is to outline how and when the board will determine its legislative agenda and who is responsible for analyzing federal or state legislation. A legislative policy addresses when it is appropriate for the system to sponsor or support legislation or regulations, when it will adopt a neutral position or no position, and when it should oppose legislation or regulations. It may also establish a legislative committee, if the board desires, and define the information required by the board to implement a consistent approach for evaluating legislative proposals.

Funding

The purpose of a funding policy is to identify the adequate funding level of the retirement system, if this is not already stated in statutes. A funding policy also identifies how a target funding level will be achieved and maintained. It requires the board to evaluate the funding situation and determine if action is needed when the funding ratio is outside the predetermined range set forth in the policy. The HPRS Board has a 30-year solvency plan, which addresses the type of issues covered in a funding policy.

Communication

The purpose of a communication policy is to promote effective dialogue (verbal or written) between the boards and the systems' memberships, staffs, elected officials, external stakeholders, and the general public. The goal of a communication policy is to ensure that communications are efficient, timely, consistent, and accurately reflect the actions and positions of the board and system. Communications policies may also identify the official spokesperson for the system. Some detailed policies set forth how and in what format regular communications are to be made. Meeting minutes, an important method of communication between a board and the membership or outside parties, are discussed in Section 1 of this Report.[104]

Customer Service

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

[104] Also see recommendations #8 and #9.

and other beneficiaries.

Board Self-Evaluation

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

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

Strategic Planning Policy

Many boards and staffs recognize that the most efficient and orderly way to fulfill the mission of the organization is through strategic planning. Small and large organizations alike can benefit from strategic planning. It need not be a time consuming or complex process. The purpose of a strategic planning policy is to encourage long range thinking and planning that will guide the shorter term (annual) business plans of the organization. In adopting such a policy, the board states its intention to engage with staff in a regular, systematic process to assess the strengths and weaknesses of the system, define outside opportunities and threats, evaluate new ways to fulfill the mission of the organization, focus resources on high value activities, and establish the general parameters within which decisions will be made.

Whistleblower Policy

While a whistleblower policy is not common among public retirement systems, it is a good policy to have and, by establishing one, sends a clear message to internal and external stakeholders about the culture of the organization. Such a policy outlines the methods by which concerns can be reported and the appropriate response by the Board and/or management can be made. HPRS has a co-fiduciary liability provision in statute; a whistleblower policy may be helpful in supporting and amplifying that statutory provision.

Placement Agent Policy

Recently, public retirement systems have suffered a series of scandals related to placement agents. Systems in New York, California, and Illinois made news when their placement agent utilization called into question their business practices.[105] In response to widespread concern, some states have enacted legislation regulating the use of placement agents.[106] Only a few public retirement systems have adopted policies completely banning any investment where placement agent is used. Most systems have adopted placement agent policies that require disclosure of certain prescribed information, such as compensation that has been paid by the system's investment managers, directly or indirectly, to placement agents, or any campaign

[105] For background see Bloomberg article "Placement Agents Likely to 'Go Away,' Illinois' Atwood Says". By Gillian Wee, May 19, 2009.
[106] Examples include California, New Mexico, and Illinois.

contributions, gifts, or other items of value that have been made or given to members of the board, staff, or consultant by placement agents.

Outside Business Activities

Many senior level professionals working for public retirement systems are invited or have a desire to participate in outside business activities, whether on a paid or unpaid basis. Such activities could include serving on non-profit or for profit boards, teaching, or engaging in consulting activities for service organizations. In most instances, such activities can not only be personally rewarding, but also offer professional enrichment. These outside activities could be problematic, however, if the senior professionals use their positions at the systems to solicit personal business. Such activities may also cause them to lose focus on their primary responsibilities to the organization or face un-resolvable conflicts of interest.

It is common for employees of corporations to be required to receive approval from management regarding outside professional activities. It would be reasonable to apply this same concept to public retirement systems, whereby the executive director would be required to notify the board of any such outside activities he or she participates in, and other staff members would be required to notify the executive director of their activities. Currently, the HPRS does not have such a policy in place.

Findings and Analysis

It is our understanding that currently HPRS does not have the policies described above. We acknowledge, however, that some of the activities or practices referred to in the descriptions of the policies are taking place at the HPRS. We find value in having good governance practices set forth in written policies and formally incorporating them into the System's routine business practices so that they are sustained despite turnover in the Board and staff.

Conclusion

We conclude that HPRS has many good policies in place and generally follows sound business practices in the areas we reviewed. HPRS may benefit, as other public retirement systems have, from a discussion of whether the above listed policies would enhance the governance or operations of the System.

Recommendation

Rec#	Recommendation	Priority Level	Cost	Parties Involved
33	Discuss and consider adopting additional governance policies to guide the System over the long term.[107]	Medium	Low	Board, Staff

[107] Additional policies could include audit, legislative, funding, communication, customer service, board self-evaluation, strategic planning, executive director evaluation, whistleblower, placement agent, and outside activities.

II. Governance Manual

Background

Many systems assemble their board policies and relevant statutes, regulations, and other important material into a governance manual in order to create one centralized place where pertinent information can be found. In general, the purpose of a governance manual is to set forth the expectations and limitations a board has established. It codifies the way things work so there is continuity when trustees change. It describes the structure, manner, and process by which a board exercises its authority and control and helps boards meet their fiduciary responsibilities.

Governance manuals also serve as an orientation tool as well as an ongoing reference for the trustees. The best governance manuals assist a board in maintaining an appropriate policy level viewpoint of the system by defining roles and responsibilities of the board, board officers, staff, and consultants. Governance manuals document delegations the boards have made to staff and others and outline how on-going monitoring of delegated duties is to be performed.

Findings and Analysis

HPRS does not have a governance manual. A Policies and Procedures Manual is in the process of being assembled by the HPRS staff, which includes some of the policies that would be in a governance manual. The Policies and Procedures Manual includes all the organization’s policies, including those approved by the Board and those only adopted by staff. We have found it best to have separate and distinct manuals for board governance policies and staff management policies and procedures. The current HPRS Trustees Manual could be expanded into a governance manual. We have included a sample table of contents for a governance manual in the Appendix of this Report.

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

Conclusion

We conclude that HPRS has a number of policies that conform with best practice and is in the process of compiling them into a staff manual. Combining board-level governance policies and operational policies in the same manual might make it more difficult for Trustees to use. Establishing a comprehensive board governance manual and a separate manual for operational procedures would be consistent with best practice.

Recommendations

Rec#	Recommendation	Priority Level	Cost	Parties Involved
34	Consider creating a board governance manual.	Medium	Low	Board, Staff
35	Consider making major policies available on the HPRS website.	Low	Low	Board, Staff

III. Policy Reviews and Compliance

Background

It is best practice for public retirement systems to systematically review the policies that have been adopted and update them to reflect evolving best practices or repeal them if they are no longer necessary. Routine reviews also ensure that fiduciaries and staff have a complete and uniform understanding of the policies that have been adopted and their requirements.

Policies protect the system only if they are followed. For this reason policy compliance is also important. Non-compliance may expose the system and its fiduciaries to criticism and/or to liability for breach of fiduciary responsibility. Furthermore, policy breaches may distract a board and staff from the system's core business.

To adequately address compliance, four things are important. First, it is best if compliance "mechanisms" are established and practical to use. Second, it is necessary that both board and staff understand the compliance mechanisms. Third, it is important that a committee, board officer, or a staff member be assigned responsibility for ongoing monitoring of policy compliance. Fourth, it is wise to impose penalties, sanctions, or consequences for non-compliance.

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

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

Findings and Analysis

HPRS staff is in the process of cataloging and reviewing the policies and procedures that are in place. HPRS, like many public retirement systems, has not documented its policy compliance mechanisms or the Board's role in policy compliance. It is understandable that policy compliance is not a top priority when a system is functioning well. Unfortunately, from experience we know that when serious transgressions occur (i.e., limits are exceed, or rules are violated) it is usually too late to engage in a meaningful dialogue about who has the responsibility for monitoring compliance.

Conclusion

After the comprehensive review of policies is complete, it would be beneficial for HPRS to have a formal schedule to periodically review all policies. Policies need not be reviewed at the same time; the reviews can be staggered. We believe that HPRS would benefit from “rounding out” its governance policies to include guidance about policy compliance responsibilities.

Recommendation

Rec#	Recommendation	Priority Level	Cost	Parties Involved
36	Establish a review requirement in all policies and maintain a review schedule, compliance mechanisms, and assign responsibility for oversight.	Medium	Low	Board, Staff

IV. Policies and Procedures as Required by Statute

Background

Public retirement systems are often required by statute to establish specified policies. Sometimes statutes set the parameters within which the system must operate. When this is the case, it is critically important for public retirement systems to have strong systems of controls in place to prevent violations of the applicable laws and policies. A violation may give rise to fiduciary liability.

Findings and Analysis

The following table specifies many of the policies and procedures that HPRS is required to have, per Chapter 5505 of the Ohio Revise Code, and whether such a policy or procedure has been adopted. This list should not be used to assess official compliance as it does not include any policies or processes that may be required by other sections of Ohio law.

Exhibit 3.2 - Policy and Procedure Adoption Compliance

Code Section	Policy or Procedure Required	Adopted by HPRS
5505.047 (A)	Election Procedures/Rules	Yes (contained within the Ohio Revised Code)
5505.05 (D)	Reimbursement of Travel Expenses Policy	Yes
5505.06 (B)	Investment Policy	Yes
5505.06 (B)	Selection of Investment Managers Policy	Yes
5505.062 (A)	Travel Policy	Yes
5505.062 (B)	Employee Bonus Policy[108]	N/A
5505.063	Ethics Policy and Ethics Training	Yes, partially[109]
5505.063	Procedure for Filing a Complaint	Board uses the Ohio Ethics Commission's Procedure
5505.065	Policy to Prevent Misuse of Material, Non-Public Information	Yes[110]
5505.065 (C)	CIO Policy to Monitor/Evaluate Effectiveness of Securities Transactions	Yes[111]
5505.068 (C)	Policy to Select Agents to Execute Securities Transactions	Yes
5505.068 (D)	Ohio Qualified Agent Utilization Policies	Yes

[108] An employee bonus policy would be required should bonuses ever become part of the compensation package offered by HPRS. Currently, bonuses are not paid to employees.
[109] As previously discussed, Trustees receive training on ethics. Staff training is in development.
[110] This policy has been incorporated into the HPRS Policies and Procedures manual but has not yet been approved by the Board. It is expected that the Policy will be reviewed by the Investment Committee at an upcoming meeting, and subsequently approved by the Board.
[111] This policy has been incorporated into the HPRS Policies and Procedures manual but has not yet been approved by the Board. It is expected that the Policy will be reviewed by the Investment Committee at an upcoming meeting, and subsequently approved by the Board.

The statute requires that HPRS have a CIO policy for monitoring and evaluating effectiveness of securities transactions and preventing misuse of material, non-public information. During the course of this review, HPRS developed a CIO policy for monitoring securities transactions that contains a statement regarding the misuse of material, non-public information. Prior to this review HPRS had not adopted this policy due to the fact that HPRS' assets are externally managed. Having this policy in place, however, is not dependent on whether assets are managed internally or externally. The statute requires it regardless of how assets are managed.

Conclusion

HPRS has complied with the law with the recent adoption of a Monitoring Securities Transactions Policy. As the Board does not maintain its own procedure for filing a complaint, it would be best to reference the Ohio Ethics Commission's published procedure within the Ethics Policy.

Recommendation

Rec#	Recommendation	Priority Level	Cost	Parties Involved
37	Reference within the Ethics Policy the Ohio Ethics Commission's procedure for filing a complaint.	High	Low	Board, Staff

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INTRODUCTION

For a public retirement board to be effective in its governance and oversight of a sophisticated institutional portfolio, the board must have the ability to seek and evaluate expert advice on a wide range of topics (portfolio structure, characteristics of various asset classes, shareholder issues, trading efficiency, audits, etc.). In small systems with few investment professionals on staff, the boards rely greatly upon outside consultants. For larger systems the boards primarily rely upon the in-house experts (staff) and supplement advice from them with advice from consultants.

The Investment Advisers Act of 1940 specifies that those that render investment advice for a fee serve in a fiduciary role. Under the Act, an investment adviser means "any person who, for compensation, engages in the business of advising others, either directly or through publications or writings, as to the value of securities or as to the advisability of investing in, purchasing, or selling securities, or who, for compensation and as part of a regular business, issues or promulgates analyses or reports concerning securities."[112]

For a board's reliance upon the advice of others to be prudent, the board must have reasonable assurance that their consultants are well-equipped and have the knowledge and experience to render independent judgment. In selecting consultants, fiduciaries should exercise prudence in the following ways:

- Use care in selecting consultants to be certain that they are truly proficient in the type of work delegated to them
- Check for conflicts of interest that could taint advice from the consultants
- Set expectations and make clear delegations to the consultants
- Monitor the performance of the consultants
- Evaluate the advice that is given to them by consultants

It is common practice for investment consultants to be selected through a competitive process using a Request for Proposal (RFP). Some turnover in consulting relationships may be beneficial, but frequent turnover is disruptive. Many plans have long term relationships with consultants who serve them well. The important consideration is whether the consulting firms and the actual consulting team keep pace with the needs of the plan as its assets grow and its strategies become more complex.

SCOPE OF REVIEW

This Section of the Report is focused on the following areas regarding the investment consultant:

I. Qualifications and Scope of Work
II. Performance Reports
III. Performance Calculation

[112] Investment Advisers Act of 1940 15 U.S.C. § 202 (a) (11)

I. Qualifications and Scope of Work

Background

Overseeing an institutional investment program is more complex and challenging than ever as a result of a proliferation of new investment managers, strategies, and financial instruments. Many institutions have retained investment consulting firms to assist in the oversight function.

The consultant serves as a resource of specialized knowledge that the client can access when making investment decisions. Through its ongoing research, a consulting firm can help clients stay abreast of trends in institutional investing, technical developments in the field, and the increasingly varied types of investment management approaches. Leading consulting firms have the ability to take the complexities of investing and distill them into clear and concise reports that aid decision making. Consulting firms that have no financial ties or affiliations with investment managers are best positioned to render unbiased advice on investment issues.

When public retirement boards delegate duties to consultants, the delegations are most often made in contracts that contain the scope of work and fees for services. The terms of the contracts vary to some degree but best practices are for contracts to impose fiduciary standards on consultants to the extent of the services they provide, and give the retirement systems quick termination rights without cause.

Findings and Analysis

For plans the size and complexity of HPRS ($649 million[113]) certain minimum qualifications ought to be met by any investment consulting firm the System hires. Those minimums should include:

- At least 5 years of experience as a firm consulting to plans of similar size and type
- At least 5 years of experience for the lead consultant performing substantially similar services for institutional investors
- No conflicts of interest
- At least $5,000,000 of professional liability insurance
- Acknowledgement that they will be a fiduciary to the plan

Beyond the minimum qualifications, we believe it is best for the lead consultant(s) to have upward of seven years of solid investment experience along with very strong references from other institutional clients. Preferably the lead person would have a relevant educational background, including a college degree and possibly an MBA, CFA,[114] and/or CAIA.[115] The firm should also have depth in the consulting ranks so that if the lead consultant is unavailable or leaves the firm, another equally qualified consultant could take over the account without much delay. Having an adequate number of competent investment analysts to do research, meet with investment managers, perform ongoing manager monitoring,

[113] Current total fund asset value based on 6/30/2010 Hartland performance report.
[114] Chartered Financial Analyst
[115] Chartered Alternative Investment Analyst

deliver customer service, calculate performance calculations, and prepare quarterly reports is also important.

Lastly, it is critically important that the firm has comprehensive databases and a thorough process for evaluating investment managers and custodian banks.

Firm Experience and Conflicts of Interest

HPRS retained Hartland & Co. ("Hartland" or "the consultant") in 2006 for general investment consulting services. Hartland is an investment consulting firm, based in Cleveland, Ohio, that has been providing investment consulting services since 1989. Hartland has 25 employees, including 13 consultants/analysts[116] and 6 performance analysts. Of these, 5 are CFA charterholders. An additional 6 employees in information technology, administration, marketing, and compliance and operations support the investment professionals.

Hartland has 60 clients, and advises on approximately $8 billion in assets. The firm works with defined benefit plans, defined contribution plans, endowments and foundations, and other plan types. Defined benefit plans represent approximately one-third of the firm's assets under advisement. HPRS is the firm's only public retirement system client and is Hartland's largest portfolio. Nearly half of Hartland's clients have assets of $50 million or less, and approximately one-third have assets between $51 and $250 million. Hartland's average defined benefit client plan size is $217 million. These statistics indicate that HPRS is an outlier in terms of size and type from Hartland's other clients.

Public retirement systems operate in a unique environment where investment parameters are set by statute, long term time horizons for investing are not often understood by the plan sponsors, open meetings and records requirements might preclude certain investments, and a sensitivity to volatility in returns might not be shared by other institutional investors. As such, having a consultant with public fund expertise can be beneficial. The duty of prudence requires knowledge of what peers are doing. Peers are defined as others in similar circumstances with like aims and goals. Having no other public funds as clients may introduce a question about how well versed an investment consultant is in the practices of peers. On the other hand, public funds and corporate fund portfolios, and even endowment and foundation portfolios, share many characteristics. All of these portfolios require an assessment of risk and return, thorough manager selection processes, and adequate reporting. An investment consultant's ability to help an organization produce acceptable risk adjusted returns may be just as important as their knowledge of other public systems.

Hartland is an employee owned firm that maintains a conflicts of interest policy which states, among other things, that it will operate as an independent investment consulting firm and will not accept revenue from investment managers, brokers, actuaries or other related-third party organizations. Hartland's conflicts of interest policy also prohibits its employees from accepting payment for travel or lodging, or receiving any gifts/favors aggregating more than $50 from investment managers or their clients' other service providers or potential service providers. These are all good features that serve to mitigate actual or perceived conflicts of interest.

[116] Inclusive of the Firm's CEO, Tom Hartland, and President, Dave Fulton

Consulting Team

The HPRS consulting team includes Tom Hartland, CEO; Jay Morgan, Senior Consultant and Director of Research; Adam Blake, Associate Consultant; and a performance analyst. Mr. Hartland has over 25 years of investment consulting experience and founded the firm. Mr. Morgan holds the CFA designation and has 8 years of investment consulting experience. Mr. Blake has 4 years of related experience. Mr. Morgan and Mr. Blake attend all bi-monthly Investment Committee meetings as well as Board meetings. Mr. Hartland attends several meetings a year as well. The Board and staff have remarked that they are very satisfied with the level of client service provided by the team. The team appears to have the necessary credentials and years of experience to serve HPRS.

Fiduciary Status

In the contract between Hartland and HPRS, Hartland acknowledges its fiduciary duty to the System. The contract does not specifically state that the standard of care as is that of a prudent expert; however, the contract does specify that the agreement shall be carried out in accordance with applicable law. Ohio Revised Code § 5506.06 specifies that, “The Board and other fiduciaries shall discharge their duties with respect to the funds solely in the interest of the participants and beneficiaries; for the exclusive purpose of providing benefits to the participants and their beneficiaries and defraying reasonable expenses of administering the system; with care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims.” This is a prudent expert standard that is, therefore, applicable to Hartland.

Terms and Fees

Language does not exist in the contract that clearly states whether Hartland is hired by and accountable to the Board or the staff. It is best practice for investment consultants to work closely with staff, but have a direct reporting line to the board so that the board receives independent advice from the consultants.

The contract between Hartland and HPRS can be canceled for any reason with 60 days notice. It is a good practice for an investment consulting contract to include a cancellation clause. While it is common for public retirement systems to be able to terminate their investment consultant with 30 – 60 days notice, best practice is for termination to be effective within 30 days or immediately upon notification.

Hartland charges an asset based fee of 0.15% on the first $50 million, 0.10% on the next $50 million, 0.02% on the next $300 million, and 0.01% on assets over $400 million. Based on the June 30, 2010 total fund market value of $647 million, this equates to an annual fee of $209,714.[117] The fee schedule HPRS has obtained from Hartland is lower than Hartland’s standard fee schedule.[118] The following table shows the average fees paid to investment consultants of public and corporate plans according to a national survey.

[117] This is a point in time annual calculation. Actual fees are calculated on a quarterly basis.
[118] Per ADV Form Part II the standard fee schedule is: 0.25% on the first $25 million, 0.20% on the next $25 million, 0.15% on the next $50 million, and 0.10% thereafter.

Exhibit 4.1: Average Investment Consulting Fee[119]

Plan Size	Public Fund Fee	Corporate Fund Fee
$500 million and under	$90,000	$156,000
$500 million - $1 billion	$126,000	$205,000
$1 – 5 billion	$233,000	$211,000
Over $5 billion	$464,000	$340,000

The fees that public funds pay for generalist investment consulting services vary to a great degree based on the scope of services. While survey data should not be used to determine an appropriate fee for a given investment consulting contract, it can be informative regarding the practices of others. Compared to the survey data, HPRS' investment consulting fee is somewhat higher than the average fee for plans with assets between $500 million and $1 billion.

Asset based fees, while commonplace for investment managers, are a less common way to compensate the investment consultants of public funds. Asset-based investment consultant fees are more common among endowments and foundations, in particular smaller funds (under $500 million) that outsource portfolio management. The most common way for public funds to compensate generalist investment consultants is through a retainer based upon the time and resources the firm will dedicate to the client.

The argument in favor of asset based fees is that it aligns the interests of the consultant with the fund in that the bigger the assets become, the better it is for both. The argument against asset based fees is that the growth in the fund is heavily dependent upon not just investment returns but also on incoming contributions, which the investment consultant does not influence.

Scope of Services

Hartland is required to perform the following services for HPRS as outlined in the contract between the two parties:

- Review of Investment Policies and Procedures (annually)
- Investment Measurement Service Reports (quarterly)
- Asset Allocation and Liability Analysis (every three years)
- Manager Structure Review (frequency not specified)
- Investment Manager Searches (as needed)
- Attendance at Investment Committee and Board Meetings (as scheduled)

These are services commonly provided to public retirement systems by investment consultants. Manager structure reviews, while specified in the contract, are not completed. As described in the contract they would include an assessment of the style (growth vs. value) and capitalization (large cap vs. small cap) exposures of each asset class and consideration of alternative structures. Usually manager structure reviews also include a review of the

[119] Greenwich 2008 Market Characteristics Report. Information for 2009 not available. The survey does not indicate whether fees are retainer-based or asset-based.

active and passive allocations within the portfolio, overall risk levels, and any diversification issues. This type of analysis would be useful for the HPRS Investment Committee and Board. Hartland does periodically produce statistics related to the aggregated characteristics of the equity and fixed income portfolios,[120] which could become the basis for a full structure review.

Selection and Ongoing Evaluation

Hartland was selected through a competitive bidding process in 2006. Proposals were solicited from investment consultants and four firms were invited to make presentations to the Investment Committee. The Investment Committee selected Hartland as the finalist firm and directed the Executor Director at that time to conduct on-site due diligence with the firm. The documentation does not indicate the criteria that were used to select the semi-finalist or finalist firms. It is important for selection criteria to include relevant factors such as expertise, resources, organizational stability, fees, and other such items. There is no evidence as to whether these factors were appropriately considered in Hartland's selection over other candidates.

The former Executive Director's assessment of Hartland was delivered to the Investment Committee at the May 2006 meeting, at which time the Investment Committee discussed the findings and recommended to the Board that Hartland be hired. HPRS met best practice by using a formal RFP process and having the Board hire the investment consultant; however, it did not meet best practice when it failed to record the criteria and ratings used to select the consultant.

The former Executive Director later conducted an evaluation of Hartland in September 2007. At that time, feedback given to Hartland regarding its performance was that staff was satisfied with Hartland's performance. The evaluation memorandum indicated that Hartland had gained the trust and confidence of the Board, which indicates that the Board was also satisfied with Hartland's performance.

It is best practice to give feedback to the investment consultant on a periodic basis (every 1 to 2 years). Good criteria for evaluating an investment consultant can include:

- Knowledge of financial markets
- Knowledge of investment strategies
- Understanding of the plan's risks, goals, and liabilities
- Interaction with the Board and staff
- Quality of research, analysis, and advice
- Timeliness, dependability, and responsiveness

The evaluation frequency, method, and criteria are not currently specified in a policy at HPRS, which would be a best practice. It is also best practice for the Trustees to reach a consensus about the consultant's performance when they do the periodic evaluations and send a clear message about any issues that need to be addressed. Periodically, it may also be beneficial to formally re-bid the investment consultant contract to ensure that fees, capabilities, and expertise remain competitive in the marketplace. Some public retirement systems are required by statute to formally re-bid contracts, including the investment

[120] "Look-Through: Equity" and "Look-Through: Fixed Income", May 2010

consultant contract, every five years. Typically, the staff would lead this process with considerable input from the Board.

Conclusion

The scope of services Hartland is to furnish is comparable to that provided by other investment consultants to their public fund clients. Hartland has limited experience with other like-sized public pension funds, which is not optimal, but the firm does have experience with many other client types. The consulting team is experienced and delivers service to HPRS that the Board and staff are generally satisfied with.

Annually evaluating Hartland would be a best practice. The Board should establish a policy that indicates how often the investment consultant will be reviewed, when competitive bids will be solicited, and what criteria will be used to evaluate consultants. Given the fact that Hartland was selected almost five years ago, and full documentation regarding the selection process is not in the file, it would be appropriate to issue a formal RFP within the next year to 18 months.

Recommendations

Rec#	Recommendation	Priority Level	Cost	Parties Involved
38	Request the investment consultant to provide a written manager structure review as specified in the contract.	Medium	Low	Staff, Consultant
39	Consider revising the investment consultant's contract to include language that clearly states that the consultant is hired by and accountable to the Board, but is expected to work constructively with the staff.	Low	Low	Board, Staff, Consultant
40	Develop a policy that establishes the frequency, method, and criteria for an investment consultant evaluation and issue a formal investment consulting RFP in the near term.	High	Low	Board, Staff

II. Performance Reports

Background

Periodic performance reports contain the type of information needed by a board and staff to make decisions regarding manager retention, termination, and the number and types of managers used in the portfolio. They also help the board and staff make overall assessments of strengths and weaknesses in the portfolio. Manager successes and deficiencies are kept in the forefront through these reports. The overall structure of the portfolio and the strategies employed are best evaluated through regular reporting that compares performance of the portfolio and individual managers to reasonable benchmarks. It is best to have quarterly written performance reports and for reports to be presented verbally at meetings where questions can be asked and answered.

Findings and Analysis

Hartland prepares performance reports on a quarterly basis. The Investment Committee receives a “flash report,” which includes preliminary results, 10 days after the close of the reporting period, and the full performance report 21 days after the close of the quarter, which represents timely completion of the reporting. Reports are posted on the Board’s secure website. Hartland reviews the reports with staff and the Investment Committee to identify areas of strength and weakness in the portfolio, as well as to answer questions.

Exhibit 4.2 lists elements of performance reports that we believe reflect best practices. We compared the elements to those included in the Hartland performance reports.[121] Those common elements included in Hartland’s reports are noted with a checkmark (✓). A star symbol (★) indicates items included in the Hartland reports that are not commonly included in the reports of other consultants and represent an extra level of detail. Where the item is not marked, that item is not included in the performance report.

Exhibit 4.2 - Performance Reports

Item	Best Practice Elements included in Performance Reports	Included in HPRS Performance Reports
1.	Capital Markets Review	✓
2.	— Return detail of markets	✓
3.	— Market and economic forecasts	★
4.	— Hedge Fund market review	
5.	— Historical asset class summary	★
6.	Investment Policy Compliance Exhibits	★
7.	Asset allocation summary	✓
8.	— Asset class over/underweight vs. policy	✓
9.	— Change in asset allocation	✓
10.	— Asset allocation vs. peers	

[121] The June 2010 performance report was used for the comparison.

Item	Best Practice Elements included in Performance Reports	Included in HPRS Performance Reports
11.	— Asset allocation by style and/or capitalization (% and/or dollars)	✓
12.	— Asset allocation by manager (% and/or dollars)	✓
13.	Return summary versus benchmark(s)	✓
14.	— Total fund level performance	✓
15.	— Asset class level performance	✓
16.	— Manager level performance	✓
17.	— Performance shown net of fee	✓
18.	— Trailing period returns (including since inception)	✓
19.	— Annual period returns	✓
20.	— Performance versus peers	
21.	Total fund and asset class attribution analysis	✓
22.	Total fund top equity holdings	★
23.	Cumulative excess return graphs	✓
24.	Ratio of cumulative wealth graphs	✓
25.	Annualized risk/return exhibits for the total fund	
26.	Annualized risk/return exhibits for each marketable security asset class	
27.	Annualized risk/return exhibits for each manager	
28.	Manager sector allocation (versus benchmark)	✓
29.	Manager sector performance (versus benchmark)	
30.	Manager characteristics (versus benchmark)	✓
31.	Manager peer group scattergram	
32.	Manager up/down markets chart	
33.	Manager country/region allocations (versus benchmark)	
34.	Manager investment philosophy/strategy	✓
35.	Manager performance commentary	
36.	Attestation of manager guideline compliance[122]	
37.	Appendix/Glossary	✓
38.	— Summary of Investment Policy and Objectives	✓
39.	— Definitions and benchmark descriptions	✓

[122] If manager compliance is monitored and reported via a separate report, it may not be necessary to include it in a performance report. To our knowledge, this information is not included in another report.

Conclusion

The performance reports produced by Hartland are generally comprehensive and include many useful exhibits. While it is not necessary to include every element listed in Exhibit 4.2 in a performance report, it is best for thoughtful consideration to be given to what information would be most useful to the fiduciaries. The reports show returns net of fees, which is a best practice. Including risk/return exhibits for the total fund would further improve the performance reports.

Recommendation

Rec#	Recommendation	Priority Level	Cost	Parties Involved
41	Review Exhibit 4.2 to determine if additional information should be included in performance reports.	Low	Low	Staff, Consultant

III. Performance Calculations

Background

Having a sound system in place to calculate the rates of return for the portfolio benefits both the boards and the staffs of public retirement systems. It also gives reassurance to external parties that are interested in the success of the investment program. Performance calculation must be accurate and completed in a timely manner. It is best for public market returns to be calculated using time-weighted returns,[123] which is industry standard and measures the investment performance of a pool of assets, removing the impact of cash flows. It is also best for investment performance to be calculated by an independent party.

Findings and Analysis

HPRS has Hartland calculate investment performance for both its external investment managers and for its two internal real estate properties. In addition, Hartland calculates performance for each asset class and the HPRS total fund using time-weighted returns, consistent with industry practices.

Hartland calculates performance monthly for external investment managers using market values and cash flow information from the custodian, PNC Bank. Hartland compares its calculated performance with performance reported by the individual managers for consistency. If returns or market values are outside of an allowable range, Hartland will initiate reconciliation steps. This is a common process used by investment consultants. Some public retirement systems utilize the performance measurement services offered by their custodian banks, which would also be acceptable. All performance of HPRS is calculated net-of-fees, which is a best practice.

In addition to internally calculating performance, Hartland utilizes proprietary software powered by State Street Global Advisors (SSgA) to calculate performance. Hartland compares its calculated performance to the performance reported by SSgA's software, which serves as another check on the accuracy of performance calculations.

We conducted a performance "spot check" for HPRS' external investment managers to verify the return calculations shown in the HPRS performance reports for the 2009 calendar year. Performance was recalculated using market values and cash flow information from PNC Bank. A time-weighted rate of return, commonly known as the Modified Dietz Method, was used to verify what was contained in the performance reports distributed to the HPRS board. The spot check showed that returns were consistent with those reported in the quarterly performance reports produced by Hartland.

Performance for HPRS' two internal properties are calculated annually by Hartland using property valuation appraisals provided to them by HPRS who obtains the appraisals from an independent appraiser, Continental Appraisal Company. The methodology for calculating performance for internally held properties does not follow best practice for two reasons. First, cash flows into and out of the properties are not accounted for in Hartland's performance calculation. The rental income produced by the properties and maintenance costs associated

[123] Guidance Statement on Calculation Methodology. CFA Institute. September 28, 2010

with keeping the properties are not reflected in the performance calculation. Second, because performance is only calculated annually, the property's activity during the year is not fully captured. It is best for performance to be calculated, recorded, and reported at least quarterly.

In 2009, an issue regarding the accuracy of the total fund performance benchmark was identified. As described in other reports and memorandums addressing this issue,[124] it resulted from a Hartland performance analyst changing the composition of the total fund portfolio benchmark before the change was approved. The persistence of this error over several quarters indicated a weakness in Hartland's internal controls.[125] Our assessment is that it was an error and not an intentional action. Since that time, Hartland has reported that it has instituted an extra layer of review regarding any changes to the benchmarks to ensure accuracy. Going forward, a re-emergence of issues related to accuracy should be quickly addressed and be a factor in Hartland's evaluation and continued retention. The appropriateness of the total fund benchmark is addressed in Section 6 of this Report.

Conclusion

HPRS' use of Hartland to independently calculate manager, asset class, and total fund performance is a best practice. Hartland's performance calculation methodology for external investment managers aligns with common practice. A spot check showed accurate performance information for HPRS' external investment managers. Hartland's performance calculation for the two internal real estate properties is done less frequently than is optimal and it does not include the effects of cash flows.

An error in the composition of the HPRS total fund benchmark calculation was discovered in 2009. While that error has been corrected, it would be appropriate for an assessment of the investment consultant's internal controls related to accuracy of client data to be part of the next evaluation.

Recommendation

Rec#	Recommendation	Priority Level	Cost	Parties Involved
42	Revise the performance calculation methodology of the two internally held real estate properties.	High	Medium	Staff, Consultant
43	Request from the investment consultant a description of internal controls related to performance calculation.	Medium	Low	Staff, Consultant

[124] From Evaluation Associates under contract with the Ohio Retirement Study Council.
[125] We did not perform a review of Hartland's internal controls.

INTRODUCTION

Asset allocation is one of the most important decisions a public retirement board is called upon to make. It is the essential, strategic decision in determining the expected long-term rate of return and risk for an investment portfolio.[126] Accordingly, fiduciaries must establish a strategic and prudent process for setting and implementing their asset allocation decision. This includes conducting continual reviews of the asset allocation to ensure its appropriateness, suitability, and compatibility with the goals and objectives of the fund. It is best for asset allocation decisions to be made using contemporary standards where individual investments are evaluated within the context of the entire portfolio. In 1997, the investment authority of the Ohio public retirement systems was expanded so that the Boards could follow this standard instead of being constrained by the previous “legal list.”[127]

Asset class diversification is a fiduciary responsibility. Consequently, a discussion of asset allocation should include the types of asset classes that are appropriate for the portfolio. Public retirement systems diversify their investments by asset type (stocks, bonds, real estate, etc.) and then further diversify within each asset class according to factors such as sector, credit quality, and geography. The introduction of a new asset class requires careful analysis and thoughtful planning before implementation. The analysis should take into account the expected return and standard deviation (risk) of different portfolio mixes. Any new asset class should fit with the investment goals of the fiduciaries and liabilities of the fund.

Best practices are for the fiduciaries and staff to be educated on the risks and expected returns of various asset classes and their correlations. Because of the importance of the asset allocation decision, it is prudent for fiduciaries to document the decision making process, maintain the materials that influenced the decision, and record the rationale for the decision in meeting minutes or memorandums.

SCOPE OF REVIEW

This Section of the Report is focused on the following areas related to asset allocation:

I. Decision Making Process
II. Appropriateness Given the Asset Liability Model (ALM) Results
III. Risk Tolerance
IV. Evaluation of the Current Asset Allocation

[126] Ibbotson, Roger and Paul Kaplan, “Does Asset Allocation Policy Explain 40, 60 or 100 Percent of Performance?” *Financial Analyst Journal*, Vol. 56, No.1 (January/February 2000): 26-33

[127] The “legal list” specified the percentage of assets that could be invested in common stock, and dictated allowable individual securities. In 1993, SB 43 expanded the legal list to include additional allowable investments but still specified allowable investments. SB 82 abolished the legal list in 1997.

I. Decision Making Process

Background

It is wise for a public retirement board to set the asset allocation with the assistance and advice of actuaries, investment consultants, and professional staff. Boards are best served if they have a carefully conceived investment approach based on sound investment theory designed to achieve clearly defined goals and objectives. Asset allocation decisions are influenced by both asset liability models (ALM) and asset allocation studies.

An ALM considers the asset allocation decision in the context of plan liabilities. By recognizing that a fund's liabilities have certain characteristics and potentially change over time, a pension fund's investment consultant, often in consultation with the staff, can recommend an asset allocation that is most likely to maintain or improve the funded status of the plan. Performing an ALM approximately every three to five years, or more often if there are major changes in the fund's circumstances, is a best practice.

The goal of an asset allocation study is to minimize the volatility of the expected rate of return of the plan. Unlike an ALM, an asset allocation study does not consider the characteristics of plan liabilities but it can assess the risk/return characteristics of various asset classes, their correlation, and the risk tolerances of a board. Typically asset allocation studies will evaluate several model portfolios in terms of an "efficient frontier." The model portfolios that have either the highest level of expected return for a given level of risk or the lowest level of expected risk for a given expected return are "efficient." Asset allocation studies are usually performed annually.

Once the asset allocation has been adopted by a board it is the duty of staff to maintain a portfolio that matches it. To be successful a rebalancing process must be adopted and adhered to. A rebalancing process (or reallocation of assets) ensures that the board-approved asset allocation and resulting risk and return characteristics are maintained. Due to continuous market movements allowable "ranges" for asset class exposures are typically approved by the board. Each approved allocation to an individual asset class may then fluctuate from its expressed target as long as it remains within the allowable range. If a range is exceeded, rebalancing is triggered to bring the actual allocation back to its appropriate level.

It is common practice for public retirement systems to initiate rebalancing between asset classes either every quarter or every month when the actual allocations exceed the allowable ranges. Often, systems will also use normal cash flows to keep the actual allocation aligned to the board-approved asset allocation.

Findings and Analysis

Consistent with best practices, the HPRS Board is entrusted with the asset allocation decision by statute.[128] The Board relies upon the input from staff, consultants, and actuaries to make this decision, which is articulated in the HPRS' Investment Objectives, Policies, and Guidelines[129] (collectively referred to in this Report as the Investment Policy Statement, or IPS). The charts below show the HPRS policy asset allocation compared to the actual allocation.[130]

Exhibit 5.1 - HPRS Policy Allocations

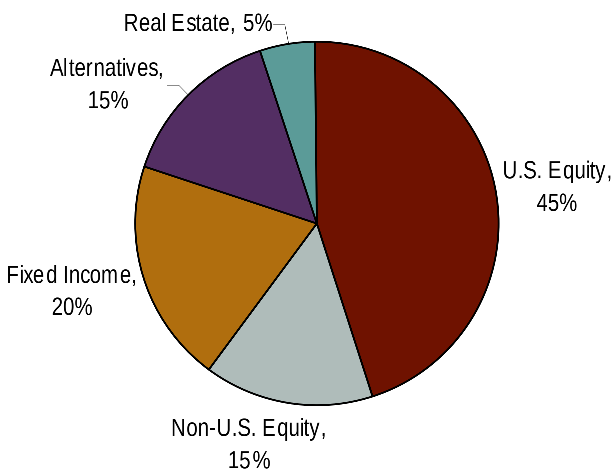
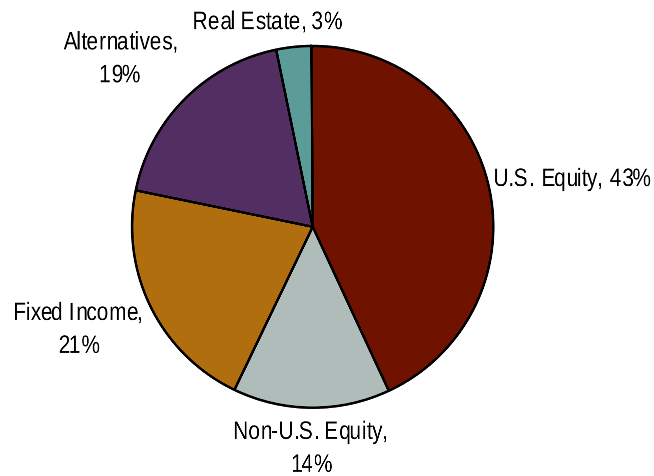


Exhibit 5.2 - HPRS Actual Allocations



The Board reviews its asset allocation on an annual basis. It has been the unofficial practice of the HPRS to perform an ALM once every three years and an asset allocation study every year. The latest ALM was conducted by the investment consultant in 2007 and the latest asset allocation study was conducted in 2009. The main themes of HPRS' most recent asset allocation study were to further diversify asset classes used in the portfolio and increase the level of investment in alternative asset classes. It is best practice to have these practices recorded in an official governance document, such as the IPS. The frequency with which HPRS conducts these reviews aligns with best practice.

In general, setting an asset allocation requires estimates of three inputs for all asset classes: expected return; volatility (standard deviation); and correlation among asset classes. It appears that the investment consultant has used actual historical data to model expected return and volatility of the portfolio. While this is not uncommon, the industry best practice is to develop forward-looking estimates using some form of theoretical modeling that reflects current market pricing (e.g., Global Capital Asset Pricing Model)[131] rather than purely relying on historical results or arbitrary estimates. This is important because the current market

[128] Ohio Revised Code § 5505.06
[129] Adopted and approved, June 11, 1986, most recently revised August 26, 2010.
[130] Current allocation percentages based on 6/30/2010 Hartland performance report.
[131] A capital asset pricing model is a forward-looking expectation that reveals the relationship between risk and expected return for an individual asset or portfolio of assets.

environment is very different from historical “average” experience. In the HPRS’ Investment Process document, a new procedure has been adopted that calls for using forward-looking assumptions, which is consistent with best practice.

Exhibit 5.3 illustrates the HPRS allocation ranges for each asset class within the fund. All of the ranges are tight, which we believe to be best practice.

Exhibit 5.3 - Policy Asset Allocations and Ranges

Asset Class	Minimum	Maximum	Current Allocation[132]	Long-Term Target Allocation
U.S. Equity[133]	40.0%	50.0%	43%	45.0%
Non-U.S. Equity	10.0%	20.0%	14%	15.0%
Fixed Income	15.0%	25.0%	21%	20.0%
Alternatives	10.0%	20.0%	19%	15.0%
Real Estate	0.0%	10.0%	3%	5.0%
Totals			100.0%	100.0%

The IPS is silent on the procedures to be followed when the actual allocations exceed the allowable ranges. The primary goal of rebalancing is to minimize the risk associated with deviation from asset allocation targets. For some investors return enhancement is a secondary goal of rebalancing, which results from normal market fluctuations (buy low / sell high) or medium-term views of opportunities.

Best practices are to document the frequency with which rebalancing will occur (e.g., monthly or quarterly) and the methodology to be followed (e.g., to the edge of the range or all the way back to the target). Rebalancing to the edge of an allowable range strikes a balance between incurring extra trading cost and incurring risk introduced by having an allocation different from that of the policy. Organizations may rebalance to the targets if they can trade in a cost-effective manner (mutual funds, futures overlay, etc.) or if they are very averse to maintaining an actual allocation that differs from the established allocation.

Conclusion

HPRS uses both an ALM and an asset allocation study to set and revise target asset allocations, which is appropriate and follows best practices. The HPRS’ asset allocation review methodology is consistent with common practice; especially now that forward-looking return and risk estimates will be used rather than relying solely on historical results.

The IPS states that the asset allocation is to be evaluated annually, which is also appropriate. The IPS, however, does not specifically mention the frequency with which the ALMs and asset allocation studies are to be conducted. Furthermore, the IPS does not include a rebalancing policy to be followed when deviations outside to the allowable asset allocation ranges occur.

[132] Current allocation percentages based on 6/30/2010 Hartland performance report.
[133] The 6/30/2010 Hartland report showed the minimum and maximum range for U.S. equity to be 35.0% - 55.0%, whereas, the most recent IPS shows the range as 40.0% - 50.0%.

Recommendations

Rec#	Recommendation	Priority Level	Cost	Party Involved
44	Adopt a policy to conduct asset allocation studies annually and complete asset liability modeling once every three to five years, or as necessary.	Low	Low	Board, Staff
45	Establish a disciplined rebalancing policy and document the policy in the HPRS Investment Objectives, Policies, and Guidelines.	High	Low	Board, Staff

II. Appropriateness Given the Asset Liability Model (ALM) Results

Background

Results from an ALM predict growth rates in liabilities and cash flows based on a fund's specific benefit formula and demographics. A retirement system's investment consultant, in collaboration with staff, can recommend an asset allocation that is most suitable for the plan. An ALM takes into account:

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

It is critical that an ALM accounts for these characteristics of a plan so that trustees can make an informed asset allocation decision.

Findings and Analysis

Based on our review, the most recent ALM[134] reasonably incorporated the liability characteristics of the plan and considered an adequately long investment horizon. The ALM examined a wide range of results, with both very favorable (e.g., 5th percentile) and very unfavorable (e.g., 95th percentile) outcomes presented in the report. We also found the metrics used (i.e., unfunded liability in the short term and longer term) to evaluate the various asset mixes were appropriate for the plan, provided that contributions to the fund were not variable.

The ALM results indicated that asset allocation mixes with higher equity allocations and long duration fixed income would result in higher estimated funded ratios than those with lower equity allocations and intermediate duration fixed income. Given the funded status of the plan, the benefit structure, and that the plan is subject to inflation risk,[135] it seems reasonable that the results supported allocations to riskier assets because the plan can benefit from higher potential returns. The Board discussed these recommendations with the investment consultant during a Board meeting, and recorded the outcomes in meeting minutes.

[134] Asset-Liability Study, Fall 2007. Hartland

[135] Inflation risk is the possibility that the value of the asset or the income from the assets will decrease as inflation erodes its purchasing power.

Conclusion

We find the methodology used for the ALM conducted by the general investment consultant to be comprehensive and reasonable. Since it has been three years since the completion of the ALM, another should be completed within the next two years.

Recommendations

None[136]

[136] See recommendation #45 which would establish a policy requiring an ALM at least every three to five years.

III. Risk Tolerance

Background

A board's risk tolerance will impact the investment goals for the fund. Investment goals can include achieving a specified absolute return (e.g. 8%), limiting volatility, earning enough income so that contribution rates are stable, protecting principal, or meeting certain cash flow and liquidity requirements. Boards with a higher tolerance for risk can also have a higher return goal, and the opposite is true as well. When investment returns are strong, boards often do not focus on risk.

Difficult markets, as experienced over the past few years, highlight the importance of analyzing risk. Many boards have taken a fresh look at their risk tolerances and corresponding investment goals. More than half of the respondents to a recent national survey[137] have reviewed or changed their policies recently. Reducing volatility and boosting predictability appeared to be the primary goals.

Findings and Analysis

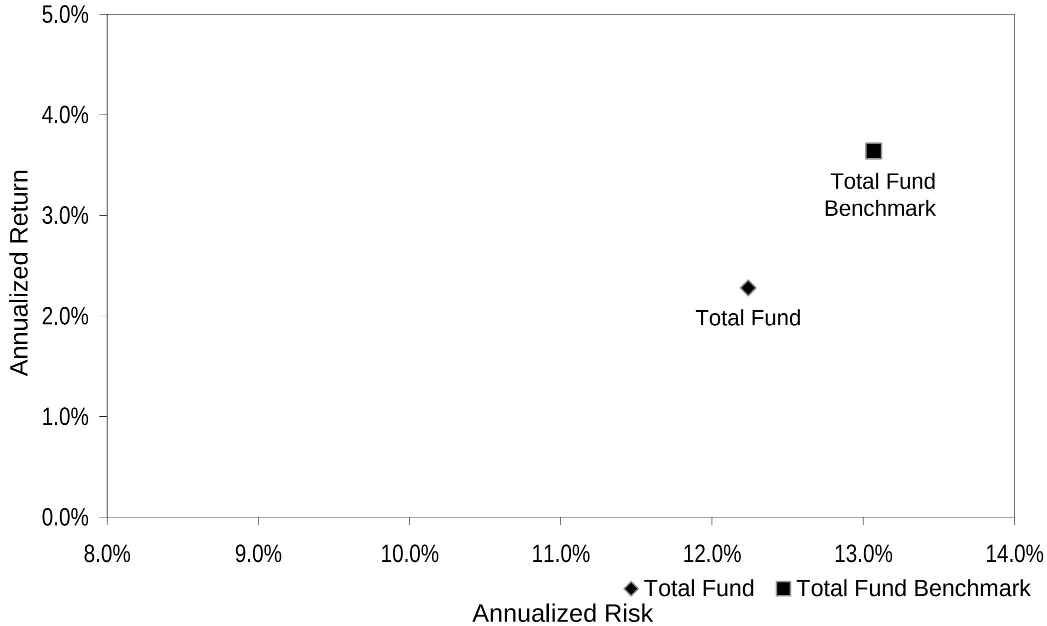
HPRS' stated investment goals and objectives, as listed in its most recent IPS, are as follows:

- Generate sufficient returns over time (preservation of capital) to provide committed level of benefits to plan participants
- Maintain a sufficient degree of liquidity in order to meet unanticipated demands and changing environments
- Minimize risk and maximize investment return
- Comply with state and federal statutes
- Provide an adequate return that is expected to exceed the return of the policy benchmark
- Provide an adequate return over the expected long-term rate of inflation (3%) plus a risk premium of 5%
- Provide an adequate return over the assumed actuarial rate of interest of 8%

We find these investment goals to be reasonable, but believe they would be enhanced by explicitly stating that one of the investment goals is to outperform the total fund policy portfolio on a risk adjusted basis. While minimizing volatility is a current goal, and speaks to the issue of risk, it alone is not sufficient. Achieving a commensurate return for the level of risk taken is an important goal for a public pension fund. The risk return characteristics of the HPRS total fund are shown in Exhibit 5.4 on the following page. As shown, the total fund has earned less return than that of the board-approved benchmark while also having a lower overall level of risk. The appropriateness of this benchmark is discussed in Section 6 of this Report.

[137] Greenwich Associates Market Pulse June 2009 survey of 152 institutions with assets under management greater than $1 billion. Among those participating in the survey were 97 corporate pension systems, 34 public systems, and 21 endowments.

Exhibit 5.4 - 5 Year Annualized Risk Return



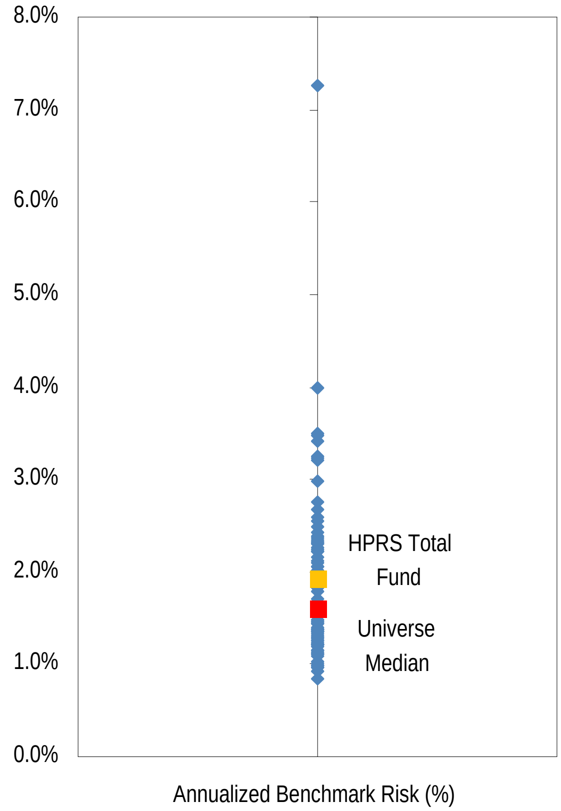
Many institutional portfolios use "risk budgets" to monitor portfolio risk levels. Risk budgets[138] typically specify a maximum level or range of risk that is allowed for each major publicly-traded asset class as well as for the total fund. In periods when the market's volatility is higher than normal, as was the case in 2007 and 2008, active risk[139] will also tend to be higher.

As active risk is linked to the market, risk budgeting should take this into account, and any maximums or ranges should reflect the changing levels of risk in the market. Using risk budgeting techniques may assist the Board and staff in setting and monitoring appropriate risk tolerances for the fund.

We analyzed the HPRS' total fund active risk in our risk budgeting model to determine the level of active risk within the public markets portfolio (equity and fixed income). The HPRS public markets portfolio has an active risk level of 1.93%. This indicates that in 2 out of every 3 years, the total fund's active management return or alpha is expected to be within plus or minus 1.93 percentage points of that of the benchmark. Compared to a universe of other total funds,[140] this level of risk is slightly above the median of 1.61%, but well within the range of others, as shown in Exhibit 5.5.

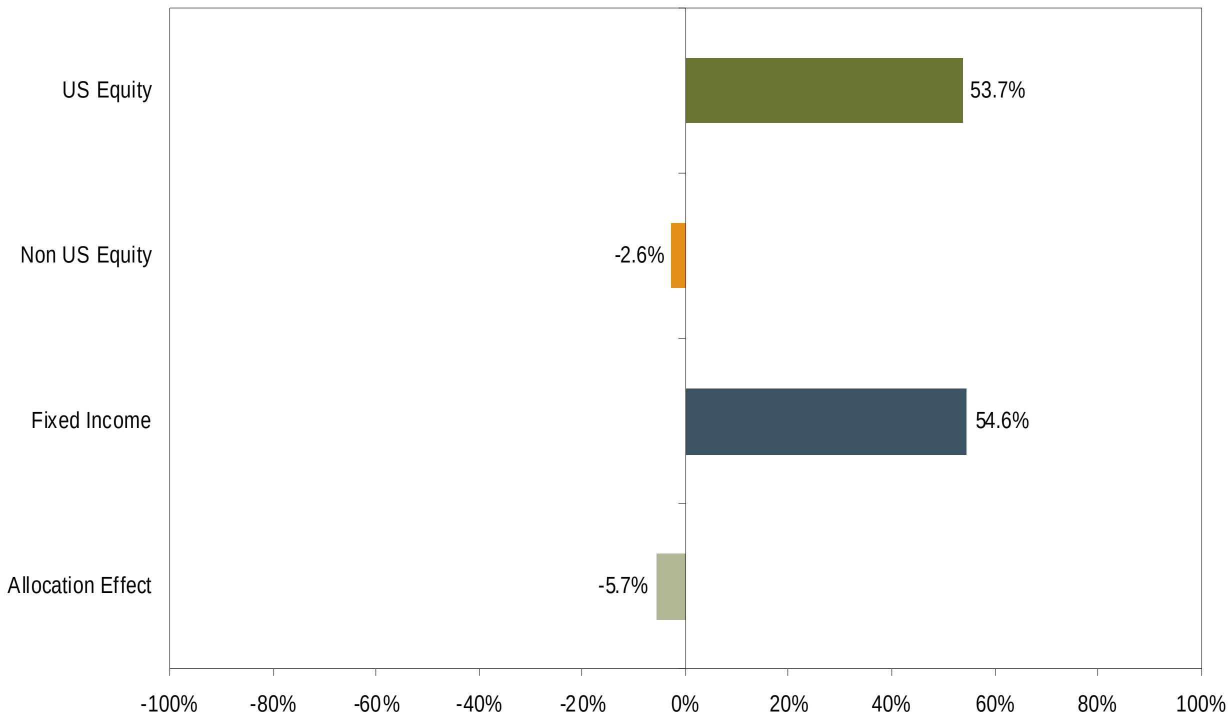
[138] A risk budgeting model is a return-based analysis that measures risk (variance in investment return) contributions at the total fund and asset class levels.
[139] Active risk is the risk created by an investment manager in the attempt to beat the return of the benchmark against which it is measured. It is a combination of two independent risks, "misfit risk" and "manager specific risk." Misfit risk is the risk that arises due to managers' mandated benchmarks being different from the asset class benchmark. Misfit risk can lead to an unintended increase in total fund risk. "Manager specific risk", is the risk that a manager takes in excess of a mandated benchmark.
[140] The universe comparison was within Hewitt EnnisKnupp's client base, inclusive of all client types.

Exhibit 5.5 – Total Fund Active – Risk Universe of Hewitt EnnisKnupp Clients



Within the risk budgeting model, each asset classes' contribution to active risk was analyzed, as shown in Exhibit 5.6 on the following page. The U.S. equity portfolio contributes approximately 54% of the total active risk of the public markets portfolio, which is very similar to its dollar allocation (56%). The aggregated allocation to non-U.S. equity managers has a slight negative contribution to active risk, which is caused by its negative correlation with the other asset classes. The aggregated allocation to the fixed income managers introduces 55% of the active risk, compared to its 26% dollar allocation. This means that there is more active risk in the fixed income asset class relative to its dollar allocation than in equities.

Exhibit 5.6 - Asset Class Contributions to Total Fund Active Risk



It is important for fiduciaries to not only set an asset allocation, but also to be aware of where risk resides within the selected allocation.

Conclusion

The current IPS does not contain any language that quantifies the risk tolerance of the Board. Best practice is to include in an IPS risk budgets, either a maximum level or range, for each major publicly-traded asset class as well as for the total fund, and to monitor risk within the portfolio on a quarterly basis.

It is also useful to monitor the contribution to active risk that each asset class introduces into the portfolio to ensure it remains consistent with the Board's risk tolerance. Currently, the fixed income asset class introduces over half of the active risk into the public markets portfolio, despite its relatively small allocation.

Recommendation

Rec#	Recommendation	Priority Level	Cost	Party Involved
46	Consider using risk budgeting and periodically review the level of risk each asset class introduces into the portfolio.	Medium	Medium	Staff, Consultant

IV. Evaluation of the Current Asset Allocation

Background

It is important to note that no asset allocation model can effectively accommodate every conceivable market environment. The vast majority of institutional investment funds are designed to perform well in high-growth / low-expected inflation economic environments. Institutional portfolios are generally positioned this way since reasonable economic growth with low inflation has been the dominant economic environment for the last several decades.

An evaluation of a selected asset allocation includes a review of the expected risk and return characteristics of the portfolio, as well as discussion about other approaches that could also be reasonable.

Findings and Analysis

Exhibit 5.7 shows the expected return and risk level for the HPRS total fund. Based on the current target allocations, the total fund's long-term passive expected return is calculated to be 8.2% with a risk level (volatility) of 15.6%. The 8.2% expected return can be improved if active investment managers add value by picking stocks or sectors that beat their respective benchmarks.

Exhibit 5.7 - Expected Return and Risk[141]

Asset Class	HPRS Target Allocation	Long Term Expected Return[142]	Expected Risk[143]
U.S. Equity	45.0%	8.1%	23.5%
Non-U.S. Equity	15.0%	9.3%	22.4%
U.S. Fixed Income	20.0%	3.3%	4.3%
Private Equity	10.0%	9.5%	32.7%
Hedge Funds	5.0%	6.0%	8.1%
Real Estate	5.0%	8.0%	17.8%
Total Fund	**100.0%**	**8.2%**	**15.6%**

While we estimate that HPRS' portfolio will earn an approximate 8.2% annual return, the uncertainty surrounding this expectation, based on the expected risk[144] of the portfolio, is quite large. Exhibit 5.8 illustrates the range of expected returns over the next ten years, along with probabilities of achieving those returns. For example, over the five year period, the probability analysis indicates that there is a 5% chance the fund could achieve a return as high as 20.1% or a return as low as -2.5%. There is over a 22 percentage point spread between the expected return at the 5th percentile and the 95th percentile.

[141] Based on Hewitt EnnisKnupp's capital markets assumptions for the fourth quarter of 2010.
[142] 10 year expected return
[143] One year holding period
[144] Expected risk, or volatility, relates to the uncertainty that a given investment will yield an expected return.

Exhibit 5.8 - Probability of Achieving Varying Levels of Return Given HPRS' Current Asset Allocation

Percentile Probability	Expected Returns			
	1 Year	**3 Years**	**5 Years**	**10 Years**
5.0%	36.7%	23.9%	20.1%	16.5%
25.0%	19.1%	14.4%	13.0%	11.6%
50.0%	8.2%	8.2%	8.2%	8.2%
75.0%	-1.7%	2.4%	3.7%	5.0%
95.0%	-14.3%	-5.4%	-2.5%	0.5%

One of HPRS' goals in setting the asset allocation is to achieve its 8.0% actuarial assumption for investment earnings, which would also serve to improve funding levels. The most significant change in the target asset allocation that occurred between 2006 and 2009 was the increase in allocation to alternative investments (private equity, hedge funds, and real estate). When compared to other public retirement systems, 20% is a fairly material allocation to alternatives.

The notable characteristics of alternative investments as an asset class are: (1) illiquidity, which means an investor may not be able to sell at the time needed, and (2) the contractual commitment to funding which requires investment over a long period of time. An overly large allocation to asset classes with these characteristics could be problematic as it exposes the fund to a variety of uncertain factors such as changes in the markets and plan demographics. The majority of HPRS' assets are in liquid marketable securities (equities and fixed income); therefore, the risk presented by a material allocation to alternatives is somewhat mitigated.

While the proper asset allocation for a fund ought to be based upon that fund's liabilities, cash flow, risk tolerance, and legal restrictions, some funds find it useful to compare their asset allocation to that of others. Exhibit 5.9 compares the target allocations of HPRS with average public fund allocations.[145] While a comparison to peers should not drive policy decisions, it can be useful to know what decisions peers have made.

[145] As reported in Greenwich Associates' 2009 survey of public systems (defined benefit assets only).

Exhibit 5.9 - Comparison of HPRS' Policy Asset Allocation to Peer Funds

Asset Class	2009 Greenwich Average – All Public Funds	2009 Greenwich Average –Public Funds ($501 Million - $1 Billion)	HPRS Target Allocation
U.S. Equity	31.5%	39.7%	45.0%
Non-U.S. Equity	18.6%	15.8%	15.0%
Total Equity	**50.1%**	**55.5%**	**60.0%**
Fixed Income	29.7%	31.2%	20.0%
Private Equity	7.8%	2.4%	10.0%
Hedge Funds	2.1%	3.9%	5.0%
Real Estate	7.3%	4.7%	5.0%
Other[146]	3.0%	2.3%	0.0%
Total Fund	**100%**	**100.0%**	**100.0%**

Compared to peers, HPRS has higher target allocations to equities and alternatives and lower allocations to fixed income. Given the funded status of HPRS, and the results of the ALM, it seems reasonable that the fund has higher target allocations to equities and alternatives because it can benefit from higher potential returns. However, as mentioned earlier, HPRS assumes a greater level of risk to achieve this higher level of return.

HPRS could reduce the risk it assumes in generating its current level of return by rethinking its allocation to public equities. Currently, HPRS views domestic and international equity markets as separate asset classes. Some institutional investors are moving away from dividing equities into domestic and international categories and instead viewing them as one category of global equities, which is consistent with Modern Portfolio Theory (MPT).[147] MPT suggests that the "market portfolio" is the most efficient portfolio in terms of risk and return trade-off that an investor can hold.

The economic argument for investing on a global basis is compelling. First, the distinction between U.S.-based and international companies is becoming less important from an investment perspective. Second, the definition of what is a U.S. versus a non-U.S. company is becoming increasingly unclear with non-U.S. companies having operations in the U.S. and vice-versa. And finally, many companies domiciled in the U.S. derive a significant portion of their revenues overseas just as many large non-U.S. companies receive a large portion of their revenue from U.S. sales.

It is an emerging best practice to think of global equity as an asset class where U.S. and non-U.S. equity are "market segments" under the global equity umbrella. The "market portfolio" then reflects a market-cap weighted sum of all available asset classes. Based on this theory, the most efficient total equity portfolio is one where U.S. and non-U.S. equity are held in

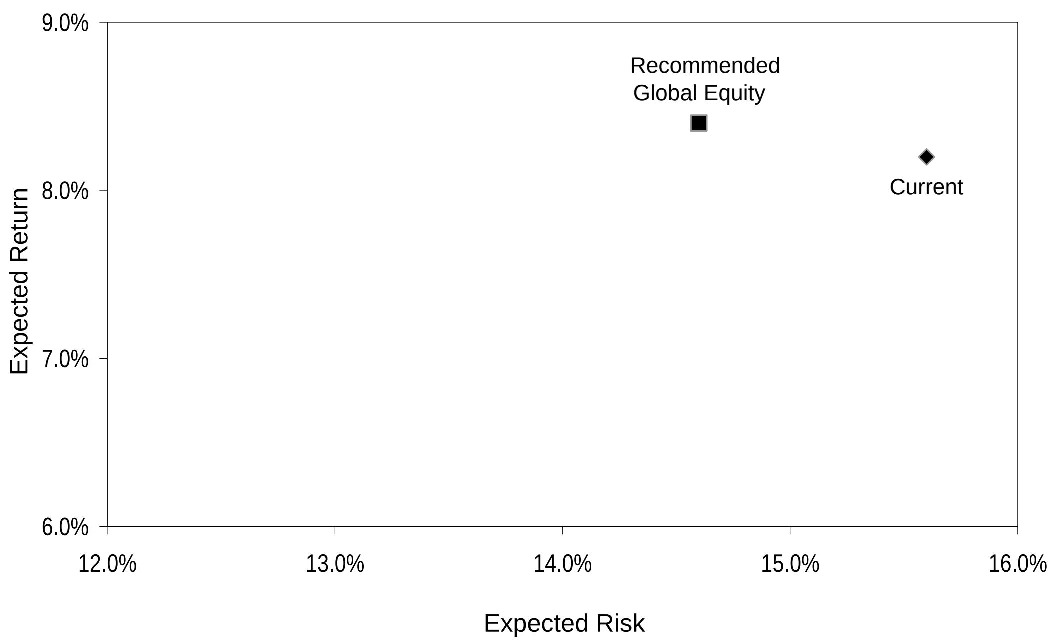
[146] Greenwich does not specify what investments are classified as "other". Other investments that may fall within this category in the survey are Real Assets, Global Tactical Asset Allocation, or Cash.
[147] MPT is an investment approach that constructs optimal portfolios by considering the risk and return characteristics of each investment within the context of the entire portfolio. The theory states that given a desired level of risk and return, an optimal portfolio can be constructed. The optimal portfolio would be the one that has the highest return, given a certain level of risk, or the lowest amount of risk, given a certain return.

proportions approximating the marketplace. This eliminates the "home country bias"[148] present in many institutional portfolios.

HPRS' current policy allocation is 45% to U.S. and 15% to non-U.S. equity. If HPRS were to hold a market-weighted portfolio of global equities it would have policy allocations to U.S. and Non-U.S. equities of approximately 25% and 35% respectively, a difference in allocation of approximately 20 percentage points.

Exhibit 5.10 depicts the results of a scenario where HPRS' equity allocations are aligned to match the market weights of the global equity market. As indicated in the chart the "Recommended Global Equity" portfolio exhibits 14.6% expected risk, roughly 100 basis points[149] less than HPRS' current total fund portfolio of 15.6% expected risk. In addition, the "Recommended Global Equity" portfolio exhibits an expected return of 8.4%, roughly 20 basis points more than HPRS' current total fund portfolio expected return of 8.2%.

Exhibit 5.10 - Expected Return and Expected Risk Graph (Based on Hewitt EnnisKnupp Forward-Looking Capital Market Assumptions)



[148] "Home country bias" is an overweight to the stock market of the country in which the institutional investor is located.
[149] A basis point equals 1/100th of 1% (100 basis points equal 1%).

Conclusion

Compared to peers, HPRS has higher target allocations to equities and alternatives and lower allocations to fixed income. Given the funded status of the Plan, we find these target allocations to be reasonable. Taking a global view of the public equities asset class could potentially reduce the fund's expected risk and improve expected return.

Recommendation

Rec#	Recommendation	Priority Level	Cost	Party Involved
47	Evaluate the merits of investing in equities via a global approach.	Medium	Low	Staff, Consultant

INTRODUCTION

While the asset allocation decision will greatly determine a portfolio's total return, investment management structure will also influence results.[150] As such, the decision regarding how to structure the portfolio within given asset allocation parameters is a very important responsibility of public fund fiduciaries. Investment management structure includes the number of managers employed, the types of managers utilized, the level of active versus passive management, and the allocation to internal versus external management. Discussions and decisions regarding the structure of an institutional investment program require careful thought and unbiased advice from experts on staff and qualified consultants.

The investment management structure will have an impact on the fees of the total portfolio. Dollar for dollar, fees and expenses take away from the assets available to meet liabilities. While fees alone should not be the only determinate of a portfolio's structure, ensuring fees are reasonable is an important fiduciary duty. It is important to keep in mind, however, that the structure with the lowest fees is not necessarily the best.

After the investment management structure has been established, investments must be monitored regularly. Best practices in investment monitoring call for fiduciaries to set benchmarks for the total fund, each asset class, and each individual investment manager and then regularly evaluate performance against those benchmarks.

SCOPE OF REVIEW

This section of the Report is focused on the following areas related to investment management structure:

I. Number of Managers
II. Allocations to Managers
III. Active and Passive Management
IV. Internal and External Management
V. Investment Management Fees
VI. Benchmarks and Performance

[150] Xiong, James, Roger G. Ibbotson, Thomas Idzorek, and Peng Chen. "The Equal Importance of Asset Allocation and Active Management." Financial Analysts Journal, vol. 66, no. 2 (2010 March/April).

I. Number of Managers

Background

A precise formula does not exist that determines the appropriate number of investment managers for a portfolio. The number of managers is based upon investment philosophy about risk and returns and the availability of skilled managers. Having a large number of managers with small allocations may result in a portfolio structure that is characterized as "closet indexing," [151] which is not optimal because it is an expensive way to gain market-like exposure. On the other hand, having a small number of managers may increase a portfolio's organization risk if the portfolio relies heavily on the performance of a particular manager. This also is not an optimal structure. The best portfolios are ones that are structured by the fiduciaries to meet or exceed the benchmark return at a reasonable level of risk.

Findings and Analysis

Exhibit 6.1 lists the number of external managers used within HPRS' investment portfolio across the different asset classes. Some managers have multiple accounts with HPRS. Each account is counted separately.

Exhibit 6.1 – Comparison of Accounts

Asset Class	HPRS[152]	Hewitt EnnisKnupp Peer Fund Survey[153]	NACUBO Peer Fund Survey[154]
U.S. Equity	11	5	5
Non – U.S. Equity	4	3	5
Fixed Income	3	6	3
Real Estate	6	10	8
Private Equity	6	15	16
Hedged Strategies	9	13	41[155]
Cash	2	2	4

HPRS has the most accounts within its U.S. equity portfolio. Having 11 manager accounts in one asset class is a relatively high number compared to other systems. HPRS' peer systems have an average of around five U.S. equity managers according to two peer system surveys as indicated in the preceding table.[156] The range around this average is quite wide. The

[151] "Closet indexing" refers to having active managers that, when aggregated into one portfolio, essentially represent index-like exposure as each individual manager's active over or underweight to stocks or sectors are offset by the positions of others. It also refers to individual active managers that maintain index-like exposures. Closet indexing can either be intentional or unintentional.
[152] Number of managers based on Hartland's 6/30/2010 performance report.
[153] An internal Hewitt EnnisKnupp client survey representing 18 peer public funds with assets over $500 million as of 6/30/2010.
[154] National Association of Colleges and University Business Offices (NACUBO) 2009 Study of Endowments. Portfolios of a group of funds with assets between $501 million and $1 billion.
[155] Includes directly held hedge fund investments. Endowments typically have a higher allocation to hedge funds than public funds.
[156] Hewitt EnnisKnupp Peer Fund Survey and the NACUBO Peer Fund Survey.

higher than average number of managers within the U.S equity portfolio corresponds to HPRS' use of a "style box" approach, where at least one manager is selected for most of the major styles (growth, core, and value) and capitalization segments (large, mid, and small) of the U.S. equity market. HPRS' style box manager structure is illustrated in Exhibit 6.2.

Exhibit 6.2 – U.S. Equity Style Exposures[157] in HPRS' Portfolio

	Value	Core	Growth
Large Cap	• DePrince, Race, & Zollo • LSV Asset Management	• SSgA S&P 500 Index	• Intech • Wellington
Mid Cap	• Brandywine	• World Asset Management	
Small Cap	• World Asset Management	• Dimensional	• Westfield Capital Management • Fred Alger

While a style box manager structure is very common and followed by many institutional investors, it has faults. The most common fault is the potential for closet indexing, which can be the result of each active manager offsetting the active management decisions of the other managers. This does not appear to be occurring in HPRS' portfolio, as tracking of the domestic equity portfolio compared to the benchmark has ranged between 60 and nearly 500 basis points on an annual basis.[158]

Having many managers also introduces complexity into a portfolio. It can be difficult to monitor many different managers and take into consideration many different moving parts. The differing styles of the managers result in some level of diversification to protect from adverse manager specific performance, but overlaps may create redundancy.

Fewer managers are used in HPRS' international equity and fixed income portfolios and the numbers appear to be reasonable. As a result, closet indexing in these portfolios is less likely. In the international equity portfolio, HPRS uses three managers that invest broadly across the developed and emerging markets and one manager that focuses on developed

[157] Managers' style exposures are as categorized by Hartland. We did not independently verify the style/capitalization exposures of the U.S. equity managers.
[158] Tracking is the difference between the portfolio and the benchmark return. The tracking described is as of 6/30/2010 over the 1, 3, 5, and 10 year periods.

small cap stocks. Within the fixed income portfolio, HPRS uses two broad-based fixed income managers that invest across the major segments of the bond index, as well as a specialized manager that invests predominately in high yield.

Closet indexing does not apply to the private market portfolios (real estate, private equity, and hedge funds) because an investable passive index does not exist for these private market asset classes.[159] The appropriate number of managers in the alternative asset classes is dependant upon the approach, size, and strategy of each account. For HPRS to have between six and nine managers in these asset classes is reasonable given the level of resources and staff and the desired portfolio structure. Some public funds that have a dedicated alternatives staff or specialized alternative consultants may have portfolios that include many more managers.[160]

Conclusion

The U.S. equity portfolio reflects a style box approach and as a result employs a relatively high number of managers compared to HPRS' fixed income portfolio. This is not uncommon. Employing 11 U.S. equity managers is not unreasonable, although it does introduce some level of redundancy and complexity into the portfolio. It would be best for the Investment Committee to periodically evaluate the management structure to ensure it is optimal. The number of managers used within the fixed income, international, and alternative asset classes appears reasonable.

Recommendation

Rec#	Recommendation	Priority Level	Cost	Party Involved
48	Analyze the overlap of manager styles within the U.S. equity portfolio.	Low	Low	Board, Staff, Consultant

[159] Broad public market indices do exist for real estate investments (REITs).
[160] For example, some very large public funds may invest in over 100 private equity managers.

II. Allocations to Managers

Background

The allocations to managers are dependent on several factors, including the desired level of passive management, the tolerance for risk, the ability to identify highly skilled managers, and the overall investment philosophy of the fiduciaries. If costs are a concern, higher allocations to passive managers may be desired. A low tolerance for risk would lead to higher allocations to managers with lower expected volatility and smaller allocations to managers with higher expected volatility.

Managers' correlation with each other is also an important consideration. The volatility of a portfolio can be reduced by combining two or more investments that have less than perfect correlation. Managers in which the fiduciary has a high degree of confidence may warrant larger allocations. Above all else, the decision about the allocation to managers should be made through a prudent process, which would include an analysis of the portfolio's aggregated characteristics.

Findings and Analysis

Currently, all manager accounts in the total fund have a dollar allocation of 10% or less, with most having less than 4% of the total fund's assets. Two managers, Dimensional Fund Advisors and World Asset Management, have multiple accounts with HPRS. As of 6/30/2010 the total allocations to Dimensional Fund Advisors and World Asset Management were 3.9% and 12.1% of total fund assets, respectively. On a relative basis, no allocation size to any one manager across the asset classes is large enough to warrant concern.

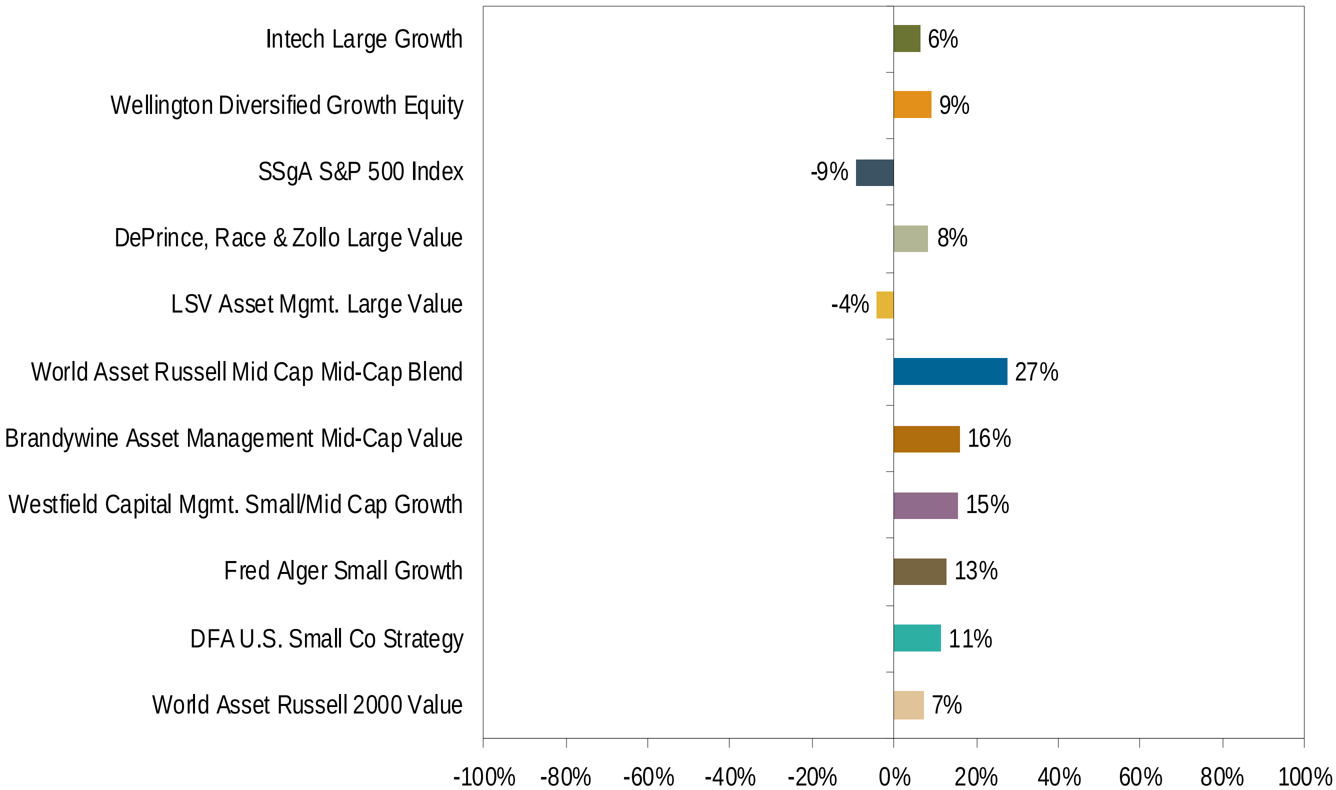
Besides a manager's dollar allocation, it is important to consider whether its contribution to risk within the portfolio is also reasonable. It is best for there to be a periodic reconciliation between the manager's allocation size and the level of risk that manager introduces into the portfolio. A manager's contribution to risk may be much greater than their dollar allocation due to concentration, tracking error, investment approach, or a host of other factors.

The dollar and risk allocation need not be equal. For example, if a manager has a 10% dollar allocation, but contributes 25% of the risk in the portfolio, it is prudent for the fiduciaries to ask themselves if they are comfortable with the level of risk that manager brings. It may be acceptable to have a manager contribute more than its dollar allocation to risk, but it must be supported by a high level of confidence in the manager's ability and an understanding of the risk within that portfolio. A suboptimal situation would be for fiduciaries to be unaware of those managers that have a substantial impact on portfolio risk even though they may have a relatively small dollar allocation.

The dollar and risk allocations of the managers in the public markets portfolios (U.S. equity, international equity, and fixed income) are analyzed on the following pages. Other allocation issues are also addressed.

U.S. Equity Allocations
Exhibit 6.3 illustrates each U.S. equity manager's contribution to active risk[161] within the U.S. equity portfolio.

Exhibit 6.3 – Manager Contributions to U.S. Equity Active Risk



World Asset Russell Mid-Cap / Mid-Cap Blend, Brandywine Asset Management Mid-Cap, and Westfield Capital Management Small / Mid-Cap Growth contribute the most to risk in the portfolio. Two managers, SSgA and LSV, have a negative contribution to risk in the portfolio, which indicates they serve as a diversification source. Exhibit 6.4 compares the managers' risk allocations to their dollar allocations.

[161] Active risk is the risk created by an investment manager in the attempt to beat the return of the benchmark. It is the standard deviation of the manager's excess return over the asset class benchmark. Active risk is different from tracking error, which is a measure of the extent to which an investment's return conforms or deviates from that of the benchmark. The graph shows the percentage of total active risk due to a particular manager. The number can be positive or negative. When it's negative, it means that the overall asset class is less risky for that manager being there—that it reduces overall risk because its' excess returns are uncorrelated with those of the other managers. When it is positive, it indicates that manager contributes to risk in the portfolio. The higher the percentage, the greater the impact that manager will have on the portfolio.

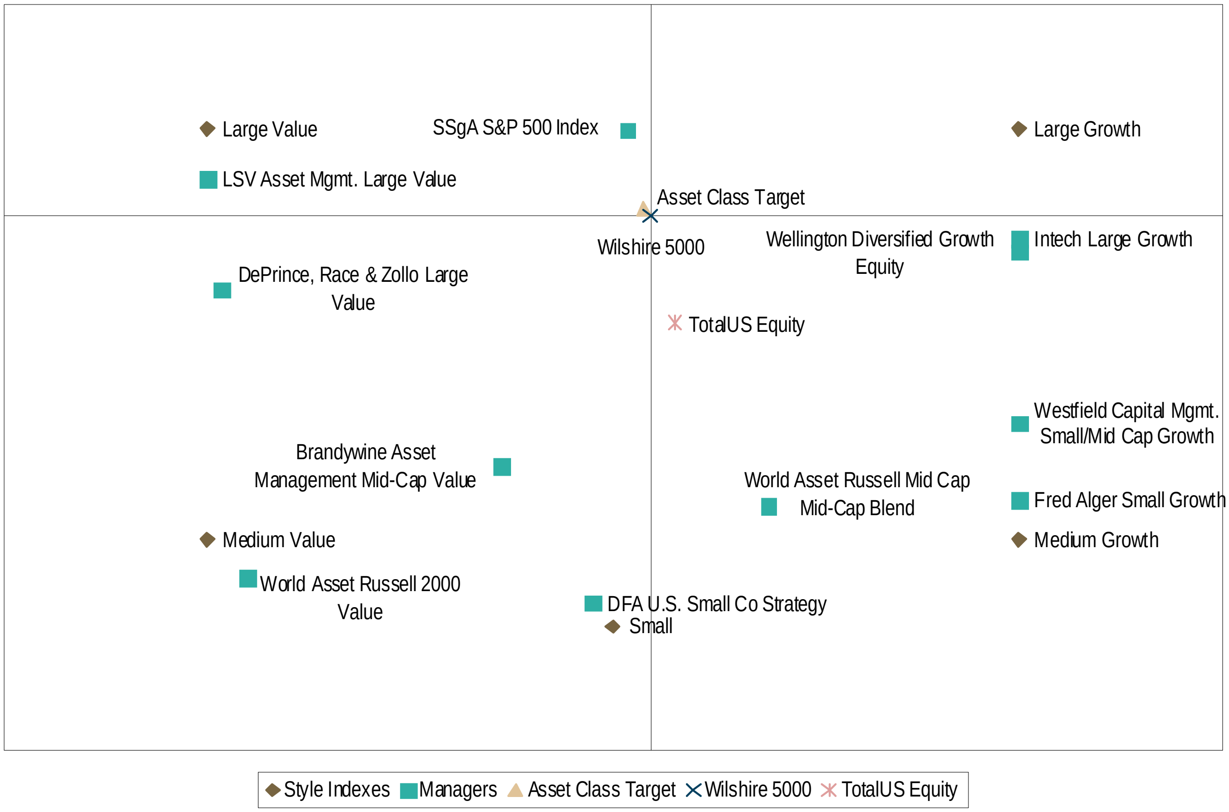
Exhibit 6.4 – U.S. Equity Manager Allocations as a Percentage of the U.S. Equity Portfolio

Manager	Dollar Allocation (%)	Risk Allocation (%)
Intech	11%	6%
Wellington	12	9
SSgA	19	(9)
DePrince, Race & Zollo	8	8
LSV Asset Mgmt	11	(-4)
World Asset Mid-Cap	12	27
Brandywine	8	16
Westfield	8	15
Fred Alger	5	13
DFA U.S. Small Co	5	11
World Asset Russell 2000 Value	4	7

The manager that contributes the most risk in the portfolio (World Asset Mid-Cap) has one of the largest dollar allocations, which makes sense. Its contribution to risk, however, is more than double its dollar allocation. Brandywine and Westfield also have risk allocations that are much higher than their dollar allocations. Some of the managers with smaller dollar allocations (Fred Alger, DFA U.S. Small Co, and World Asset Russell 2000 Value) also have risk allocations that are much greater than their dollar allocations. This does not mean the allocations are inappropriate. It merely means that it is a worthwhile discussion point for the Investment Committee.

It is also important to consider the characteristics of the aggregated managers' allocations compared to the broad market. Exhibit 6.5 illustrates the style and capitalization characteristics of HPRS U.S. equity portfolio compared to the Wilshire 5000 Index. A portfolio that holds all segments of the market in an equal weight relative to the Wilshire 5000 would plot in the very center of the graph. HPRS' U.S. equity portfolio plots slightly below and to the right of the Wilshire 5000 indicating a slight bias toward mid and small-cap growth stocks.

Exhibit 6.5 – U.S Equity Effective Style Map



Over shorter time periods, investment styles experience returns that can vary significantly from the broad market. Absent a strong positive or negative outlook for a certain segment of the market, investment theory supports a portfolio that is market neutral.

International Equity Allocations

Exhibit 6.6 shows the risk allocation of each manager in the non-U.S. equity portfolio. As shown, Manning & Napier contribute the most to risk within the portfolio, followed closely by World Asset and Artio.

Exhibit 6.6 – Manager Contributions to U.S. Equity Active Risk

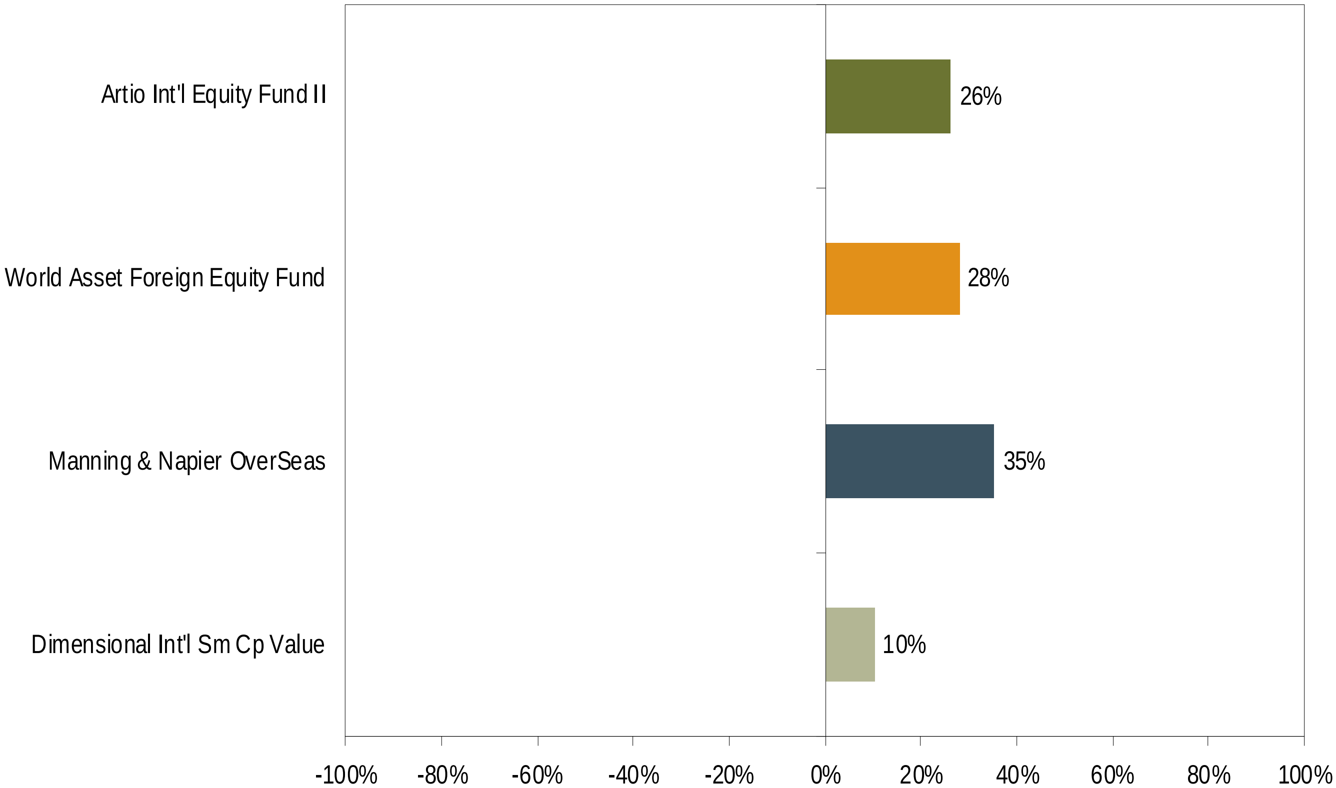


Exhibit 6.7 compares the risk allocation of each manager to its dollar allocation.

Exhibit 6.7 Non-U.S. Equity Manager Allocations as a Percentage of the Portfolio

Manager	Dollar Allocation (%)	Risk Allocation (%)
Artio Int'l Equity Fund II	24%	26%
World Asset Foreign Fund	38	28
Manning & Napier Overseas	24	35
Dimensional Intl Small Cap	14	10

While the manager with the largest dollar allocation does not also have the largest contribution to risk, the risk is spread relatively evenly over the three managers with large allocations. The manager with the smallest allocation also has the smallest allocation to risk.

In addition to the dollar and risk allocation, it is important to review the portfolio's characteristics when the managers' allocations are aggregated. As shown in Exhibits 6.8 and 6.9, the combined allocations to the four international equity managers[162] closely resemble the allocation to developed and emerging markets in the MSCI All-Country World ex- U.S. Index;[163] however,

[162] Allocations are based on a weighted average of HPRS' manager mandates as 6/30/2010.
[163] The MSCI Index represents a neutral approach to international equity markets.

there is a slight overweight in HPRS' international portfolio to non-U.S. developed markets. This is not unusual as many institutional portfolios exhibit a bias toward the developed markets. A small overweight to emerging markets may actually improve the risk and return characteristics of the portfolio.

Exhibit 6.8 - HPRS International Allocations

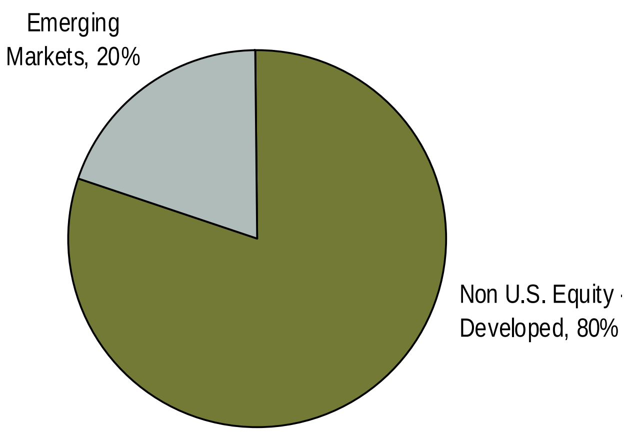
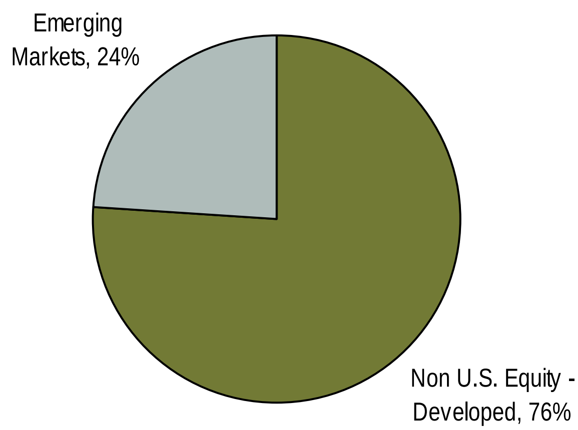


Exhibit 6.9 - MSCI All-Country World Index ex-U.S. Allocations



Fixed Income Allocations

The fixed income portfolio represents 20% of the asset allocation, but nearly 55% of the risk, making it the primary source of active risk in the aggregated public markets portfolio.[164] Further analysis, as illustrated in Exhibit 6.10, shows that the vast majority of the active risk contributed by the fixed income portfolio is due to HPRS' allocation to the high yield bond manager, Western Asset High Yield.

[164] See Exhibit 5.6

Exhibit 6.10 –Total Contribution to Active Risk

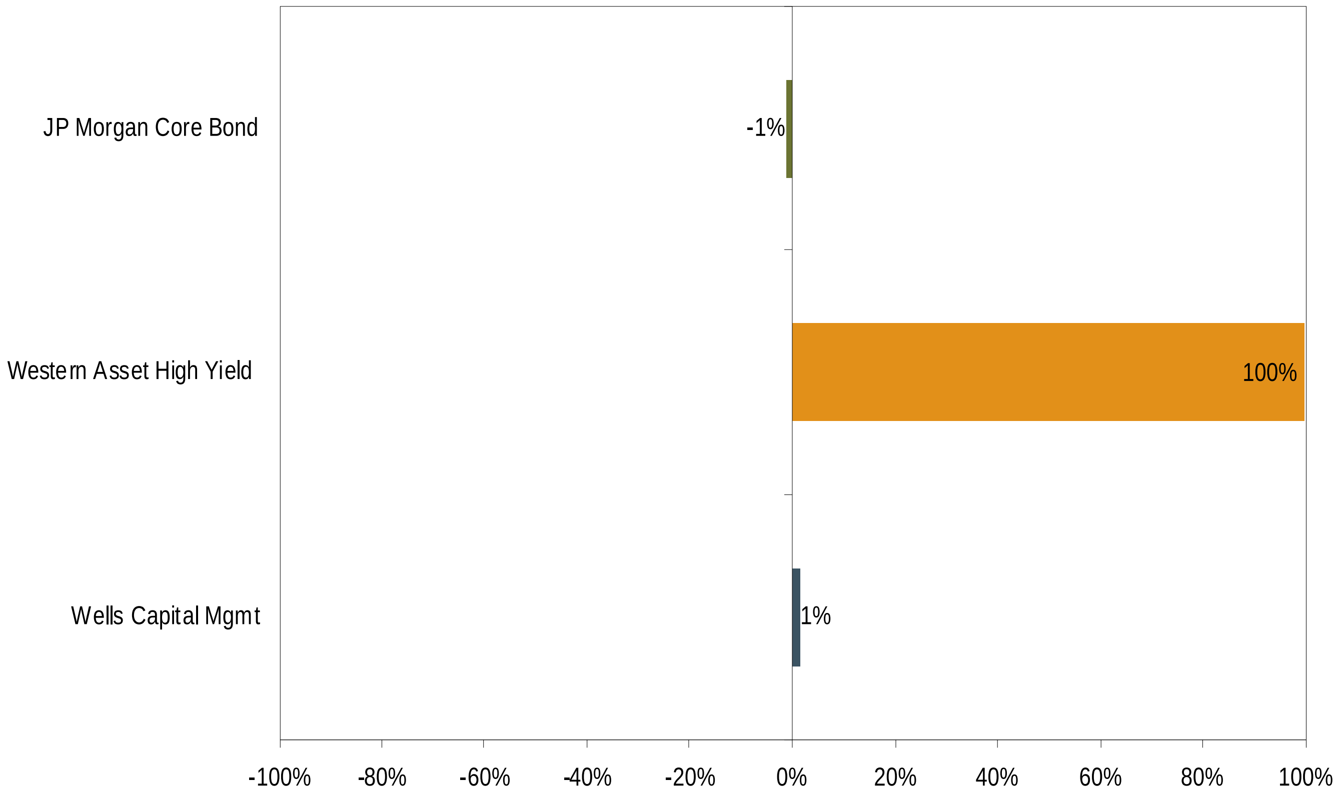


Exhibit 6.11 below compares the risk allocation of each manager to its dollar allocation.

Exhibit 6.11 - Fixed Income Manager Allocations as a Percentage of the Portfolio

Manager	Dollar Allocation (%)	Risk Allocation (%)
J.P. Morgan Core Bond	50%	(1)%
Western High Yield	11	100
Wells Capital	39	1

High yield bonds have risk and return characteristics that represent equity exposure more so than core bond exposure, which is why the Western High Yield portfolio dominates that risk allocation in the bond portfolio. Investments in certain segments of the bond market, notably mortgages and high yield, can be appropriate as long as the increased risk potential for these investments is understood by the fiduciaries. These investments also require investors to have specialized expertise and adequate resources to monitor the associated risks. Any time a single manager has a significant impact on the total risk of the asset class and total fund portfolio, it is best to periodically review its allocation.

Conclusion

The dollar allocations to each manager in the public markets portfolios are reasonable. No individual manager account represents more than 10% of the total portfolio, and aggregated accounts managed by the same manager do not represent more than 12.1% of the portfolio. There is no absolute maximum beyond which it is imprudent to allocate assets to any one manager. Large allocations introduce some amount of organizational risk, where the portfolio can be significantly impacted by adverse events from one manager, while small allocations introduce complexity, redundancies, and possibly higher fees.

It is important for fiduciaries to not only be aware of the dollar allocation to each manager, but also the amount of risk that each manager contributes. While dollar and risk allocations need not be equal, fiduciaries should be aware of those managers that contribute a substantially high amount of risk to the portfolio. The Western High Yield Bond Portfolio contributes a significant amount of risk within the fixed income portfolio, as well as to the total public markets portfolio despite its relatively small allocation. A review of the appropriateness of this allocation has not recently been completed.

Recommendations

Rec#	Recommendation	Priority Level	Cost	Party Involved
49	Evaluate the dollar allocations to individual managers in light of their contributions to risk to ensure they are reasonable.	Medium	Low	Board, Staff, Consultant
50	Review the bias to mid and small-cap stock within the U.S. equity portfolio to ensure it is understood and remains appropriate.	Medium	Low	Board, Staff, Consultant
51	Consider eliminating or reducing the bias to developed markets within the non-U.S. equity portfolio.	Medium	Low	Board, Staff, Consultant

III. Active and Passive Management

Background

The vast majority of large public systems use both active and passive management. Research shows that it is difficult for active management to outperform an appropriate benchmark representing passive management.[165] Investment theory says that active management will be most successful where market efficiency is relatively low and investment skill of the managers is high. In efficient markets, information on publicly-traded companies flows freely and it is difficult for one investor to have a material advantage over another.

Within an equity portfolio the case for passive management is strengthened by the highly efficient nature of the U.S. and large-cap developed non-U.S. stock markets. Historically, the non-U.S. stock markets have not been viewed as efficient as the U.S. stock market. More recently, the large-cap developed market exhibits a high degree of efficiency; however, inefficiencies appear to persist in certain markets including global, emerging markets, and certain small and mid-sized international stock classes. In some studies, the U.S. small cap stock market also exhibits some degree of inefficiency.

The cost differential between active and passive managers is also significant. Given that the returns of active managers have not consistently beaten the market averages, a diversified, low-cost passive approach is compelling for many institutions.

Within the fixed income markets, institutional investors use a predominately active approach. The main benefit of active management over passive management in fixed income markets is compensated risk for investment grade credit, high yield, and emerging market mandates. For a U.S. Treasury portfolio, or for investors that place a paramount importance on limiting overall portfolio volatility, a passive portfolio may be a more practical approach. Absent that, utilizing skilled active management that invests strategically in many areas of the fixed income market[166] continues to be an appropriate management structure for a fixed income portfolio.

Findings and Analysis

Across all asset classes, approximately 14.9%,[167] or $96.2 million of HPRS' total fund is invested passively, which is slightly more than the 10.6% invested passively by its peer group (public systems with assets under $1 billion). [168] There are many compelling reasons to use passive management to a great degree within an equity portfolio. The average for all public

[165] Standard & Poor's Indices Versus Active Fund Scorecard (Mid Year 2010) provides performance comparisons corrected for survivorship bias for actively managed U.S. equity, international equity, and fixed income mutual funds. Per the scorecard, over the five year period versus appropriate indices, 64% of large cap U.S. equity funds underperformed, 77% of U.S. mid cap funds underperformed, 65% of U.S. small cap funds underperformed, 84% of international equity funds underperformed, 30% of international small cap funds underperformed, and 68% of intermediate investment grade fixed income funds underperformed.

[166] This approach is commonly known as "core plus", which indicates the manager will not only invest in the "core" segments of the fixed income market that are included in the Aggregate Bond Index (credits, government bonds, mortgages, asset backed securities) but also "plus" sectors (including high yield, emerging market debt, bank loans, convertibles.

[167] As of 6/30/2010

[168] Greenwich Associates 2009 Market Dynamics Survey. Dollar weighted domestic and international equity mix of 41 Public Funds.

retirement systems, including very large systems with over $10 billion in total assets, is 25.5%. The use of passive management tends to increase with the size of the fund.

HPRS uses passive management only within its U.S. equity portfolio. Exhibit 6.12 lists the index fund managers used by HPRS, as well as their mandates.

Exhibit 6.12 – Index Fund Managers and Mandates Used by HPRS

Manager	Mandate
State Street Global Advisors	S&P 500 Index
World Asset Management	Russell Mid Cap Index Russell 2000 Value Index

HPRS has divided its index fund exposure by capitalization (large, medium, and small cap). This approach allows HPRS to offset any style allocations that result in the portfolio due to the specific active managers hired. It also introduces some level of complexity. An alternative approach would be to combine all three into one broad market index fund, such as a Russell 3000 Index Fund or a DJ U.S. Total Stock Market Index Fund. This approach could potentially result in a small cost savings[169] to HPRS and allow for simplified access to the full opportunity set of the U.S stock market.

Exclusively implementing passive management within the U.S. equity market is typical of many institutional investors; however, an increasing number of public retirement systems also have passive exposure within the international equity and fixed income asset classes. Investing passively on a global basis is also an emerging trend.[170] The decision of whether to invest passively in other areas of the market is best made within the context of an investment management structure review given the objectives of the portfolio. This topic has not recently been addressed by the Investment Committee.

Exhibit 6.13 shows the historical relative performance of HPRS' public market active managers over a five year period by asset class. Active managers lacking five years of performance within HPRS' portfolio were not included in this analysis.

[169] Investment management fees for index funds are very low, but combining the assets from three separate index funds into one may qualify the HPRS for an even lower management fee.
[170] A passive global investment would be to an index fund that includes both U.S. and non-U.S. stocks such as the MSCI All Country World Index Fund.

Exhibit 6.13 – Historical Active Public Market Manager Investment Performance

Manager	5 Year Benchmark Over (Under) Performance as of 6/30/2010
U.S. Equity	
Intech	(0.9)%
DePrince, Race, & Zollo	0.0
Brandywine Asset Management	1.0
Westfield Capital Mgmt.	2.6
DFA U.S. Small Co Strategy	2.9
Non – U.S. Equity	
Artio Int'l. Equity Fund II	(1.4)
Manning & Napier OverSeas	0.4
Dimensional Int'l Sm Cp Val	1.2
Fixed Income	
Western Asset High Yield I	(1.4)

Overall, HPRS has successfully implemented active management in the public market asset classes. The majority of HPRS' active U.S. equity managers have outperformed their respective benchmarks, with three out of five adding value over the five year period. Similarly, two out of three active managers in the non-U.S. equity portfolio have outperformed their respective benchmarks. The active fixed income manager with five years of performance in HPRS' portfolio failed to outperform its respective benchmark over the five year period. The other two fixed income managers in the portfolio do not yet have five years of performance history with HPRS.[171]

Conclusion

HPRS has a higher allocation to passive management than peer systems with assets under $1 billion, but has a lower allocation compared to the total public fund peer group. A significant allocation to passive management is appropriate. All of HPRS' allocation to passive management lies within its U.S. equity portfolio, which is common. Investing in one broad-based U.S. equity index fund could potentially represent a cost savings to HPRS over the long term. Some investors also invest passively within other asset classes, or on a global basis. The decision of whether to invest passively in other asset classes would be part of a thorough management structure review. Although HPRS' successful implementation of active management within the public market asset classes is commendable, such performance is not guaranteed over a longer time horizon.

[171] Over the three year period, J.P .Morgan has added 1.9 percentage points of value while Wells Capital has lagged by 1.5 percentage points (as of 6/30/2010).

Recommendations

Rec#	Recommendation	Priority Level	Cost	Party Involved
52	Evaluate whether an increased allocation to index funds would benefit the portfolio.	Low	Low	Board, Staff, Consultant
53	Consider investing in one broad U.S. equity index fund as opposed to using the three index funds currently in place.	Low	Low	Board, Staff, Consultant
54	Review the appropriateness of investing passively in additional asset classes during a management structure review.	Low	Low	Staff, Consultant

IV. Internal and External Management

Background

Managing assets in-house typically has a cost advantage when compared to external management. The cost advantage, however, is only meaningful if performance is not sacrificed. Therefore, potential cost savings alone should not drive the decision to manage assets internally. The ability to consistently and safely achieve appropriate returns net-of-expenses should drive the decision. To be successful, internal management requires not only an adequate number of expert portfolio managers but also sufficient support from investment operations and accounting staff.

Risks are increased when managing assets internally, but they can be mitigated. The most important risks are associated with the inability to attract and retain qualified staff, the lack of strong internal controls, non-adherence to strict trading policies, and ineffective review by an external auditor.

Best practices are for internal portfolios to be held to the same standards (performance, trading efficiency, and operational risks) as externally managed portfolios. Further, the internal portfolios should be consistently monitored and independently evaluated.

Findings and Analysis

HPRS does not currently manage any publicly traded assets internally. Exclusively relying on external managers to invest assets is typical for public retirement systems of HPRS' size. A recent survey shows that public retirement systems with assets between $500 million and $1 billion have, on average, 4.2% of assets managed internally.[172]

HPRS does own and operate some real estate internally. HPRS' allocation to individual properties represents approximately 22% of the real estate portfolio and 0.5% of total fund assets, or $4.1 million. HPRS' Investment Objectives, Policies and Guidelines (collectively referred to in this Report as the Investment Policy Statement, or IPS) allows for investments in "improved or unimproved real property" within the context of the real estate portfolio. It also stipulates that real estate investments are to "provide sufficient diversity to protect against adverse conditions in any single market sector" and "provide diversity among geographical locations, property types, and property sizes." The current investment in two properties subjects HPRS to significant risks associated with a very specific market sector, geographical location, property type, and size. HPRS' other real estate investments are in externally managed real estate funds[173] which invest in many different properties and are diversified by geography and property type. These externally managed real estate funds offer HPRS access to the private real estate market without exposing the portfolio to risks and added responsibilities associated with the internally managed properties.

[172] Greenwich Associates 2009 Market Dynamics Survey
[173] Fidelity Real Estate Growth II, Fidelity Real Estate Growth II, OakTree Real Estate Opportunities, and Henderson Indirect Property Fund.

Conclusion

HPRS does not currently manage publicly-traded assets internally, which is appropriate and similar to peer systems. HPRS uses both internal and external management for real estate. Managing undiversified real estate internally subjects HPRS to significant risks.

Recommendation

Rec#	Recommendation	Priority Level	Cost	Party Involved
55	Carefully re-evaluate the merits and risks of directly held real estate in the portfolio.	High	Medium	Board, Staff, Consultant

V. Investment Management Fees

Background

The number and type of managers hired directly affects the overall investment management expenses incurred by a fund. Generally speaking, passive management is less expensive than active management and internal management is less expensive than external management. Additionally, larger allocations of assets to a single manager will usually reduce the fees if certain thresholds are met.

Investment management fees can also be reduced through skillful negotiation of contract terms.

Findings and Analysis

The investment management fees[174] associated with HPRS' investment program amount to approximately $3.4 million per year or roughly 53.0 basis points (bps) on HPRS' total asset base (excluding cash) of approximately $641.5 billion.[175] The information provided in Exhibit 6.14 illustrates HPRS' total fund fee compared to peers. HPRS' total fund fee is slightly higher than those of peer public retirement systems with assets between $501 million and $1billion.

Exhibit 6.14 – HPRS Total Fund Investment Manager Fees Compared to Peers

Fee Comparison	
Source: Greenwich 2009 Fee Report	Fee (in basis points)
HPRS Investment Management Fees	*53.0*
Average -- All Public Funds	48.7
Average -- Public Funds $1-5 billion	53.9
Average – Public Funds $501million - $1 billion	49.2
Average – Public Funds $500 million and under	57.7

HPRS' slightly higher than average total fund fee can be attributed to HPRS' higher than average allocation to alternative investments. Alternative investments are typically more expensive than investments in public market securities.

When compared at the asset class level, HPRS' fees prove to be competitive relative to peer fund averages as illustrated in. Exhibit 6.15.

[174] Total Fund and asset class fees represent weighted averages of underlying investments in each asset class using 6/30/2010 market values provided in the Hartland performance report. Asset class fees based upon fees for individual managers per fee schedules in investment management agreements.
[175] Assets based on 6/30/2010 Hartland performance report: $647.1 million less $5.6 million in cash.

Exhibit 6.15 – HPRS Total Fund Investment Manager Fees Compared to Peers

HPRS' fee for each of the asset classes for the year 6/30/2010			
Asset Class	**Assets ($ in Millions)**	**Fee (in basis points)**	**Peer Group Fee Comparison[176]**
Domestic Equities	$280.6	40.7	56.3
International Equities	89.9	49.7	63.4
Fixed Income	129.5	31.0	31.9
Real Estate	16.7	105.7[177]	150.0[178]
Private Equity	67.6	81.5	100-200[179]
Hedge Funds	57.2	119.9	157.6
Total	$641.5	53.0	--

HPRS' fees are lower relative to peer fund averages for each asset class. The fees that are included in the peer universe represent active management only. Therefore, HPRS' higher than average use of passive management within the domestic equity portfolio partially explains the difference in domestic equity fees, since passively managed funds are typically more cost effective than actively managed funds. HPRS' lower than average fee for the other asset classes can be attributed to HPRS' commitment to reduce costs by hiring managers with competitive management fees.

Exhibit 6.16, on the following page, compares each marketable security managers' fee with that of a peer group. The rank of HPRS' fee is also shown in the table. A rank of 1 is the best (meaning the manager has a low fee compared to average). The four managers within HPRS' portfolio that have higher than average fees are highlighted.

[176] Greenwich Associates 2009 Market Dynamics report except where noted. Fees represent actively managed portfolios of a peer group of public funds with assets between $501 million and $1 billion.
[177] Fees related to the two properties maintained by HPRS within its allocation to real estate are assumed to be zero for the purpose of this analysis.
[178] Industry average based on portfolios containing domestic and international funds.
[179] Fee range is sourced from the Dow Jones, Private Equity Analyst, Terms and Conditions Report, Fourth Edition (2008).

Exhibit 6.16 – HPRS Manager Fee Comparison

HPRS Manager Fee Comparison *(Fees in basis points)*			
	HPRS Fee[180]	**Average Fee[181]**	**Rank**
Intech	50	64	5
Wellington Diversified Gr Eq	57	64	26
SSgA S&P 500 Index	5	8	8
DePrince, Race, & Zollo	55	65	17
LSV Asset Mgmt.	30	65	1
World Asset Russell Mid Cap	10	9	55
Brandywine Asset Management	60	78	9
Westfield Capital Mgmt.	100	90	77
Fred Alger	100	100	50
DFA U.S. Small Co Strategy	35	100	1
World Asset Russell 2000 Value	10	9	55
Artio Int'l. Equity Fund II	84	80	64
World Asset Foreign Equity Fund	8	76	1
Manning & Napier OverSeas	70	80	27
Dimensional Int'l Sm Cp Val	69	100	14
JP Morgan Core Bond	28	29	45
Wells Capital Mgmt	28	29	33
Western Asset High Yield I	55	74	17

The majority of HPRS' individual investment managers have fees that are lower than the average fee for comparable managers. Although the highlighted fees are greater than average, they are still reasonable compared to industry average, only differing from peer fund averages by a few basis points.

We reviewed the fees of HPRS' external real estate managers. Overall, the fees and terms appear reasonable. HPRS' 105.7 basis point fee within its real estate portfolio is well below the average 150 basis points of other peer systems.[182]

We also reviewed the fees paid to the private equity general partners along with the hurdle rates and carried interest compensation.[183] Overall, the fees and terms appear standard as HPRS' aggregate fee of 81.5 bps is well below the peer average fee range of 100 to 200 bps.

[180] Manager fees calculated based on contractual fee schedules and market values as of 6/30/2010.

[181] Average fee in an eVestment universe of similar strategy, vehicle, and mandate size.

[182] Greenwich Associates 2009 Market Dynamics report except where noted. Fees represent actively managed portfolios of a peer group of public funds with assets between $501 million and $1 billion. International average based on portfolios containing international and domestic funds.

[183] A hurdle rate is the minimum amount of return that a manager must earn before performance fees are assessed. Performance fees, also know as carried interest compensation, is a share of profits over a specified hurdle rate. Carried interest rates among hedge funds have historically also centered around 20% but have had greater variability than those of private equity funds, occasionally reaching as high as 50% of a fund's profits.

We also reviewed the fees associated with hedge fund investments. While fund-of-funds are highly diversified investments, the investor is required to pay fees to both the underlying hedge fund manager and the fund-of-funds manager. This additional layer of fees is likely to exceed 100 basis points per year. Overall, the fees and terms for the existing hedge fund investments appear reasonable.

Conclusion

HPRS' investment management fees are lower than peer averages when compared by asset class. The total fund investment management fee is slightly higher than peer systems due to HPRS' higher than average allocation to more expensive alternative investments.

Recommendations

None

VI. Benchmarks and Performance

Background

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

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

Findings and Analysis

Benchmarks

Pursuant to HPRS' investment policy statement (IPS) total fund performance is to be compared to both the fund's actuarial assumption of 8% annually over a market cycle, and to a composite benchmark composed of 65% Russell 3000 Index, 20% Barclays Capital Aggregate Index, and 15% MSCI ACWI ex-US Index. While comparing total fund performance to such a benchmark provides a certain level of insight, this approach is not best practice because it does not accurately reflect the underlying investments in HPRS' portfolio. It is best for HPRS to use a policy portfolio benchmark.

As the target asset allocations stand, an appropriate benchmark for HPRS' total fund would be as follows in Exhibit 6.17.

Exhibit 6.17 – Policy Policy Portfolio Benchmark Composition

Allocation	Index
45%	Russell 3000 Index[184]
15%	MSCI All Country World Ex-U.S. Index[185]
5%	NCREIF Property Index[186]
5%	Hedge Fund Research Institute (HFRI) Fund-of-Funds Index[187]
10%	Wilshire 5000 Index + 3%[188]
20%	Barclays Capital Aggregate Bond Index[189]

HPRS' policy allocation approved by the Board does not currently include an allocation to real assets (timber). Since HPRS has a material allocation (6% of total fund assets) to real assets, it would be best for this to be reflected in the policy allocation and the policy portfolio benchmark. Currently, the real asset investment is incorrectly benchmarked against the private equity benchmark at the total fund level.

Exhibit 6.18 shows the benchmark assigned to each asset class in the IPS and as used in the performance reports produced by the investment consultant. Also included is an assessment of whether each is appropriate.

Exhibit 6.18 – Asset Class Benchmarks

Asset Class	Benchmark Per IPS	Benchmark Shown in Performance Reports	Assessment
Total Equity	None indicated	Russell 3000 Index	The Russell 3000 Index is a broad measure of the total U.S. equity market. A more appropriate benchmark for a total equity asset class, which includes non-U.S. stocks, would be a broad measure of the total global equity market such as the MSCI All Country World Index.
Total Domestic Equity	None indicated	Russell 3000 Index	Appropriate but not stated in the IPS.
Domestic Large Cap Equity	S&P 500 Index	S&P 500 Index	Appropriate
Domestic Small/Mid Cap Equity	Russell 2500 Index	Russell 2500 Index	Appropriate

184 The Russell 3000 Index represents a broad measure of the total U.S. equity market.
185 The Morgan Stanley Capital International (MSCI) All Country World ex- U.S. index represents a broad measure of the total global equity market excluding U.S. equity.
186 The National Council of Real Estate Investment Fiduciaries (NCREIF) Property Index reflects a very large pool of individual U.S. commercial real estate properties and is a broad measure of a diversified real estate portfolio.
187 The HFRI index is an equally weighted index of both domestic and offshore funds and is a common benchmark for diversified hedge fund investments.
188 The Wilshire 5000 Index is a broad universe benchmark of public market securities. The added 3% premium accounts for the additional risk associated with private equity securities.
189 The Barclays Capital Aggregate Bond Index is a broad measure of the U.S. bond market.

Asset Class	Benchmark Per IPS	Benchmark Shown in Performance Reports	Assessment
International Equity	MSCI AC World ex-US Index	MSCI AC World ex-US Index	Appropriate
Fixed Income	BC Aggregate U.S. Bond Index	BC Aggregate U.S. Bond Index	Appropriate
Total Alternatives	None indicated	Russell 3000 Index	The Russell 3000 Index is a broad measure of the total domestic equity market and is not an appropriate benchmark for alternative investments. A more appropriate benchmark would be a custom benchmark that reflects policy allocations made to the individual asset classes within the alternatives portfolio.
Real Estate	NCREIF Property Index	NCREIF Property Index	Appropriate
Hedge Funds	HFRI Fund of Funds Index	HFRI Fund of Funds Index	Appropriate
Private Equity	Wilshire 5000 + 3%[190]	Wilshire 5000 + 3%[191]	Appropriate; Venture Economics would also be a suitable secondary benchmark to compare strategy, vintage year, or geographic results.
Real Assets (Timber)	None indicated	None indicated	HPRS' investment in Timbervest represents an investment in real assets. Real assets are appropriately benchmarked against the CPI plus a desired premium (such as 5%).
Global Tactical Asset Allocation (GTAA)	CPI + 5%	None indicated	Appropriate. Some GTAA managers use a stated return target, such as the CPI + 5%, as a benchmark. Others try to beat a default neutral global weighting, such as 60% MSCI World Index and 40% Citigroup World Government Index. Both benchmarks are appropriate and depend on the particular strategy of each manager. Therefore, the total GTAA asset class benchmark should represent an equal weighting of the strategies (a mix of CPI+5% and the default neutral global weighting) employed by the GTAA managers.
Cash & Cash Equivalents	None indicated	Merrill Lynch 91-Day T-Bill	Appropriate; but not stated in the IPS.

[190] The private equity benchmark was changed in 4th quarter 2010 from CPI + 5% to the Wilshire 5000 + 3%, which was an appropriate benchmark revision.
[191] As indicated in the revised 9/30/2010 Hartland performance report.

To assess the appropriateness of benchmarks used for each manager we performed a "best benchmark" analysis that relies on both qualitative and quantitative factors. [192] The results of this benchmark analysis are presented in Exhibit 6.19.

Exhibit 6.19 – Public Equity and Fixed Income Benchmarks

HPRS Manager	HPRS Mandate	HPRS Benchmark	"Best Benchmark" Analysis Results	Hewitt EnnisKnupp Assessment
Domestic Equity				
Intech	Large Cap Growth	Russell 1000 Growth	Russell 1000 Growth	Appropriate
Wellington Diversified Growth Equity	Large Cap Growth	Russell 1000 Growth	Russell 1000 Growth	Appropriate
SSgA S&P 500	Large Cap Blend	S&P 500	S&P 500	Appropriate
DePrince, Race, & Zollo	Large Cap Value	Russell 1000 Value	Russell 1000 Value	Appropriate
Westfield Capital Mgmt.	Small/Mid Cap Growth	Russell 2500 Growth	Russell 2500 Growth	Appropriate
World Asset Russell Mid Cap	Mid Cap Blend	Russell Mid Cap	Russell Mid Cap	Appropriate
Brandywine Asset Management	Mid Cap Value	Russell 2500 Value	Russell 2500 Value	Appropriate
World Asset Russell 2000 Value	Small Cap Value	Russell 2000 Value	Russell 2000 Value	Appropriate
DFA U.S. Small Co.	Small Cap Blend	Russell 2000	Russell 2000	Appropriate
Fred Alger	Small Cap Growth	Russell 2000 Growth	Russell 2000 Growth	Appropriate
LSV Asset Mgmt.	Large Cap Value	Russell 1000 Value	Russell 1000 Value	Appropriate
Non – U.S. Equity				
Manning & Napier Overseas	International Equity	MSCI AC World ex U.S.	MSCI AC World ex U.S.	Appropriate
Artio Int'l. Equity Fund II	International Equity	MSCI AC World ex U.S.	MSCI AC World ex U.S.	Appropriate
World Asset Foreign Equity	International Equity	MSCI AC World ex U.S.	MSCI AC World ex U.S.	Appropriate[193]

[192] The qualitative factors include Hewitt EnnisKnupp's knowledge of the managers' mandates and strategies, while the quantitative factors include a statistical measure of the "fit" between the managers' return history and that of the benchmark. Fit is a combination of R-squared and tracking error. The R-squared value is the correlation coefficient squared. The correlation coefficient between a manager and a benchmark indicates how often the two move in the same direction. The amount of tracking error is the standard deviation of the manager's return in excess of the benchmark's return. The smaller the tracking error, the better the fit.
[193] The 6/30/2010 performance report produced by Hartland describes the mandated benchmark as the MSCI EAFE index while the portfolio actually is benchmarked against the MSCI AC World ex US index.

HPRS Manager	HPRS Mandate	HPRS Benchmark	"Best Benchmark" Analysis Results	Hewitt EnnisKnupp Assessment
Fund				
Dimensional Int'l Small Cap Value	International Equity	MSCI EAFE Small Cap	MSCI ACW ex U.S. Small Cap Value	Appropriate; statistical analysis indicates a small cap value-orientated benchmark as being a better statistical match; however, the MSCI EAFE Small Cap is also a reasonable benchmark.
Fixed Income				
Wells Capital Mgmt.	Intermediate – Term Bond	BC Aggregate Bond	BC Aggregate Bond	Appropriate
JP Morgan Core Bond	Intermediate – Term Bond	BC Aggregate Bond	ML Intermediate Government Bond Index	Appropriate; statistical analysis indicates a benchmark reflective of intermediate maturity bonds may be a better benchmark; however, the BC Aggregate Bond Index was is also a reasonable benchmark
Western Asset High Yield I	High Yield Bond	BC High Yield	ML High Yield Master II	Appropriate; statistical analysis indicates a benchmark that accounts for zero-coupon and payment-in-kind bonds may be a better benchmark; however, the BC High Yield Index is also a reasonable benchmark

Beyond securities in public markets, HPRS also invests in real estate, private equity, and hedge funds. The individual managers within the real estate allocation are benchmarked against the NCREIF Property Index (NCREIF), which is appropriate. NCREIF reflects a very large pool of individual U.S. commercial real estate properties and is an appropriate broad measure of a diversified real estate portfolio. NCREIF is also an appropriate benchmark for the two individual properties within the portfolio.

The benchmark for the individual private equity investments recently changed from the CPI plus 5% to the Wilshire 5000 plus 3%. This change was appropriate. The added premium accounts for the additional risk associated with private equity securities. Previously, the CPI plus a 5% premium was inappropriate because the CPI is a measure of inflation and does not accurately reflect the volatility inherent in these types of investments.

The Timbervest investment is inappropriately benchmarked to the NCREIF Property Index. Because the Timbervest investment is a real asset, a benchmark consisting of the CPI plus a premium (for example, 5%) would be appropriate. Currently HPRS does not have a target asset allocation to real assets. In order to align with best practice, if HPRS feels that it is necessary to invest in real assets, it would be best for the Board to approve a target asset allocation and appropriate benchmark for this asset class.

The individual hedge fund-of-fund managers are appropriately benchmarked against the HFRI Fund-of-Funds Index. This Index is an equally weighted index of both domestic and offshore funds and is a common benchmark for diversified hedge fund investments. Investments in the individual hedge funds (Seix Credit Opportunities, Feingold O'Keeffee, and Sankaty Prospect Harbor funds) were recently changed from being benchmarked against the S&P 500 to an equally weighted index of loans and high yield bonds. This change was appropriate and the previous S&P 500 benchmark was not. The 90 day Treasury Bill plus a premium would also be an appropriate benchmark, and is a common market neutral benchmark used for individual hedge fund investments.

Performance

Exhibit 6.20 compares HPRS' actual rate of return (ROR) against the total fund policy benchmark as described in the Investment Policy Statement adopted by the Board.[194] The Exhibit also shows HPRS' rank in a universe of other public retirement systems with total assets under $1 billion. A rank of 1 is the best, and a rank of 99 is the worst.

Exhibit 6.20 – Total Fund Performance

Annualized Performance As of 6/30/2010[195]	**1 Year ROR Rank**	**3 Years ROR Rank**	**5 Years ROR Rank**	**10 Year ROR Rank**
HPRS Total Fund	13.9% (37)	-4.8% (69)	2.3% (45)	3.0% (34)
Total Fund Policy Benchmark	14.0% (35)	-3.0% (36)	3.6% (11)	3.3% (17)

HPRS' total fund has underperformed the policy benchmark over the 1, 3, 5, and 10 year periods. The one year performance shortfall was very small. Over the long term, much of the difference can be attributed to the underperformance of non-U.S. equity and real estate portfolios respective to their asset class benchmarks. Total fund underperformance ending 6/30/2010 was due in large part to the alternatives portfolio underperforming equities. During this period the alternatives portfolio returned 9.9% while its benchmark, the Russell 3000 Index, returned 15.7%. HPRS' allocation to alternative assets (hedge funds and private equity) has successfully added value relative to the U.S. equity market over the two and three year periods. HPRS' diversification of risky assets into alternatives is prudent and appropriate as we detail in the Asset Allocation Section of this Report. Despite underperforming its

[194] As discussed in the Benchmarks section of this review, HPRS' Total Fund Benchmark is not a direct passive representation of HPRS' strategic asset allocations as they have changed over time. As a result, the relative performance of the Fund does not accurately reflect the success of HPRS' investments. This is primarily because the current Total Fund Benchmark compares the performance of the alternative asset class to an equity asset class benchmark.

[195] Returns per the Hartland Performance Report for the quarter ended 6/30/2010. Performance is net of fees. Ranks are calculated on data provided by BNY Mellon Risk and Analytics Universe for a public fund universe of 57 plans, each with under $1 billion in total plan assets.

benchmark, HPRS ranks above average in a peer group of public retirement systems with assets under $1 billion over the 1, 5, and 10 year periods.

Conclusion

HPRS' current total fund policy benchmark is not appropriate. The total fund benchmark should be a passive representation of HPRS' asset allocation. Currently, the Investment Objectives, Policies, and Guidelines do not articulate benchmarks for total domestic equity, total alternatives, and real assets (timber). It would be best for the Board to approve benchmarks for these asset classes and require that they be reflected in the performance reports. The performance reports already reflect appropriate benchmarks for total domestic equity, the Russell 3000 Index, and total international equity, the MSCI All Country World Ex-U.S. Index. The performance reports show total equity (domestic and international) against the Russell 3000 Index, which is not appropriate. An appropriate benchmark for total equity would be a broad measure of the total global equity market such as the MSCI All Country World Index.

The benchmarks that are identified for the sub-categories of alternatives (hedge funds, private equity, and global tactical asset allocation) are appropriate; however, a combined total alternatives benchmark is not specified. The performance reports currently measure total alternatives against the Russell 3000 Index, which is not appropriate. An appropriate benchmark would be a custom benchmark that reflects the policy allocations made to the individual asset classes within the alternatives portfolio.

Specific benchmarks set for the individual managers were reviewed and found to be appropriate.

Recommendations

Rec#	Recommendation	Priority Level	Cost	Party Involved
56	Establish a total fund policy benchmark that is a passive reflection of the target allocations of the fund as they have changed over time.	High	Low	Board, Staff, Consultant
57	Discuss and adopt within the Investment Objectives, Policies, and Guidelines, appropriate asset class benchmarks for total domestic equity, the total alternatives asset class, and real assets (timber); require that the performance reports reflect appropriate benchmarks.	High	Low	Board, Staff, Consultant

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INTRODUCTION

Many factors influence investment program performance. Studies show asset allocation has a very large impact on investment portfolio returns, while manager and security selection have a smaller effect at the total portfolio level.[196] Manager selection and oversight, however, should not be overlooked. When making manager decisions, fiduciaries have the duty to act prudently. They are judged by the prudence of their process, not by the outcome.[197] Prudence is not the same as "perfection," but it does require fiduciaries to use the same care, skill, and diligence that other sophisticated institutional investors use in the selection and monitoring of comparable investment managers.

Prudence involves a rigorous due diligence process, which has two phases: (1) the initial selection of managers and (2) the ongoing monitoring of those managers. The selection process begins with the consideration of a very large universe of managers. Of these, a much smaller number may be suitable for a public retirement system to seriously consider due to the size and structure of the investment portfolio. As a result, the selection process must effectively identify and screen the managers uniquely skilled for each mandate.

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

Due diligence can be exemplary, but if the research and analysis of managers are not documented in policies, procedures, and reports, efforts will fall short of best practices. Documentation helps to evidence that expectations for the care and scrutiny to be used in selecting and monitoring managers are understood and followed.

SCOPE OF REVIEW

This Section of the Report is focused on the following areas relating to the manager selection and monitoring process:

I. Roles of the Board, Staff, and Consultant
II. Selection Process
III. Monitoring Practices

[196] For example, Ibbotson, Roger and Paul Kaplan, "Does Asset Allocation Policy Explain 40, 60 or 100 Percent of Performance?" *Financial Analyst Journal*, Vol. 56, No.1 (January/February 2000): 26-33.
[197] *Donovan v. Cunnigham*, 716 F.2d 1455, 1457 (5th Cir. 1987).

I. Roles of the Board, Staff, and Consultant

Background

As the ultimate fiduciaries for the funds, boards of public retirement systems have an obligation to ensure that the manager selection process is fair, transparent, and sound. Boards are not required, however, to have trustees complete all the work involved with manager selection and monitoring. Boards are able to delegate a significant portion of the work to others, including the investment committee, staff, and the investment consultant. Some boards have delegated the entire manager selection and monitoring process to others, while many have remained involved. No one approach is necessarily better than the other. What is important is that the roles are clearly understood and documented, and that the process is carried out in accordance with a prudent policy.

Findings and Analysis

Based upon our interviews and a review of relevant documentation, the HPRS Board, Investment Committee, staff, and investment consultant all appear to have a common understanding of the role each group has in the manager selection process.

The role of the investment consultant is to:
- Identify the need for new managers
- Develop the Request for Proposal (RFP)
- Evaluate proposals
- Assist the Investment Committee in identifying semi-finalists
- Attend manager presentations at HPRS' office
- Discuss candidates with the Investment Committee and the Board
- Conduct on-site due diligence with finalist firms
- Assist in the development of investment manager guidelines

The role of the staff is to:
- Post the RFP to HPRS' website
- Oversee the work of the investment consultant
- Ensure the process is completed in an appropriate manner
- Ensure the Investment Committee and Board receive appropriate information
- Coordinate the development and execution of manager contracts and guidelines
- Conduct on-site due diligence with selected finalist firm if deemed appropriate

The role of the Investment Committee is to:
- Approve the initiation of a search
- Validate that the search process was carried out appropriately
- Select and evaluate the semi-finalists
- Attend manager presentations at HPRS' offices
- Request additional information, if warranted
- Select the manager(s) that will be recommended to the Board for hiring

The role of the Board is to:
- Reject, modify, or approve the recommendation from the Investment Committee regarding the manager(s) to hire

The roles that have been adopted by HPRS for manager selection are commonly used by other public retirement systems. The Board's Selection of Investment Managers and Agents Policy, Investment Objectives, Policies, and Guidelines, and the Highway Patrol Retirement System Investment Process[198] document (Investment Process document) generally describe the manager selection process. The role of the investment consultant, however, is not described in any of these documents.

After the managers have been selected and retained, the investment consultant's role is to monitor the investment managers and provide relevant updates to the staff and the Investment Committee. The Executive Director/CIO of HPRS also monitors investment managers. The Investment Committee's role is to determine, based upon the investment consultant's and staff's recommendations, whether any managers should be terminated. The Board has final authority for manager terminations.

Conclusion

The roles that have been assigned to each party related to manager selection and monitoring are appropriate. Best practices would call for further documentation of the roles of each party in the Selection of Investment Managers and Agents Policy and/or the Investment Process document. Roles could also be stated in committee charters and position descriptions.

Recommendation

Rec#	Recommendation	Priority Level	Cost	Parties Involved
58	Improve documentation of the roles of the Board, Investment Committee, staff, and investment consultant in the manager selection and monitoring processes.	Low	Low	Board, Staff, Consultant

[198] The "Investment Process" document outlines manager search and selection activities. The first two sections were approved in August of 2010. A third section, which outlines implementation issues, was approved in December 2010.

II. Selection Process

Background

Historically, in the public retirement arena, investment managers have been assessed and selected through an RFP process, where interested managers submit information on their firms, personnel, and investment strategies. Many systems continue to use such a formal process because it often parallels the protocol government agencies use for purchasing goods and services and it is designed to offer equal opportunity for doing business with the system. An RFP process is also seen as a way to ensure fairness in the selection process.

Some public retirement systems have moved away from this time-intensive process and instead rely upon staffs and investment consultants to identify a list of suitable candidates that are appropriate for the mandate using their knowledge of the managers and the fund's needs. Many public retirement systems find this process to be more efficient as it avoids the delays associated with receiving proposals from a multitude[199] of prospective vendors, many of whom may be totally inappropriate for the fund to hire.

Regardless of whether a formal RFP process is used, it is important for the selection process to be transparent, fair, and focused on those factors that are most relevant to assessing the manager's ability to add value going forward.

Findings and Analysis

HPRS Investment Objectives, Policies, and Guidelines include a summarized description of the manager selection process. The process is further described in writing in the Investment Process document and in the Selection of Investment Managers and Agents Policy. Actual practice is consistent with these documents.

HPRS' investment consultant, Hartland, recommends the initiation of a search when the need for a new investment manager is identified. Once a new search has been approved, Hartland has responsibility for the initial development of an RFP to be used in the process. The search criteria to be used are described in the Investment Process document and include:

- Fees
- Ownership
- Organization/People
- Investment Philosophy
- Past Performance
- Product/Mandate Fit
- Client Service Capabilities

A documented set of criteria for searches completed before 2010 does not exist. The criteria established in 2010 are reasonable factors to include in the selection process. The weighting of the evaluation criteria is not specified.

[199] For example, there are thousands of U.S. equity managers. A typical search process conducted through RFP could easily result in over 100 responses.

In addition to the criteria list above, Ohio statute requires that all fiduciaries, which would include investment managers, have at least $1 million in insurance or bond coverage for loss by reason of acts of fraud or dishonesty.[200] The staff verifies whether the managers under consideration meet this requirement during the due diligence process.

Consistent with Senate Bill 133 (effective September 15, 2004), HPRS will give equal consideration to Ohio-based, minority, and female-owned investment managers. In order to ensure they are not unduly excluded from the process, search criteria such as a minimum level of assets under management, firm-specific investment team, and organizational history are not factors that will prevent a manager from being considered. A thorough evaluation of skill and relevant experience is always required. HPRS' practices in this regard are similar to those of other public retirement systems.

Hartland has responsibility for reviewing and vetting the proposals that are received in response to the RFP. They evaluate the proposals and discuss summary information with the Investment Committee in order to determine a set of semi-finalist candidates, typically two to four managers. Limited documentation of the analysis that resulted in the selection of semi-finalist firms was made available for this review.[201] It is best practice for such an analysis to be completed and kept as part of the due diligence record.

The proposals from each semi-finalist candidate are compiled into a booklet for the Investment Committee. Hartland includes comparative exhibits that show risk, return, style (growth vs. value) and capitalization (small vs. large cap), peer rankings, and other statistics[202] for the Investment Committee's review.

Hartland does not compile a traditional search report for HPRS as other consultants do for their public retirement system clients. The best search reports are more than a compilation of RFP responses; they include a discussion and comparison of relevant evaluation factors and at a minimum address those factors identified in the Department of Labor Advisory Council's *Report on Guidance in Selecting and Monitoring Service Providers.*[203]

On the following pages we list and describe the factors that we believe should be analyzed by investment consultants and included in a comprehensive search report. The analysis would include the investment consultant's assessment of strengths and weakness in each area, competitive advantages of each candidate, and appropriateness for the client.

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[200] Ohio Revised Code § 5505.061 (D) and (E)

[201] A memo regarding the enhanced large cap value search completed in May 2007 was provided. That memo documents the initial screening criteria that resulted in the three candidate firms (product type and style, benchmark, and active status). The documentation we are referring to includes that related to qualitatively and quantitatively winnowing a list of capable firms to the top contenders.

[202] For example: Upside/downside (frequency and level of out or underperformance versus the benchmark), R-squared (a measure of how closely the portfolio's performance is correlated to that of the benchmark), Sharpe Ratio (a measure of excess return per unit of risk), and tracking (performance difference between the portfolio and the benchmark)

[203] While the DOL's guidance is for ERISA plans, it is often used as an appropriate model for public funds as well.

1. Business:

   In a review of the business, a comprehensive selection process will consider the ownership structure and whether investment management is the sole or dominant business of the firm. The goal is to understand the structure of the firm and how it has evolved over time. It is important to know whether a parent company influences the asset management business and what stake investment professionals have in the success or failure of the organization. Client base, business objectives, conflicts of interest, and management should also be considered. Business issues can have a major impact on staffing and the investment process so understanding each candidate firm's situation is an important evaluation criterion.

2. Organization and Staffing:

   Staffing has a direct impact on the success of an investment manager. The individuals or team responsible for security selection must be experts in their respective areas and knowledgeable about risk, portfolio construction, and economic factors. A good selection process will focus on the quality, education, experience, and tenure of the investment professionals as well as how information is shared within the organization, team dynamics, and depth of resources.

3. Investment Process:

   Investment process is the method by which a manager identifies holdings for the portfolio. While there is no one right or wrong approach, it is important to understand and evaluate the manager's investment process during a search. Process includes the manager's philosophy or general approach to investments, research capabilities, portfolio construction, and implementation techniques.

4. Risk Management:

   A thorough selection process will include an assessment of a firm's risk management capabilities which includes the controls that are in place for limiting positions within portfolios. It also involves analyzing where and how value can be added or lost. Risk management takes into account an evaluation of operational risks, which includes an assessment of how trades are communicated, executed, and allocated.

5. Systems:

   A review of a manager's systems will include an evaluation of the availability and quality of tools the investment team and back office have to trade and monitor the portfolio. The evaluation should include a review of general system capabilities (research databases, risk tools, etc.) as well as trading systems and client compliance capabilities.

6. Performance:

   It is known that an investment manager's past performance is a poor predictor of future performance. Research has shown that generally past performance has no reliable predictive content. Nevertheless, since performance is difficult to ignore, it should be taken into consideration. A selection process should evaluate the manager's performance in light of their style, whether those responsible for past outperformance are still in place, whether the level of return within the portfolio was appropriate given the risk, and what has driven performance. Dispersion[204] and GIPS[205] compliance is also important to review.

7. Client Service and Fees:

   A search should include an evaluation of the firm's client service capabilities, including the types of reporting and the responsiveness of client service teams. Fees are important because the performance of managed funds suffers dollar for dollar as a result of management fees. There is no evidence of a relationship between fees and performance. Accordingly, differentials in management fees are assumed to translate directly to differentials in net return. Within a search report, each candidate's fees should be compared to each other and to the peer universe in general.

The finalist managers are asked to make a presentation to the Investment Committee. Having an investment committee or board involved in interviewing and selecting investment managers is a common practice. This task can successfully be delegated to the staff or the investment consultant if a complete board-approved due diligence process is documented and followed. While this is not a common practice, some public retirement systems with larger investment staffs have adopted this model.[206]

Based upon input from staff and the investment consultant, the Investment Committee recommends to the Board the manager(s) to be hired. Some investment committees prefer for an investment consultant to recommend a specific investment manager to them. Others prefer for the investment committee to pick the manager without being biased by receiving the investment consultant's recommendation first. Either way, the investment consultant should have an assessment of what manager or managers would be the best fit for the system. It does not appear that HPRS' Investment Committee has received any such written recommendation from the consultants based on the documents we reviewed.

When the Investment Committee's recommendation is made to the Board, the Board is given an overview of the search process and manager information. The Board typically approves the Investment Committee's recommendation.

HPRS has a policy that calls for Trustees and staff to refrain from contact with potential managers during the search process.[207] This is a good practice which serves to mitigate actual or perceived conflicts of interest.

After the manager to be hired has been identified, staff and the investment consultant work with the manager to execute an investment management agreement and investment guidelines. Outside legal counsel reviews the contracts before they are signed.

[204] The difference between the manager's composite and individual portfolio results.
[205] GIPS (Global Investment Performance Standards) are a set of standard principles regarding the calculation and reporting of investment performance published by the CFA Institute.
[206] For example, Los Angeles County Employees Retirement Association, Missouri State Employees' Retirement System, and Teacher Retirement System of Texas.
[207] The Contact with Vendors During the Hiring Process Policy is reviewed in more detail in Section 3 of this report.

The entire search process typically spans three to six months. Neither the investment consultant nor staff believes that the formal RFP process has caused HPRS to miss out on investment opportunities. There have been a limited number of instances where a formal RFP process has not been used. This has occurred when a current investment manager is hired for an additional mandate. In these instances, the investment consultant reported that they still compare the incumbent manager's ability to others in the available universe.

When actual practice deviates from the standard policy of issuing RFPs, it is important to document the rationale for using an alternative process and the due diligence efforts that were used. If flexibility is expected to be needed at times, it is best for the manager selection policy to specify when an alternative process can be used.

Conclusion

We conclude that HPRS' manager search and selection process and criteria as established in 2010 and documented in the new Investment Process document are thorough and prudent. This recently established document will serve as a useful roadmap going forward. Documentation regarding the criteria upon which managers were selected in the past is incomplete.

Investment consultants to public retirement systems commonly compile search reports that include their independent assessment and comparison of relevant factors that may impact the managers' ability to add value going forward. The search reports produced in the past for HPRS fell below common practice; they mainly consisted of managers' proposals. Going forward, search reports should include an analysis of the criteria outlined in the Investment Process document. Without this type of analysis, an investment committee and board are underserved. Documentation proves that a prudent process was actually undertaken and that the rationale for the decision was reasonable given the facts the board had at the time. A mere compilation of managers' proposals is not sufficient and does not meet common or best practice.

Using a formal RFP process for manager selection is a common practice; however, stating in a policy when the RFP process may be bypassed, and what analysis must be used in lieu of the RFP process, is best practice.

Recommendations

Rec#	Recommendation	Priority Level	Cost	Parties Involved
59	Require the investment consultant to prepare comprehensive written search reports that analyze those factors identified in the HPRS Investment Process document.	High	Low	Board, Staff, Consultant
60	Codify in a policy when an RFP is not required for the selection process and what analysis and documentation will be used instead.	Medium	Low	Board, Staff, Consultant

III. Monitoring Practices

Background

Ongoing manager monitoring includes a review of any changes in the factors that were used in the selection process. For example, special attention should be given to the manager's ownership, organization, key personnel, and investment process. For those boards that have not delegated investment manager decisions to staff or the investment consultant, they must be given valuable insights and updates on the investment managers' performance and organizational stability. If the board has delegated these decisions, it is still important for the review and analysis of this information to be completed and documented.

While on-site visits are not always a part of ongoing monitoring, the practice is valuable because it allows staffs and investment consultants to gain critical insight from seeing a manager's operations and meeting with essential portfolio managers and support staff. Best practice is for an on-site meeting to be conducted, either by staff or the investment consultant, every one to two years or when material changes have occurred.

It is also best practice for assessments of managers to be in writing and shared with the boards or investment committees either quarterly or annually. These assessments help boards identify issues that could negatively impact performance or increase risk. They state whether staff or the investment consultants have any concerns. Such documentation is valuable in evidencing what monitoring has been performed and demonstrating that boards are meeting their fiduciary duty of prudent oversight.

Findings and Analysis

The Investment Process document outlines manager monitoring requirements. It includes a listing of factors that should be reviewed and considered in manager assessments (e.g., people, philosophy, process, performance, the firm), as well as the frequency of reviews. Having such documentation is prudent and a best practice. The development of the Investment Process document in 2010 is a noted improvement from HPRS' past practice when such written guidance did not exist.

Most of the manager monitoring in terms of performance, organizational, and personnel issues is performed by the investment consultant; however, this delegated responsibility is not in writing. While we believe this is an appropriate division of responsibilities between the staff and the consultant, best practice includes thorough documentation of the assignment of responsibilities.

A new requirement for Hartland is to conduct on-site meetings with all of HPRS' investment managers every 18 months. Hartland is working toward this requirement, and has met with many of HPRS' managers within the last 18 months. Meetings with the remaining managers are scheduled to be completed during 2011.

Managers are also periodically asked to make presentations to the Investment Committee. The Investment Process document outlines the focus of those meetings, which is a good practice to ensure the meetings are not merely marketing opportunities for the managers without the substance the Board is interested in. The Investment Process document calls for the Investment Committee to meet with each investment manager at least once every 24 months. This is a reasonable practice; however, we do not believe meeting with every investment manager must be a board or investment committee responsibility. This task can be appropriately delegated to the investment consultant or staff. Meeting with select managers on a periodic basis, however, can be educational for boards or investment committees.

Hartland's manager reviews include summary details on the organization, strategy, and process. Hartland will assign a buy, sell, or hold rating to the manager. The due diligence report that we reviewed[208] did not provide in-depth analysis of the investment manager's strengths and weaknesses. Most of the information appeared to be what could be garnered from a standard database. We requested additional manager monitoring samples from Hartland to review, but as of the date of this Report, additional samples were not made available to us.

The Executive Director/CIO of HPRS will also independently monitor managers and provide a memorandum of his findings to the Investment Committee. The memorandum we reviewed[209] included observations and analysis regarding the manager's process, trading, compliance, and fees. The memorandum contained useful information and is evidence of a good monitoring process.

Hartland is responsible for recommending termination of investment managers to the Investment Committee. The Investment Process document identifies reasons to consider termination. Written samples of documentation outlining the analysis of manager terminations were requested but not provided by Hartland. Just as documentation related to manager selection is important, so too is documentation for manager terminations.

Hartland has responsibility for monitoring managers' compliance with the guidelines they are to operate within on a quarterly basis. The Investment Objectives, Policies, and Guidelines contain requirements with which investment managers must comply. For example, they specify that 67% of large cap domestic mandates must be invested in securities with a market capitalization of more than $5 billion and 67% of small/mid cap domestic mandates must be invested in securities with market capitalization of more than $500 million. Hartland indicated they use a combination of manual and automatic processes to monitor compliance. Quarterly verification of manager compliance with guidelines is a common and best practice. Hartland does not provide HPRS with written assurance of managers' quarterly compliance which is neither common or best practices.

Some organizations monitor portfolio compliance more closely than do others. Technology is available that allows portfolio positions to be reviewed monthly or even daily. Top-tier custodian banks offer compliance monitoring services to clients for a fee. PNC Bank, HPRS' current custodian bank, does not have this capability. When real-time compliance monitoring is used, any time a manager's portfolio violates an investment guideline, the staff and/or investment consultant are notified. A dialogue can then occur between the staff or the investment consultant and the investment manager to discuss the nature of the violation and whether any action should be taken. While it is typical for investment managers to carefully monitor guideline compliance, this type of monitoring serves as a double check.

[208] Evanston Due Diligence Report, 2/21/2010
[209] James Investment Research Due Diligence Memorandum, September 30, 2010

HPRS has recently adopted a formal "watch list," which is a way some systems formally monitor investment managers and document issues of concern. The criteria for the watch list, as stated in the Investment Process document, were approved in December 2010. A manager can be placed on watch for organizational issues, performance, or any other matters which are of concern. The watch list criteria are reasonable and appropriately documented. It is anticipated that the watch list will be presented to the Investment Committee on a quarterly basis going forward.

The use of a watch list is a fairly common practice among public retirement systems. Benefits to a watch list include formalizing a disciplined monitoring process and a methodology for noting manager concerns. One drawback to maintaining a formal watch list is that it is difficult to establish one that incorporates all types of concerns. Further, having a watch list could create unnecessary pressure on trustees and staff to terminate a manager or encourage managers to take more risk to "fix" performance.

Conclusion

Assigning the investment consultant the main responsibility for ongoing manager monitoring is comparable to what others do. Based upon the manager monitoring information we reviewed, the documentation evidencing the investment consultant's due diligence efforts is not in alignment with best practice.[210] It offers summarized information, but does not include unique insights or observations. It is best for investment consultants to provide the staffs and boards of public retirement systems thoughtful and insightful comments regarding the managers in the portfolio and not simply produce statistics and data.

HPRS staff also completes manager monitoring, which serves as a complement and enhancement to the manager monitoring performed by Hartland. The compliance monitoring process is partially manual and is performed on a quarterly basis, which is consistent with common practice. Better documentation of guideline compliance would be beneficial. If automated compliance monitoring services become available to HPRS at a reasonable cost, it would be worthwhile to consider them.

Recommendations

Rec#	Recommendation	Priority Level	Cost	Parties Involved
61	Require the investment consultant to provide more in-depth ongoing reviews of the investment managers.	Medium	Low	Staff, Consultant
62	Document managers' compliance with investment guidelines on a quarterly basis.	Low	Low	Board, Staff

[210] We reviewed a small sampling of Hartland's manager monitoring documents. We requested additional samples from Hartland on which to base our assessment but were not provided with additional documentation. Therefore, our assessment is based upon the limited documentation we received.

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INTRODUCTION

A number of important activities support a public retirement system's investment program. These include brokerage and trading, trust and custody arrangements, and control procedures.

Brokerage and trading relate to the process of buying and selling securities. Although their importance to the asset management process is often overlooked, these services generate significant transaction costs. Therefore, institutional investors have a duty to monitor these costs and assess the impact of the costs on the investment performance.

A strong custodian bank relationship is critical to a successful investment program. The primary role of a custodian bank is safekeeping, accounting for, and reporting on an investor's assets. The typical services that leading custodian banks provide their clients include: safekeeping and valuation of the assets, managing settlements relating to the purchase or sale of securities, handling collection of income and dividends on investments, assisting with voting proxies, handling corporate actions on underlying securities, accounting for the investments and investment transactions, managing cash investments, and operating a securities lending program.

Control procedures related to an investment portfolio are the processes that give management and fiduciaries reasonable assurance that assets are protected and properly recorded. Financial institutions, especially those that deal with public retirement systems, are particularly sensitive to having good internal controls in place. Although processes for internal controls are often undervalued and sometimes resisted when a business is running smoothly, they nevertheless are a good protection for the boards and staffs who are responsible for large asset pools. It is important for internal controls to be documented and periodically tested.

SCOPE OF REVIEW

This Section of the Report is focused on the following investment related activities:

I. Brokerage and Trading
II. Trust and Custody Arrangements
III. Control Procedures
    A) Internal Controls and Risk Management Approach
    B) Investment Accounting Process

I. Brokerage and Trading

Background

Fiduciaries have a duty to maximize returns within a given risk tolerance and to minimize expenses. Trading costs represent major expense incurred in the asset management function. Therefore, it is critical for public retirement systems to monitor and evaluate the effectiveness and efficiency of trading and determine whether “best execution” has been achieved. Best execution requires that investment managers and broker/dealers use reasonable diligence to obtain the best possible result for the client. Best execution takes into account price, costs, speed, likelihood of execution and settlement, size, nature, and other relevant considerations.[210]

Public retirement systems often use an external service provider to assist them in assessing the efficiency of trading costs. A number of recognized companies, including several large custodian banks and specialized firms, provide transaction cost analyses. Different approaches are used to establish the benchmark against which the transaction costs are measured.[211]

Findings and Analysis

In 2001, HPRS conducted research to determine the actual cost and effectiveness of the brokerage actions taken on behalf of the System by the investment managers. The results of that research led to the establishment of a Directed Brokerage Program which was subsequently implemented on January 1, 2002.

The Directed Brokerage Program applies only to domestic equity managers of separate accounts. As of June 30, 2010, eight of the eleven domestic equity managers were separate accounts, representing 65% of the domestic equity portfolio.[212]

As required by the Program, HPRS identifies brokers to be used and provides a list of the approved brokers to the investment managers. The list of approved brokers includes Ohio-based firms, minority-qualified firms, and other firms. HPRS’ managers are expected to establish a relationship with the brokers for the purpose of executing trades.

The managers may use any or all of the brokers on the approved list. Per statute,[213] investment managers are encouraged to use the Ohio-based and minority/female owned brokers when the cost, quality, and security of those firms are equal to other brokers on the list. Investment managers may not accept “soft dollars” from the approved brokers, which aligns with best practice. Soft dollars is the term used to describe paying brokers for services through commission revenue, instead of a direct payment. They are often used to pay for research or other supplementary services (Bloomberg terminals, subscriptions, etc.). Soft

[210] See National Association of Securities Dealers (“NASD”) Rule 2320 and Rule 2440, as amended by FINRA Rule 2010. The text of the Rules can be found in the FINRA Manual, www.finra.org/finramanual. See also, *European Markets in Financial Instruments Directive 2004/39/EC - Article 21*.
[211] Examples of benchmarks commonly used include: Volume Weighted Average Price (VWAP), Implementation Shortfall, Arrival Price, Average Price, Open Price, Close Price, and Previous Night’s Close.[211] Some service providers have the ability to create a customized benchmark based on the client’s requirements.
[212] SSgA S&P 500 Index, Wellington Diversified Growth Equity, and DFA U.S. Small Company strategy are commingled funds and are not included in the Directed Brokerage Program.
[213] ORC § 5505.068

dollar arrangements are not optimal; they pass the cost of research and other services on to the investor and result in excessive costs.[214]

HPRS conducts an annual third party evaluation of the performance of both the managers and approved brokers. These reports are used to assess the appropriateness of the brokerage practices performed on behalf of HPRS. HPRS hired Global Trading Analytics (GTA) to conduct its most recent annual brokerage trading program evaluation in September 2010. GTA is a trading cost analysis consulting firm which specializes in custom, client specific, trade cost analysis. GTA's approach to trade cost analysis is to assess the impact of two costs, brokerage commission cost and market impact cost.

These two costs should be periodically reviewed and evaluated. Commissions are the most visible and easiest to measure, but they constitute only a small component of total trading costs. The more significant component is the implicit market impact of the transaction such as the price paid or received for the security relative to the "market." The market component is difficult to measure. The negative price impact due to the improper handling of trades can produce much greater costs than commissions. GTA is following best practice by analyzing both commission costs and market impact costs.

GTA evaluates commission cost relative to an appropriate industry universe. Market impact cost is calculated relative to three suitable benchmarks: volume weighted average price (VWAP), a representative customized Institutional Peer Universe,[215] and the GTA custom price benchmark.[216] Market impact is then compared to an appropriate industry universe.

GTA's trade cost analysis does not account for '"delay costs" when a broker is not able to execute a trade all at one time and instead trades over multiple days. Delay cost, however, is not likely to affect HPRS due to the program's relatively low trading volume. Should trading volume ever increase significantly it may be appropriate to evaluate delay costs as part of the analysis.

In general, GTA found HPRS' domestic equity brokerage trading program to be cost efficient. According to the GTA report, HPRS' brokerage trading program represented a total savings of $15,904 to the System over a four quarter period (Q3'09 to Q2'10) when compared to the brokerage practices of an Institutional Peer Universe.[217] The majority of this savings is attributable to the lower than average commission costs experienced by HPRS through its use of approved brokerage firms. HPRS' brokerage program has, however, experienced larger than average market impact costs. This relative lack of trading efficiency, however, did not exceed the savings achieved through lower commissions. The primary trading cost driver appears to be one specific investment manager, DePrince, Race & Zollo (DRZ). HPRS' staff

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[214] "Paying Up: The Hidden Cost of Portfolio Management." The Journal of Investment Volume 12 Number 3. Fall 2003.

[215] The peer universe reflects weighted aggregated trading results as a percentile of all institutional trading in the same issues traded, on the same day, independent of any benchmark. For example, a result of 50% indicates that, in the aggregate, trading was better than 50% of the institutional trading in the same issues traded on the same day. Top-level peer universe results will trend toward the 50th percentile due to the fact that the universe result is generated through the aggregation of the best trades (100 percentile) and the worst trades (zero percentile). Most groups fall between the 40th and 60th percentiles.

[216] The GTA benchmark price is a proprietary measure of the VWAP price. It accounts for adverse market conditions and adjusts the VWAP in the clients' favor if the trade occurs in a volatile or abnormal market. In the analysis, GTA accounts for volatility, large "off-market" trades affecting the benchmark, and liquidity in the market on the day of the trade. If any of these market conditions are higher than normal, then the VWAP is adjusted to reflect the appropriate conditions.

[217] As reported in the Equity Brokerage Full Day Volume Weighted Average Price analysis. Total savings is equal to total market impact plus commission relative to the Institutional Peer Universe.

has engaged in a dialogue with DRZ several times regarding their trading efficiency. DRZ has stated their trading efficiency level is an attribute of their trading style, which is integral to their investment process. Despite the trading costs, DRZ has had strong net investment performance.[218]

GTA provides on-line reporting to HPRS that is easily accessible and the report analytics and findings are intuitive and clearly presented. The GTA reports contain an executive summary of findings, and additional detail showing specific trades is available to HPRS, the investment managers, and HRPS' brokers on-line. GTA also participates in on-site meetings with HPRS where additional qualitative analysis is shared and discussed.

HPRS does not engage GTA for an evaluation of the trading efficiency of the international managers. Currently, HPRS only invests in international commingled funds and mutual funds. The underlying trade data is not available for those funds. Those investors that invest in international separate accounts sometimes find value in conducting a trade execution analysis for their international portfolios. While trading data on the non-U.S. markets is not as comprehensive as that for the U.S. market, the analysis can be informative.

Conclusion

In general, the methodology used to evaluate brokerage trading costs is appropriate. GTA provides useful information to HPRS, which is needed to effectively and efficiently monitor and analyze the brokerage and trading process. HPRS' staff has appropriately used the output of the GTA analysis to monitor trading efficiency and investigate the relatively high market impact costs within the brokerage program.

Recommendations

None

[218] As of 6/30/2010

II. Trust and Custody Arrangements

Background

The custodian bank business is an extremely technology-based business and thus, the superiority of a custodian's technology platform is a key driver of its ability to offer top-tier custodian services. Given that the leading banks spend significant time and money in maintaining technology, another key differentiator between custodian banks is the quality, depth of knowledge, and experience of the client service team assigned to a client relationship.

Custodian banks with sizeable assets benefit from economies of scale and function more efficiently than smaller banks. Further, banks with larger custody businesses accrue more experience and tend to maintain state-of-the-art operations. Also, organizations that derive a significant portion of their revenues from the custody business are likely to be more stable and take the necessary steps to remain competitive. The best fit for a public retirement system is to use a custodian bank with sufficient experience and expertise to meet their specialized needs.

Findings and Analysis

HPRS began using PNC Bank as its custodian bank as of July 2010. The scope of HPRS' relationship with PNC Bank includes securities custody and accounting for the entire investment program, security trades processing, and income collections (interest, dividends, etc.). The Custody Agreement is current with an effective date of July 5, 2010.

As discussed in Section 1 of this Report, the custodian bank is selected by the State Treasurer. While this is not an unusual practice, it is best for boards to have autonomy over the selection of any investment related service providers, including custodian banks. The State Treasurer's office solicits periodic feedback from HPRS on the custodian's performance and uses this feedback in the bank's formal evaluation.

PNC Bank has over 52 U.S. based public fund clients with over $6.9 billion public fund assets under custody. PNC Bank is not typically considered a top tier public fund custodian bank in terms of number of public fund clients or level of assets under custody. Some larger custodian banks have upward of 150 public fund clients and over $1.5 trillion in total public fund assets. PNC's public fund custody business represents 8% of its U.S. custody assets. Despite not having the same economies of scale as some of the larger custodian banks, with nearly $7 billion in assets and over 50 public fund clients, PNC maintains economies of scale and sufficient experience with institutional investors that are similar to HPRS.

The single most important factor impacting client satisfaction is the quality of the people assigned to the custody relationship. At PNC Bank, each relationship manager has between 25 to 60 clients and an average of 14 years of custody experience. According to our discussions with HPRS, the staff is pleased with the level of service that HPRS has received from the PNC Bank relationship team.

HPRS pays PNC Bank an annual fee of 0.75 basis points[219] on the total market value of assets in custody. HPRS' forecasted annual custodian bank fee, assuming assets under custody of $647 million,[220] is $48,525. There are no extra fees for transactions.[221] From our industry experience, this fee is competitive. Further, HPRS' custodian bank fee is in line with the estimated average 1.3 basis point custodian bank fee paid by its peer Ohio public retirement systems.[222] The difference between HPRS' custody fee and the estimated average is likely due to differences in scope of services. PNC Bank does not perform securities lending, performance measurement, or compliance services for HPRS. PNC does not offer a compliance monitoring service to clients.

The Custody Agreement may be terminated by the Treasurer with 120 days notice, which is fairly typical. The Agreement includes custody operating procedures, which provide a general description of responsibilities, HPRS authorized representatives, the custody account structure, account reconciliation procedures, lines of communication, trade processing, reporting, and other related items. Certain service level agreements, such as availability of statements and completion of reconciliation processes, are also outlined in the operating procedures. It is a good practice to have this level of detail in place.

Conclusion

It would be best for the Board to have authority regarding the hiring and termination of HPRS' custodian bank. We recommended earlier in this Report that the Board seek statutory change so that it does have such authority.[223] Absent that, HPRS' current practice of evaluating the services it receives and reporting the outcomes to the State Treasurer is a good practice. The fee HPRS pays for custody services is competitive when compared to fees charged for similar investment programs.

Recommendations

None

[219] One basis point equals 1/100th of a percentage point.
[220] HPRS Total Assets as of 6/30/2010
[221] Purchases/sales, receipts and deliveries, outgoing wire transfers, etc.
[222] Peer Ohio systems include Ohio Police and Fire Pension Fund, State Teachers Retirement System of Ohio, School Employees Retirement System of Ohio, and the Ohio Public Employees Retirement System. The average custodian fee was calculated using custodian fees reported in each system's 2009 Comprehensive Annual Financial Report and total fund market values reported in the Evaluation Associates 6/30/2009 performance report.
[223] See recommendation #7

III. Control Procedures

For this Section of the Report, the group that is responsible for the investment accounting functions related to HPRS' operations is referred to as the "Investment Accounting Group" or "IAG." The IAG is comprised of three individuals: one Trading Analyst, one System Accountant, and the Chief Financial Officer (CFO) who leads the IAG.[224]

A) Internal Controls and Risk Management Approach

Background

Internal controls are vital to an organization. Today more and more public retirement systems are focusing attention on internal controls because they serve to protect not only the trust fund assets, but because they also ensure efficiency and effectiveness of operations and the accuracy and reliability of information. They promote compliance with the policies set by the board and management, as well as compliance with applicable laws and regulations. Altogether, effective control procedures mitigate fiduciary risk.

The Committee of Sponsoring Organizations[225] (COSO) has defined five components of internal control:

- Control Environment
- Risk Assessment
- Information and Communication
- Control Activities
- Monitoring

In assessing the adequacy of internal controls, the role of an organization's internal auditor is important in independently examining and providing assurance to management and the board that appropriate internal controls and risk management processes are in place. Large public retirement systems often have one or more internal staff members in an internal audit department. At smaller systems sometimes the function is outsourced. The arrangement is not simply dependent on the availability of resources, but also dependent on the size and complexity of the system's services, including investments, and the level of risks associated with such programs.

Findings and Analysis

Control Environment

An organization's control framework is established by management, who has the responsibility for control policies and procedures. It is also management's responsibility to communicate and model within the organization the expected behaviors and commitment to controls, which impact the effectiveness of controls. HPRS' Executive Director has the

[224] The roles and responsibilities of the staff are further discussed in Section 2 of this Report.
[225] The Committee of Sponsoring Organizations was established in 1985 and was sponsored jointly by five major professional associations: the American Accounting Association (AAA), the American Institute of Certified Public Accountants (AICPA), Financial Executives International (FEI), The Institute of Internal Auditors (IIA), and the National Association of Accountants (now the Institute of Management Accountants). COSO is commonly acknowledged as an authority in internal controls and financial reporting.

authority to set, review, and modify all internal policies and procedures, as well as set the tone within the organization regarding the commitment to accuracy.

Part of the control framework includes ensuring employees at the appropriate levels are assigned authority and responsibility commensurate with their job descriptions. It is also the Executive Director's responsibility to ensure employees are trained and executing their responsibilities appropriately. The Executive Director reviews each employee's performance and adherence to policies (discussed further in Section 2 of this Report), and the CFO has been assigned responsibility for further documenting existing procedures.

Risk Assessment

Consistent and organized risk management benefits an organization by documenting and classifying risks, codifying risk mitigation practices, keeping key decision makers abreast of risks that are present in the organization, assisting in identifying risks that are not (or only partially) being managed, and assigning responsibility for risk management throughout the organization. HPRS does not appear to have a formalized risk assessment process in place, which is not uncommon for an organization of its size.

Often within a public retirement system, the main focus of risk assessment is the risk within the investment portfolio; however, a board should be aware of other risks besides investment risk. The Association of Public Pension Fund Auditors (APPFA) has provided guidance to public retirement boards and managements on how to address common operational and investment risks.[226] It is a good practice for a risk management program to address the issues identified by APPFA. HPRS has reviewed APPFA's guidance, and is in the process of incorporating internal controls to assess operational and investment risks. It may be helpful to establish a work plan that outlines the expected completion date of this task, as well as the many other documentation projects (including the development of manuals) that are currently taking place to ensure the work remains on schedule and is completed.

Given the small size of the staff, and the key responsibilities carried out by the Executive Director, HPRS has significant "key man" risk. In a small organization, this risk is common. If the Executive Director were to suddenly leave the organization, complete documentation of processes and work flow would be critically important.

Information and Communication

In order for control procedures to be effective, information must be recorded accurately and shared appropriately. Communication must occur across the organization. In our assessment of HPRS, the lines of communication, both between the staff and the Board, and across the staff, appeared open and working well. Since the staff is relatively small, communication between the Executive Director and all other staff members can easily be maintained. Larger organizations, with many reporting levels, sometimes have difficulty in maintaining open lines of communication. The Executive Director, assisted by the

[226] 2000 Report: "Statements of Key Investment Risk and Common Practices to Address Those Risks." and 2003 APPFA Report: "Operational Risks of Defined Benefit and Related Plans and Controls to Mitigate those Risk".

CFO, is in the process of documenting how each employee's activities relate to others and ensuring that all employees understand proper workflow and protocol.

Control Activities

Control activities, as defined by COSO, are the policies and procedures that help ensure management directives are carried out. Below we highlight several of HPRS' control activities, including documentation, controls over investment related payments, external audits, separation of duties, and review of internal controls of service providers.

1. Documentation:
   The IAG developed an Internal Control Manual (the Manual) for HPRS in February 2010 which includes:

   - Internal Control Overview
   - Key Internal Control Procedures
   - Internal Audit
   - General Information Technology Controls
   - Specific Controls (for office and pension operations)

   Best practices are to have the internal control framework and accounting procedures thoroughly detailed and compiled into one cohesive document. The statute[227] also requires HPRS' Chief Investment Officer to adopt, implement, and enforce written policies and procedures that are designed to prevent misuse of material information. Such policies and procedures are important control activities. HPRS has developed a policy for Monitoring of Securities Transactions,[228] which specifies the CIO's responsibility to annually review the adequacy and effectiveness of procedures in place to monitor against misuse of nonpublic information. Since all investments (except the two commercial office buildings) are managed externally, the CIO and staff members at HPRS would not normally have access to any nonpublic information regarding securities transactions.

   The Manual identifies those employees that have responsibility for existing procedures, which is a good practice. It is anticipated that the Internal Control Manual will be further developed to include more detailed descriptions of all the System's procedures. It is important for business continuity purposes that all key procedures are adequately documented so that in the event that any employee is not available to complete his/her responsibilities, others would be able to fill in as seamlessly as possible. The Policies and Procedures manual, which is also in progress, is also an important part of documentation.

2. Controls over Investment Related Payments:
   HPRS' staff receives invoices from those managers that have separate accounts with HPRS on a monthly or quarterly basis, depending on availability. The Trading Analyst verifies the market value shown on the invoice with those on record. Next, the Trading Analyst verifies the fee calculations to ensure they are consistent with the

[227] ORC § 5505.065 (B)
[228] The Policy was developed by staff in January of 2011 and will be presented to the Board for approval at an upcoming meeting.

fees contained in the investment manager's contract. All manager fee schedules are compiled in an internal spreadsheet, which the CFO periodically checks for accuracy. Invoices from the custodian bank are handled in the same manner. This is an appropriate process.

If the market values and calculated fees on the invoice are consistent with those verified by the Trading Analyst, the invoice is approved by the Executive Director and paid. HPRS is in compliance with common practice by having invoices checked by one party and approved by another. Fees for commingled funds are deducted directly from the investment accounts and verified by the Trading Analyst.

For expenses related to internal building management, the Building Administrator approves building-related expenditures. The Executive Director is responsible for signing off on each one. The Board receives a summary of all investment related payments in the CAFR Schedule of Investment Expenses as well as in the budget document that is submitted to the ORSC each September. This is a reasonable process.

3. External Audits:
   HPRS has an external audit of its financial statement every year is a best practice that is in place at nearly all public retirement systems.

   The external auditor is selected by the State Auditor via a competitive bidding process every five years. While this is not an unusual practice, it is not best practice.[229] It is best for a public retirement system to have authority to select and terminate the external auditor so that the fiduciaries are responsible for the quality, scope, and cost of the audit. Absent this authority, it is best for public retirement systems to at least influence the selection process. HPRS has stated that they have been able to provide input into the State Auditor's selection of the external auditor and they are satisfied with the capabilities of the current auditor. Periodic rotation of external auditors is also a best practice.

   The audit of HPRS' financial statements as of the year ended December 31, 2009, found the net assets of HPRS to be presented fairly, in all material respects. A financial audit opinion provides reasonable assurance about whether the financial statements are free of material misstatement, but does not provide absolute assurance that all assets are managed and accounted for properly. The purpose of a financial audit is frequently misunderstood by boards. Many think it provides more protection than it actually does. It is important to note that an external audit does not include an opinion on the adequacy and effectiveness of internal controls unless this scope of work is specifically covered in the contract with the auditors.

4. Separation of Duties:
   Given the small size of staff at HPRS, it is difficult to maintain a complete separation of duties. Separation of duties represents an important check and balance within an organization. When one employee is able to verify the work of another employee, accuracy is improved and the opportunity for mishandling assets is reduced. Also, it

[229] See recommendation #6 which proposed seeking a legislative change which would allow the Board the discretion to use the State Auditor's office, or select an independent financial auditor.

is important for the authorization and recordkeeping of transactions to be separated. When such separation is not possible, it is important for appropriate controls to be in place to account for the lack of separation of duties. HPRS' management is aware of this issue and is in the process of re-evaluating and re-assigning job responsibilities and modifying work flow. Once job duties for each position are finalized, it will be important for all employees to be aware of the internal controls that are associated with their job responsibilities.

5. Review of Internal Controls of Service Providers:
During the manager due diligence process, the Executive Director and investment consultant evaluate whether each investment manager has appropriate internal controls in place. When available, HPRS' staff also requests and reviews the manager's SAS 70 Type II[230] report. This is a sound practice and a common practice among institutional investors. The IAG recently requested and reviewed the State Treasurer's evaluation of PNC Bank's SAS 70 Type II to assess the custodian bank's accounting internal controls.

Monitoring

An internal auditor has an important role in monitoring the quality of internal controls over time. While internal auditors are not responsible for setting internal controls, they work to improve controls by conducting reviews and making recommendations. HPRS does not have an internal auditor on staff or on contract. The statute[231] (passed in 2004) requires HPRS to appoint a committee to oversee the selection of an internal auditor and hire one or more persons to fulfill this role.

Since 2004, the financial auditor has reviewed certain items that would typically be under an internal auditor's purview so that HPRS is able to provide the ORSC with an annual internal audit report in compliance with Senate Bill 133. Kennedy Cottrell and Richards currently serves as the external auditor. In addition to completing the financial audit, they reviewed the following areas related to internal controls:[232]

- Conflicts of interest
- Insurance and bonding
- Licensing and reporting
- Internal operational policies
- Fiduciary duties
- Financial audit duties

Minor recommendations were made and adopted by the Board. No material defects were found by the external auditor. While this cursory review by the external financial auditor provides some level of review of internal controls, the controls are not assessed in a

[230] SAS 70 reports represent one of the most effective ways an organization can communicate information about its controls. There are two types of SAS 70 reports. A Type I SAS 70 is a fairness opinion about the organization's description of controls in place and the suitability of the controls to achieve their stated objectives. A Type II goes a step further and includes the auditor's opinion as to whether the controls were operating effectively at the time of the review.
[231] ORC § 5505.111
[232] Letter to the Chairman of the ORSC from HPRS, dated August 20, 2008. HPRS was unable to locate the 2009 report; the 2010 report will be completed in early 2011 for the 2010 calendar year and was not available at the time of the publication of this report.

comprehensive manner. HPRS' planned review will include an assessment of compliance requirements (conflicts of interest, insurance, licensing and reporting, and ethics training and fiduciary duties) as well as a sampling and testing of pension calculations, service credit purchases, pension payments, transfers from/to other systems, and investment/bank reconciliations.

Best practices are for a public retirement system to have an internal auditor either on staff or on contract. HPRS is planning to hire a contract internal auditor who will establish an audit plan and systematically complete internal audits of all key functions, including investments. Having a contract internal auditor, as opposed to one on staff, is appropriate for HPRS given its size and circumstances. An internal auditor's responsibilities typically include:

- Conduct annual risk assessments
- Analyze operations
- Ensure risks are appropriately identified and managed
- Plan and schedule audits
- Coordinate with the organization to finalize recommendations for improvements

Some organizations develop an audit procedures and process manual, which includes a description of the purpose, mission, objectives, and responsibilities of the internal auditor. Other items sometimes included in an internal audit manual are a description of auditing standards that are followed, authority of the various parties, and relevant policies including those related to examinations, inspections, independence, methods, standards of conduct, records retention, continuing education requirements, and other such matters.

It is best for the internal auditor's audit plan to be reviewed and approved by an audit committee or board as well as senior management.[233] Recent guidance from the Institute of Internal Auditors (IIA) has called for additional attention to be paid to detecting fraud. Because of this, many internal auditors are increasing their focus on activities where a potential for fraud exists. When a public retirement system internally manages assets or properties, it is also important for there to be extra focus on such areas. Since HPRS directly holds two real estate properties, this is an area of risk for the organization that should be thoroughly reviewed.

It is best for an internal auditor to report to the Executive Director administratively, but maintain a direct relationship with the Audit Committee or the Board. The key, as defined by the IIA, is that the internal auditor must have sufficient independence to perform necessary functions. As of January 2009, an IIA standard requires direct interaction between the internal auditor and a board.[234]

In some systems, the selection and evaluation of the internal auditor is a responsibility of both the executive director and the board (or the audit committee of the board). An IIA practice advisory indicates that the board should be kept apprised of the selection and termination decisions regarding the internal auditor.

[233] IIA Standard 2010: "The chief audit executive must communicate the internal audit activity's plans and resource requirements, including significant interim changes, to senior management and the board for review and approval."
[234] IIA Standard 1111: "The chief audit executive must communicate and interact directly with the board."

Conclusion

Senior management of HPRS has displayed a commitment to establishing and maintaining effective internal controls within the organization and is currently in the process of further developing an internal control manual, documenting procedures, and re-aligning staff responsibilities and work flow to further separate duties. A contract internal auditor is being sought, but has not yet been hired.

Recommendations

Rec#	Recommendation	Priority Level	Cost	Parties Involved
63	Formalize a process to identify, document, and classify risks facing the organization.	Medium	Low	Audit Committee, Staff
64	Consider developing a work plan that identifies all the documentation projects underway (including all manuals in progress) to track progress and expected completion dates.	Low	Low	Staff
65	Further develop the Internal Control Manual to include detailed descriptions of HPRS' procedures related to key activities.	Medium	Low	Staff
66	Ensure all employees are aware of the internal controls that are associated with their job responsibilities.	Medium	Low	Staff
67	Ensure the review of internal controls performed by the external auditor is completed on schedule and submitted to the ORSC.	Medium	Medium	Board, Staff, External Auditor
68	Hire an internal auditor, who will report to the Executive Director on an administrative basis and have direct access to the Audit Committee or Board.	High	High	Board or Audit Committee, Staff
69	Create an internal audit manual.	Medium	Medium	Staff, Internal Auditor
70	Ensure the internal auditor's annual audit plan is reviewed by the Audit Committee (or Board) and senior management.	Medium	Low	Audit Committee or Board, Executive Director, Internal Auditor
71	Ensure future audit plans incorporate sufficient auditing activities that focus on detecting and preventing fraud.	Medium	Low	Board, Staff, Internal Auditor

Rec#	Recommendation	Priority Level	Cost	Parties Involved
72	Ensure sufficient focus is placed on reviewing the internal controls related to the directly held real estate properties.	High	Low	Staff, Internal Auditor

B) Investment Accounting Process

Background

Generally, the tasks associated with investment accounting include analyzing and documenting each investment, recording all investment transactions and related income, reconciling the ledger in an accurate and timely manner, and reporting on all financial transactions.

These functions are needed to make certain that all investment transactions are properly recorded and reported, and are in compliance with the stated policies and guidelines. To be consistent with best practices, investment accounting should be independent of staff who have control and make decisions regarding assets (e.g., external or internal investment managers).

An investment accounting and operations unit works closely with the custodian bank. Typically, the custodian bank provides general ledger feeds to the investment accounting and operations unit, which then validates that the data is accurate and complete.

Examples of some investment accounting processes used to mitigate risk related to the accuracy and integrity of financial information include:

- Verifying, reconciling, and validating the general ledger data (by accounting operations personnel)
- Instituting written accounting procedures that address the preparation and input of general ledger entries and the preparation of financial statement and reports
- Establishing a systematic process for reviewing new accounting pronouncements and new investment vehicles and determining the appropriate accounting treatment

Findings and Analysis

The Chief Financial Officer is currently documenting the investment accounting process. The IAG's most important role related to investment activities includes performing monthly, quarterly, and annual reconciliations of cash and investment accounts and building the annual financial statements. The IAG's general ledger serves as the book of record. During the reconciliation process, the IAG updates the general ledger after the closing process each month. The IAG then reconciles the general ledger to the source data, such as investment manager statements, on a monthly or quarterly basis (dependant on the availability of manager statements).

The IAG houses the financial statements in Traverse, HPRS' main accounting and customer management application. Traverse is an accounting specific software package that provides proper controls for accessing and editing financial statements. In its continuing effort to streamline the accounting process, HPRS is currently designing an updated general ledger application which will replace Traverse.

The IAG currently has a general set of accounting procedures primarily focused on cash and investment account reconciliation processes. IAG is not involved in the performance reporting of investments, which is handled by the general investment consultant, Hartland. Entrusting the performance reporting duties to an independent third party serves as a proper separation of duties. A more detailed discussion of investment performance reporting can be found in Section 4 of this Report.

HPRS does not currently generate balance sheets and statements of equity for the real estate properties that are directly held (i.e., the Busch properties) but monthly income statements are produced. Typically, a full set of financial statements is internally generated for real estate directly owned by public retirement systems. Further, standard industry practice for real estate investments is to obtain an annual audit of financial statements. Given the size of HPRS' directly held real estate portfolio holdings, an annual financial statement audit may be costly; however, investigating other cost effective ways to provide assurance that there are proper controls in place given the limited segregation of duties and concentrated staffing may be beneficial. Cost effective measures may include obtaining an agreed upon procedures engagement and/or an annual "no material weakness" letter from the auditing firm specifically relating to investment accounting and financial statements for the Busch properties.

Conclusion

The IAG appears to have a coordinating role in the accounting functions for HPRS' investments. Its responsibilities are not yet fully documented but the CFO has assumed the responsibility to ensure that all functions and processes are covered and detailed in a clear, concise manner, and that periodic reviews and updates take place.

HPRS is not responsible for generating investment performance reports. Those are handled by the general investment consultant, Hartland, and this separation of duties is prudent. The performance calculation for the internally held real estate properties needs to be reviewed, as noted in an earlier recommendation.[235]

The tools used by the IAG are adequate to build financial statements for the System but currently the preparation of financial statements for the internally held real estate properties is not adequate and needs to be improved.[236]

[235] Recommendation #42
[236] The first issue to address is the overall appropriateness of the directly held real estate properties in the portfolio. See recommendation #56.

Recommendations

Rec#	Recommendation	Priority Level	Cost	Parties Involved
73	Document the internal controls currently in place for the accounting and cash management systems.	Medium	Low	Staff
74	Generate a complete set of financial statements for the directly held real estate properties.	High	Medium	Staff, Outside Auditors
75	Evaluate cost-effective methods of reviewing the investment accounting practices regarding the internally held real estate properties.	Medium	Medium	Staff, Outside Auditors

Ohio Retirement Study Council's Independent Review and Evaluation of the Ohio Highway Patrol Retirement System Listing of All Recommendations

A complete list of the recommendations resulting from this review is included on the following pages. A priority and cost level have been assigned to each recommendation. Also indicated are the parties that would be involved in addressing each recommendation. Recommendations are shown in the order they appear in the Report, not in order of priority. Recommendations with a high priority level are highlighted. The recommendation key is below.

Priority Level	Explanation
Urgent	Recommendation addresses an actual material breach in fiduciary responsibility that must be addressed immediately.
High	Recommendation addresses a material issue that could cause fiduciary problems for HPRS.
Medium	Recommendation addresses a current practice that falls short of best practices.
Low	Recommendation presents an alternative approach to current practices that may benefit the HPRS.

Cost Level	Explanation
High	Involves significant HPRS internal resources and/or significant service provider input and cost.
Medium	Involves moderate internal resources and/or modest service provider input and cost.
Low	Involves some internal resources and/or low outside service provider input and cost.

Rec #	Recommendation	Priority Level	Cost	Parties Involved
	Board of Trustees			
1.	Consider whether it is necessary to have a statutory provision that removes Trustees for poor attendance.	Low	Low	Legislature, Board, Staff
2.	Determine whether annual Board offsites would be valuable for the System.	Low	Low	Board, Staff
3.	Develop and adopt a Board responsibilities document, Board officer position descriptions, and a Trustee position description.	Medium	Low	Board, Staff
4.	Adopt Committee Charters and annual work plans.	Medium	Low	Board, Staff
5.	Seek a legislative change to allow the Board the discretion to use the Attorney General's office or other legal counsel.	Medium	Medium	Legislature, Board, Staff
6.	Seek a legislative change to allow the Board the discretion to use the State Auditor's office or select an independent financial auditing firm.	Medium	Medium	Legislature, Board, Staff
7.	Seek a legislative change to allow the Board the discretion to select its own custodian bank.	Medium	Medium	Legislature, Board, Staff
8.	**Enhance meeting minutes by documenting the rationale for decisions on investment and actuarial matters.**	**High**	**Medium**	**Staff**
9.	Identify in meeting minutes when individual Trustees leave or reenter a meeting prior to adjournment.	Low	Low	Staff

Rec #	Recommendation	Priority Level	Cost	Parties Involved
10.	Formalize an HPRS specific new Trustee orientation program, document the curriculum in a Policy, and offer a follow-up orientation after Trustees join the Board.	Medium	Medium	Board, Staff
	Staffing and Organizational Structure			
11.	Delegate the authority for hiring all staff to the Executive Director.	Medium	Low	Board
12.	Incorporate major Board delegations of authority into the Executive Director's and Chief Investment Officer's position descriptions.	Medium	Low	Board, Staff
13.	Seek statutory change to place the responsibility for hiring and firing all personnel with the Executive Director.	Low if #11 suffices	Medium	Legislature, Board, Staff
14.	**Identify the best approach to managing key person (Executive Director/CIO) risk to the System.**	**High**	**Medium**	**Board, Executive Director**
15.	Survey the membership regarding satisfaction levels.	Low	Low	Staff
16.	Update all staff position descriptions for accuracy and appropriateness with an emphasis on identifying the minimum requirements for each position.	Medium	Low	Staff
17.	Continue to document processes and procedures associated with critical System functions.	Medium	Low	Staff
18.	Discuss staff succession planning and address ways to mitigate the risk of unexpected turnover.	Low	Low	Staff
19.	Discuss the benefit of having a policy that addresses staff tuition reimbursement for college degrees and certifications.	Low	Low	Board, Executive Director
20.	Delegate approval of staff travel and related expenses to the Executive Director.	Low	Low	Board, Executive Director

Rec #	Recommendation	Priority Level	Cost	Parties Involved
21.	Formalize and document in a policy the approach to evaluating the Executive Director, including his or her duties as CIO.	Medium	Low	Board
22.	Improve the annual staff performance evaluation process.	Medium	Low	Board, Executive Director
23.	Document in a policy the Board's compensation philosophy, including whether or not the practice of automatic salary increases will be continued.	Medium	Low	Board, Executive Director
	Governance Policies			
24.	**Further enhance the current IPS with special attention given to those items noted in Exhibit 3.1.**	**High**	**Medium**	**Board, Staff, Consultant**
25.	**Establish annual ethics training for staff.**	**High**	**Medium**	**Staff, Ethics Commission**
26.	Enhance the Ethics Policy to address those items identified in this Report.[237]	Medium	Low	Board, Staff
27.	Expand the Training and Expense Policy to require annual fiduciary training for Trustees and to specify the subscriptions for which the system will pay.	Medium	Low	Board, Staff
28.	Modify the Training and Expense policy to include Audit Committee responsibility for verifying expense reimbursements are made in accordance with the Policy.	Low	Low	Board, Staff
29.	Modify the Contact with Vendors During the Hiring Process Policy regarding allowable contact between a designated staff person and service providers during a search.	Low	Low	Board, Staff

[237] Required vendor disclosures, Trustee and staff gift disclosures, protocols for disclosing conflicts of interest during Board meetings, compliance mechanisms, and frequency of Policy review.

Rec #	Recommendation	Priority Level	Cost	Parties Involved
30.	Consider modifying the Purchasing Policy to increase the dollar limit for sole-sourced contracts.	Low	Low	Board, Staff
31.	Consider whether the Purchasing Policy should allow the Executive Director to enter into contracts of a maximum amount without the approval of the Board.	Low	Low	Board, Staff
32.	Specify within the Purchasing Policy that the automatic five-year re-bidding requirement does not apply to investment managers.	Medium	Low	Board, Staff
33.	Discuss and consider adopting additional governance policies to guide the System over the long term[238].	Medium	Low	Board, Staff
34.	Consider creating a board governance manual.	Medium	Low	Board, Staff
35.	Consider making major policies available on the HPRS website.	Low	Low	Board, Staff
36.	Establish a review requirement in all policies and maintain a review schedule, compliance mechanisms, and assign responsibility for oversight.	Medium	Low	Board, Staff
37.	**Reference within the Ethics Policy the Ohio Ethics Commission's procedure for filing a complaint.**	**High**	**Low**	**Board, Staff**
Investment Consultants				
38.	Request the investment consultant to provide a written manager structure review, as specified in the contract.	Medium	Low	Staff, Consultant
39.	Consider revising the investment consultant's contract to include language that clearly states that the consultant is hired by and accountable to the Board, but is expected to work constructively with the staff.	Low	Low	Board, Staff, Consultant

[238] Additional policies could include audit, legislative, funding, communication, board self-evaluation, strategic planning, executive director evaluation, whistleblower, placement agent, and outside activities.

Rec #	Recommendation	Priority Level	Cost	Parties Involved
40.	**Develop a policy that establishes the frequency, method, and criteria for an investment consultant evaluation and issue an investment consulting RFP in the near term.**	**High**	**Low**	**Board, Staff**
41.	Review Exhibit 4.2 to determine if additional information should be included in performance reports.	Low	Low	Staff, Consultant
42.	**Revise the performance calculation methodology of the two internally held real estate properties.**	**High**	**Medium**	**Staff, Consultant**
43.	Request from the investment consultant a description of internal controls related to performance calculation.	Medium	Low	Staff, Consultant
	Asset Allocation			
44.	Adopt a policy to conduct asset allocation studies annually and complete asset liability modeling once every three to five years, or as necessary.	Low	Low	Board, Staff
45.	**Establish a disciplined rebalancing policy and document the policy in the HPRS Investment Objectives, Policies, and Guidelines.**	**High**	**Low**	**Board, Staff**
46.	Consider using risk budgeting and periodically review the level of risk each asset class introduces into the portfolio.	Medium	Medium	Staff, Consultant
47.	Evaluate the merits of investing in equities via a global approach.	Medium	Low	Staff, Consultant
	Investment Management Structure			
48.	Analyze the overlap of manager styles within the U.S. equity portfolio.	Low	Low	Board, Staff, Consultant
49.	Evaluate the dollar allocations to individual managers in light of their contributions to risk to ensure they are reasonable.	Medium	Low	Board, Staff, Consultant

Rec #	Recommendation	Priority Level	Cost	Parties Involved
50.	Review the bias to mid and small-cap stock within the U.S. equity portfolio to ensure it is understood and remains appropriate.	Medium	Low	Board, Staff, Consultant
51.	Consider eliminating or reducing the bias to developed markets within the non-U.S. equity portfolio.	Medium	Low	Board, Staff, Consultant
52.	Evaluate whether an increased allocation to index funds would benefit the portfolio.	Low	Low	Board, Staff, Consultant
53.	Consider investing in one broad U.S. equity index fund as opposed to using the three index funds currently in place.	Low	Low	Board, Staff, Consultant
54.	Review the appropriateness of investing passively in additional asset classes during a management structure review.	Low	Low	Board, Staff, Consultant
55.	**Carefully re-evaluate the merits and risks of directly held real estate in the portfolio.**	**High**	**Medium**	**Board, Staff, Consultant**
56.	**Establish a total fund policy benchmark that is a passive reflection of the target allocations of the fund as they have changed over time.**	**High**	**Low**	**Board, Staff, Consultant**
57.	**Discuss and adopt within the Investment Objectives, Policies, and Guidelines, appropriate asset class benchmarks for total domestic equity, the total alternatives asset class, and real assets (timber); require that the performance reports reflect appropriate benchmarks.**	**High**	**Low**	**Board, Staff, Consultant**

Rec #	Recommendation	Priority Level	Cost	Parties Involved
Manager Selection and Monitoring Process				
58.	Improved documentation of the roles of the Board, Investment Committee, staff, and investment consultant in the manager selection and monitoring processes.	Low	Low	Board, Staff, Consultant
59.	**Require the investment consultant to prepare comprehensive written search reports that analyze those factors identified in the HPRS Investment Process document.**	**High**	**Low**	**Board, Staff, Consultant**
60.	Codify in a policy when an RFP is not required for the selection process and what analysis and documentation will be used instead.	Medium	Low	Board, Staff, Consultant
61.	Require the investment consultant to provide more in-depth ongoing reviews of the investment managers.	Medium	Low	Staff, Consultant
62.	Document managers' compliance with investment guidelines on a quarterly basis.	Low	Low	Staff, Consultant
Investment Related Activities				
63.	Formalize a process to identify, document, and classify risks facing the organization.	Medium	Low	Audit Committee, Staff
64.	Consider developing a work plan that identifies all the documentation projects underway (including all manuals in progress) to track progress and expected completion dates.	Low	Low	Staff
65.	Further develop the Internal Control Manual to include detailed descriptions of the HPRS' procedures related to key activities.	Medium	Low	Staff
66.	Ensure all employees are aware of the internal controls that are associated with their job responsibilities.	Medium	Low	Staff

Rec #	Recommendation	Priority Level	Cost	Parties Involved
67.	Ensure the review of internal controls performed by the external auditor is completed on schedule and submitted to the ORSC.	Medium	Medium	Board, Staff, External Auditor
68.	**Hire an internal auditor, who will report to the Executive Director on an administrative basis and have direct access to the Audit Committee or Board.**	**High**	**High**	**Board or Audit Committee, Staff**
69.	Create an internal audit manual.	Medium	Medium	Staff, Internal Auditor
70.	Ensure the internal auditor's annual audit plan is reviewed by the Audit Committee (or Board) and senior management.	Medium	Low	Audit Committee or Board, Executive Director, Internal Auditor
71.	Ensure future audit plans incorporate sufficient auditing activities that focus on detecting and preventing fraud.	Medium	Low	Board, Staff, Internal Auditor
72.	**Ensure sufficient focus is placed on reviewing the internal controls related to the directly held real estate properties.**	**High**	**Low**	**Staff, Internal Auditor**
73.	Document the internal controls currently in place for the accounting and cash management systems.	Medium	Low	Staff
74.	**Generate a complete set of financial statements for the directly held real estate properties.**	**High**	**Medium**	**Staff, Outside Auditors**
75.	Evaluate cost-effective methods of reviewing the investment accounting practices regarding the internally held real estate properties.	Medium	Medium	Staff, Outside Auditors

Appendix A
Glossary of Acronyms

Acronym	Name/Term
ACWI	All Country World Index
AG	Attorney General
AICPA	American Institute of Certified Public Accountants
ALM	Asset Liability Model
APPFA	Association of Public Pension Fund Auditors
BLS	Bureau of Labor and Statistics
CAFR	Comprehensive Annual Financial Report
CAIA	Chartered Alternative Investment Analyst
CEBS	Certified Employee Benefit Specialist
CFA	Chartered Financial Analyst
CFO	Chief Financial Officer
CIO	Chief Investment Officer
COSO	Committee of Sponsoring Organizations
CPA	Certified Public Accountant
CRC	Certified Retirement Counselor
DOL	Department of Labor
ED	Executive Director
ERISA	Employee Retirement Income Security Act
GBA	Group Benefits Associate
GIPS	Global Investment Performance Standards
GTAA	Global Tactical Asset Allocation
HFRI	Hedge Fund Research Institute
HPRS	The Ohio Highway Patrol Retirement System
IAG	Investment Accounting Group
IIA	Institute of Internal Auditors
IPS	Investment Policy Statement
MBA	Master of Business Administration
MPT	Modern Portfolio Theory
MWBE	Minority and Women Owned Businesses
NASRA	National Association of State Retirement Administrators
NCPERS	National Conference on Public Employee Retirement Systems
NCREIF	The National Council of Real Estate Investment Fiduciaries
NCTR	National Council on Teacher Retirement
ORSC	The Ohio Retirement Study Council
PERS	Public Employees Retirement System of Ohio
PFPF	Ohio Police & Fire Pension Fund
RFP	Request for Proposal
ROR	Rate of Return

RPA	Retirement Plans Associate
SEC	Securities and Exchange Commission
SERS	School Employees Retirement System of Ohio
STRS	State Teachers Retirement System of Ohio
UMPERSA	Uniform Management of Public Employee Retirement Systems Act
UPIA	Uniform Prudent Investor Act
VWAP	Volume Weighted Average Price

Appendix B
Useful Reports for a Board
(This is not an all inclusive list.)

The following outline sets forth the type of information that public retirement boards might use in their oversight role. A meaningful exercise for the board and staff is to inventory the reports currently furnished to the board and its committees and discuss their usefulness and frequency. Once the optimal types and frequency are decided upon, best practices are to document this in a policy, so that the board will be assured it will have adequate information going forward.

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

Investments

Description	Current Frequency	Changes to the Frequency
A review of the asset allocation of the Fund presented jointly by the investment consultant and the Chief Investment Officer		
A review of the investment policy statement along with any changes recommended by the investment consultant, the Chief Investment Officer, the Investment Committee or other Trustees		
An inventory of investments and their valuations		
An update of the activities of the managers connected with alternative investments		
A report of brokerage commissions paid to each firm and historical information regarding the trends in costs		
A report detailing the deviations from the target allocations for the portfolio		
An investment performance report for the previous quarter and the previous one, three and five year periods		
Review of each investment manager’s adherence to guidelines; comparison to other similar managers; portfolio risk; material changes in the organization, its philosophy or processes; and analysis of new opportunities		
Securities lending reports prepared by the custodian bank and verified by investment staff or the investment consultant (should HPRS reinstate a securities lending program)		
Valuations of private equity investments prepared by the investment consultant or staff		
A summary of proxy voting and deviations from the proxy policy		

Description	Current Frequency	Changes to the Frequency
Shareholder activities, if applicable, in addition to proxy voting such as submission of resolutions, attendance at annual meetings, correspondence with corporations, involvement with class actions, etc.		
An analysis of the passive/active strategy with recommended changes, if necessary		
A request to allow a deviation from the investment policy statement along with the rationale for doing so		
Profiles of the top investment manager candidates for a particular asset category, as recommended by staff and the investment consultant		
Portfolio rebalancing activities		
Information about the departure of key people from staff, current investment managers, or consulting firms		
Placement of investment managers on the "Watch List"		
Overall status of investments		
Detailed information about real estate or private equity investments that is needed by fiduciaries		
Review and evaluation of key consultants and vendors, including investment consultant, custodian bank within the context of service level agreements		
Requests for adding or deleting permissible asset classes		

Benefits and Customer Service

Description	Current Frequency	Changes to the Frequency
Overview of the results of any member surveys		
Metrics on major aspects of service including timeliness and accuracy of contributions and pension checks, and cycle times for benefit estimates and retirement and disability application processing, among others		
Trends in System healthcare costs, premiums, services and utilization		
An overview of the organization's member and retiree outreach strategy, if applicable		

Actuarial Reports

Description	Current Frequency	Changes to the Frequency
Asset/liability modeling study		
Actuarial valuations of the Fund		
Actuarial experience studies of the Fund		
Funded status of the pension and healthcare programs and reasonableness of methodology, assumptions and amortization period.		

Audits

Description	Current Frequency	Changes to the Frequency
The independent financial audit of the Fund along with the organization’s responses to any findings and comments in the management letter		
The internal audit report along with the management’s responses		
The internal auditor’s proposed scope of work for reviewing areas within the organization		
The organization’s plan to address any of the findings or comments in the financial or internal audit reports		

Legal Matters

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

Media

Description	Current Frequency	Changes to the Frequency
An overview of the organization’s media outreach, if applicable		
Publicity about the board, the organization, or any fiduciary connected with the Fund		

Legislation

Description	Current Frequency	Changes to the Frequency
A summary of proposed state and federal legislation affecting the Fund		
Detailed information about important pending legislation		
A summary of the Board’s positions, if applicable, on pending legislation		
Lobbying activities relating to legislation that could affect the Board		

Operations

Description	**Current Frequency**	**Changes to the Frequency**
The performance evaluation of the Executive Director/CIO and the total aggregated compensation for all staff positions		
The total annual operating budget for the System and actual amount used versus budgeted amount		
Information on compliance with procurement and purchasing policy		
Detail on Board approved travel and education expenditures		

Appendix C
Sample Governance Manual
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APPENDIX C
Expense Reimbursement Form

APPENDIX D
Executive Director Position Description

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Appendix D
List of Interviews and Documents Reviewed

INTERVIEWS

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

Board Members
- John Born, Chair
- Darryl Anderson, Trustee
- Ken Boyer, Trustee
- Tony Bradshaw, Trustee
- Cory Davies, Trustee
- Larry Davis, Trustee
- David Dicken, Trustee
- Greg Kontras, Trustee
- Carl Roark, Trustee
- Joseph Thomas, Trustee
- Rudy Zupanc, Trustee

HPRS Staff
- Dan Weiss, Executive Director / Chief Investment Officer
- Chuck Redifer, Chief Financial Officer

Consultants / Service Providers
- Jay Morgan, Hartland & Co.
- Glenn Hamilton, PNC Institutional Investments
- Paul Morgan, Evaluation Associates

ORSC Staff
- Aristotle Hutras, Director
- Glenn Kacic, Staff Attorney
- Anne Erkman, Research Attorney

DOCUMENTS REVIEWED

For the review, Hewitt EnnisKnupp reviewed the following documents:

- Select laws and statutes:
  - Ohio Revised Code § 5505
  - Senate Bill 133
- Comprehensive Annual Financial Report (2009)
- Board policies
  - Governance guide
  - Investment Objectives, Policies, and Guidelines
  - Ethics Policy
  - Training and Expense Policy
  - Contact with Vendors During Hiring Process Policy
  - Purchasing Policy

  - Membership in Organizations Policy
  - Selection of Investment Managers and Agents Policy
  - Monitoring of Securities Transactions Policy
  - Management Policies and Procedures
- Board committee descriptions
- Trustee biographies
- Trustee ethics filings
- Trustee expenses (2008-2009)
- Board meeting minutes (2005-2010)
- Organizational Chart
- Staff education and experience (2010)
- Internal salary study (2010)
- Position descriptions
  - Executive Director
  - Chief Financial Officer
  - System Accountant
  - Trading Analyst
  - Benefit Director
  - Benefit Specialist
  - Administrative Assistant
  - Building Administrator
  - Maintenance Assistant (6500 and 6161)
- Executive director evaluation (2009)
- Budget review (2008-2010)
- Ohio retirement system budget comparison (2010)
- 30 year solvency plan (2009)
- Actuarial valuation report (2009)
- Experience study (2009)
- Outside independent financial audit (2007)
- Draft internal controls manual (2010)
- Letter to the Chairman of ORSC from HPRS, August 20, 2008
- Membership communications
- Retiree survey (2003)
- HPRS Investment Process Document (Parts I, II, and III)
- Manager searches
  - Manager search process
  - Core Fixed Income RFP (2010)
  - Core Fixed Income RFP responses (2010)
  - International Small Cap RFP (2010)
  - International Small Cap RFP responses (2010)
  - Hartland & Co. Investment Committee meeting manager presentations (2010)
- Manager due diligence reports
  - Hartland Evanston Due Diligence Report (2/21/2010)
  - HPRS James Investment Research Memorandum (9/30/2010)
- Consultant evaluation (2007)
- Managers contracts and fees
  - Brandywine Global Investment Management
  - DePrince, Race & Zollo, Inc.
  - DFA U.S. Small Cap

- Fred Alger
- INTECH
- LSV
- SSGA S&P 500
- Wellingotn Management Co.
- World Asset Management Mid Cap
- World Asset Russell 2000 Value
- Ario Global Management
- Dimensional International Small Cap Value
- Manning & Napier Advisors
- World Asset Foreign Equity
- JP Morgan Asset Management
- Wells Capital Management
- Western Asset
- Henderson Global Investors
- Fidelity Real Estate Growth II and III
- Oaktree Real Estate
- Credit Suisse Securities
- Kayne Anderson Capital
- Pantheon Ventures
- Timbervest
- GAM Fund Management
- Lehman Brothers
- Protégé Opportunistic
- Protégé Partners
- Weatherlow Fund
- Feingold O'Keeffee Capital
- Oaktree Capital Management
- Sankaty Advisors
- Seix Investment Advisors

▪ Other contracts and fees
  - Hartland & Co. (2006)
  - PNC Bank (2010)
▪ Property market value appraisals (2009)
▪ GTA Trade Analysis Reports (2010)
▪ Consolidated trade data statement (2010)
▪ HPRS Report on Ohio-Qualified Agents and Investment Managers (September 15, 2010)
▪ Asset allocation (2009)
▪ Asset liability study (2007)
▪ Performance reports (2008-2010)
▪ Evaluation Associates benchmark review (2009)
▪ Evaluation Associates memorandums to ORSC
  - May 19, 2008
  - October 1, 2009
  - October 16, 2009
  - November 12, 2009

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

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