2023 Fiduciary Performance Audit of the Ohio Highway Patrol Retirement System

Final Report

Conducted on Behalf of the Ohio Retirement Study Council



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Executive Summary

Introduction

Funston Advisory Services LLC (FAS) was selected to conduct the 2023 Fiduciary Performance Audit of the Ohio Highway Patrol Retirement System (HPRS) on behalf of the Ohio Retirement Study Council (ORSC).

For each of the six areas in scope, the Main Body of this report details our expectations, the standards of comparison, and our specific findings, conclusions and recommendations for the Ohio Highway Patrol Retirement System.

This executive summary addresses the fiduciary performance audit from three main perspectives:

- 1. Fiduciary duties to current and future members and beneficiaries.
- 2. Powers reserved exclusively for the HPRS Board.
- 3. Fiduciary Performance Audit findings and recommendations.

Over the course of our work, although not a forensic review, no indicators of fraud or misdoing came to our attention.

The first two decades of the 21st century have heightened awareness of some of the uncertainties that fiduciaries must take into account when making decisions affecting the long-term sustainability of public retirement systems.

Overall, the purpose of a public retirement system is to sustainably create, deliver and protect value for current and future members and beneficiaries despite uncertainties. The financial sustainability of public retirement systems is essential, and the Ohio Highway Patrol Retirement System (HPRS) is no exception.

For public employees, who dedicate themselves to a career of public service, public employment offers financial security and compensation and the promise of lifetime benefits which sometimes include health care. Typically, public employees place high value on the security of those benefits. For public employers, public retirement systems offer a way to attract and retain a qualified workforce and benefits are an efficient way to compensate. Questions about the long-term value and security of benefits increase difficulties in public employee recruitment and retention.

For the public, communities benefit when public employers are able to attract and retain skilled public employees. And, as many of those public workers tend to retire in-state, and since pension benefits are economically counter-cyclical, those benefit payments are an added economic benefit for the local economy.

The Ohio Retirement Study Council (ORSC)

The general purpose of the Ohio Retirement Study Council is to provide legislative oversight as well as advise and inform the state legislature on all matters relating to the benefits, funding, investment, and administration of the five state retirement systems in Ohio. As of January 1, 2022, the five state retirement systems have combined assets of approximately \$266 billion with approximately 655,000

active contributing members, 1,100,000 inactive members, and 486,000 beneficiaries and recipients.

The ORSC has multiple mechanisms for oversight including review of financial, actuarial and investment reports among others. The ORSC also commissions actuarial, investment and fiduciary reviews (see Exhibit A for more detail).

The Ohio Legislature codified the fiduciary performance audit pursuant to R.C. 171.04(F), "the ORSC shall have a fiduciary performance audit conducted by an independent auditor at least once every ten years of each of the state retirement systems." We consider the ORSC code to be a leading practice as a mechanism for state oversight of public retirement systems due to its ongoing requirement, as opposed to episodic involvement in many states, as a continuing source of independent reassurance regarding actuarial, investment, and fiduciary performance for the five state systems.

A fiduciary performance audit of HPRS was last completed in 2011 and an actuarial audit in 2022. The 2023 fiduciary performance audit was commissioned by the ORSC in December 2022 through a competitive process that selected Funston Advisory Services LLC (FAS) to perform the audit.

Summary Roles and Responsibilities					
Legislative Oversight					
Ohio Retirement Study Council (ORSC)	ORSC selects independent reviewers: fiduciary, actuarial and investment and also reviews HPRS's reports and budgets. Oversees HPRS's performance on behalf of the Ohio Legislature. Has engaged RVK to provide semi-annual investment performance analysis of HPRS (and the other four systems).				
Direction, Oversight and Control					
HPRS Board (Board)	Board members are fiduciaries to the system's current and future participants and beneficiaries. The Board acting as a whole is responsible for the overall direction, oversight and control of the system. Its role is to prudently exercise the powers reserved exclusively for the Board by Ohio code.				
Independent Advice					
Actuary	Foster & Foster is the actuary for HPRS. The main tasks of pension actuaries are ensuring that their clients are in compliance with the law, calculating the employer's liability for the defined benefit pension plan and determining contributions to be made to the plan. Pension actuaries perform annual valuations to determine the employer's liability for the pension plan. The valuation includes two main areas: funding and expense. Foster & Foster also assists the Board in determining cost-of- living adjustment (COLA) benefits payments and contributions to the Healthcare Trust.				
Investment Consultants	The Board's retained investment consultant, Clearstead, creates and reviews investment performance results and provides investment advice at least quarterly and acts as a fiduciary under Ohio Revised Code Section 5505.01 (Q) (2).				

Summary Roles and Responsibilities					
Reasonable Assurance					
Executive Director & Staff	Responsible for the execution of direction within policy. Engaging with stakeholders. Reporting vital signs for vital functions. Providing reasonable assurances re: "normal" or expected performance. Escalating exceptions together with direction/policy insights. Advising the Board on direction and policy.				
Independent \	/erification				
Internal Audit	HPRS's receives internal audit services from the Internal Audit Department of Summit County, Ohio. The scope currently includes Board compliance, new investment managers, accounts payable and receivable, health care and benefits payments, and IT security. The Summit County staff has unrestricted access to all HPRS activities and records and provides reports to the Board of Trustees.				
Ohio Auditor of State	HPRS undergoes an annual external financial audit by Rea & Associates, under the oversight of the Ohio Auditor of State. The audit covers the financial statements and related notes to the financial statements. HPRS has consistently received a clean opinion that indicates the financial statements were presented fairly in accordance with generally accepted accounting principles.				

The Purpose and Scope of This Fiduciary Performance Audit

The purpose is to independently assess whether HPRS's current governing statutes, policies, processes, and practices enable fiduciaries to fulfill their duties to prudently direct, oversee and ensure effective control of the system. Such an assessment provides reasonable, but not absolute, assurance.

FAS was asked by the ORSC to review the following six main topics to "identify areas of strengths and weaknesses in HPRS, compare HPRS operation with best practices of other public pension plans, and make recommendations for improvement":

- 1. Board Governance and Administration
- 2. Organizational Structure and Staffing
- 3. Investment Policy and Oversight
 - a. Investment Policy
 - b. Investment Oversight and Review
 - c. Investment and Fiduciary Risk
 - d. Custodian Policy
- 4. Legal Compliance
- 5. Risk Management and Controls
- 6. IT Operations

FAS is independent. Our firm has never received compensation from any investment consultant, managers, or benchmark service. We have experienced no attempts at undue influence. Our recommendations solely aim to improve fiduciary performance to benefit current and future HPRS

members and beneficiaries. The scope did not include a forensic review, a compliance review, a financial statement audit, or a review of the asset allocation or investment decisions. These are all separate reviews commissioned independently of a fiduciary performance audit.

Fiduciary Performance Audit Process

Given inevitable uncertainties, the duty of prudence is assessed by the diligence of the process for decision-making under the current circumstances when compared to peers and not by the outcomes alone. Decision-makers, especially for decisions with long-term consequences and high uncertainty, do not have the benefit of hindsight. Given the information available, was the decision prudent at the time?

Prudence is assessed by comparison with prevailing and leading peer practices, i.e., "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."

We assessed each area within the scope and formed an independent opinion as to whether it was a lagging, prevailing or leading practice. A lagging practice has fallen behind peers. A prevailing practice is common among peers. A leading practice is a practical improvement over prevailing practice. We also considered whether the practice was adequate for the purpose. While a practice may be prevalent, it may be inadequate or unsuitable for HPRS's purposes under present and future circumstances.

We reviewed documents, conducted a survey of trustees and executives, collected benchmark information, interviewed the HPRS Board, the executives, and key stakeholder groups. We reasonably relied on information provided by qualified, independent third parties. As a result, we have identified what we believe is working well and what can be improved. As a result, we have made 111 recommendations for improvement.

Overview of the Ohio Highway Patrol Retirement System (HPRS)

In 1941, the Ohio General Assembly established the State Highway Patrol Retirement System (HPRS) for troopers and communications personnel employed by the Highway Patrol. Today, membership in HPRS is limited to troopers with arrest authority and cadets in training at the Highway Patrol Training Academy.

In addition to pension benefits, HPRS provides disability benefits to active-duty members, disabled both in the line of duty and not in the line of duty. Survivor and death benefits and health care coverage are provided for benefit recipients and eligible dependents. In 1974, the Legislature authorized HPRS to offer health care benefits to retired members if excess funds are available.

Today, HPRS serves approximately 1,225 active members and 1,549 retirees (including disability, early and reduced) and 320 survivors, including spouses and children. One hundred forty-one active members are in the deferred retirement option program (DROP).

HPRS receives funds from three sources: 1) employee contributions, 2) employer contributions, and 3) investment returns. These funds are used to pay benefits and expenses of the system. All funds are

placed in income-producing investments that follow the guidelines in Ohio Revised Code Chapter 5505. The HPRS Board of Trustees (board) oversees investment decisions of the Investment Committee or its subcommittees that include appointed Trustees, the Chief Investment Officer and outside investment consultants. As of December 31, 2022, HPRS's investment portfolio was valued at \$981 million.

HPRS's operating expenses are paid solely out of investment returns. No member contributions or tax dollars are expended. HPRS's operating budget is approved by the retirement system's board of trustees, who under Ohio law act as fiduciaries to the retirement system's members and beneficiaries.

Additionally, prior to approval by the HPRS Board, the operating budget is, by law, reviewed by the Ohio Retirement Study Council, which is comprised of members of the Ohio House and Senate, three members appointed by the Governor, as well as the executive directors of Ohio's five public retirement systems.

HPRS provides several vital retirement functions:

- Investment management
- Benefits administration
- Enterprise administration

Fiduciaries have a duty to ensure the fund is sustainable for the benefit of current and future members and beneficiaries.

A. Fiduciary duties to current and future members and beneficiaries.

Ohio Revised Code Section 5505.06 (A) sets forth the fundamental fiduciary duties that apply to HPRS. These duties are interpreted and implemented within the context of related court decisions, opinions of the Attorney General, Federal tax qualification standards and rules or policies adopted by HPRS.

In addition, guidance for application of fiduciary duties may be found in the common law of trusts and in fiduciary duty regulations that govern other institutional investors, such as private pension fund standards under the Employee Retirement Income Security Act (ERISA). This complex legal framework is generally summarized as containing the following fiduciary principles:

- Loyalty
- Prudence / Care
- Stay informed
- Diversify assets
- Impartiality
- Control costs
- Comply with law
- No blind eye to co-fiduciary behavior

There is high potential for conflicts of interest inherent in the governance of public retirement systems. The eleven trustees are elected and appointed. Five are elected by contributing members, two are elected by retired members, and three are appointed investment experts (one appointed by the Ohio Senate/House, one by the Treasurer of State, and one by the Governor). The Superintendent of the Ohio

State Highway Patrol serves as an ex-officio trustee. They are expected to ensure their constituent interests and issues are expressed and considered. However, fiduciaries must make decisions in the best long-term interests of all participant groups, including both current and future members and beneficiaries.

Because of the high potential for conflicts of interest, fiduciaries are held to the highest legal standard of loyalty and impartiality (higher than that of corporate director). Beneficiaries need additional protection because of their concentrated lifetime financial exposure to the fund, the complexity of financial concepts, difficulty in determining compliance in a timely manner, and a lack of authority to take effective action to prevent harm or remove bad actors.

Duties	Conclusions re: Fiduciary Duties
Loyalty / Impartiality	The HPRS Board appears to have acted with loyalty and impartiality solely in the interests of current and future members and beneficiaries.
Prudence / Care	The HPRS Board appears to act with appropriate prudence and care.
Stay informed	The HPRS Board appears to stay informed.
Diversify assets	The asset allocation appears to be appropriately diversified.
Control costs	HPRS appears to effectively manage costs while maintaining high performance standards.
Comply with law/ reporting	HPRS appears to have appropriate people, policies and processes to comply with the law and reporting requirements.
Co-fiduciary duty	Fiduciaries have a duty not to turn a blind eye to wrong doings by other fiduciaries. There was nothing that came to our attention during the course of our review that would suggest fraud or defalcation or unethical behavior on the part of any fiduciary.

The chart below summaries our conclusions regarding each of these fiduciary duties.

B. Exercise of powers reserved exclusively for HPRS Board

Fiduciaries fulfill their duties through the prudent exercise of the powers reserved for them. The powers reserved are primarily defined in the governing statutes, bylaws, and policies. The following section of this report describes the powers reserved exclusively for HPRS Board.

The HPRS Board is comprised of eleven members as follows:

- 1. Superintendent of the Ohio State Highway Patrol (OSHP) (ex officio).
- 2. Five employee members elected to four-year terms by the active members.
- 3. Two retired members elected to four-year terms by the retired members
- 4. Three statutory members with professional investment experience
 - One appointed by the Governor
 - One appointed by the State Treasurer
 - One appointed jointly by the Senate President and the Speaker of the House.

The Ohio Revised Code prescribes the powers granted to the HPRS Board. FAS has developed a proprietary Powers Reserved Framework which we used to assess how the HPRS Board exercised powers to fulfill its duties:¹



- Conduct the business of the board and its committees
- Set direction and policy and then prudently delegate
- Approve key decisions above a threshold
- Oversee the execution of direction within policy
- Verify then trust and obtain independent advice as needed.

A power reserved is a decision or an authority that can only be exercised by a specific decision-maker. This could include the State of Ohio, the HPRS Board, and/or management and staff. The Board can only decide and act as a whole. Committees can only recommend and oversee, not decide, unless authority is explicitly delegated in statute or Board policy. No individual trustee can direct the executive or staff. The Powers Reserved Framework clarifies the roles and lines of accountability in the governance structure used at HPRS.

We assume fiduciaries are well-intentioned and genuinely interested in improving the prudent exercise of their powers to better fulfill their fiduciary duties to all members and beneficiaries unless facts and circumstances uncovered during the review suggest otherwise.

Overall

Based on our analysis of the powers reserved exclusively for the HPRS Board of Trustees, we found the Board has the powers or authorities needed to fulfill its fiduciary duties with a couple of exceptions. The State's delegation to the Board of powers for budgets, staffing and setting compensation, and for procurement are leading practices that align the Board's authority with its responsibilities.

Conduct the business of the board and its committees

One of the fundamental powers reserved for the board is to effectively and efficiently conduct its business and that of its committees. The power to Conduct includes a wide range of topics from, for example, setting and calendaring agendas, the use of consent agendas, the role of chairs and vice-chairs, the use of committees, board member dynamics and engagement, self-evaluation, continuing education, the

¹ This framework is the subject of guidance Funston Advisory Services LLC is developing for use by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). COSO has previously published, for example, an Internal Control Framework and Enterprise Risk Management.

selection, evaluation and compensation of the Executive Director.

The power to Conduct is also about how the board uses its time and that of its executives. It includes how board members conduct themselves, the way they communicate with one another, management and advisors and comply with ethical standards of conduct such as the treatment of confidential information

Approve key decisions above a threshold

Generally speaking, there are a range of ways the board may choose to engage in approving a decision or setting direction and policy. The difference between the powers of Approve and Set is in the level of board involvement from the outset of the decision-making process.

In Approve, the board is more likely to delegate the due diligence process and be involved at the end of the decision-process to officially approve the recommendation. Whereas, Set (setting direction and policy) reflects those areas where the board wants to be more actively engaged in the development process from the outset such as in strategy and overall policy setting.

Set direction and then prudently delegate

The power to Set direction and then prudently delegate authority and resources is an extension of the board's power to approve, but the level of board and committee engagement is higher. With the power to Approve, the board's involvement is at the end of a process of robust due diligence by management and the board's advisors.

By contrast, in exercising the power to Set, the board and/or its committees are actively engaged throughout the process. This includes the process of identification and the evaluation of strategic issues and options and the choice of direction and resource allocation. Strategy development work is still done by the executive, staff and advisors.

Oversee the execution of direction within policy

To Oversee means to watch over and direct, but that does not generally mean to closely manage performance or risk on a daily basis. Unfortunately, oversight can also mean to miss something. Understandably, some trustees assume they must closely manage or exercise "day to day supervision" in order to exercise effective oversight and to avoid potential failure. But too much focus on the details can risk losing sight of the big picture.

While it is certainly the board's responsibility to watch over and direct, it is not the role or responsibility of a board to closely manage performance and related risk. Trustees are part-time and even if they are experts, fiduciary standards require that they prudently delegate execution – even if they cannot completely delegate oversight or verification. For purposes of verification, a board may reasonably rely on internal and external audit and other third parties retained for that purpose. This is why the board is responsible for hiring a capable executive director and holding that person accountable for the organization's performance.

Verify then Trust

To Verify means to make sure processes are in place which demonstrate whether (something) is true, accurate, or justified. Verification (e.g., through audits) is how the board ensures that reports and assurances from others are reliable. Verification is embedded in the board's powers to conduct, approve, set and oversee and is key to a board's confidence in management.

C. Summary of Findings and Conclusions

Overall Findings and Conclusions

HPRS is generally a well-run system with appropriate governance and oversight. The Board of Trustees and its committees function effectively and provide clear direction to staff and advisors. The system has the people, policies and processes in place to operate in compliance with statutes and administrative rules.

As a small state public retirement system, HPRS has a small staff of 8 employees and relies heavily on external advisors and service providers to provide specific expertise and capabilities required to manage the system. This approach, and the level of internal staffing, is consistent with most peer state public retirement systems of similar scale.

HPRS has capable and competent advisors and service providers, and the Board and staff have effective working relationships with each. Vendor management is a critical requirement for staff and, in general, this functions well.

As a small organization, potential turnover and extended absences of any staff member represent key person risk. HPRS recognizes this risk and has strived to implement cross training of staff and to identify and develop backup capabilities wherever possible. There is one key service provider where there is key person risk; HPRS plans to address this situation.

The investment program is managed effectively and the external financial advisor is highly qualified. There is an overall Investment Policy Statement that articulates program direction and key roles and responsibilities. Opportunities for improvement are primarily in enhanced and more extensive reporting to the Board and formalization and documentation of policies in numerous areas.

Pension administration functions effectively and there is a high level of member and retiree satisfaction. Although the supporting MembersLink system does not offer as much self-service capability as many other retirement systems, there is a high level of communication with members and, with a limited number of retirees, staff can effectively handle inquiries through direct contacts. There is an intent to further enhance MembersLink and the HPRS website with added functionality and member self-service capabilities.

HPRS has effective legal support but could formalize some legal standards and compliance responsibilities.

Accounting, external audit and procurement policies and processes are effective. Internal audit, which is outsourced, functions effectively but could be improved through more direct and active guidance by the Audit Committee and updating of the audit risk assessment as soon as practicable.

HPRS has limited internal IT systems beyond the MembersLink pension administration system and the internal accounting system. HPRS has been effectively served by an external contractor in the IT function for many years; however, there is key person risk in this area. Information security should be improved, and a business continuity plan should be developed.

The following is a summary of findings and conclusions for each area of scope:

1. Governance and Administration

HPRS governance is well structured and functions effectively. In recent years there have been improvements in many areas, including Board and committee operations, trustee continuing education, and member communications. We did not identify any areas where HPRS is materially out of compliance with statutes or administrative rules.

Although trustee education has improved, there are opportunities for further refinement.

The joint educational program established by the five Ohio public pension funds provides efficient and valuable training events but are not offered every year. These joint training events are regularly supplemented by HPRS training included in Board meetings.

Developing individualized education plans for trustees, and expansion of the joint educational programs developed with the other Ohio public pension funds, could be improvements to consider.

Overall, we believe that HPRS has policy provisions and practices that are reasonable and appropriate for implementation of its statutory and administrative code governance obligations.

The HPRS Board of Trustees generally has leading practice authorities, e.g., for budgets, staffing and setting compensation, and procurement; however, there are several lagging practices.

Selection of the custodial bank by the Treasurer of State is a lagging practice from a governance perspective; however, with the more limited resources at HPRS, and the thoughtful and effective selection and oversight process currently utilized by the Treasurer of State staff, this could be considered an effective practice for HPRS.

The HPRS Board appears to function effectively and efficiently.

Trustees rely on the expertise of fellow members and have a high level of trust and confidence. The Board has effectively addressed challenging issues in recent years. HPRS Board meetings, but not committee meetings, are streamed live over the internet. The Board should consider streaming of both Board and committee meetings and maintaining recordings on the website, a leading practice that is found at many peer systems. In addition, public meeting materials should be available on the website.

HPRS Board committee meetings are generally well-functioning and effective and serve as the venue to conduct much of the work of the Board.

Trustees state they are satisfied with the committees, and longer-serving trustees believe that committee effectiveness in general has improved in recent years. The Board Chair should discuss committee assignments with each trustee and ensure that trustees interests and committee skill sets are appropriately balanced; the Board should approve committee assignments recommended by the Board Chair, a prevailing practice at peers.

The Investment Committee (IC) leverages the experience and qualifications of the appointed investment experts, as well as elected trustees with investment experience.

The IC recommends policy changes to the Board and provides effective oversight of the investment

consultant and the Chief Investment Officer (CIO).

The Audit Committee (AC) should be more proactive in providing direction to the internal and external auditors.

The AC does not meet with either the external or internal auditors without staff present, a practice that should be followed at least annually to ensure that the appropriate level of independence from management is maintained. Ideally, the AC would be more proactive in reviewing audit plans and ensuring that all high-risk areas are being addressed rather than relying on staff, as the auditors are intended to provide reassurance independent of management.

Budget development and reporting processes generally work well but could be enhanced.

Management should prepare and present quarterly budget variance reports to the Board. In the future, multi-year capital expense budgets should be developed as major initiatives are contemplated and incorporated into strategic planning.

HPRS conflicts of interest standards are generally consistent with peer policies but could be improved.

The standards do not provide for receipt of periodic (at least annual) written certifications regarding compliance with applicable standards of conduct and other contractual requirements. HPRS should consider adoption of policy provisions that provide for annual certification by outside managers and service providers regarding compliance.

The Board has not had a formal succession planning process for the Executive Director (ED) and should develop one.

The succession plan should more formally include, at a minimum, a process to replace the ED in case of an emergency, identification of potential internal candidates, and a Board process for long-term succession planning.

The HPRS staffing level appears to be consistent with comparable scale peer state public retirement systems.

Although each peer public retirement system is different, with varying levels of complexity and different resourcing strategies, we conclude that HPRS does not have excessive staffing and generally appears to have an operating model similar to most peers.

HPRS has a communications policy that is comparable to peer funds but could be enhanced.

HPRS should consider development of a comprehensive stakeholder communications plan. To maintain public clarity of roles and minimize public exposure of trustee personal email accounts, HPRS should provide trustees with dedicated system email accounts that are both secure and easily accessed, to be used for all system electronic communications, including delivery of meeting materials.

2. Organizational Structure and Staffing

It is clear that members and retirees are satisfied with the services provided by HPRS. Staffing is stable and compensation appears to be adequate. Staff have appropriate training opportunities.

Although sufficient, compared to large state systems with many employers, HPRS conducts significantly less customer satisfaction surveying and monitoring.

The HPRS approach appears to be sufficient because there is only one employer, the State Highway Patrol, and there are multiple ongoing touchpoints with members and retirees, including many with personal interactions.

The HPRS participant surveys are more comprehensive than those typically administered by larger funds.

HPRS has received very useful feedback from these surveys and has acted upon the feedback. Although in 2020 members were generally pleased with HPRS services, 2023 responses indicate that communications have been improved; members are finding information on the website more effectively; ratings of staff have slightly improved; the newsletter is more highly valued; members feel better informed; and satisfaction with office contacts is higher.

Despite very positive feedback, it may be possible to better identify further opportunities for improvement with more focused member surveying.

HPRS should consider if utilizing a customer service survey specialist, and conducting more focused surveys more frequently, could improve its ability to more quickly and effectively identify member service improvement opportunities.

HPRS has had minimal unplanned attrition and compensation levels appear to be adequate.

Since HPRS competes with other public pension plan systems in the Columbus, Ohio region for talent, it is important that the compensation opportunities offered reflect a heightened level of responsibility expected at HPRS as compared to its peers. HPRS should work with external industry compensation benchmark entities at least once every five years to develop and maintain the compensation structures.

HPRS should consider a functional competencies-based HR model to mitigate key person risk

In lieu of a job description-based model that emphasizes departmental specialization across the organization, HPRS may effectively build bench strength across critical functions, mitigate key person risk, support career growth of associates, improve the annual evaluation cycle, standardize compensation, align training to operational needs, and improve overall retention by establishing a competencies-based HR model for support staff.

HPRS provides mandatory and discretionary training opportunities to staff based upon position and level; training could be linked to performance goals to improve effectiveness.

Training is divided into mandatory, discretionary, and subscriptions/ conferences. Participation is at the discretion of the Executive Director and attendance for both Personnel Training (i.e., ethics, policy, compliance) and KnowBe4 training (i.e., IT security) is tracked on a spreadsheet each year.

3. Investment Policy and Oversight

a. Investment Policy

HPRS generally has prevailing practice investment policies for a public retirement system of its scale. A number of practices should have more complete documentation, and existing policies should be updated on a more frequent and regular basis.

The HPRS Board follows prevailing practices in the development of their Investment Policy Statement (IPS).

Input is solicited from multiple sources by the Board and staff, including input from actuaries, investment consultants, investment managers, and stakeholders. The Trustees made a determination of appropriate risk and return outcomes based on the data presented in the Asset-Liability Study (ALS) study. An implementation plan was developed once the target strategic asset allocation was determined.

The HPRS Board should develop a separate Statement of Investment Beliefs (SIB).

A Statement of Investment Beliefs would provide the foundation for the investment approach and policies that HPRS is using to manage and administer the fund for the organization. In particular, this could include direction on the organization's ability to manage external resources; the philosophy behind using both active and passive strategies in the portfolio and the segments most appropriate for each; the reasoning behind the use of absolute return and other opportunistic investments, including private credit and private equity; the reasoning behind having broad global strategies in addition to having geographically focused US and non-US strategies; the use of diversifying investments such as core real estate; and the philosophical approach to topical areas such as ESG.

The IPS could go deeper by defining the unique constraints and risks that the HPRS Board is considering when establishing the target asset allocation.

The IPS could be linked to the SIB, as well as concepts such as risk budgeting and active risk management, which are typically incorporated into an IPS. Key actuarial assumptions and concepts relied upon when establishing the IPS should also be included in the IPS.

The IPS should address the actuarial assumptions for both the HPRS DB plan and the Healthcare Trust; consider developing an asset-liability study for the Post-Retirement Health Plan to document the anticipated funding of this plan.

A discussion of the separate financial constraints of the Healthcare Trust, perhaps in a separate IPS, is warranted in order to better document the Board's decision process when establishing the investment policy for the Healthcare Trust assets.

The policy for determining the granting of pension COLA's and the allocation of funding to the Healthcare Trust should be documented.

The Board holds the responsibility for determining when to grant cost of living adjustments (COLAs) for DB participants and when to divert legislatively determined employer contributions into the Healthcare Trust. The IPS does an adequate job describing many of the key policies HPRS has established; however, the policy that has been developed and is being utilized to determine allocations to the Health Care plan and to COLA payments should be documented in the IPS.

The IPS should include a Board approved policy for the CIO to follow when executing rebalancing transactions.

The authority for the CIO determining rebalancing decisions is included in the HPRS IPS; however, the Board has not articulated a rebalancing policy. This approach should be outlined in the IPS.

The Board should adopt a policy on liquidity management in the IPS.

The policy should include maximum allocations to illiquid asset categories and a discussion of expectations of incoming liquidity and disbursements for the HPRS pension and healthcare plans.

The reporting infrastructure linking the target asset allocation and benchmarks specified in the IPS to actual reported results is robust.

The investment consultant, Clearstead, produces monthly reporting and has the ability to link into PNC custodial values should intra-month asset values be required to ensure investment allocations are within established guidelines.

A rebalancing report and private assets pacing plan analysis should be included in the regular Board reports.

There is not a requirement for formal reporting to the Board regarding rebalancing decisions made by the CIO; providing this documentation to the Board on a retrospective basis could keep the Board appraised. With a significant allocation to illiquid investments, the Board should be familiar with the pacing plan for future expected commitments and distributions from the illiquid portfolio.

Investment due diligence policies and practices should be formalized, including documentation of both internal and external due diligence processes.

No material due diligence issues were identified; however, HPRS documentation of contractual standards, adviser due diligence activities, and file development/retention practices central to demonstrating appropriate due diligence should be developed.

HPRS follows prevailing practices for compliance and audit among similar size retirement plans.

With the exception of one separately managed account in the domestic portfolio, compliance and audit functions are subject to the operating agreements of the investment vehicles and performed by the asset managers or agents retained by those investment managers. Clearstead has a role in monitoring compliance as well as monitoring capital calls for the illiquid portfolio.

HPRS should prioritize the reviewing and updating of its policies, with a staff member and Board committee responsible for each policy.

HPRS policies are in need of updating. There are current plans to assign a staff member primary responsibility for coordinating the review and updating of all policies. The project should include assignment of a Board committee that is responsible for review of each policy.

b. Investment Oversight and Review

HPRS has an effective investment governance structure that provides effective oversight of the investment program. The Board should have access to more detailed material such as manager monitoring and due diligence reports. Due diligence standards should be formalized and documented.

The roles and responsibilities adopted for the Board, Investment Committee, Chief Investment Officer and consultant represent an appropriate delegation of responsibility and are consistent with other plans of this size.

The Board establishes performance objectives, identifies and reviews investment policies and guidelines, retains outside investment and actuarial counsel, reviews the performance of the fund, implements necessary changes in the investment policies, objectives, asset allocation and investment managers. The Investment Committee is responsible for ensuring the investment selection, termination and review processes adhere to the policies outlined in the Manager Review Policy and Manager Search and Termination Policy. It has delegated the day-to-day management of the investment program to the Chief Investment Officer who concurrently serves as General Counsel. The Board has employed Clearstead since 2006, for general investment consulting services, including ongoing monitoring of the portfolio performance and investment managers, reviewing of asset allocation and investment strategy against objectives, and monthly investment monitoring reports.

HPRS Board review of the investment program is appropriate.

The asset allocation is reviewed quarterly to ensure compliance within target ranges. The IPS itself is reviewed at least annually, or as needed. There is adequate documentation and analysis of proposed asset allocation changes, consistent with prevailing practice.

HPRS relies heavily upon its consultant for ongoing investment manager monitoring, consistent with peer practice.

The consultant presents a Manager Review chart to include qualitative and quantitative information quarterly. Any manager flagged for certain qualitative criteria, failing specific performance metrics, or as determined by the CIO or Investment Committee Chair, is added to the Committee List.

The investment consultant should provide HPRS with access to a client portal to access all relevant investment manager monitoring updates, due diligence reports, and related information.

Clearstead has not provided further documentation on the monitoring of alternative investment managers such as hedge funds, private equity, or infrastructure. It is common practice for consultants to offer periodic updates of their findings at onsite/offsite meetings or conversations with investment managers to the Chief Investment Officer and Investment Committee through a client portal.

The Board and CIO should consider retaining an independent qualified third-party for a biennial investment consultant review of services compared to peer practices.

The consultant plays a central role in supporting the Board in its monitoring and oversight efforts of the HPRS investment program and as a long-term trusted advisor. HPRS has maintained vigilance in its annual service review of the consulting relationship; however, we would encourage continuation of this practice along with a biennial third-party independent assessment to ensure optimal adoption of services relative

to the industry and the long-term needs of the portfolio.

Policy benchmark asset class weights used in performance reporting should correspond to the target allocations as defined by the IPS.

The investment consultant is exclusively responsible for the collection of performance data, calculation of portfolio returns, and monitoring of individual manager and total portfolio performance. HPRS utilizes a blended portfolio benchmark of market indices based on the targeted asset allocation. However, we observed the performance reports indicate different index weightings than the targeted allocations defined in the IPS.

All annual reviews of asset classes should include performance attribution, benchmark fit, manager contribution and appropriate fit, active risk, exposure, and look through analysis.

Portfolio benchmarking reviews have been conducted every December for the past three years, but there was very little documentation of the reviews in any of the presentations to the Board, including within the specific asset class reviews. In addition, attribution analysis was not included, a prevailing industry practice.

There should be documentation of the analysis and process performed to arrive at benchmark selection or changes.

Benchmarks for the total portfolio and specific asset classes are listed in the IPS. Any changes to benchmarks require Board approval which is consistent with prevailing practice. The asset-based benchmarks are appropriately selected. However, there is limited documentation on how those benchmarks are conceived and the analysis behind the selections.

Investment fees are monitored but could be supplemented by an independent third-party assessment.

Clearstead prepares an Annual Fee Review for the Board which lists HPRS' investments by style category and arrays the estimated annual expense (in dollars) and the fund's expense ratio. HPRS could consider periodic investment cost reviews by an independent benchmarking service (e.g., CEM Benchmarking) to ensure that the fees it is paying are reasonable and not rely solely on self-reporting by Clearstead.

The delegation of investment selection authority to an Investment Task Force, an Investment Committee subcommittee, by the Board and Investment Committee is effective, but should be clearly stated and be documented as part of investment governance structure in the Investment Policy Statement and the Investment Committee charter.

The investment selection criteria and process, as well as requirements for an RFP, are explicitly defined in the Manager Search and Termination Policy. The process itself is primarily driven and led by the Investment Consultant. A Task Force is formed by the Investment Committee Chair ("Chair"), and includes the Chief Investment Officer (CIO), investment consultant, one or two other trustees (typically Investment Experts) as appointed by the Chair. The investment consultant, with the approval of the CIO, recommends mandates for hire to the Chair. The Chair will formally approve the recommendation once the mandate is determined to be within the asset allocation set by the Committee and approved by the Board.

HPRS should develop due diligence standards and checklists, including operational due diligence, to include minimum standards across all asset classes and responsibilities for conducting each step in the process.

The overall investment selection process from sourcing to approval is consistent with prevailing standards. However, documentation of the selection process should be formalized to ensure consistency, and more details should be provided to the Investment Committee and Board.

The Oversight Dashboard provided by the investment consultant should include a list of investment pipeline opportunities being considered, along with recently approved decisions by the subcommittee.

The Oversight Dashboard currently outlines the workplan of the investment program. It should include a pipeline of investments under consideration or currently under due diligence to create a "no surprises" environment for the Investment Committee/Board.

c. Investment and Fiduciary Risk

Investment risk reporting to the Board could be enhanced, and the Board could consider a broader set of risk factors in policy setting and program monitoring.

Similar to most peer systems, HPRS could enhance Board understanding and oversight of investment risk.

Quarterly performance reports include risk/return metrics, including standard deviation, beta, alpha, Sharpe ratio, and Upward/Downside capture against the policy benchmark over the 5-year period and are compared against the broader universe of public plans. Additional metrics, such as attribution, information ratio, correlation, excess return, and tracking error are lacking in HPRS reports but would be considered industry prevailing practice.

Strategic asset allocation reviews should include a clear comparison of current returns and volatility versus the forecasted return and volatility metrics of the near-term target allocation, and similarly of the long-term targets.

There should be a broader risk discussion beyond volatility or liquidity during annual risk reviews, including risk factors such as credit, inflation, rates, and geographic/sector exposure. A comprehensive annual review of broader risk factors of the portfolio, across asset classes, and a discussion of the risk budget is prevailing practice.

The Chief Investment Officer should work with the investment consultant to determine an appropriate expansion of the quarterly reporting format in the area of investment risk monitoring and reporting.

Investment risk analysis, benchmark development, and risk reporting should be expanded at HPRS along with the Board education effort connected with this expansion. The staff should work with the investment consultant to determine an appropriate quarterly reporting format that balances cost, understandability and completeness for use by HPRS staff and Board with detailed output available on the Board portal.

d. Custodian Policy

HPRS custodial services are adequate and function well. There is an opportunity to take advantage of additional technology offered by the custodial bank.

Staff should utilize PNC Bank's iHub portal technology to improve workflow.

PNC Bank offers its iHub portal technology to improve workflow. The technology would allow HPRS to set up capital calls in advance and allow for automated approvals based on agreed upon rules. This would eliminate a potential bottleneck at the callback stage. Additionally, iHub allows for invoices to be viewed in advance of payment, a task that HPRS has been performing manually with some challenges.

Staff should proactively engage with PNC Bank's relationship management on a regular basis to learn of new service offerings from the Bank to determine if they can assist HPRS.

HPRS has not proactively asked PNC Bank what additional services it could offer that would be beneficial. Since HPRS has a small staff, augmenting operations with outsourced services, offerings or technology could potentially offer significant benefit.

The operational services HPRS receives from its custodial bank, PNC, meet its needs and the processes are sound; the fee HPRS pays for its custodial bank services is competitive and reasonable.

HPRS receives standard cash management services from PNC Bank which includes the posting of the endof-day cash position and also maintains a Demand Deposit Account that is used to pay benefits and other expenditures. Short-term investments are invested in a U.S. Government money market mutual fund. HPRS does not require foreign exchange transactions or engage in securities lending, so no additional oversight is required for these functions.

The Treasurer of State and HPRS should develop a Memorandum of Understanding that documents current policies and procedures with respect to selection and oversight of the custodial bank.

The current TOS staff are to be commended for taking a constructive and collaborative approach to working with HPRS to select and contract with the appropriate custodial banks and proactively monitoring and managing performance. There is concern that with a different TOS and potentially new Trust Department staff, some or all of the currently effective processes could be degraded or stopped.

In the case of HPRS, with its limited staffing, the role of the Treasurer of State as custodian is beneficial, providing the RFP process "service" and the oversight framework to manage the working relationship with PNC.

The most recent search was conducted by the TOS in a very collaborative and timely manner, and HPRS was satisfied with both the selection process and the bank chosen.

4. Legal Compliance

HPRS legal support is effective. Compliance oversight should be formalized, with responsibilities assigned. Legal due diligence standards should be better documented.

HPRS legal functions appear to be reasonably staffed and are consistent with similar size peers.

HPRS legal staff appear to be well qualified and consists of a 0.5 General Counsel (combined General Counsel/Chief Investment Officer position) plus a paralegal. Outside counsel firms are also experienced legal advisors to public pension funds in their respective areas of expertise. They have been retained for matters where internal counsel does not have the necessary capacity or expertise. Legal fees appear to be reasonable when compared with similar size funds with small staffs that rely heavily on outsourced service providers.

HPRS should formalize its tax compliance procedures in a policy that provides for periodic receipt of written confirmation from tax counsel that the plan qualifies for favorable tax treatment.

Since the plan has not been substantively amended since receipt of the last IRS favorable tax determination letter in 2017, HPRS legal staff has informally determined that the plan remains qualified for public pension plan favorable tax treatment. HPRS has utilized outside advisers to handle foreign and title holding company tax compliance; they also assist in addressing potential tax exposures.

HPRS should seek legislative authority to select external legal counsel or engage with the Attorney General about formalizing a Memorandum of Understanding that provides for HPRS to select outside legal counsel.

Section 742.09 of the Revised Code provides that the Attorney General shall be the legal counsel to the HPRS Board. The Attorney General's office has assumed responsibility for selecting outside counsel and approving billing rates and invoices from outside counsel. HPRS does not have the authority to control engagement and supervision of its own counsel.

HPRS should assign compliance monitoring and reporting to a staff member and task a Board committee with compliance oversight for the board.

HPRS has ethical standards of conduct in place and provides regular ethics and fiduciary duty onboarding and continuing education training. While HPRS cooperates with the Ethics Commission on monitoring and enforcement of ethics standards, there is no designated internal HPRS compliance function.

Documentation standards for investment, operational and legal due diligence materials, confirming the roles played by Clearstead and outside investment legal counsel, should be included in HPRS files.

Extensive investment authority has been delegated to Clearstead, and the board's resulting reliance on documentation of their investment decisions is essential to demonstrate compliance with the duty of prudence. In addition, legal staff relies upon outside investment legal counsel to conduct the bulk of legal due diligence activities and negotiate terms of investment documents.

Legal and investment staff should consider use of investment, operational and legal due diligence closing checklists.

HPRS due diligence policies should include file documentation standards to establish that investment, operational and legal due diligence have been prudently conducted, for example, a pre-closing comfort letter from outside legal counsel confirming that appropriate legal diligence has been done or an annotated legal due diligence memorandum from outside legal counsel.

5. Risk Management and Controls

Overall, HPRS is a high performing organization with a strong tone at the top, middle and bottom. Governance, risk and compliance are taken very seriously and commitment to improvement is evident throughout. Accounting and audit procedures are generally consistent with prevailing practices.

HPRS should refresh the audit risk assessment, identify "vital sign" critical risk factors, and assign operational performance tolerance levels and strength of controls assessments to each.

The most recent HPRS risk assessment was completed by the internal auditors in 2012. Staff and the Audit Committee should update the assessment and identify the current most critical risks to the organization and develop ongoing practices to monitor actual performance of functional operations against predefined tolerance levels. This should provide the ability to monitor evolving risks, minimize potential future impacts, and provide a robust assurance methodology that assures controls are operating as intended.

HPRS procurement policies and processes are fundamentally sound.

The policies are updated regularly, and the processes contain key checks and balances throughout. On a periodic basis, internal audit should perform a sampling of purchases to assure adherence to policy.

Accounting and related processes and financial controls at HPRS are well documented.

HPRS employs a very high standard of care in its financial and accounting operations. The breadth and depth of accounting process and control documentation at HPRS is robust. There is appropriate emphasis on segregation of duties, proper authorization, accountability, and authority to the organization's books and records, as reflected in both the HPRS Accounting Policy & Procedures and the Internal Control Manual. The documentation and standards extend to key roles for external service providers including external investment managers, PNC (custodian), and Treasurer of State,

Information contained in the Board portal should be expanded to include Board policies, training materials, and other reference documents to improve access.

The HPRS Board utilizes a Board portal, a secure section of the HPRS website, primarily for transmission of the Board agenda and accompanying materials to trustees in advance of each meeting. Board meeting materials are retained in the Board portal for a year and are organized by meeting date and committee. Leading practice is to enhance the Board portal to provide relevant reference materials.

Internal audit, which is outsourced to Summit County, appears to function effectively, using a five-year rotation of audit areas; however, there are opportunities for improvement.

The risk assessment should be refreshed by the internal auditors and the scope expanded to include key aspects of Investment Risk, Compliance Risk, Operational Risk, Technology Risk, and Strategic Risk. Internal audit should operate more independently of the ED and present its findings directly to the Audit Committee. Internal audit should be engaged, as needed, to perform important advisory work on upcoming and in-process initiatives.

External audit policies and practices are consistent with prevailing practices at peer funds.

The Ohio State Auditor's Office selected Rea & Associates via a formal bidding process in the Fall of 2020. Their current contract spans four years. The auditor supports the review of annual financial statements, which are developed and presented at fiscal yearend in the summer. The auditor is required to submit the annual financial statement audit to the Auditor of State.

Current record retention policies and practices are effective but could be improved.

HPRS maintains a detailed, documented records retention schedule which identifies the categories and detailed types of records that need to be retained and the prescribed retention periods for each record type. The schedule was approved and is reviewed periodically by the Board of Trustees. However, the records retention schedule lacks purge/destruction procedures and does not maintain hold procedures for a legal, regulatory or business reason. In addition, there is no designated point person for the records program and any related inquiries.

6. IT Operations

In general, HPRS has adequate information systems to support its operations, although there are many manual processes. Similar to other areas at HPRS, there is a heavy reliance on external providers, which is appropriate. HPRS intends to update its website and pension administration system over the next few years, and potentially also its financial systems. Our findings and recommendations are intended to address key IT areas and mitigate risk as much as possible.

Reliance on a sole consultant for IT operations poses a significant risk.

All IT Operations functions are performed by an IT consultant, with the oversight of the Operations Manager. The IT consultant is a sole practitioner who has been retained by HPRS since the mid '00s. From all indications, the IT consultant is very capable and is performing to the satisfaction of his client. However, considering that the IT consultant is a sole practitioner with such long tenure at HPRS, the system faces considerable key person risk. He would be quite difficult to replace. If he were incapacitated or absent should an IT-related emergency occur, HPRS would encounter serious problems with continuing operations, including making pension payments.

There are no procedures for systems development or application change management.

HPRS does not have a formal, documented Systems Development Life Cycle (SDLC). Inasmuch as in recent years there has been very little system development (the key application, MembersLink, was developed in 2010) there is not an informal one either. We have been informed that there are plans for major upgrades to HPRS' IT systems in the next few years, so the development and implementation of a thorough SDLC is becoming a matter of some importance.

Sensitive member information is not encrypted.

HPRS should encrypt its sensitive information, including its membership databases. This is a widely recommended leading practice and would mitigate the impact of theft of member information caused by a cyberattack.

HPRS does not have a Business Continuity Plan and its IT Disaster Recovery Plan has not been tested.

HPRS does not have a Business Continuity Plan to address on-going service to active and retired members in the event of a business disruption. It should be noted that HPRS was able to continue operations during the pandemic without a documented plan. HPRS' IT Disaster Recovery Plan is a very technical document, describing in detail how to recover its systems and data in the event of a disaster to its primary site in HPRS' offices, but it has never been tested.

HPRS runs the risk of its primary and backup data centers being affected by the same event.

The recovery site for HPRS' systems is located approximately three miles from HPRS' offices, subjecting the fund to the possibility of the same event (e.g., tornadoes, toxic spills) incapacitating both at the same time.

D. Detailed Recommendations

1. Board Governance and Administration

- R1.1.1 HPRS should consider development of its own trustee education policy that formalizes the Board's expectations for skills development, supplements the shared Ohio retirement systems education programs, provides for use of the HPRS Board self-evaluation and/or a collective knowledge evaluation to identify training needs, and establishes a process for creation of annual individualized trustee continuing education plans.
- R1.1.2 The HPRS Board (or Governance Committee) should confer with the Executive Director regarding potential opportunities to establish additional shared educational programs with the other Ohio retirement systems pursuant to Ohio Revised Code Section 171.50.
- R1.2.1 HPRS should clarify that referrals of potential investments or service providers by trustees or other public officials, as well as trustee information requests made outside of Board or committee meetings, be tracked and periodically reported to the Board (or Audit Committee).
- R1.4.1 HPRS should consider video streaming of committee meetings to allow stakeholders to remotely observe committee meeting proceedings.
- R1.4.2 HPRS should provide archives of Board and committee meeting videos on the website to allow stakeholders to access prior meeting proceedings.
- **R1.4.3** HPRS should provide access to the public meeting materials from Board books on the website in advance of Board meetings and archive the materials for future access.
- R1.4.4 The Board Chair should discuss committee assignments with each trustee and ensure that trustees interests and committee skill sets are appropriately balanced; the Board should approve committee assignments recommended by the Board Chair.
- R1.4.5 The Audit Committee should be more proactive in providing direction to the internal and external auditors; utilizing Audit Committee guidance from the AICPA could be helpful.
- R1.4.6 The Audit Committee should meet with the internal and external auditors without staff present at least once annually to reinforce the independence of the auditors.
- R1.5.1 Management should prepare a quarterly actual versus budget variance report and submit to the Board as reference/appendix information.
- R1.5.2 Management should commence the practice of developing multi-year capital expense budgets for major initiatives.
- R1.5.3 HPRS should apply forward-looking annual expense forecasts to the 2022-2027 strategic plan to illustrate overarching projections of total capital and operating costs inclusive of all strategic priorities and other objectives contained within it.

- R1.6.1 HPRS should consider adoption of policy provisions (in addition to use of related contract clauses) that provide for annual certification by outside managers and service providers regarding compliance with applicable standards of conduct, conflicts of interest and other contract or regulatory requirements; responsibility for oversight of the process and reporting on manager and service provider compliance should be specifically assigned within HPRS.
- R1.6.2 HPRS should adopt a policy that prohibits trading with material, non-public information and provides guidance on where trustees or staff can go at HPRS with questions regarding application.
- R1.6.3 Internal policies on conflicts of interest and standards of conduct should include guidance on where to go for advice at HPRS on related questions and also include information about how to use the state whistleblower process.
- R1.7.1 The Board should discuss and develop a formal succession plan for the Executive Director that includes, at a minimum, a process to replace the ED in case of an emergency, identification of potential internal candidates, and a Board process for long-term succession planning.
- R1.9.1 HPRS should enhance its website and stakeholder communications capabilities and develop a comprehensive plan for managing two-way stakeholder communications that includes regular communications and consistent messaging with legislators, media and the public.
- R1.9.2 HPRS should provide trustees with system email accounts that are secure and can be easily used for all system-related communications.

2. Organizational Structure and Staffing

- **R2.1.1** Consider adopting a functional based position management operating model supported by defined proficiencies, training plans, evaluation processes and compensation structures.
- R2.1.2 Develop SMART (Specific, Measurable, Achievable, Relevant and Time Bound) annual goals for the ED and cascade annual goals at the beginning of each performance evaluation cycle for each staff member and utilize them in the execution of year end performance evaluations.
- **R2.1.3** Improve staffing depth and backup through:
 - Where practicable, and informed by risk (i.e., most critical), cross-train for critical operational functions and maintain a matrix of associates and job function proficiencies.
 - Explore options including stand-by roles for third party providers or borrowed temporary resources from other Ohio public pension plans in case of an unexpected staffing emergency.
 - Promote internships with local universities to perform specific change management and administrative roles within HPRS.

- R2.2.1 HPRS should consider if utilizing a customer service survey specialist, and conducting more focused surveys more frequently, could improve its ability to more quickly and effectively identify member service improvement opportunities.
- R2.3.1 Consider utilizing a proficiency-based position model to establish compensation formula that directly reflect an employee's contribution to the organization; provide full transparency to associates when communicating the compensation formula to them.
- **R2.3.2** Work with external industry compensation benchmark entities at least once every five years to develop and maintain the compensation structures.
- R2.4.1 For each described proficiency-based position and level, define a set of hard and soft skills required to attain the demonstrated level of proficiency for the position; and select internal and/or external training offerings that can provide the knowledge to selected associates as needed.
- **R2.4.2** Link training and development to the annual performance goal setting and year end evaluation processes.

3. Investment Policy and Oversight

3.1 Investment policy and Procedures.

- **R3.1.1.1** The HPRS Board should develop a separate Statement of Investment Beliefs (SIB).
- R3.1.1.2 The HPRS consultants, directed by HPRS staff, should provide focused workshop/education programs on the area of sector risk analysis and performance attribution concepts for all Trustees and continue the workshops that have begun with respect to actuarial concepts.
- **R3.1.2.1** The IPS should include a discussion of the key constraints, assumptions and risks the HPRS Board and staff are considering when establishing the IPS.
- **R3.1.2.2** The IPS should address the actuarial assumptions for both the HPRS DB plan and the Healthcare Trust, and perhaps have separate IPS statements.
- **R3.1.2.3** The policy for determining the granting of pension COLA's and the allocation of funding to the Healthcare Trust should be documented.
- **R3.1.3.1** The IPS should include a Board approved policy for the CIO to follow when executing rebalancing transactions.
- **R3.1.3.2** The Board should adopt a policy on liquidity management in its IPS that would include maximum allocations to illiquid asset categories and a discussion of expectations of incoming liquidity and disbursements for the HPRS pension and healthcare plans.
- **R3.1.3.3** The IPS should include a requirement for periodic investment structure risk reviews, with discussion of active risk assumptions and active return assumptions.

- R3.1.5.1 Consider developing an asset-liability study for the Post-Retirement Health Plan to document the anticipated funding of this plan and ability of the Board and staff to remediate this situation through investment performance.
- **R3.1.6.1** A rebalancing report and prospective pacing plan analysis should be included in the regular Board reporting documentation provided by Clearstead.
- R3.1.7.1 HPRS should prioritize plans to develop and update policies to accurately formalize investment due diligence practices, including documentation of both internal and external due diligence processes. See also Recommendations in 3.2.1 and 3.2.6.
- R3.1.9.1 HPRS should prioritize the review and updating of its policies, with a staff member and Board committee responsible for each policy; policy review and update frequency should be defined, and new policies should reflect recommendations from this report.

3.2 Investment oversight and review.

- **R3.2.1.1** The Board and CIO should maintain its current annual reviews of the consultant but consider retaining an independent qualified third-party for a biennial investment consultant review of services compared to peer practices.
- R3.2.1.2 The investment consultant should provide HPRS with access to a client portal to access all relevant investment manager monitoring updates, due diligence reports, and any other key documents important to the oversight of the plan.
- **R3.2.1.3** Consider the addition of a Committee List and Review List (per Manager Review Policy) as modules to the Oversight Dashboard.
- R3.2.1.4 The Chief Investment Officer and the investment consultant should collaborate and prepare a 4-to-8-week cash forecast; tactical deviation outside of the cash target allocation should be monitored and evaluated for cash drag effect.
- **R3.2.1.5** Monthly review of rebalancing and subsequent allocation changes should be documented and made available.
- **R3.2.1.6** Quarterly performance reporting for public market investment managers should be more consistent across managers.
- R3.2.1.7 Set investment manager monitoring standards for the investment consultant to include, for example, frequency of virtual and onsite visits; documentation of organization, personnel, or operational changes; changes in accountants, auditors, legal counsel, etc.
- R3.2.1.8 Resume compliance reporting of investment guidelines for the separately managed account and quarterly reporting of the Manager Review chart as mandated by the Manager Review Policy.
- **R3.2.3.1** Policy benchmark asset class weights used in performance reporting should correspond to the target allocations as defined by the IPS.

- **R3.2.3.2** Portfolio returns should be reviewed and verified by a supervisor at the consultant before distributed to HPRS.
- **R3.2.3.3** Performance should be verified by the custodian or independent third-party on a periodic basis.
- **R3.2.3.4** The investment consultant should provide attribution analysis as part of performance reporting and asset-class reviews.
- **R3.2.3.5** There should be documentation of the analysis and process performed to arrive at benchmark selection or changes.
- R3.2.3.6 Separate performance analysis of each non-marketable asset class based on vintage, lifecycle, and strategy should be included in quarterly performance materials, including peer comparisons and rankings to commonly accepted benchmarks such as Cambridge Associates, NCREIF, etc.
- R3.2.3.7 All annual reviews of asset classes should be documented and available for review and should include performance attribution, benchmark fit, manager contribution and appropriate fit, active risk, exposure and look through analysis.
- **R3.2.4.1** Supplement the Annual Fee Review to include an independent benchmarking service to better understand the relative cost of different managers, styles and mandates.
- **R3.2.4.2** Define standards around private fund fee levels and reporting transparency to share with Clearstead for use in the due diligence process.
- R3.2.6.1 The delegation of investment selection authority to the Task Force (or subcommittee) by the Board and Investment Committee should be clearly stated and be documented as part of investment governance structure in the Investment Policy Statement and the Investment Committee charter.
- R3.2.6.2 Develop proposed due diligence standards and checklists, including operational due diligence, to include minimum standards across all asset classes, any unique requirements for individual asset classes, and responsibilities for conducting each step in the process.
- **R3.2.6.3** An investment memo for any new selection should be provided by the investment consultant with input from the Task Force/subcommittee.
- R3.2.6.4 For any investment selection that does not meet minimum criteria as defined in the Manager Search and Termination Policy, reasons for the exception should be welldocumented and subject to additional scrutiny and discussion; HPRS should consider commissioning a third party Operational Due Diligence report for investments recommended by Clearstead that do not meet these guidelines.
- R3.2.6.5 All documents related to the selection process (list of candidates, write-ups, interview notes, research, etc.) should be made available to the Investment Committee or full Board upon request.
- **R3.2.6.6** The Oversight Dashboard should include a list of investment pipeline opportunities being considered along with recently approved decisions by the subcommittee.

3.3 Investment and fiduciary risk.

- **R3.3.1.1** The appetite for risk should be clearly defined and communicated in the Investment Policy Statement. See Section 3.1.2
- **R3.3.1.2** Staff, in conjunction with the investment consultant, should establish a risk budget and review periodically with the Board; a comprehensive and robust risk analysis of the portfolio should also be reviewed and presented annually.
- **R3.3.1.3** Additional metrics such as attribution, information ratio, correlation analysis, and tracking error for the total portfolio and investment managers should be in the quarterly report or at the very least made available on the Board portal.
- R3.3.1.4 Strategic asset allocation reviews should include a clear comparison of current returns and volatility versus the forecasted return and volatility metrics of the near-term target allocation, and similarly of the long-term targets.
- **R3.3.1.5** Liquidity analyses should include projected cash flow build up from net flows from private equity, private credit and real assets, plus contributions and benefit payments assumptions.
- **R3.3.1.6** Portfolio look-through should be performed consistently and across asset classes by Clearstead and made available in either the quarterly report or on the Board portal.
- **R3.3.2.1** The Chief Investment Officer should work with the investment consultant to determine an appropriate expansion of the quarterly reporting format in the area of investment risk monitoring and reporting (including some of the recommendations made under the previous section and 3.1 and 3.2).
- **R3.3.2.2** To alleviate key person risk for the CIO, another member of the executive team should receive training and be prepared to play a backup role in case of unavailability of the CIO.

3.4 Custodian policy.

- **R3.4.1.1** Employ use of PNC Bank's iHub portal technology to improve workflow.
- **R3.4.1.2** Proactively engage with PNC Bank's relationship management on a regular basis (standing meeting) to learn of new service offerings from the Bank to determine if they can assist HPRS.
- R3.4.4.1 The Treasurer of State and HPRS should develop a Memorandum of Understanding that documents current policies and procedures with respect to selection and oversight of the custodial bank to ensure that these effective processes that benefits HPRS remain in place, despite a change of Treasurer.

4. Legal Compliance

- R4.1.1 HPRS should formalize its tax compliance procedures in a policy that provides for periodic receipt of written confirmation from tax counsel that the plan qualifies for favorable tax treatment.
- R4.2.1 HPRS should seek legislative authority to select external legal counsel for investment and fund management matters, or engage with the Attorney General about formalizing a Memorandum of Understanding that provides a process which recognizes the fiduciary duties that HPRS has in selection of and contracting with outside legal counsel.
- R4.3.1 HPRS should assign monitoring and reporting on compliance to a staff member who assumes overall compliance program responsibilities; a Board committee should also be tasked with compliance oversight for the board.
- R4.4.1 HPRS should consider use of due diligence checklists and establishment of file documentation standards to demonstrate that appropriate investment, operational and legal due diligence have been conducted; materials confirming the roles played by Clearstead and outside investment legal counsel should be included in HPRS files. See also section 3.2.6.
- R4.4.2 Legal and investment staff should consider authorizing Clearstead and outside legal counsel to directly communicate with each other and coordinate in their negotiation of deal documentation and completion of due diligence on behalf of HPRS, subject to staff oversight.

5. Risk Management and Controls

- R5.1.1 Refresh the organization-wide risk assessment for HPRS, determine "vital sign" critical risk factors, and assign operational performance tolerance levels and strength of controls assessments to each.
- **R5.1.2** Expand the Risk Management Internal Controls Policy Document to describe new risk assessment and controls governance processes.
- R5.1.3 Monitor performance against tolerances for vital signs and develop a cadence of reporting to the Audit Committee; use the risk assessment and ongoing performance monitoring to inform the internal audit plan.
- R5.1.4 As part of a future initiative to potentially replace QuickBooks with a more modern and expansive accounting solution, incorporate requirements for automating the production of financial reporting at HPRS.
- R5.1.5 Enhance the language about purchasing and purchasing card policies within the Internal Controls Manual document to include descriptions of controls, evidence of controls, and an assessment of control strength (weak, adequate, strong) based on a formulaic assessment.
- R5.1.6 On a periodic basis, but no less frequently than biennially, have internal audit (Summit

County Internal Audit) perform a sampling of purchases to assure adherence to policy.

- R5.2.1 HPRS should seek to transition manual processes at PNC to better leverage the custodian's new client portal. See R3.4.1.1
- R5.3.1 Information contained in the Board portal should be expanded to include Board policies, training materials, and other reference documents to improve access; the portal should have search capabilities.
- R5.3.2 Periodically, perhaps at the annual Board off-site meeting, there should be a discussion about the reports received by the Board, including potential useful new reports to be added as well as any reports that could be eliminated due to minimal utility.
- R5.4.1 Refresh the 11-year old audit risk assessment for HPRS and include key aspects of Investment Risk, Compliance Risk, Operational Risk, Technology Risk, and Strategic Risk; provide a refresh of the risk assessment no less frequently than every five years.
- **R5.4.2** Monitor and report performance internally and to the Audit Committee on a regular basis.
- **R5.4.3** The Audit Committee should play a more proactive role in reviewing and approving the audit plan; the internal auditors should interact directly with the Audit Committee.
- R5.4.4 Engage Summit County, as needed, to perform advisory work on upcoming and in-process initiatives to ensure that policies are developed and control structures are designed into new operating processes.
- R5.4.5 Request that Summit County provide HPRS with notifications of changes in personnel (including certifications acquired, hirings, transitions) for senior management, client relationship management and assigned auditors.
- **R5.5.1** Conduct periodic assessments (e.g., random sampling) of records to assure adherence to the records retention policy; document results and present them to the Board accordingly.
- **R5.5.2** Update records retention policy documentation to capture records disposal, assurance reviews, and hold functions.
- R5.5.3 Develop process documentation to capture specific processes to categorize, store and dispose of documents; develop process documentation to perform periodic assessments of controls.
- **R5.5.4** Review all key counterparty procedural and contractual documentation to ensure the inclusion of language regarding records retention.
- R5.5.5 Add records retention to the schedule of internal audit reviews conducted by Summit County.
6. IT Operations

- R6.1.1 HPRS should consider means to mitigating the key person risk in IT Operations; a Managed Service Provider (MSP) or use of third-party systems could achieve this objective.
- R6.1.2 HPRS should continue the effort to document necessary IT policies and procedures; the development of policies and procedures should be focused on effective management of the system and not generate more documentation than is needed to that end.
- **R6.2.1** HPRS should maintain a list of all applications and infrastructure systems that it uses.
- R6.2.2 HPRS should develop a formal project management process for major IT initiatives, as well as other major projects.
- R6.2.3 The risks involved in IT Operations should be regularly assessed as a part of an overall risk Management process. See R5.4.1.
- R6.4.1 HPRS should document a System Development Life Cycle (SDLC).
- R6.4.2 The IT change management process should be formalized.
- **R6.7.1** HPRS should encrypt its sensitive information, including its membership databases.
- R6.7.2 The inclusion of an appropriate level of information security in development projects should be a part of the SDLC. See R6.4.1.
- R6.8.1 HPRS should conduct regular, perhaps annual, tests of its IT Disaster Recovery Plan.
- R6.8.2 HPRS should consider a more remote site to recover its IT systems in the event of a regional disaster; alternatively, HPRS might use cloud-based services instead of or in addition to its current IT recovery site.
- R6.8.3 HPRS should develop a high-level Business Continuity Plan in the event there is an extended disruption affecting its offices or its IT systems.
- R6.10.1 HPRS should acquire services and tools to monitor the security of its systems and data on an everyday, round-the-clock basis; should HPRS choose to retain a managed service provider this might be a task assigned to it.
- R6.10.2 HPRS should determine, document, and test a plan for how it could continue operations on a manual basis while its systems are being recovered, in preparation for destructive attack on those systems.
- R6.10.3 Accountability for data privacy should be formally designated.

Main Body of the Report

1. Board Governance and Administration

The Contractor will perform a review of the governance structure of HPRS in terms of the makeup of its board and level of monitoring and oversight provided in its policies, procedures, and practices. The Contractor shall evaluate the adequacy of the policies concerning delineation of roles and responsibilities of the board, staff, investment managers, and others with administrative or oversight responsibilities.

Specifically, this will include an analysis of:

- 1.1 Board trustee education, training, and their associated costs;
- 1.2 Whether HPRS sufficiently delineates, communicates, and documents the lines of reporting and responsibility over staff responsibilities in general and in the investment program specifically and whether the role of the board and staff are clearly defined for both;
- 1.3 The statutes and administrative rules under which HPRS operates to determine if the board and staff comply with applicable statutes and rules as well as whether the statutes and administrative rules are sufficient to allow the board and staff to meet their responsibilities;
- 1.4 Comparison of the governance provisions and practices to industry standards and best practices in comparable systems.
- 1.5 HPRS budget process and its adherence to board approved budget;
- 1.6 Written policies and procedures currently in place to monitor and guard against professional conflicts of interest;
- 1.7 Succession planning for key positions;
- 1.8 Administrative costs, including determining their appropriateness compared to comparable public systems; and
- 1.9 Communication policies and procedures of HPRS between the board, its members, and its retirees.

Board Governance and Administration Review Activities

For the review, we utilized the following sources of information to complete our assessment and comparison to leading, prevailing and lagging practices at similar peer state retirement systems in the U.S.

- Ohio statutes and administrative rules governing HPRS, including Title 55, Chapter 5505; and Title 1, Chapter 102 of the Ohio Revised Code; and other statutes that address conflicts of interest, including Chapter 2921 of the Ohio Revised Code and related Administrative Code sections within scope of the review were examined in conjunction with Board policies and practices.
- HPRS's governance policies, including charters, delegations, position descriptions, ethics and standards of behavior policies and communications policy.
- HPRS's Board education and training program and materials.
- HPRS's communications policies and plans.
- Interviews with Board members and HPRS executive staff.
- FAS governance policies and practices knowledgebase.
- Most recent three HPRS annual operating budgets and financial and operating reports.
- HPRS's staff development and succession planning documentation.
- Investment contract side letter sample transaction documents
- The HPRS website.

1.1 Trustee Education

Board trustee education, training, and their associated costs.

Expectations

An effective public retirement system board education program should be designed within the context of the specific system to address the variety of knowledge and skills-building needs found in a group of trustees with diverse backgrounds and experiences. Consistent education and exposure to pension industry practices is an essential part of equipping trustees to fulfill their fiduciary duties, which reference peer practices and require staying current with evolving changes. A leading practice program typically includes both new trustee onboarding and trustee continuing education.

Trustee On-boarding

At most retirement systems, onboarding is typically a one-time event (2-6 hours) of "meet and greet" presentations and review of a thick policy manual, often without much context. However, while legal duties of trustees apply from day one, it takes time for most trustees to get up-to-speed on what are often novel responsibilities. New trustees have immediate, individual learning needs that may require more than traditional onboarding, even if it is supplemented with external conferences. Most trustees describe the process of learning basics of their role as overwhelming and like "drinking from a fire hose."

The initial onboarding experience should be considered as only part of the first year of a trustee's continuing education program. That approach will position training within a paced, targeted, and customized process intended to bring the new trustee up to speed as quickly as possible and address each trustee's unique needs in a more understandable way. The onboarding materials should orient the new trustee to the retirement system as a public entity (e.g., governing legislation; open meetings and public records laws; fiduciary duties; powers reserved for the Board and powers delegated; the employer's roles; pension plan design and rules; the retirement system organization and staff; Board and committee structure and operations; ethics and standards of conduct; Board policies; key external service providers).

An onboarding process should also utilize materials from the core continuing education program, as appropriate, to address an individual new trustee's requirements or needs. Each trustee will bring their own skill set to the position, and not all trustees will always need the same training.

In recognition of the wide range of learning needs that most new trustees will have, a Board might consider a more significant number of required hours for training in the initial year, or alternatively, the first two years. A longer onboarding process with an individualized plan can most easily be tailored to each trustee's individual needs.

Continuing Education

The core component of trustee continuing education, which is a standard offering for the full Board, should cover the fundamental responsibilities of each trustee, including key Board decisions and oversight duties. For example, a core curriculum would typically include basic understanding of fiduciary duties;

pension fundamentals; actuarial concepts, investment governance and oversight; benefits governance; administrative oversight; independent reassurance; and other pension governance functions.

While the core continuing education program should be part of the initial trustee onboarding within the first year, it should also be folded into periodic "refresher" training sessions every several years in full Board or online training sessions. The core training materials should also be readily accessible to all trustees as reference materials, ideally through an online digital Board portal.

Core continuing education also typically includes on-site training by key service providers, such as the actuary and investment consultants, as well as expert internal staff. Timing of training sessions is also a consideration. For example, sessions which review the role and characteristics of each asset class in the fund's portfolio, or a potential new asset class, could be scheduled prior to deliberations on updating the investment policy or asset allocation. The timing of specific education could be scheduled on the Board's annual calendar to coincide with important Board deliberation topics throughout the year.

Advanced education might be provided as a "menu" of possible training sessions from which a trustee could choose to meet relevant individual interests or address skill gaps (for example, perhaps board chair skills development or cyber security). Some training might be most efficiently provided through external programs such as conferences, webinars, online learning, or other venues and media.

Elective training will often include an extensive selection of investment-related offerings to help trustees cope with the changing and increasing complexities of modern institutional portfolios. Trustee education should offer opportunities to enhance understanding of all aspects of the retirement system's governance, policies, and programs. The Board (or one of its committees) should work with staff to develop an education program that fits the needs of trustees and the system.

An effective trustee education program develops individual trustee education plans and tracks trustee education program participation and completion rates. Compliance with training plans should be reported back to the Board. Education programs should also provide a mechanism for trustees to give feedback to the system based on their perceptions of the effectiveness of attended outside programs. This would help to inform other trustees and could include recommendations on which programs are worth attending. Trustee evaluations and reporting on education to the full Board can be an important part of an effective education program.

Educational Options / Methods

A leading practice trustee education program can include a number of planning elements and other features, including:

- 1. Individualized learning plans and calendars for each trustee.
- 2. Established expectations for hours and topics of continuing education, with attendance tracking and reporting back to the board
- 3. Mentoring, with each new trustee assigned to an experienced trustee mentor. An executive staff member might also be assigned.
- 4. Curriculum identified and organized by subject area, using a variety of programs and sources to ensure exposure to the full range of peer and evolving practices and diverse perspectives:

- a. Internally delivered education sessions incorporated into meeting agendas
- b. Annual retreats or special meetings that feature education
- c. External, in-person conferences
- d. Staff, service provider and third-party presenters
- e. External virtual conferences
- f. Online training

Trustee Education Standards of Comparison and Findings

Trustee Education Standards of Comparison	Findings
There is a formal education policy and program which specifies minimum requirements.	Yes
There is an onboarding process for new trustees that is effective in building core trustee competencies over the first one-to-two years.	Yes
There is a reasonable Board continuing education budget.	Yes
Training is individualized and there is an individual training plan for each trustee.	Partial
Trustees meet their orientation and continuing education requirements.	Yes
Trustee education covers most key topics: Fiduciary responsibilities; Investments; Ethics; Pensions; Health Care; Actuarial principles.	Yes
Training is linked with Board self-assessment results.	Partial

Conclusions

The joint educational program established by the five Ohio public pension funds appears to provide efficient and valuable training events designed to implement the statutory orientation and continuing education requirements, although it is not offered every year.

The joint training events are regularly supplemented by HPRS training that is included in Board meetings. Topics covered during Board meeting education sessions are designed to address issues that will be coming to the Board for discussion. The Board members also collectively did an individualized evaluation of pension system knowledge to identify topics for future educational offerings.

Some HPRS trustees have participated in conferences offered by the National Conference on Public Employee Retirement Systems (NCPERS), International Foundation of Employee Benefit Plans (IFEBP) and other providers. However, attendance at educational conferences is not mandated. Trustees who do go provide a verbal report to the Board after attending conferences and other external training events to advise on topics covered and quality.

Individualized education plans are not developed by HPRS for trustees. An emerging best practice is to develop an individualized training plan for every trustee based on the annual Board self-evaluation or

administration of a collective trustee knowledge evaluation. This process could cover both the aggregate skill levels of the Board as a whole, as well as areas where individual trustees would benefit from training. To focus the process, HPRS might choose to approve a list of subject matters for which trustee familiarity would be advantageous, taking into consideration the joint Ohio retirement systems training program curriculum. Continuing education offerings could also be coordinated with upcoming Board calendar action items, so that trustees are fully prepared to consider the matters.

Expansion of the joint educational programs developed with the other Ohio public pension funds pursuant to Ohio Revised Code Section 171.50 might also be considered where there are shared training needs. This would allow HPRS to benefit from the combined resources of all the Ohio retirement systems.

Recommendations for Improvement

- R1.1.1 HPRS should consider development of its own trustee education policy that formalizes the Board's expectations for skills development, supplements the shared Ohio retirement systems education programs, provides for use of the HPRS Board self-evaluation and/or a collective knowledge evaluation to identify training needs, and establishes a process for creation of annual individualized trustee continuing education plans.
- R1.1.2 The HPRS Board (or Governance Committee) should confer with the Executive Director regarding potential opportunities to establish additional shared educational programs with the other Ohio retirement systems pursuant to Ohio Revised Code Section 171.50.

1.2 Lines of Reporting and Responsibility

Whether HPRS sufficiently delineates, communicates, and documents the lines of reporting and responsibility over staff responsibilities in general and in the investment program specifically and whether the role of the board and staff are clearly defined for both.

Expectations

Overall Governance Framework

There are several forms of governance models for public retirement systems in use in the U.S. today. The structure under which HPRS operates is the most common structure, (i.e., an integrated investment and pension administration organization with a single fiduciary board.) The Executive Director or CEO is responsible for the entire organization and reports to a board that has authority for investments and pension administration and delegates specified powers and responsibilities to external service providers and to staff through the CEO. Thirty-eight of the largest sixty-five, or 58%, of state public pension funds in the U.S. utilize this structure. In our comparisons to peer funds, we consider other state public retirement systems with a similar structure.

There are a limited number of statewide public retirement systems in the U.S. of similar scale to HPRS. FAS has identified 11 peer systems under \$3.5 billion and conducted a benchmarking analysis based upon publicly available information from each.

HPRS relies heavily on its investment consultant for investment program management, similar to most of its peers. Despite having minimal internal investment staff, as shown in the table below, with one exception, all of the peer boards approve selection of investment managers, with assistance from the consultant.

Peer Public Fund	DB AUM (\$Bils)	Investment Staff	# of Mgrs./ Funds	Board Approves Managers	General Consultant
Oklahoma Firefighters Pension &					
Retirement System	\$3.2	0	16	Yes	AndCo
Missouri DOT & Patrol Employees'					
Retirement System	\$3.0	5	75	No	NEPC
Municipal Fire & Police Retirement					
System of Iowa	\$3.0	1+	NA	Yes	Marquette
Pennsylvania Municipal Retirement					
System	\$2.9	1	21	Yes	Marquette
Oklahoma Police Pension &					Asset
Retirement System	\$2.9	0	89	Yes	Consulting
Arkansas Local Police and Fire					Stephens
Retirement System	\$2.7	0	37	Yes	Inc.
Louisiana Municipal Police					
Employees' Retirement System	\$2.3	0	26	Yes	NEPC
Louisiana School Employees'					Segal
Retirement System	\$2.0	2	50	Yes	Marco
Firefighters' Retirement System of					
Louisiana	\$1.9	2	39	Yes	NEPC
Ohio Highway Patrol Retirement					
System	\$1.1	1-	35	Yes	Clearstead
Louisiana State Police Retirement					
System	\$1.0	0	NA	Yes	UBS
Louisiana Clerks of Court Retirement and Relief Fund	\$0.7	0	17	Yes	Andco

Governance Roles and Responsibilities

Governance duties, roles and responsibilities for a public pension fund can be complex and confusing. Leading practice involves formalization of the Board's powers, with clear delineation of delegated powers and lines of reporting. This involves organization of governance roles and responsibilities into the following categories as described in the overview to this section of the report:

- Conduct the Business of the Board and its committees
- Approve key decision above a threshold
- Set direction and policy and then prudently delegate
- Oversee the execution of direction within policy
- Verify then trust and obtain independent audit and advice as needed.

Leading practice also includes development of standard due diligence review questions that provide guidance for boards and committees when considering action on key decisions. Recurring Board agenda items are scheduled in a board agenda calendar at leading practice public retirement systems to ensure items are not overlooked and issues are properly sequenced.

In addition, public retirement system leadership responsibilities typically lie primarily with the board chair and vice chair, board committee chairs, and the executive director. It is the responsibility of this leadership group to insist on maintaining good trustee and senior executive conduct, based on applicable legal standards, effective governance practices and established policies, all of which are usually collected in a Governance Policy Manual.

The Board chair typically has seven major duties:

- 1. Preside over meetings, approve the agenda for those meetings, and maintain order in conducting the business of the board.
- 2. Oversee the setting of the system's strategic agenda and priorities.
- 3. Oversee board communications, information requests, and collaboration with the executive director.
- 4. Ensure the board receives adequate and appropriate materials in a timely fashion.
- 5. Monitor board performance and counsel board members.
- 6. Appoint and rotate terms of committee members and oversee board/committee coordination.
- 7. Act in coordination with the executive director as spokesperson for the board and as an ambassador to stakeholders.

The vice-chair, whether for the full board or a committee, acts as chair in the absence of the chair.

- 1. The vice-chair may lead selected board initiatives, at the discretion of the chair.
- 2. At some funds, where the vice-chair serves as chair-elect, the vice-chair prepares to eventually take on the role of chair.
- 3. Some funds also encourage selection of the vice-chair so as to provide balanced leadership representation across participant groups.

The prevailing practice in the vast majority of states is for the board to elect its chair from among sitting members, although in a few states the chair is appointed by the governor, or an ex officio member is the standing chair. When the board elects its chair, the prevailing practice is for all trustees to be eligible for nomination and election as chair or vice-chair/chair-elect.

Lines of Reporting and Responsibility Standards of Comparison and Findings

Overall Governance Framework

Overall Governance Standards of Comparison	Findings
The powers reserved for the board and authority delegated to staff are clearly defined.	Yes
Each decision that requires board approval is identified and recurring approvals are included in the board decision calendar.	Yes
Each board decision has defined decision due diligence standards that identify preparation and information requirements necessary to meet board approval.	Partial

Governance Roles and Responsibilities

Governance Roles and Responsibilities Standards of Comparison	Findings
Regular rotation of board and committee leadership to facilitate trustee development and leadership succession planning.	Yes
The election of the vice chair takes succession planning into account; where practical, the vice-chair should succeed the chair.	Yes
All trustees are eligible to be elected and considered as candidates as Board chair.	Yes
The board and committee chairs ensure formal and respectful behavior from trustees to each other, to staff, and to advisors.	Yes
The executive director and executive team (deputies) ensure that all interactions between staff and board members and between staff and external consultants/advisors are respectful and collegial.	Yes
The executive director is responsible for maintaining board minutes and documentation in a searchable and accessible manner.	Yes
There is a board policy that requires substantive requests for information from board members to go through the board chair and executive director to be prioritized and tracked for follow-up.	Partial
When the board approves a significant change program, oversight responsibilities are assigned to trustees and staff or consultants/advisors for implementation; the plan includes associated target completion dates and approved resources, as required.	Yes

Conclusions

Powers Reserved and Delegated

Responsibilities of the Board and committee chairs, the Board vice-chair, Board members and Executive Director are set forth in the HPRS Governance Manual. They are substantially consistent with prevailing practices at peer public retirement systems.

Current HPRS policy requires that substantive trustee requests for information that are made to staff outside of Board or committee meetings go through the Executive Director and be coordinated with the Board or committee chair. The Executive Director is also required to make the requested information available to all trustees.

Referral of potential investment opportunities or service providers by trustees are required to be submitted to the Executive Director or his designee. However, there is no explicit requirement that the full Board be informed of trustee referrals nor is it explicitly stated that established due diligence and procurement standards must be applied to trustee referrals. In order to ensure transparency about trustee (and other public official) referrals and to discourage related attempts to exert undue influence on staff, the existing policies should be clarified to make it clear that a log of trustee and other public official referrals be kept by the Executive Director and reported to the Board or Audit Committee. The

policies should also confirm that established due diligence and procurement standards must be applied to all referrals.

Recommendations for Improvement

R1.2.1 HPRS should clarify that referrals of potential investments or service providers by trustees or other public officials, as well as trustee information requests made outside of Board or committee meetings, be tracked and periodically reported to the Board (or Audit Committee).

1.3 Statutes and Administrative Rules

Examine the statutes and administrative rules under which HPRS operates to determine if the board and staff comply with applicable statutes and rules as well as whether the statutes and administrative rules are sufficient to allow the board and staff to meet their responsibilities.

Expectations and Standards of Comparison

The Ohio Statutes establish legal requirements that govern HPRS and the Board. In turn, the Board interprets and implements those laws through the creation of Administrative Code provisions and policies. HPRS policies and processes were evaluated in the context of those legal obligations.

Conclusions

The primary statutory requirements which relate to governance of HPRS are summarized in the following table. The "Implemented" column contains our conclusions regarding general consistency of HPRS rules, policies and practices with implementation of these statutory requirements. Overall, we believe that HPRS has policy provisions and practices that are reasonable and appropriate for implementation of its statutory and administrative code governance obligations. Nevertheless, this Report identifies a number of recommended opportunities for improvement.

Торіс	Primary Statutes and Rules	Implemented
Board Elections	oard ElectionsBoard shall hold elections for employee and retiree board members: ORC 5505.041 et seq.	
Board Chair	The Board shall annually elect a Chair and Vice-Chair: ORC 5505.04 (A)(2)	Yes
Travel Expense Reimbursement	The Board shall adopt rules regarding trustee travel expense reimbursement: ORC 5505.049, 5505.05 and 5505.062	Yes
Oath of Office	Board members must take an oath upon election or appointment: ORC 5505.05	Yes
Board Powers & Fiduciary Duties	Board has full power to invest fund; duties of loyalty, care and prudence: ORC 5505.06	Yes
Prohibited Transactions	No self-dealing or interested party transactions: ORC 5505.061 and 5505.08	Yes
Ethics Policy, Training & Financial Disclosure Statements	Board must develop ethics policy in consultation with Ohio Ethics Commission and do related trainings; annual financial statement filings: ORC 5505.063 and 102.02	Yes
Chief Investment Officer	Appointment, qualifications and duties of CIO, including misuse of confidential information oversight: ORC 5505.065	Yes
Ohio Agents;	Use of minority and women owned firms and Ohio brokers,	Yes

Торіс	Topic Primary Statutes and Rules	
Minority & Women Owned Firms	dealers and managers; related reporting: ORC 5505.068, 5505.06 and 5505.0610	
Employees and Compensation	Authority to retain staff and set compensation: ORC 5505.07	Yes
Actuary	Engagement of actuary, related authority, duties and reporting requirements: ORC 5505.07 and 5505.12	Yes
Custodian & Fiscal Records	Treasurer of State is HPRS custodian; fiscal records of the system shall be open to public inspection: ORC 5505.11	Yes
Internal Audit	Board shall appoint an audit committee to engage an internal auditor: ORC 5505.111	Yes
Unfunded Liability	funded Liability Standards for planning payment of unfunded liability and related reporting: ORC 5505.121	
Ohio Retirement Study Council		
Legal Adviser	Attorney General is the Board's legal adviser: ORC 5505.23	Yes
Budget	Annual budget submission to ORSC: ORC 5505.062	Yes
Contributions & Benefits	System contribution requirements and system benefits: ORC 5505.15 et seq.	Yes
Healthcare	HPRS may provide health insurance to plan members and beneficiaries: ORC 5505.28	Yes
Disability Retirement	Disability benefits provided; submit report for the preceding fiscal year of the disability retirement experience of the state highway patrol: ORC 5505.18 and 5505.181	Yes
DROP Plan	Administration of Deferred Retirement Options Plan: ORC 5505.50	Yes

Recommendations for Improvement

See Recommendations 3.4.4.1 regarding custodian selection and 4.2.1 regarding selection of outside legal counsel.

1.4 Governance Provisions and Practices

Comparison of the governance provisions and practices to industry standards and best practices in comparable systems.

Expectations

Board Authorities

The fiduciary board has authorities that match its responsibilities and allow the board to prudently provide direction and oversight to the Executive Director and the System. Consequently, the System is adequately resourced, with appropriate in-house staff and infrastructure, and seeks external expert assistance and services as appropriate. The board has the authority to approve hiring and compensation levels as well as budgets and major capital expenditures.

Board Meetings and Operations

Increasingly, public sessions of board meetings are live streamed on the internet to provide access to stakeholders; video recordings of meetings are available on the system website for maximum transparency. Public meeting documents are made available on the website when they are provided to trustees and are retained as archive files available to the public.

Board meeting agenda content, development, and documentation are the responsibility of the board chair and the executive director (ED) primarily. In the case of committees, the committee chair and appropriate staff liaison collaborate to set the agenda, often with input from the ED if the ED is not the committee's staff liaison.

The board chair and ED collaborate on agenda setting and should be in regular contact between meetings. The ED has the primary responsibility to draft an agenda that is organized in a standard format around the "Powers Reserved for the Board" and is coordinated with the Board's strategic plan.

Individual board members, through the chair, have the opportunity to suggest agenda items. Leading practice is to organize and prioritize meeting agendas by powers reserved, i.e., set policy items first, recurring approvals second, conduct (e.g., ED evaluation, board self-assessment) third, and oversight (e.g., familiarity with due diligence processes, performance monitoring) items last. The majority of the agenda items should be focused on decisions ("set" or "approve") vs. oversight or informational items. There is typically a higher focus on oversight by committees rather than the full board, with each committee escalating important exceptions to the board, as appropriate.

The Board spends a significant amount of its time with robust discussion about strategic issues and policies and effective delegations and does not get bogged down in excessive monitoring of day-to-day investment performance and operations. See section *5.3 Appropriateness of Reports* for more details. In addition, the board has an effective source of independent reassurance that indicates they can rely on management reports and the system of controls. See section *5.4 Sufficiency of Internal and External Audit Procedures* for more details.

As they arise, legislative updates are typically discussed with the board chair and presented by the ED.

The ED should be in regular contact with the chair on legislative matters so there should be no surprises. Generally, the ED should take no action or speak on legislative issues (other than providing factual information about the system) without being guided by defined responsibilities and the input of the board or board chair.

A consent agenda is a board meeting practice that groups routine business and reports into one agenda item. The consent agenda can be approved in one action, rather than filing motions on each item separately. Using a consent agenda is a standard peer practice that can save boards anywhere from a few minutes to a half hour. A consent agenda moves routine items along quickly so that the board has time for discussing more important issues. Consent agendas are a helpful efficiency tool for items which require board approval but do not typically require active board or committee discussion, such as approval of meeting minutes. Typically, items may be removed from the consent agenda and moved to the regular calendar at the request of any trustee. Attention to Open Meetings Act compliance must be included in design and use of consent agendas.

Peer system boards typically meet either approximately 10-12 times annually or 4-6 times. There is no singularly consistent peer practice. With increasing delegation to staff, however, there has been a trend over the past decade for some boards that had been meeting monthly to meet less frequently. For example, CalPERS has recently moved from regular monthly meetings to every other month, with special meetings as required. Boards that have not delegated manager selection typically meet much more frequently, often as frequently as monthly (and sometimes more often on an hoc basis when needed to consider an investment in a time-limited opportunity).

It is prevailing practice for the board to conduct periodic retreats for more in-depth discussion, typically at least once annually. Topics addressed at retreats often include: asset/liability management and/or asset allocation; strategic planning and long-term agenda setting; investment program reviews; project reviews (e.g., IT, facilities, etc.) or other program reviews (e.g., health care, insurance, long-term care, etc.); legislative agenda; board governance topics, e.g., review charters, policies, etc.; board self-assessment and performance discussion; board continuing education program planning; executive director / CEO or other Board direct report evaluations; and outside speakers on various topics as part of continuing education.

Most board members spend more time in committee meetings than in full board meetings, as the committees play an important role in due diligence on policy decisions and providing ongoing oversight of the system. As a result, full board meetings typically last 2 to 5 hours at most systems.

At most public retirement systems, committees do the bulk of the work of the board, so it is important to ensure committees are effective. For example, based upon a FAS benchmarking study of large public retirement systems, a typical trustee, on average, spent 74 hours per year in committee meetings of which he or she was a member, versus 43 hours annually in full board meetings.

Committee Meetings

Well-functioning board committees can significantly enhance a board's efficiency and effectiveness. Each committee should have a strategic focus, as defined by its charter, and must be able to exercise important oversight functions. Insight is essential to both effective direction-setting and oversight.

Committees are empowered to research issues and options, obtain the advice and recommendations of staff and consultants, and make recommendations to the full board. Committees allow board members to exercise a greater level of decision due diligence than the board likely would as a whole.

Committees help the board to exercise its fiduciary responsibilities by:

- Improving trustee insight into complex issues, the range of options available, and the related pros and cons, to enable more effective direction and policy setting; committees can advise and make insightful recommendations to the full board on direction and policy.
- More thoroughly reviewing, understanding, and challenging staff and consultants' due diligence that underpins recommendations for decisions that require board approval.
- Overseeing those aspects of system performance within their respective mandates, better understanding and interpreting the key metrics associated with their scope and identifying and escalating exceptions to the full board.
- Completing much of the work of the board for those activities that the board must conduct itself, for example, the goal setting and performance evaluation of the executive director, providing feedback to board consultants, conducting the board self-assessment, etc. All these, of course, are reported out to the full board.
- Finally, ensuring information reported to the board is reliable by commissioning and receiving reports from those who are independent of management, for example, internal audit, external audit, and third parties such as fiduciary auditors and general investment consultants.

Prevailing practice is for committee chairs to work with staff to identify policy development / review priorities for the next cycle. Leading practice is for the committee policy agenda and activities to be linked to an overall board policy agenda. The committee reviews and approves the agenda for recommendation to and approval by the board.

Consistent with the committee strategic agenda, certain committee responsibilities repeat annually at the same time of the year; however, other responsibilities may occur over a longer cycle or may tie to a 3-5-year strategic plan.

Leading practice is for the committee chair to provide a report to the board at the next regularly scheduled board meeting to update the board as to its activities, findings, recommendations, and any other relevant issues, and for committee meeting minutes to be distributed to the board. Any recommendations brought to the board for approval would be documented and included in the board book package.

The committee chair should also share the agenda for the next upcoming committee meeting with the entire board at the board meeting taking place immediately prior to the committee meeting. This can also be accomplished by including the upcoming committee agenda in the board book package.

It is not unusual for some trustees who are not committee members to regularly sit in meetings and participate in discussions, although typically they are not allowed to vote. While this can be helpful for individual trustees to educate themselves on issues, which is beneficial, it can sometimes be a sign that some trustees do not trust the due diligence and recommendations of the committees, which can be a cause for concern.

Lay boards often encounter the situation of not knowing what questions to ask of their consultants/ advisors and staff. The use of checklists and "questions to ask" for each committee can be helpful as thought starters. For example, the American Institute of Certified Public Accountants (AICPA), in their brief "10 Key Internal Audit Topics for Audit Committee Consideration," provides a list of Ten Key Questions for Audit Committees. The AICPA also offers additional toolkits to aid audit committee effectiveness.

Committee Structure

Every committee should have a well-defined purpose and clearly articulated responsibilities for advising the board on strategy, policy, and decision-making; providing ongoing oversight; and obtaining independent reassurance on the effectiveness of controls and the reliability of management's reports.

It is typical for the board chair, in consultation with each member, to select and appoint trustees to each committee, with the approval of the entire board. It is also prevailing practice for each newly appointed committee to elect its own chair and vice chair at their first meeting.

The committee structure should be aligned with the system functions and organization structure to facilitate:

- Effective comprehensive oversight of the system's vital functions (e.g., asset management, pension administration, health care, financial management, etc.), and
- Consistent and constructive committee-board, committee-staff, and committee-consultant interaction.

Boards of state retirement systems typically have no more than 6-7 standing committees. The most common standing committees are Audit (often including Risk) and Investment. Nearly all large integrated public funds have these two committees. The next most prevalent are Personnel and Compensation; Board Governance; Finance and Administration; Actuarial and Benefits; and Appeals and Disability Reviews. There are sometimes also committees that focus on legislation and external affairs, or a standalone risk committee, or an executive committee, but these are not typical. Although there have been many instances of a committee whose focus is on corporate governance or ESG, most funds are moving this responsibility into the Investment Committee.

Committees should be structured to have a reasonably balanced workload, both from the standpoint that all committees should have significant responsibilities, and the assignments should result in a steady workload over time without ongoing excessive workload or long periods when the committee is not required to meet.

Each committee should be as small as practical; a good rule of thumb is about three to five members per committee (with an odd number to avoid tie votes), with the Investment Committee potentially having up to seven members. "Committees of the whole" provide the illusion of delegation and defeat the purpose of appointing a committee; a committee of the whole is often an indication of the topic being too important/ sensitive for delegation or that there is a dysfunctional governance dynamic which should be recognized (e.g., lack of trust, micromanagement, need for added trustee expertise or training).

Committee Meeting Frequency and Duration

Committee meeting frequency varies by committee. The most common committee, which exists on nearly every board, is the Audit Committee. It typically meets 3-5 times per year, based upon annual auditing activities and responsibilities.

The Investment Committee is the second most prevalent committee. Meeting frequency varies based upon the level of delegation to staff. For example, when a board has delegated investment manager selection to staff and has appropriate oversight and checks and balances in place, it may only meet 4-5 times per year (e.g., Teacher Retirement System of Texas).

For boards that have an Appeals Committee, the meeting frequency is often monthly. However, at many systems this is handled as an administrative function and is not a function of the board (though subject to board oversight). Prevailing practice with public retirement systems is to have a hierarchy of decision processes and checks and balances in reviewing disability claims and appeals, as this is the nature of the appeals process. Often, disability appeals are handled by an administrative law judge. If a member files an appeal, the system legal staff typically handles the response, sometimes with the assistance of a consultant.

Each state is somewhat different in the procedural requirements for handling disability reviews and appeals, but funds generally have some type of medical review or medical advisory board that reviews and then recommends to staff for acceptance or denial based on the medical documentation and legal requirements. Legal staff guide the process and compliance with legal standards unique to the system and state's administrative procedures requirements.

In some states, if a settlement is not reached the appeal will again go to a judge for resolution. In other states, the system's fiduciary board has final jurisdiction. Handling of disability reviews and appeals is also a more-frequent board approval activity at systems where the board is involved. Although this process can vary dramatically from one system to another, it typically follows a set of standard procedures and protocols to ensure compliance with all rules and regulations and fair outcomes.

Each committee should have responsibilities that require it to meet at least 3-4 times annually; if not, the committee should be a candidate for consolidation into another committee.

Governance Standards of Comparison and Findings

Board Authorities

Board Authorities Standards of Comparison	Findings
The Board has the authority to manage fund assets, without restrictions (e.g., legal lists), and for setting the assumed rate of return (discount rate).	Yes
The statutes do not place undue restrictions on the board regarding its annual budget or ability to hire staff, as necessary for the effective operation of the retirement system.	Yes
The current statutes do not unduly restrict the ability of the board to appropriately compensate its staff.	Yes
The board is not impeded by state statute with respect to procurement of goods and services necessary to effectively operate the retirement system.	Yes
The board has full authority to select and oversee the relationship with the key service providers including the custodial bank.	Partial

Board Meetings and Operations

Board Meetings and Operations Standards of Comparison	Findings
Public sessions of board meetings are live streamed on the internet and recordings are available on the system website.	Board only live – Yes Committees – No Recordings – No
Public Board meeting materials are made available on the system website when they are initially distributed to trustees.	No
The board has developed a multi-year strategic policy agenda that identifies the expected timing of key policy decisions (e.g., asset-liability management decisions, key procurement decisions, major policy reviews).	Partial
The Board formally delegates appropriate topics to each committee, staff and consultants annually and sets target dates for bringing key policy items to the Board for approval.	Yes
Detailed board due diligence work and ongoing oversight are delegated to the appropriate committees, with final approval and enterprise-wide items reserved for the full board.	Yes
There is a systematic process for engaging the board and its committees in identifying and evaluating policy options before a decision is made.	Yes
The board spends significant time discussing strategic issues and policies and effective delegations and does not get bogged down in excessive monitoring of day-to-day investment performance and operations.	Yes
Meeting agendas are organized and prioritized according to Powers Reserved for the Board: first conduct Board business (e.g., call to order, roll call, minutes approval); then policy items; then recurring approvals; and then oversight (e.g., monitoring) items last.	Yes

Board Meetings and Operations Standards of Comparison	Findings
Consent agendas are used effectively to handle routine board approvals.	No
The board conducts periodic retreats for more in-depth discussion on key topics, conducting board self-evaluations and executive director evaluations, and trustee education.	Yes
There is a formal policy and process that requires substantive requests for information from board members to go through the board chair and executive director to be prioritized and tracked for follow-up.	No

Committees

Committees Standards of Comparison	Findings
Committees conduct due diligence on strategy and policy decisions within the scope of their charter.	Yes
Committees function as an important oversight mechanism for the board and bring appropriate policy and performance issues for the full board to address.	Yes
Each committee reviews and approves its annual agenda for recommendation to and approval by the board.	No
Each committee chair provides a report to the board at the next regularly scheduled board meeting to update the board as to the committee's activities, findings, and recommendations.	Yes
Each committee has a checklist of key questions for members to ask on various topics.	No
Committees are well-structured, each with a strategic focus and well-defined charter.	Yes
The board chair, in consultation with each trustee, selects and appoints committee members, with the approval of the entire board.	Partial
Each standing committee has a reasonably balanced workload, and the committee meets with a regular cadence and does not have long periods when the committee is not required to meet.	Yes
About half peer systems have a requirement for at least one member of the Investment Committee to have specific expertise or experience.	Yes, three
The Audit Committee typically meets 3-4 times per year, based upon annual auditing activities and responsibilities, with meetings lasting 0.5 to 2 hours.	Yes
If a board has a committee to hear disability and retirement appeals, the policies, and processes for this function result in a limited number of cases that rely on trustee judgement for adjudication.	Yes

Board Authorities

Conclusions

Compared to other U.S. state integrated retirement systems, the HPRS Board:

- Is typical, with 11 voting trustees compared with a median of 10 members
- Has more elected and fewer appointed members
- Has more plan members as trustees

The HPRS Board of Trustees generally has leading practice authorities, e.g., for budgets, staffing and setting compensation, and procurement; however, there are several lagging practices.

Based upon Funston Advisory Services InGov[©] peer benchmarking data, as shown in the table below, the authority to select the external auditor and outside legal counsel is delegated to the Board of Trustees or its designees at the majority of systems in this peer group. The HPRS responsibilities are denoted by green shading.

Who has final responsibility for the following decisions on selecting the following outside service providers? (N = 9)	External Actuary	External Auditor	Outside Legal Counsel
Board of Trustees	8	4	2
Executive Director / CEO	1	1	3
Treasurer or Comptroller		1	
Attorney General			4
State Auditor		3	

Source: Funston Advisory Service InGov[©] Research

HPRS is in a small minority of U.S. states (Iowa, Ohio, Pennsylvania, Tennessee) where, by statute, the State Treasurer selects the custodial bank for the state retirement system DB plans, which is generally considered a lagging practice with larger state systems. However, with the more limited resources at HPRS, and the thoughtful and effective selection and oversight process utilized by the Treasurer of State staff, this could be considered an effective practice for HPRS. This is addressed in more detail in section *3.4 Custodian Policy*.

HPRS purchasing exceptions and limitations vis-à-vis standard state policies are consistent with most peer funds.

Recommendations for Improvement

No recommendations at this time.

Board Meetings and Operations

Conclusions

The HPRS Board typically meets six times annually including a two-day retreat for one meeting. This appears to be an effective schedule for HPRS. The Board typically concludes its business during a three-hour meeting, resulting in somewhat less time in full Board meetings than the peer group. This can be attributed to: strong leadership and a collaborative Board; less complexity in the HPRS business as compared to peers; and, the effectiveness of the Board committees (to be discussed below).

The HPRS Board appears to function effectively and efficiently. Trustees rely on the expertise of fellow members and have a high level of trust and confidence. The Board has addressed challenging issues in recent years such as improving health care funding sustainability and developing a more effective methodology for determining an appropriate COLA decision, and members generally appear to be pleased with the outcomes.

On average over the past two years, how many times has your Board met annually as a full Board?		What is the average duration of a regular full Board meeting, in hours?		Total Full Board Meeting Hours Per Year
Meetings/Year	Responses	Hours by Response	Average	Hours
4	1	1	1.0	4
6	5	2,3,3,3,4	3.0	21
7	1	7	7.0	49
10	4	1,2,4,6	3.3	37
12	1	2	2.0	24
13	2	2, 5	3.5	46
Peer Averages				
8.5	14		3.2	27
	HPRS			
6			3	18

Source: Funston Advisory Service InGov[©] Research

HPRS Board meetings, but not committee meeting, are streamed live over the internet. Streaming of both Board and committee meetings has become prevailing practice over the past few years and is typically appreciated by members and retirees, as well as other stakeholders, for providing an opportunity to observe meeting proceedings remotely. Recordings of the HPRS Board meetings are not made available on the website, a leading practice that is found in use at many peer systems.

In addition, leading practice is to provide access to the public meeting materials from Board books on the website in advance of Board meetings and to archive the materials for future access. HPRS does not make meeting materials available to stakeholders in advance of meetings.

Recommendations for Improvement

- R1.4.1 HPRS should consider video streaming of committee meetings to allow stakeholders to remotely observe committee meeting proceedings.
- R1.4.2 HPRS should provide archives of Board and committee meeting videos on the website to allow stakeholders to access prior meeting proceedings.
- **R1.4.3** HPRS should provide access to the public meeting materials from Board books on the website in advance of Board meetings and archive the materials for future access.

Committees

Conclusions

HPRS has five standing committees of the Board, consistent with the peer average of 4.8 committees. As shown below, Audit, Investment, and Disability (Health, Wellness & Disability at HPRS) Committees are the most common peer committees. The Administration and Health Care Funding Committees are also typical committees found at peer funds.

Each standing committee of the Board has an existing charter that describes the committee membership, purpose, responsibilities and duties, meetings and agendas, and reporting responsibilities to the Board. The charters are clearly articulated and provide effective guidance for each committee.

The Board Chair appoints committee members each year. Although there are some informal discussions, there is not a formal process for soliciting input from each trustee regarding their upcoming assignments. There is not a confirming Board vote on the committee appointments.

Each Board committee elects its own Chair and Vice Chair, consistent with prevailing peer practice. Committee leadership generally rotates among the members, although not every year, which has been effective in supporting trustee development while maintaining continuity.

The HPRS Board typically spends about 24 hours annually in committee meetings, slightly less than the peer average. Most of the trustees stated that they typically attend all committee meetings when their schedules allow, including committees where they are not members. This is also typical at peer public retirement systems and helps trustees to be informed for discussions with the full Board.

All of the committees appear to generally function well. Trustees state they are satisfied with the committees, and longer-serving trustees believe that committee effectiveness in general has improved in recent years.

Note: HPRS responses highlighted in green

Committee	No. of Standing Committees N = 15*	Ave. No. of Members	Ave. No. of Meetings	Ave. Duration of Meetings (Hours)	Ave. Time Spent in Comm. Mts. (Hours)
Audit/Audit & Risk	12	4.8 <mark>(5)</mark>	3.9 <mark>(3.5)</mark>	1.3 <mark>(0.8)</mark>	4.1 <mark>(2.6)</mark>
Investment	10	7.5 <mark>(6)</mark>	6.6 <mark>(5.5)</mark>	2.8 <mark>(1.5)</mark>	12.3 <mark>(7.8)</mark>
Disability/Appeals	6	5.3 <mark>(5)</mark>	7.5 <mark>(5.5)</mark>	1.9 <mark>(1.5)</mark>	5.7 <mark>(8.3)</mark>
Legislative/Policy	5	4.4	2.8	1.2	1.1
Personnel/Compensation	4	4.8	3.5	0.8	0.8
Health Insurance/Insurance	4	6.5 <mark>(5)</mark>	4.2 <mark>(3.5)</mark>	0.8 <mark>(0.8)</mark>	0.9 <mark>(2.8)</mark>
Benefits	3	4.3	3.5	1.3	0.9
Finance/Administration/ Budget	3	4.5 <mark>(5)</mark>	3.5 <mark>(3.5)</mark>	1.1 <mark>(0.8)</mark>	1.0 <mark>(2.8)</mark>
Governance/Board Governance	2	6.0	4.5	1.1	0.7
Defined Contribution/ Deferred Compensation	2	6.5	2.5	1.6	0.5
Operations	1	5.0	3.5	1.5	0.1
Executive	1	5.0	7.5	1.5	0.6
Proxy/Corporate Governance/ Sustainability /ESG	1	7.0	1.5	0.8	0.1
Elections	1	7.0	1.5	0.3	0.1
Final Average Salary	1	7.0	3.5	0.8	0.2
Rules	1	6.0	3.5	1.5	0.4
Average	4.8				29.5
HPRS	5				24.3

Source: Funston Advisory Service InGov[©] Research

The six-member Investment Committee (IC) has three appointed trustees with investment experience, and several of the elected trustees on the IC also have finance and/or investments experience. The IC recommends policy changes to the Board and provides effective oversight of the investment consultant and the Chief Investment Officer. The Investment Committee appoints an ad hoc Task Force, or subcommittee, to vet each investment on its behalf. Each Task Force typically includes the IC Chair plus one or two other IC members, the CIO, and several members of the investment consultant's team. If the Task Force unanimously supports an investment, it is considered approved; if an investment is supported, but there are dissenting votes, the recommendation goes to the Investment Committee, which then makes a decision. Each of the trustees believes this is an effective process that leverages the time and expertise of the Board and results in good and timely decisions.

The Audit Committee (AC) meets regularly and receives reports from the external auditor and the outsourced internal auditor. When any audit issues have been identified the AC has been informed and works with the Executive Director to ensure they have been remediated. The AC members do not have significant financial or audit experience and rely heavily on HPRS staff to provide direction to both the external auditors. The AC does not meet with either the external or internal auditors without staff present; this is a practice that should be followed at least annually to ensure that the appropriate level of independence from management is maintained. Ideally, the AC would be more proactive in reviewing audit plans and ensuring that all high-risk areas are being addressed rather than relying on staff, as the auditors are intended to provide reassurance independent of management.

It is a leading practice for each committee to have a standard checklist of questions to ask. The AICPA has an Audit Committee Toolkit and Checklist, for example, to help Audit Committees know what questions to ask. This could assist the AC in being more effective and informed in their due diligence. The AICPA article, "10 Key Internal Audit Topics for Audit Committee Consideration" is attached as *Exhibit C*. For more findings and recommendations regarding internal audit see section *5.4 Internal and External Audit*.

The Health, Wellness & Disability Committee (HWDC), along with the Investment Committee, is the most active at HPRS. The largest volume of material in the Board books is typically for disability retirements. Committee members believe the reports are very thorough and well prepared and that the HWDC functions effectively.

The Health Care Funding Committee (HCFC) has recently assisted in developing and implementing a new program for retiree Medicare subsidies that has been well received. The current focus is on pre-Medicare health care support. Both the trustees and executives believe the HCFC has performed well.

Finally, the Administration Committee is responsible for overseeing HPRS operations, including retirement plan administration, member services, annual budget, and procurement. The Administration Committee has provided oversight for these areas but is not as active as some of the other committees. There will likely be a need to consider potential updates to information systems, including the website, over the next few years.

Recommendations for Improvement

- R1.4.4 The Board Chair should discuss committee assignments with each trustee and ensure that trustees interests and committee skill sets are appropriately balanced; the Board should approve committee assignments recommended by the Board Chair.
- R1.4.5 The Audit Committee should be more proactive in providing direction to the internal and external auditors; utilizing Audit Committee guidance from the AICPA could be helpful.
- R1.4.6 The Audit Committee should meet with the internal and external auditors without staff present at least once annually to reinforce the independence of the auditors.

1.5 Budget Process

HPRS budget process and its adherence to board approved budget.

Expectations

According to the Greater Washington Society of CPAs Educational Foundation, "A good budgeting process engages those who are responsible for adhering to the budget and implementing the organization's objectives in creating the budget. Both the finance committee and senior staff participation is built into the process and a timeline is established leaving adequate time for research, review, feedback, revisions, etc. before the budget is ready for presentation to the full board. The annual budgeting process should be documented, with tasks, responsibility assignments and deadlines clearly stated. A good budgeting process should incorporate strategic planning initiatives and stipulate that income is budgeted before expenses. Fixed costs are identified and related to reliable revenue. Budgeting decisions are driven both by mission priorities and fiscal accountability."²

One of the key aspects included in the above statement is the linkage to strategic planning initiatives. A public retirement system typically does not have a capital planning process which identifies key capital investment needs, so it is very important that longer-term project spending is identified and appropriately included in the annual budget.

Since a significant portion of the administrative costs of a retirement system are personnel related, prevailing practice is to budget and monitor staffing headcount by department. Costs in a number of operational areas in a public retirement system can be driven by volume of activity – for example, costs related to processing new retirees, or costs related to updating member files to conform to rule changes. An effective budgeting process identifies those costs which are primarily fixed and not sensitive to changes in activity levels and those costs which are significantly subject to fluctuation. For those costs which are activity-level dependent, the budget assumptions should specifically include the anticipated volumes which drive costs so that any variance, either over or under budget, can be readily understood.

Regarding budget monitoring, the annual budget should be calendared monthly to allow tracking and reporting on a monthly process. Each department head who is responsible for their budget should receive monthly performance reports on a timely basis, should become aware of any significant variances, and should report to the executive team regarding the source of the variance and whether or not any corrective action was warranted.

Budget Process Standards of Comparison	Findings
The directional framework for both operating and capital budgets cascades from the System's strategic plan.	No
There is a comprehensive budget policy which is implemented effectively for all administrative costs (not including external investment fees).	Yes

Budget Process Standards of Comparison and Findings

² The Budgeting Process, Elizabeth Hamilton Foley, Greater Washington Society of CPAs Educational Foundation

Budget Process Standards of Comparison	Findings
The budget reporting policy and process is effective in planning and managing costs and providing timely financial performance reports.	Yes
The budgeting and budget reporting processes are largely automated and do not rely on manually intensive processes and spreadsheets.	No
There is an integrated budgeting and reporting tool.	No
The travel and expense reporting processes have effective controls.	Yes

Unlike a number of the larger systems, the HPRS budget process is elementary in its design and execution. Fewer than 20 line items within a handful of general categories (i.e., personnel, professional services, communication expenses, other operating expenses) comprise the entire annual budget, which is largely managed by the Finance Director. The annual budget reporting form for submission to the Ohio Retirement Study Council (ORSC) is provided by the ORSC, as it is for all statewide public retirement plans.

The annual budget review falls within the purview of the board's Administration Committee, submitted to the ORSC, and presented to the Board for approval at the December Board meeting. It is notable that the annual review and presentation of the operating budget to the full Board is not explicitly included in the Administration Committee's most recent Charter and Workplan; however, approval for unbudgeted additions to the plan in excess of \$25,000 during the course of the budget cycle is.

It is typical for HPRS to operate the organization at about 4-5% under budget. Information Technology (IT) is typically overbudgeted to accommodate unexpected expenses that the organization may incur throughout the year. Management informs the Board of all positive variances that may arise, but outside of that, the Board does not review the annual budget against actuals as a matter of course throughout the year. The Finance Director diligently tracks actuals versus budget variances throughout the cycle and maintains budget data over multiple fiscal years.

Within the HPRS Strategic Plan for the period 2022-2027, there are no forecasts of capital or operating expenses tied to strategic priorities and objectives. The recently-concluded implementation of the healthcare (HRA / post-Medicare) initiative yielded significant expense reductions for the organization; however, the program was largely executed absent a capital expense forecast based on a cost-benefit model.

Conclusions

Budget Policy and Practice, Development, Tracking and Reporting

The budget process is mostly manual, but due to its simplicity, does not warrant an automated solution. Third party external manager fees are not included in the annual operating budget, which is prevailing practice for public pension plans. The annual budget contains proper details of costs and descriptions of variances (from the prior year), where appropriate to do so. An effective example of that may be found in the 2023 annual budget, where the explanation for a year-over-year variance of 23.18% at a total

budget level is largely attributable to the costs of the ORSC mandated fiduciary performance audit. Typical variances between budgets over the past few years have been de minimus in comparison.

It is leading practice to incorporate a cost-benefit analysis to justify the costs of implementation and the forecast of benefits, and on a periodic basis, no less frequently than semi-annually, for public pension plan systems to prepare actual versus forecasted updates on costs, schedule and benefits to the board.

The organization cites a common practice that incorporates capital project expenses into the annual operating budget. It is expected that the upcoming healthcare initiative affecting pre-Medicare eligible retirees and the prospective modernization of the HPRS website and conversion of the benefits administration platform and G/L (QuickBooks to MS Dynamics) will likely follow a similar formula.

Travel, Expense Management and Reporting

HPRS has detailed policies for travel and expense reimbursement that are applicable to professional staff and trustees alike. The travel policy requires both pre-approval of Board and staff travel (from a majority of Board members or the Executive Director, respectively) and a submission of estimates in advance. Travel policies are further defined by types of travel – local, statewide, interstate. Annual travel allowances per Board member and per event are explicitly described. All provisions represent leading practice in the public pension plan space.

The expense reimbursement policy is also clear in both practice and execution. Reasonable expenses accompanied by valid receipts are submitted to the HPRS Administrator, who reviews them for accuracy and adherence to the policy before submitting them to either the Executive Director or Board Chair for review and approval.

Recommendations for Improvement

- R1.5.1 Management should prepare a quarterly actual versus budget variance report and submit to the Board as reference/ appendix information.
- R1.5.2 Management should commence the practice of developing multi-year capital expense budgets for major initiatives.
- R1.5.3 HPRS should apply forward-looking annual expense forecasts to the 2022-2027 strategic plan to illustrate overarching projections of total capital and operating costs inclusive of all strategic priorities and other objectives contained within it.

1.6 Conflicts of Interest

Written policies and procedures currently in place to monitor and guard against professional conflicts of interest.

Expectations

A public retirement system should have policies and practices to effectively and transparently address actual or apparent conflicts of interest. It is important that the system's policies clearly identify the persons who are subject to its conflicts of interest policies (i.e., covered persons), typically board members, staff, managers, consultants, and certain other key service providers. In some instances, outside parties may be subject to their own conflicts of interest policy, which could supplement or replace the system's policy. The system should review and approve any replacement conflicts of interest policy (including any modifications) to ensure it provides acceptable coverage.

Board members and staff should receive regular training regarding conflicts of interest, including the process for disclosing and/or curing any potential conflicts and where to go for guidance when they have questions. Investment managers, consultants, and other professional service providers should provide initial and annual compliance certification disclosures, as well as be subject to ongoing noncompliance reporting obligations. Board members and staff should also be subject to annual verification, certification, and reporting with respect to compliance.

Most states also have an independent ethics commission that oversees compliance with standards of conduct and conflicts of interest limitations by covered officials and employees. They also typically require covered individuals to file statements of economic interests, which disclose financial interests and investments. Those filings may provide a mechanism to check on potential conflicts or other misconduct (e.g., trading on confidential system investment information or involvement in a party in interest transaction) by covered system fiduciaries.

General Conflicts of Interest Standards of Comparison	Findings
The following policies are in place:	
Ethics	Yes
Standards of Conduct	Yes
Conflicts of Interest and Recusal	Yes
Misuse of confidential/proprietary information	Yes
Manager/Vendor Referral	Yes
The Ethics Policy describes board members' obligations with respect to conflicts of interest and provides appropriate guidance to board members regarding their obligations.	Yes
The Financial Disclosure Statements cover reporting of financial interests that could raise potential conflicts of interest.	Yes

General Conflicts of Interest Standards of Comparison and Findings

General Conflicts of Interest Standards of Comparison	Findings
There is an Investment and Business Opportunity Referrals Policy which addresses potential for board member improper influence and adequately protects board members from the appearance of impropriety.	Partial (See R.1.2.1)
Consultants confirm compliance with conflicts of interest and ethics policies annually.	No
There are policies/prohibitions regarding the use of placement agents by counterparties and prohibiting "pay-to-play" or its potential appearance.	Yes
There is an employee personal conduct policy covering prohibited activity, ethical conduct, gifts, personal trading, and whistleblower protection.	Yes

Conclusions

HPRS conflicts of interest standards are generally consistent with peer policies. However, they do not provide for receipt of periodic (at least annual) written certifications regarding compliance with applicable standards of conduct and other contractual requirements. In addition, the conflicts of interest policy could include guidance on where to go at HPRS with questions regarding standards of conduct, to determine whether a situation presents a prohibited conflict of interest or find out how a conflict might be resolved.

Investment-Related Conflicts of Interest Standards of Comparison and Findings

Investment-Related Conflicts of Interest Standards for Comparison	Findings
There is an insider trading policy and a policy for material non-public information (MNPI).	No
Investment managers are required to affirm that they do not have a conflict of interest at the outset of the relationship and reaffirm this annually pursuant to the Required Annual Disclosure Form.	Partial
Any conflicts that arise during the course of the relationship must be timely disclosed to the system in writing.	Yes
The template side letter requires investment managers to complete a Required Annual Disclosure Form upon execution of the side letter and again annually.	Partial
Contract terms and the Required Annual Disclosure form appear to be effective at identifying conflicts.	Partial
The Required Annual Disclosure forms are submitted annually.	No
Investment Compliance is responsible for ensuring that the Required Annual Disclosures are received.	No
Investment Compliance verifies that information received is consistent with data reported to the SEC or otherwise available to HPRS.	No
Investment Compliance escalates any significant findings.	Partial

Investment-Related Conflicts of Interest Standards for Comparison	Findings
External managers and broker/dealers must affirm compliance with system rules annually.	No

Conclusions

Since HPRS does not manage assets internally, it has less exposure to risk of trading on material non-public information (MNPI), which is prohibited by Federal law. However, since it is still possible that HPRS trustees or employees could receive MNPI from outside managers, we recommend that an insider trading policy be adopted by HPRS.

As was mentioned above, HPRS should require (by policy and contract) that managers, consultants and advisers at least annually certify compliance with standards of conduct, conflicts of interest policies and other contractual requirements. HPRS should assign responsibility for oversight and reporting of compliance. Including compliance exception reporting to the Board or Audit Committee.

Recommendations for Improvement

- R1.6.1 HPRS should consider adoption of policy provisions (in addition to use of related contract clauses) that provide for annual certification by outside managers and service providers regarding compliance with applicable standards of conduct, conflicts of interest and other contract or regulatory requirements; responsibility for oversight of the process and reporting on manager and service provider compliance should be specifically assigned within HPRS.
- R1.6.2 HPRS should adopt a policy that prohibits trading with material, non-public information and provides guidance on where trustees or staff can go at HPRS with questions regarding application.
- R1.6.3 Internal policies on conflicts of interest and standards of conduct should include guidance on where to go for advice at HPRS on related questions and also include information about how to use the state whistleblower process.

1.7 Succession planning

Expectations

Selecting, evaluating, and preparing for the succession of the executive director (ED) are among the most important functions of a fiduciary board. It is through the executive director that the board's direction and policies are executed, and organizational leadership and public presence are demonstrated.

The importance of the ED's position and the reporting and working relationship with the board cannot be overstated. It is to the ED that a board first looks for implementation, and that individual is the single point of executive accountability as the most senior officer of the system.

For all these reasons, the executive director's succession plan is very important in the event of a temporary vacancy in this position or in the event of a permanent vacancy due to retirement or other reasons. The leadership and performance of all senior officers and staff, with the exception of the Chief Audit Executive (CAE) who reports directly to the board, is ultimately the responsibility of the ED.

Trustees should be prepared to make the transition to a new Executive Director as smooth as possible for the organization, minimize lost productivity, and reduce uncertainty of direction. Having a succession plan should be part of the preparation. Succession planning can be addressed as part of the periodic evaluation cycle, though some boards may address it as part of a Strategic Planning process.

It is unusual to have a designated successor in advance of an Executive Director's departure. Nonetheless, it is possible for trustees to establish a succession planning process that can help assure ongoing leadership and an efficient process for selecting a successor. Rather than reacting to circumstances under time pressure, trustees can think through a variety of issues in advance and set some parameters. Having thought through and identified how the recruitment will proceed saves time and prevents distraction. Trustees can outline the recruitment process well in advance.

Key questions the Board can address as part of succession planning in anticipation of potentially needing to replace the Executive Director include:

- Will the board use a sub-committee of its members to lead the process?
- Who will chair any search committee?
- Will the board employ a search firm?
- How will that firm be selected?
- Is the recruiting profile up to date?
- Do we need to revisit the compensation and other customary terms of employment?
- How do open records and meetings laws apply to the recruitment process?

By addressing these issues in advance, a board can focus on identifying, recruiting, and selecting the right individual, rather than getting bogged down in the process details. The result is likely to be a shorter and more fruitful recruitment process. In addition, trustees may wish to debrief once recruitment is completed, and use the opportunity to fine-tune the process for the future

Succession planning for other key positions in a public retirement system is a critical responsibility of the executive director. The plan should be approved by the board, then updated as necessary. Public retirement systems all have some hurdles in succession planning, especially for those that are directly

within the executive function of state government and that operate within civil service requirements and union contracts. Typically, the identification of specific individuals for specific positions is prohibited. Nonetheless, a succession plan, particularly for emergency vacancies, is a prevailing practice for meeting business continuity needs.

The succession plan should maintain internal governance and checks and balances such as segregation of duties. For example, if there are two positions that are control positions in that each is required to countersign documents, then those positions should be covered by someone within those respective functions and not the ED.

The ED has the responsibility to keep the board informed and the plan up to date. Within a system-wide plan, the board should ensure there is a clear emergency succession plan for its direct reports, i.e., the executive director and the CAE. The board should also become familiar with the bench strength of the leadership of the system through exposure to executives at board and committee meetings. Succession planning for senior level positions is also typically embedded in hiring and promotion decisions.

Succession Planning Standards of Comparison	Findings
There is a succession plan for the executive director approved by the board including an emergency succession plan; the emergency succession plan maintains segregation of duties.	Partial
There are succession plans for all key positions given the constraints of the civil service.	Partial
There is a clear understanding of how often the ED and senior staff succession plan is reviewed with the board or a designated board committee.	Partial
The staff ongoing education plans link to developing bench strength and supporting succession plans.	Yes
The system has a robust strategic planning process that is transparent both internally and externally.	Yes
The strategic plan is a useful and valuable tool used at all levels of the organization in goal setting and accountability.	Yes
There is a standard process for engaging the leadership team, the Board, and the ED around the strategic plan.	Yes
The board or a board committee has a process for meeting with the ED to review and update goals and ensure the ED's focus incorporates important goals of the strategic plan for that year.	Yes

Succession Planning Standards of Comparison and Findings

Conclusions

Due to the small internal staff at HPRS, with executives typically filling multiple roles, there is significant key person risk that cannot be avoided. As described elsewhere in this report, there is a conscious effort to cross train and ensure that other executives and/or staff can perform each other's functions during any absences. The additional benefit of the cross training is to mitigate some of the key person risk. It is not practical for HPRS to have a formal succession plan for each associate considering the small staff size; however, cross-training as it is implemented at HPRS should be the most effective solution.

The Board has not had a formal succession planning process for the Executive Director. Although it is difficult in a small organization such as HPRS to have a thorough ED succession plan, the Board should designate who would be the Acting Executive Director in case of an emergency and, at least annually, discuss potential options should succession become necessary.

Recommendations for Improvement

R1.7.1 The Board should discuss and develop a formal succession plan for the Executive Director that includes, at a minimum, a process to replace the ED in case of an emergency, identification of potential internal candidates, and a Board process for long-term succession planning.
1.8 Administrative Costs

Administrative costs, including determining their appropriateness compared to comparable public systems.

Expectations

The scope of this section of the review includes the administrative costs of the retirement system. Investment-related costs are addressed separately in Section Three: Investment Policy and Oversight.

Large public retirement systems typically participate in periodic benchmarking of pension administration costs and service levels through studies conducted by an independent service such as, e.g., CEM Benchmarking Inc. of Toronto, Canada. For smaller scale systems such as HPRS this is less common. The system manages performance by developing achievable goals in the areas of cost, service, and transaction volumes, and considers pension administration cost relative to service levels achieved.

Administrative Costs Standards of Comparison and Findings

Administrative Costs Standards of Comparison	Findings
The administrative headcount is consistent with peers.	Yes
The cost per member and annuitant is consistent with peers.	Yes

Conclusions

As shown in the table below, HPRS could be considered to have a staffing level comparable to peer funds. With a less than full-time CIO, HPRS relies heavily on its investment consultant for the investment management program, similar to most of its peers. As each of these state public retirement systems is different, with varying levels of complexity and different resourcing strategies, there are limits as to what can be determined through benchmarking; however, we can conclude that HPRS does not have excessive staffing and generally appears to have a similar operating model to most similarly scale peer state public retirement systems.

Peer Public Fund	DB AUM (\$Bils)	Total Staff	Investment Staff	Board Approves Managers
Oklahoma Firefighters Pension & Retirement System	\$3.2	11	0	Yes
Missouri DOT & Patrol Employees' Retirement System	\$3.0	18	5	No
Municipal Fire & Police Retirement System of Iowa	\$3.0	9	1+	Yes
Pennsylvania Municipal Retirement System	\$2.9	10	1	Yes
Oklahoma Police Pension & Retirement System	\$2.9	10	0	Yes
Arkansas Local Police and Fire Retirement System	\$2.7	8	0	Yes
Louisiana Municipal Police Employees' Retirement System	\$2.3	8	0	Yes
Louisiana School Employees' Retirement System	\$2.0	27	2	Yes
Firefighters' Retirement System of Louisiana	\$1.9	11	2	Yes
Ohio Highway Patrol Retirement System	\$1.1	8	1-	Yes
Louisiana State Police Retirement System	\$1.0	5	0	Yes
Louisiana Clerks of Court Retirement and Relief Fund	\$0.7	**	0	Yes

Recommendations for Improvement

No recommendations at this time.

1.9 Communication Policies and Procedures

Communication policies and procedures of HPRS between the board, its members, and its retirees.

Expectations

As a fiduciary, the board has an obligation to provide accurate reports to its fund beneficiaries and employers on plan status and performance, as well as submit statutorily required statement of funds reports to participants, financial statements and various other reports to participants, legislative oversite bodies and the public. In addition, accurate stakeholder understanding of pension fund issues is critical to maintaining support for practices that deliver participants' retirement security, as well as for the plan's sustainability and success. All stakeholder groups should be included in access to information and dialogue, generally through the executive director (ED) and senior staff.

A board policy commonly establishes communications roles for trustees and staff to ensure interactions with stakeholders (including media and legislators) are appropriate and that the information provided is accurate and consistent. The ED is normally the designated spokesperson for most matters.

The ED commonly delegates most day-to-day communications responsibilities to a public information officer (PIO). That can include staff or consultants that manage websites, handle requests for information, oversee social media monitoring and usage, provide the content and design of official materials and engage with the media. The PIO also typically assists trustees with matters that require a public response from the board.

Many larger funds now have a team involved in managing external relations and communications. The PIO and ED develop key messages and communication strategies and ensure the board is well informed. The board approves the basic thrust of a system's messaging. Consistency and clarity of messages is critical. The PIO and ED have been trained in the development and use of messaging as a critical component of effective communication.

The board chair is usually the spokesperson for matters involving board decisions and situations where it is inappropriate for the ED to speak on behalf of the board. Board policy typically directs that other trustees speak on behalf of the board only when authorized to do so by the board. If an individual trustee is compelled to comment on a board matter, it is important to be clear whether the trustee is voicing a personal opinion or speaking for the board.

Peers' policies commonly require trustees to inform the ED if they are contacted by the media, elected officials, vendors, or other stakeholders. Such a policy enables the board and leadership to have a more complete picture of matters that interest stakeholders, to provide timely and consistent responses, and develop important messages.

In a public retirement system, it is important to engage key stakeholders such as beneficiaries, active members, retirees, and the legislature in the strategic planning process, both in the formulation of the plan and in its communication. This is especially important for crisis communications (e.g., in the event of a cyber security breach, unexpectedly large investment loss or office damage from a weather event). Transparency and consistent messaging are important.

Trustees are typically instructed to not provide specific advice regarding the rights or benefits to which an

individual fund participant may be entitled. They also should not have access to individual member information nor divulge information about individual participants in the fund or other confidential matters they may encounter as they carry out their responsibilities. Generally, trustees do not have access to any individual member account information, nor should they ask to access such information, though aggregated information may be included in reports.

Prior to engaging in external communications on sensitive issues, the ED is usually expected to consult with the board or board chair, as circumstances allow. Some policies require that the board or board chair review press releases before they are disseminated to ensure that they accurately reflect the board's views. Other funds have delegated this function but expect the board to be updated in real time.

In addition, trustees should each have a system-specific email account. There are several reasons for this: first, to clarify the capacity in which they are communicating (especially if they wear "multiple hats"); secondly, to keep personal and public accounts separate. Are they speaking as a trustee, a private citizen, a legislator, law enforcement officer or in their official HPRS capacity? Public retirement systems may receive public requests for access to information and trustees may have their email accounts, if used for official business, included in such litigation discovery or public records requests. For these reasons, the prevailing practice is for the system to provide system-dedicated email accounts for trustees to be used only for system business.

Communication Policies and Procedures Standards of Comparison	Findings
There is a robust stakeholder communications policy, communications plan, and crisis communications plan.	Partial
Communications roles are clear for the Board and senior executives.	Yes
The Board has a policy that the ED speaks for the fund generally, and the Board's expectations for being advised.	Yes
• The policy applies to media, legislative, or individual requests for information or position of the fund on any particular issue.	Partial
 The ED is accessible and responds timely. Personal contact with legislators and member and retiree groups is a key responsibility in representing the fund and keeping stakeholders advised. 	Yes
 Messaging is consistent and clear and is not a recitation of facts. Messaging has heart and is stated in a manner to advocate for the fund and its beliefs and positions. 	Yes
Written and oral communications are in plain language and understandable for those outside the pension fund administration or investment field.	Yes
Policies and practices support a proactive role in keeping legislators adequately informed regarding system performance and on any potential legislative concerns.	Partial
Participants are able to interact with the system and obtain current	Yes

Communication Standards of Comparison and Findings

Communication Policies and Procedures Standards of Comparison	Findings
information electronically or in a paper format if preferred.	
The system is accessible for individual member communications and interaction, and the system can communicate quickly with the vast majority of fund participants electronically.	Yes
Stakeholder communication is clearly written and concise, and stakeholders are advised on contacts for questions or additional information. Key staff including the ED meet with all stakeholder groups at least twice annually in person and listen to questions and share updates on pension fund health and issues going forward. They engage in dialogue around shared issues.	Yes
The Fund is literate in multiple communication media including social media platforms. Fund has consultants and staff that are capable of monitoring and pushing information via multiple resources.	Partial
Meaningful and impactful messaging is consistent across the system and is always timely, honest and purposeful.	Yes
Trustees utilize a system-specific email account to clarify the capacity in which they are communicating and to keep personal and public accounts separate.	No

Conclusions

HPRS has a communications policy that is in line with what similar funds have and appears to communicate well with plan members. However, its ability to plan and execute informed and consistent two-way and multi-platform communications with other stakeholders (e.g., legislators, media, the taxpayers) has been constrained. Greater attention to identifying and addressing long-term enterprise risks associated with these other stakeholders is an important function for public pension systems, given their public profile and governmental budget impact. HPRS should consider development of a comprehensive stakeholder communications plan and related internal or external resourcing needs in connection with evaluation of enterprise risks and strategic planning. Updating the website (which is already a near-term priority for HPRS) could be an important component of an updated communications plan.

To maintain public clarity of roles and minimize exposure of trustee personal email accounts to public records requests or litigation discovery, HPRS should provide trustees with dedicated system email accounts that are both secure and easily accessed. The HPRS email accounts should be used for all system electronic communications, including delivery of meeting materials.

Recommendations for Improvement

- R1.9.1 HPRS should enhance its website and stakeholder communications capabilities and develop a comprehensive plan for managing two-way stakeholder communications that includes regular communications and consistent messaging with legislators, media and the public.
- R1.9.2 HPRS should provide trustees with system email accounts that are secure and can be easily used for all system-related communications.

2. Organizational Structure and Staffing

The Contractor will perform a review of the overall organizational structure of HPRS and its capacity and effectiveness in implementing the policy and assignments delineated by the HPRS Board and management. Specifically, this will include an analysis of:

- 2.1 Staffing size, hiring procedures, staff qualifications, roles, compensation, performance evaluation requirements, and an analysis of these factors compared to other similar size public pensions;
- 2.2 Adequacy of process to evaluate and improve customer/member satisfaction;
- 2.3 Whether compensation levels are sufficient to facilitate HPRS's ability to attract and retain qualified pension fund professionals; and
- 2.4 Monitoring and maintaining staff qualifications and continuing education requirements, including leadership development process.

Organization Structure and Staffing Review Activities

- 1. Assessed the organization structure, staffing and capabilities of HPRS as compared to peer retirement systems;
- 2. Reviewed human resources policies and practices and compared to leading practices;
- 3. Assessed staff qualifications and hiring and evaluation processes;
- 4. Evaluated compensation policies and structure;
- 5. Assessed processes for monitoring, measuring, and improving member satisfaction;
- 6. Reviewed staff training and continuing education policies and program and compared to peer retirement systems
- 7. Compared customer service monitoring policies and practices and results with leading practices at peer state retirement systems in the U.S.
- 8. Reviewed strategic plans, customer service reports, interviewed senior executives, and utilized the FAS public retirement benchmarking knowledgebase to assess member satisfaction monitoring and management.
- 9. Compared compensation policies and practices with leading practices at peer state retirement systems in the U.S.
- 10. Utilized the FAS public retirement benchmarking knowledgebase to assess compensation policies and structure.

Organizational Structure and Staffing

It should be noted that the organizational findings and recommendations for HPRS in this and other sections of the report reflect the smaller scale and limited internal staffing resources of HPRS and the less complex operating environment serving a single employer.

2.1 Staffing and Compensation

Staffing size, hiring procedures, staff qualifications, roles, compensation, performance evaluation requirements, and an analysis of these factors compared to other similar size public pensions.

Expectations

An effective organization structure facilitates overall organization performance. When assessing the organizational structure of a public retirement system, key considerations include:

- Clarity of lines of reporting and responsibilities with appropriate spans of control:
- Appropriate assignment of responsibilities to operating departments to facilitate development of capabilities and coordination of work:
- Ability of support functions, combined with external service providers, to effectively serve operating departments;
- Delegation and segregation of duties from a control standpoint, where appropriate: and,
- Facilitation of information flow in support of internal and external communications requirements.

When evaluating the staffing and capabilities of a public retirement system and comparing to peer systems, it is important to understand any differences in services provided to members and annuitants, use of third-party providers vs. internal staffing, scale of operations, and any other areas which may not directly compare. Taking those factors into consideration, comparisons to peer retirement systems typically provide an indication of the appropriateness of a system's level of staffing. The capabilities of a system should be aligned with the services offered, regardless of whether they are internally staffed or from a third-party provider.

Standards of Comparison and Findings

Staffing and Compensation Standards of Comparison	Findings
The organization structure and management span of control is appropriate for a retirement system of HPRS's scale, lines of authority are clear, and it appears to function effectively.	Yes
The Chief Financial Officer (CFO) reports directly to the ED.	Yes
A position description for each staff member that describes general and position-specific requirements.	Yes
The system periodically conducts or participates in independent compensation studies and utilizes the results to improve its compensation structure and ranges. (See also 2.3)	No
Recruitment and hiring practices are effective; open positions and time-to-fill are monitored, and open positions are filled in a timely manner. (See also 2.3)	Partial
There is an effective employee performance management system linked to	Partial

Staffing and Compensation Standards of Comparison	Findings
the compensation system (See also 2.3).	
There is a practice for obtaining employee-level input regarding professional satisfaction and retention issues.	Partial
HR staff resources focus on:	
Hiring issues.	As needed
• Skills gaps.	Yes
 Job rotation and backup capabilities. 	Yes
Staff/positions with retirement eligibility.	Yes
Succession planning and talent review.	Partial
A tuition reimbursement program is available to all staff to encourage professional development (see also 2.4).	Yes

Ohio HPRS has effectively documented position descriptions for each of the nine functions within the organization. Although the descriptions are written distinctively in terms of roles and responsibilities, the reality of HPRS' lean organization requires each associate and manager to wear multiple hats regardless of specific job title. As an example, inbound telephone calls from active members or retirees seeking assistance from HPRS may be routed to three different individuals, who may not share one job description.

Because of its modest size, maintaining a deep functional bench is even more imperative to HPRS. Variability in execution quality, timeliness, or completeness can have a profound effect on a significant percentage of clients if issues relating to skillsets or resource availability are allowed to influence operational performance. On the positive side, recent client satisfaction survey results in both 2020 and in 2023 suggest a consistent and high level of performance across client points of contact in processing and service. Further, recent concerted efforts to document processes are commendable to minimize variability and to reduce key person risk in critical processes.

As a collegial and mission-driven organization with a close-knit culture, HPRS has also benefited from long tenured employees and very low turnover. The vast majority of HPRS staff have joined the organization from Highway Patrol or an affiliated organization (i.e., Highway Patrol Credit Union). Simply put, being able to form and staff an organization from a natural affinity group is an advantage compared to many employers today who struggle with retention and recruitment.

Conclusions

Organizational Design, HR Strategy, Organization and Current Challenges

Applying the old investment adage that "past performance does not guarantee future results" to organizational design and staffing, there are several steps that HPRS may consider to strengthen the organization, prevent future challenges in tight job markets, promote a long-term personnel strategy based on transparency, employee growth and satisfaction, and mitigate key person risk across HPRS' critical functions. They appear in the paragraphs that follow.

Position and Performance Management and Linkage to Compensation

As previously stated, position management is granular at HPRS, where there is an equivalent number of job descriptions as there are associates. In addition to increasing workload to maintain the sheer number of written job descriptions, the practice of focusing on specificity of roles is not entirely consistent with the approach that HPRS deploys to ensure adequate staffing coverage across multiple functions. While the design of a larger pension plan is more commonly comprised of "specialist" functions, HPRS "positions" are more fluid in nature to mitigate single points of failure in the organization. HPRS' focus on cross-training and back up adequacy allows the agency to deliver uninterrupted service to its active members, retirees, and beneficiaries with a very small number of associates.

Over and above the use of third-party providers to offload key functions, another tactic that enables modest sized organizations to effectively and efficiently support a broad range of responsibilities, is through the application of functional proficiencies to define roles and compensation levels in lieu of specialized job descriptions. In this model, an organization defines a set of core functions and sub-functions (e.g., benefits processing, client servicing, accounting, reporting) and dynamically establishes "positions" based on an associate's levels of operating proficiency according to maturing levels of responsibility. An example may include the following:

- Benefits Associate Level I processes name, address and beneficiary changes only.
- Benefits Associate Level II Benefits Associate Level I plus phone center coverage for client inquiries, complaints and service matters
- Benefits Associate Level III Benefits Associate Level II plus retirement earnings calculations and retirement counseling.

The method may be replicated for other business functions and staffing functions or other non-specific business roles (e.g., administrative or project related role) that an associate may be asked to perform in support of their job such as budgeting, payroll processing, process documentation, travel and expense review and approval. In lieu of maintaining a specialist-style, role profile-based set of position descriptions across the organization, using a skills or responsibility-based matrix model for position management can create opportunities for growth based on the acquisition and demonstration of skills. The dynamic, proficiency-based model would create growth opportunities not constrained by openings within the organization and establish incentives for skills acquisition and training which will naturally create a deeper bench and higher valued employees. It would also level the playing field transparently for compensation opportunities across the organization and reinforce the important goals of resource retention and

recruiting.

The annual performance evaluation process will also greatly benefit from this organizational construct. Today, each associate within the organization is evaluated annually by the ED using a variety of (mostly) subjective based components. However, the evaluations are largely suboptimized due to a lack of a closed-loop process; leading practice would begin at the commencement of each year with the development of employee goals (directly cascaded from the ED's goals) and continue over time being informed by not only factors relating to execution, communication, interpersonal relationships, and client satisfaction, but also by the acquisition and demonstration of more advanced skills and functional responsibilities over a longer period of time. In that regard, employee evaluations become more of a component of a longer-term, living process of development and contribution than they are a distinct point-in-time historical perspective of an associate's performance over a fixed annual period.

Succession Planning, Talent Assessment, and Employee Feedback

The subject of structural succession planning for HPRS is described in Section 1.7. From a tactical succession planning perspective, leading practice seeks to ensure that at least three associates within an organization are adept at proficiently executing each vital job function to prevent key person risk. That model includes not only execution functions, but client servicing responsibilities, and assurance and authorization roles. Originating with a very clear tone from the top and disseminating throughout the organization through a focus on the development of processes and procedures documentation, HPRS continues to rapidly advance capabilities to prevent key person risk; however, with fewer than a handful of professional staff, attaining a leading practice, three-deep level of tactical proficiency may be impractical and unaffordable across the entirety of operational functions. However, for the subset of tasks deemed most critical, supported by only one or two associates, and with only limited control capabilities supporting them, the goal of expanding bench strength should be an ongoing objective.

Talent pipeline management at HPRS has largely been underserved simply because of very limited staff turnover, a healthy pipeline of talent from within the ranks of the Ohio Highway Patrol group, and budgetary limitations. The unanticipated loss of a key resource would result in a reduction of capacity by 12.5% – one of eight – and could create challenging effects to the organization's operations in key places where functional support is not outsourced (e.g., benefits administration) or could interrupt critical project initiatives. While it does not make sense to keep a pool of talent "warm" just to avoid preventing key person risk, HPRS may benefit from introducing internships from local universities should opportunities arise later. Interns could take on specific value-added services like documenting processes, designing controls, and working on key business or IT projects (e.g., website redevelopment, QuickBooks to MS Dynamics) during their limited tenure.

Another alternative to establish contingency "bench strength" in the case of unplanned attrition would potentially involve expanding the use of key outside counterparties (e.g., PNC Bank, Clearstead) or potentially "renting" resources from another Ohio State public pension system to close a gap temporarily in case of an unexpected staffing emergency.

Capturing employee feedback in a small organization creates additional challenges not found in a larger one. The fundamental tenet of anonymity, essential to capturing honest feedback, is essential but impractical within a small organization. The senior management team at HPRS promotes accountability,

communication, transparency, and trust, all of which create a positive environment for associates to promote ideas or to raise concerns in a safe and welcoming environment. Other methods that small organizations may deploy include the creation of an independent ombuds office, the adoption of an opendoor policy, or through more formal "ideas" incentives.

Recommendations for Improvement

- **R2.1.1** Consider adopting a functional based position management operating model supported by defined proficiencies, training plans, evaluation processes and compensation structures.
- R2.1.2 Develop SMART (Specific, Measurable, Achievable, Relevant and Time Bound) annual goals for the ED and cascade annual goals at the beginning of each performance evaluation cycle for each staff member and utilize them in the execution of year end performance evaluations.
- **R2.1.3** Improve staffing depth and backup through:
 - Where practicable, and informed by risk (i.e., most critical), cross-train for critical operational functions maintain a matrix of associates and job function proficiencies.
 - Explore options including stand-by roles for third party providers or borrowed temporary resources from other Ohio public pension plans in case of an unexpected staffing emergency.
 - Promote internships with local universities to perform specific change management and administrative roles within HPRS.

2.2 Customer/Member Satisfaction

Adequacy of process to evaluate and improve customer/member satisfaction.

Expectations

A high-performing public retirement system should have a strong focus on providing high-quality services to its members. To ensure that it is meeting its objectives, it should have identified metrics that measure the effectiveness of key retirement administration processes and put in place monitoring and reporting that provides feedback to staff and allows management to understand how well the system is performing and where it can and should improve.

Key member services processes that are typically measured and monitored, according to CEM Benchmarking, include:

- On-time payment performance.
- Pension inception without a cash flow interruption.
- Disability turnaround time.
- Call center outcomes.
- Call center wait time.
- Percentage of members counseled.
- Percentage of members attending presentations.
- Satisfaction with website capabilities.

In addition, members and annuitants should be surveyed on a regular basis, particularly those which have had direct interaction with the system, such as newly retired members, members who have called the customer service center, members who have attended counseling sessions or presentations, or members who have made purchases or withdrawals. The survey data is an integral part of the system's member service performance management processes, and reports should be regularly received by operating management. In addition, the Board should receive periodic reports on member satisfaction, typically quarterly.

Standards of Comparison and Findings

Customer/Member Satisfaction Standards of Comparison	Findings
The system has implemented substantial member self-service capabilities on their website.	Partial
The strategic plan includes a focus on maintaining and improving levels of member service.	Yes
The customer service system provides a platform to make member service improvements.	Partial
Employer and member service systems have extensive self-validation and reconciliation capabilities to maintain data integrity without significant manual intervention.	No

Customer/Member Satisfaction Standards of Comparison	Findings
Service levels are rated as satisfactory or higher by participants.	Yes
There is regular monitoring and reporting of member services metrics.	Partial

Conclusions

Compared to large state systems with many employers, HPRS conducts significantly less customer satisfaction surveying and monitoring. However, the HPRS approach appears to be sufficient for several reasons. First, there is only one employer, the State Highway Patrol, and there are multiple ongoing touchpoints with members and retirees, including many with personal interactions. HPRS has acted upon the input received from its members and retirees to improve member service levels.

HPRS completed a member survey in early 2023 as a follow up to the prior survey that was conducted in 2020. Each survey was administered to all active members and all retirees and surviving spouses. The response rates were significant in both surveys; in 2023 the response rate from active members was 34% and from retirees and surviving spouses was 36%. The HPRS surveys are more comprehensive than those typically administered by larger funds, which tend to be focused on specific interactions such as a call, a visit, or participation in a training session.

For at least the last two HPRS surveys, the topics addressed included:

- Preferred mode and frequency of communications from HPRS
- Concerns about future benefits (open ended with hundreds of responses)
- Satisfaction with HPRS staff answering questions
- Website usage and ability to find information
- Customer service satisfaction (friendliness, timeliness, knowledgeable, willingness to search for answers, accuracy of information, customer focus, responsiveness)
- Newsletter readership, helpfulness, and improvement opportunities
- Adequacy of information about benefits, including health care
- Satisfaction with HPRS office contacts
- Intention to enter the DROP program and how long expect to stay in the program
- Open ended comments and suggestions

HPRS has received very useful feedback from these surveys and has acted upon the feedback. For example, in the 2020 survey, respondents expressed a preference for more frequent HPRS newsletters and the publication schedule was changed from quarterly to monthly. In addition, a message from HPRS was added to each edition of the Flying Wheel, the State Highway Patrol newsletter that is published three times annually. As a result of feedback in the 2023 survey, HPRS will further refine its communications by emailing time-sensitive information to each member in addition to publishing it in the next newsletter.

Based upon the two prior HPRS surveys, it is clear that members and retirees are satisfied with the services provided by HPRS. Although in 2020 members were generally pleased with HPRS services, 2023 responses indicate that communications have been improved, members are finding information on the website more effectively, ratings of staff have slightly improved, the newsletter is more highly valued, members feel better informed, and satisfaction with office contacts is higher.

Despite this very positive feedback, it may be possible to better identify further opportunities for improvement through some more focused member surveying, similar to peer practice, in addition to the less frequent, but effective, current surveys.

Recommendations for Improvement

R2.2.1 HPRS should consider if utilizing a customer service survey specialist, and conducting more focused surveys more frequently, could improve its ability to more quickly and effectively identify member service improvement opportunities.

2.3 Compensation

Whether compensation levels are sufficient to facilitate HPRS's ability to attract and retain qualified pension fund professionals.

Expectations

An effective compensation policy should be based upon a compensation philosophy designed to support the needs of the organization. The policy should operationalize the compensation philosophy and include detailed compensation practices, such as how the basis for compensation will be determined, determination of salary grading structure, guidelines for merit increases, and benefits.

Leading practice for maintaining an effective compensation structure includes periodically benchmarking compensation levels for each type of position and aligning the structure to current labor market conditions to ensure competitive compensation without significantly exceeding the objectives of the overall compensation philosophy.

Compensation Standards for Comparison	Findings
The system has defined its employee compensation philosophy and compensation goals to guide its compensation policy and structure.	Partial
The Employee Compensation Policy defines the compensation approval processes and responsibilities for implementing the compensation philosophy.	Yes
The Board of Trustees is responsible for approval of annual merit increases and any incentive plans.	Yes
The Board approves commissioning of an independent compensation program review at least every five years, at the recommendation of the ED.	No
The Employee Compensation policy also defines the roles of the ED, Deputy ED, and HR in managing and administering the compensation program, including:	
Review of grade levels and position classifications.	Partial
Performance management processes.	Yes
 Annual review of salary structure and merit increases and incentive awards. 	Yes
• A comprehensive set of HR policies has recently been reviewed and updated and defines the overall compensation and benefits program.	Partial
In addition to the Employee Compensation Policy, there are other HR policies which define other aspects of the compensation and benefits program, including:	
 Assignment of and modifications to salaries. 	Partial

Standards of Comparison and Findings

Compensation Standards for Comparison	Findings
Employee recognition.	Yes
Compensation for unused leave time.	Partial
The system periodically benchmarks its salary structure through the use of an independent third party as its policy specifies.	No

Getting compensation right is a core pillar of an organization that requires its associates to demonstrate proficiencies across multiple, sometimes unrelated business functions. The core of this requires senior management to embrace the direct correlation between the acquisition and demonstration of skills to the value of an employee to the organization and its customers. Each additional proficiency acquired and effectively and consistently demonstrated has an intrinsic value associated with it that should be addressed through compensation.

Conclusions

At HPRS today, the Executive Director determines compensation increases subjectively using a number of internal factors such as performance evaluation and external factors such as peer group comparisons with other Ohio pension systems. However, many of those larger systems position their employees not as generalists but as specialists in accounting, technology, benefits administration, healthcare, HR and other functional areas. Further, they engage third party compensation benchmarking vendors to validate their compensation models. These cross-referencing of specialized functions to comparable industry benchmarks reinforces compensation practices and outcomes. Since HPRS competes with other public pension plan systems in the Columbus, Ohio region for talent, it is important that the compensation opportunities offered reflect a heightened level of responsibility expected at HPRS as compared to its peers.

The use of third-party industry benchmarks, which are typically based on standard industry defined specialist roles, may be effectively blended to support the generalist style positions found across HPRS. With the help of benchmark consultants, an organization may develop a useful and defensible formulaic process for establishing compensation targets for an associate that supports multiple business and administrative support functions, possesses and demonstrates skills in change management and other disciplines considered valuable to their employer. This practice became more prevalent following September 11, 2001, when asset managers were compelled to establish multiple operating locations to prevent business disruption. In the months and years that followed, these investment houses created smaller, satellite offices within which associates needed to possess skillsets across multiple disciplines in case of a business disruption event. The compensation benchmark vendors worked alongside the asset management and distribution teams to create hybrid compensation structures.

Recommendations for Improvement

- R2.3.1 Consider utilizing a proficiency-based position model to establish compensation formula that directly reflect an employee's contribution to the organization; provide full transparency to associates when communicating the compensation formula to them.
- **R2.3.2** Work with external industry compensation benchmark entities at least once every five years to develop and maintain the compensation structures.

2.4 Staff Qualifications and Continuing Education

Monitoring and maintaining staff qualifications and continuing education requirements.

Expectations

Leading practices for staff training and continuing education policies within public retirement systems include:

- A staff training policy which requires minimum annual levels of training
 - o Mandatory for all employees (e.g., fiduciary, compliance, information security)
 - o Department specific (e.g., investments, IT, member services)
 - o Role-specific (e.g., leadership training for managers and directors)
- Training roles and responsibilities
- New employee orientation requirements
- Types of acceptable training (e.g., on-the-job training, on-site training classes, self-study including online training available through other state agencies, external training programs)
- Employee reimbursement policy for external training
- Tuition reimbursement policy
- Professional certification expense reimbursement policy

A well-executed employee training program should include a comprehensive training plan and program for the organization which identifies training needs and monitors participation at the individual level. Typically, the Human Resources (HR) department will have a central leadership and coordinating role in providing training which is common across the organization, and each department head has a lead role for department-specific training, with support from HR.

In a proficiency-based position management structure, each designated position level is accompanied by an assessment of the hard skills and soft skills required to acquire the essential elements of proficiency. Hard skills may include use of key systems, knowledge of subject matter and procedural proficiency, where soft skills may include things such as client relationship practices, written and oral communication proficiency, or presentation / spreadsheet development. The aspirational attainment of these skills is built into the annual goal setting process, and the year-end evaluation captures the employee's results in attending the prescribed education and successfully achieving the objective.

Staff Qualifications and Continuing Education Standards of Comparison	Findings
Staff development design and offerings are well structured to support the organization's strategic plan.	Partial
There are effective staff training and continuing education practices, and these are included in formal policy statements.	Yes
There is an onboarding program for new employees which includes training and a structured review process.	No

Standards of Comparison and Findings

Staff Qualifications and Continuing Education Standards of Comparison	Findings
There are tuition and professional certification reimbursement policies for staff.	Yes
An organization-wide staff development program includes tracking individual skills and experiences, completed education, monitoring the relationship between development, performance, and retention, and establishing a continuous improvement culture for training and development needs.	Partial

Conclusions

Section 7.5 of the HPRS Employee Handbook recognizes the importance of training for both Board members and associates. Training is divided into mandatory, discretionary, and subscriptions/ conferences. Participation is at the discretion of the Executive Director and attendance for both Personnel Training (i.e., ethics, policy, compliance) and KnowBe4 training (i.e., IT security) is tracked on a spreadsheet each year.

Recommendations for Improvement

- R2.4.1 For each described proficiency-based position and level, define a set of hard and soft skills required to attain the demonstrated level of proficiency for the position; and select internal and/or external training offerings that can provide the knowledge to selected associates as needed.
- **R2.4.2** Link training and development to the annual performance goal setting and year end evaluation processes.

3. Investment Policy and Oversight

3.1 Investment policy and Procedures.

Scope of Review

The Contractor will perform an evaluation of the board investment policy and procedures. The Contractor will:

- 3.1.1 Review the process by which the investment policy is adopted and compare that process to best practices;
- 3.1.2 Review the Investment Policy Statement and compare it to industry best practices;
- 3.1.3 Determine whether HPRS investment policy includes all critical elements, acknowledging an understanding of HPRS's financial and actuarial characteristics, and in accordance with established investment and funding goals, and risk tolerances;
- 3.1.4 Evaluate whether the asset allocation is tied to the investment policy statement;
- 3.1.5 Evaluate whether HPRS investment policy is compatible with the most recent asset/liability study and five-year experience review;
- 3.1.6 Evaluate the adequacy of the mechanisms and decision-making processes utilized for setting, periodically reviewing, and rebalancing the asset allocation;
- 3.1.7 Evaluate whether HPRS policy specifies to what extent the basis for particular investment decisions should be articulated in writing by the Board or HPRS staff;
- 3.1.8 Evaluate the extent to which HPRS observes its formal written investment policies and procedures, and identify what, if any, practical problems have resulted either on a systematic or isolated (but significant) basis; and
- 3.1.9 Evaluate how often and by what process the board or staff reviews HPRS's written policies, guidelines, and procedures.

Review Activities

For our assessment of the Board's Investment Policy and Guidelines Statement. We utilized the following sources of information to complete our assessment and comparison to leading, prevailing and lagging practices:

- HPRS's current Investment Policy and Guidelines Statement (IPS) dated 12/15/22 and prior versions available
- Interviews and emails with HPRS investment staff
- Interviews and emails with the HPRS general investment consultant Clearstead
- Interviews with HPRS Custodian PNC
- Interview with the HPRS actuary Foster & Foster
- Investment quarterly reports and analytical reports produced by Clearstead
- FAS investment policy and operations knowledgebase
- HPRS's annual CAFR investment reports since 2018
- HPRS's most recent asset-liability study from 2022
- The benchmark review and recommendation from December 2022

- HPRS's most recent five-year experience review produced by Foster & Foster in May 2020
- Annual Actuarial Valuations delivered for both the Defined Benefit plan and the Post Retirement Health Plan
- HPRS's Board minutes
- Clearstead Investment Reports delivered to the Board
- Agendas and Meeting Minutes of Annual HPRS Conference
- Relevant HPRS's internal audit reviews
- HPRS Governance Manual

To develop our assessment, we utilized the knowledge of our team members and the FAS knowledgebase to assess the contents of the IPS. The FAS team reviewed the IPS, the asset-liability study, investment reports and rebalancing reports to evaluate consistency of investment staff actions with policies. Using the information described above, the FAS team:

- 1. Assessed the process used to develop and update the IPS and compared to leading and prevailing practices
- 2. Reviewed the content of the IPS and compared it to peer leading practices
- 3. Determined whether HPRS IPS includes an understanding of HPRS financial and actuarial characteristics and is developed in accordance with established investment and funding goals and risk tolerances
- 4. Assessed consistency between the IPS and the asset allocation, the asset/liability study, and the most recent five-year experience study.
- 5. Reviewed mechanisms and decision-making processes for periodically reviewing and rebalancing the asset allocation
- 6. Evaluated HPRS's policies and practices for governance and documentation of investment decisions
- 7. Assessed HPRS's compliance with documented investment policies and procedures and identified any issues
- 8. Reviewed HPRS Board and staff policies and processes for periodic review and updating or investment policies, guidelines, and procedures
- 9. Observed how the Board assesses risk during the asset allocation process; and,
- 10. Observed how the system identifies and controls investment and fiduciary risk and compared to leading practices

Note: our review activities did not include tests of transaction compliance with policy.

3.1.1 Investment Policy Development Process

Review the process by which the investment policy is adopted and compare that process to best practices.

Expectations

Good governance practices create and document a formal decision-making process that guides the establishment and implementation of investment policies following fiduciary standards and take into account the culture of the sponsoring organization. The formality and accountability that derives from good governance practices, including the development and adoption of clear and comprehensive policies (and compliance with such policies), is essential to demonstrating prudence. The twin duties of prudence and care combine to create the core fiduciary responsibilities for those charged with overseeing the investment of retirement assets.

A Statement of Investment Beliefs (SIB), written and adopted by the Board, is frequently developed as a separate document although occasionally incorporated into the Investment Policy Statement (IPS). The outcome of this exercise is generally used as a basis for understanding the various implementation policies utilized by the staff and consultants and outlined in the IPS. In the SIB, the Board agrees to the general philosophies that guide consultants and the staff when implementing the investment portfolio. For example, beliefs about the ability to attract and retain in-house investment talent, market efficiency, risk philosophies appropriate for the participant population and the culture of the organization, active vs. passive management and the ability to attract and manage active managers, internal management vs. external management, and approach to Environmental, Social and Governance (ESG) factors. The discussion when developing the SIB should assist in establishing appropriate investment time horizons, fee philosophy, sensitivity to external influences such as; liquidity constraints; legislatively induced changes; publicity impact on Board actions; and stakeholder interests. The SIB provides a guide for use by the staff when implementing the investment portfolio and provides guidance to the Board and external stakeholders when reviewing results.

An Investment Policy Statement (IPS) is typically the overarching document that summarizes and documents the intended policies and procedures for the management and operations of a fund's investment program and is consistent with the philosophies established in the SIB. It is meant to document guidelines that will be followed yet not be formulaic by requiring actions when the Board determines circumstances may not warrant action. It should be reviewed and approved by the ultimate fiduciary for the Plan – the Board in the case of HPRS – and kept current, reflecting input from all aspects of the sponsoring organization and service providers assisting the staff/Board. In situations where a formal SIB does not exist, the IPS establishes, in accordance with appropriate Laws, Rules and Regulations, the desired approach the Board intends to follow to ensure both the payment of benefits and maintenance of fiscal soundness of the Plan.

The IPS typically documents the conclusions reached following an asset-liability study (ALS). An ALS is conducted to consider both potential opportunities from an investment perspective while taking into account the unique liability circumstances of the Pension Plan. The ALS takes a multi-year (typically 5 years) investment horizon and is performed with the assistance of third-party consultants and actuaries.

The asset side of this study considers the current investment portfolio, anticipated asset class assumptions

for returns and risks and correlations between asset classes, and anticipated risk-adjusted alpha potential, and considers the operational ability to implement desired changes over the Plan's implementation horizon.

Potential asset allocations are then tested against the unique liability characteristics of the plan, with an analysis of possible changes in the expected actuarial return assumption, expected contribution policies, possible variations in expected contributions, possible changes in benefit formulas, demographic assumptions, or other critical assumptions.

The Board and staff frequently incorporate education sessions on capital market return assumptions, investment concepts incorporated in strategic asset allocation portfolios, actuarial concepts, and risk management during the process of performing these studies. Although the strategic asset allocation policy may be revisited to examine progress towards meeting long-term goals and to consider whether the assumptions and conditions extant at the point of adoption are still valid, rapid changes to the strategic asset allocation policy established during the ALS would only occur under exceptional circumstances. Ranges of possible outcomes are presented and considered. Rebalancing to maintain asset allocation targets within acceptable ranges is generally set as an intended policy unless extraordinary circumstances are encountered and discussed with the Board.

The Board actively participates in the establishment of strategic asset allocation targets through the ALS. This participation allows the Board to consider expectations for the future economic environment, reach consensus on its views of the potential capital market assumptions (expected risk/return/correlation) of various asset classes, develop an understanding of key actuarial characteristics and expected outcomes, consider all implicit issues such as economic leverage, transparency, fee levels, liquidity, and whether the Board has reason to believe its staff and managers have the resources and skills required to implement the expected goals coming out of the ALS analysis.

When significant asset allocation changes are suggested, the process typically includes implementation schedules, approved by the Board, that outline expectations for the investment office to move to the new asset allocation over time.

The process and frequency for reporting on investment strategies and the portfolio risk management program should be defined and documented in the IPS.

IPS Development Standards of Comparison	Findings
A Statement of Investment Beliefs (SIB), written and adopted by the Board, is either incorporated into a Statement of Investment Policy or developed separately as a standalone document.	No
The Board actively participates in a robust strategic asset allocation process through the ALS.	Yes
The IPS includes the conclusions of a strategic asset allocation plan and is adopted for a multi-year (typically 3-5-year) period.	Yes
The strategic asset allocation process includes implementation schedules, approved by the Board, that outline expectations for the investment office to	Yes

IPS Development Standards of Comparison and Findings

IPS Development Standards of Comparison	Findings
move to the new asset allocation over time when there are significant allocation changes.	
The process and frequency for reporting on investment strategies and the portfolio risk management program are defined and documented in the IPS.	Yes

Conclusions

The HPRS Board follows prevailing practices in the development of their Investment Policy Statement (IPS). Input is solicited from multiple sources by the Board and staff, including input from actuaries, investment consultants, investment managers, and stakeholders, and funding rules established by the Ohio Legislature (and proactive legislative actions) are all evidenced in the Board materials and minutes.

A series of possible strategic asset allocation targets were developed and tested for possible outcomes against the HPRS liability in the ALS. The Trustees made a determination of appropriate risk and return outcomes based on the data presented in the ALS study. An implementation plan was developed once the target strategic asset allocation was determined. Interviews with staff suggest all are acting with a high level of knowledge regarding the key issues impacting the HPRS investment program and liability structure. Interviews with Trustees suggest the Board is acting with diligent interest and knowledge regarding all aspects of the investment policy and structure. The level of understanding by staff and trustees surrounding the development of the investment policy is at the prevailing practice level compared to peer organizations.

Although HPRS does not have a formal Statement of Investment Beliefs, HPRS investment documentation includes statements on a number of topics that are typically included in an SIB. HPRS's Board should consolidate these thoughts and develop a separate SIB. This document would provide the philosophical foundation for the investment approach that HPRS is using to manage and administer the retirement plans for the organization. In particular, this could include direction on the organization's ability to manage external resources; the philosophy behind using both active and passive strategies in the portfolio and the segments most appropriate for each; the reasoning behind the use of absolute return and other opportunistic investments, including private credit and private equity; the reasoning behind having broad global strategies in addition to having geographically focused US and non-US strategies; the use of diversifying investments such as core real estate; and the philosophical approach to topical areas such as ESG.

HPRS has effectively outlined the implementation plan for the gradual increase in alternative investments following the last few asset allocation processes. Also, the strategic asset allocation process allows a thorough review of HPRS's actuarial characteristics and assumptions inherent in the determination of the plan's makeup.

The Board receives ongoing investment training through the investment consultant and managers. Foster & Foster, the actuary, has also conducted educational sessions with the Board on actuarial concepts and sensitivities. Trustees expressed strong interest in deepening their understanding of the investment policy issues and the actual investment portfolio. As discussed later in this report, Clearstead does significant work not presented to the full Board in the area of sector risk analysis and performance

attribution. These are areas the Board could benefit from more in-depth, ongoing education. Clearstead, directed by staff, should provide regular focused workshops on these and other investment concepts involved with developing and overseeing institutional investment portfolios. Clearstead has participated in the Annual HPRS Conference; this would be a good forum for this type of ongoing education and review.

Recommendations for Improvement

- **R3.1.1.1** The HPRS Board should develop a separate Statement of Investment Beliefs (SIB).
- R3.1.1.2 The HPRS consultants, directed by HPRS staff, should provide focused workshop/education programs on the area of sector risk analysis and performance attribution concepts for all Trustees and continue the workshops that have begun with respect to actuarial concepts.

3.1.2 The Investment Policy Statement

Review the investment policy statement and compare it to industry best practices.

Expectations

The IPS serves as a strategic guide in the planning and implementation of an investment program. The IPS articulates unique issues related to the circumstances and the intended governance of the investment program, establishes appropriate asset allocation targets and the core assumptions underlying those targets, incorporates policies and beliefs used to implement an investment program with internal and/or external managers, and establishes the approaches and frequency of monitoring results and risks. The IPS also establishes accountability for the various entities that may work on behalf of an asset owner.

Most importantly, the IPS serves as a policy guide that details an objective course of action to be followed during periods of disruption when emotional or instinctive responses might otherwise result in less prudent actions. It is meant to establish guidelines that will be followed yet not be formulaic requiring actions when circumstances may not warrant such actions. The IPS should be consistent with a Statement of Investment Beliefs (SIB) that is reflective of the approach fiduciaries believe is appropriate to implement the investment program.

Investment Policy Statement Standards of Comparison	Findings
The Investment Policy Statement (IPS) specifies delegations and responsibilities, including:	
 Defines the major risks and risk management approaches, including links to underlying liability structure. 	Partial
 Includes the asset allocation, implementation approach, rebalancing, and performance benchmarks both for asset classes and for the fund as whole. 	Yes
Makes levels of delegations and related accountabilities explicit.	Yes
 Incorporates a Statement of Investment Beliefs (may also be free- standing). 	No
It is detailed, yet clear and concise.	Yes
 The IPS articulates the principles that are important to the Board to provide guidance to staff rather than a rules-based approach with limited flexibility. 	Partial
The IPS should focus on investment portfolio structures and policies that govern investment functions and practices.	Yes

Investment Policy Statement Standards of Comparison and Findings

Conclusions

The HPRS IPS generally follows several CFA Institute guidelines³ for investment policy statements. The HPRS IPS:

- 1. Defines the system and objectives;
- 2. Focuses on the governance of the plan defining roles and responsibilities of responsible parties;
- 3. Establishes investment, return and risk objectives with a discussion of objectives for each asset class; and
- 4. Establishes performance measurement accountabilities and a process for proxy voting, trade execution and directed brokerage.

The IPS could go deeper by defining the unique constraints and risks that the HPRS Board is considering when establishing the target asset allocation. This could include key direction from the SIB mentioned above, as well as concepts such as risk budgeting and active risk management which are typically incorporated into an IPS. Key actuarial assumptions and concepts relied upon when establishing the IPS should also be included in the IPS.

By policy the Board has delegated the oversight of the investment of assets set aside for both the Defined Benefit and Post-Retirement HealthCare Plans to the Investment Committee. The Board holds the responsibility for determining when to grant cost of living adjustments (COLAs) for DB participants and when to divert legislatively determined employer contributions into the Healthcare Trust.

The IPS does an adequate job describing many of the key policies HPRS has established; however, the policy that has been developed and is being utilized to determine allocations to the Health Care plan and to COLA payments should be documented in the IPS. Also, a discussion of the separate financial constraints of the Healthcare Trust, perhaps in a separate IPS, is warranted in order to better document the Board's decision process when establishing the investment policy for the Healthcare Trust assets.

From a governance perspective, the HPRS IPS refers to the Manager Search and Termination Policy to frame the roles and responsibilities of staff, the Investment Committee and the Board in the manager selection process. The process of manager selection has evolved in recent years to include a designated Task Force, or subcommittee, to vet each investment. The Chief Investment Officer, the Chair of the Investment Committee, at least one of the appointed Trustee Financial Experts, and several members of the investment consulting team comprise an Investment Task Force. The Task Force interviews the Short list candidates that have been identified by the investment consultant for an identified potential investment. Should they be unanimous in their evaluation regarding the candidates, that candidate is recommended to the Investment Committee, and subsequently the full Board, for approval. This process appears to be effective and is outlined in the document referred to in the IPS but is not explicitly stated in the Investment Committee charter or the IPS itself.

Rebalancing and implementation of all investment mandates approved by the Board fall under the

³ CFA Institute, "ELEMENTS OF AN INVESTMENT POLICY STATEMENT FOR INSTITUTIONAL INVESTORS," 2010 (available online at: <u>https://www.cfainstitute.org/-/media/documents/article/position-paper/investment-policy-statement-institutional-investors.ashx</u>

purview of the Chief Investment Officer and staff and are clearly articulated in the IPS.

HPRS updates the IPS annually and documents changes in this document over time.

Recommendations for Improvement

- **R3.1.2.1** The IPS should include a discussion of the key constraints, assumptions and risks the HPRS Board and staff are considering when establishing the IPS.
- **R3.1.2.2** The IPS should address the actuarial assumptions for both the HPRS DB plan and the Healthcare Trust, and perhaps have separate IPS statements.
- **R3.1.2.3** The policy for determining the granting of pension COLAs and the allocation of funding to the Healthcare Trust should be documented.

3.1.3 IPS Completeness

Determine whether HPRS's investment policy includes all critical elements, acknowledging an understanding of HPRS's financial and actuarial characteristics, and in accordance with established investment and funding goals, and risk tolerances.

Expectations

The IPS should define all key policy issues, including actuarial assumptions, and articulate responsibilities and accountabilities for them.

IPS Completeness Standards of Comparison and Findings

IPS Completeness Standards of Comparison	Findings
Overall structure for setting and reviewing the asset allocation is provided in the IPS, including the risk profile and return targets.	Yes
Documents the policies, processes, and responsibilities for:	
Selection and use of benchmarks	Yes
 Rebalancing for both asset classes and sub-asset classes or styles, including levels of tactical over/under weights 	Partial
Liquidity	No
Transition management	No
Use of brokers	Yes
The standards for permitted and prohibited investments	Yes
ESG considerations	No
Any specials programs (e.g., in-state, MWBE, Iran/Sudan, etc.)	No
Monitoring methodology for portfolios, whether external or internal	Yes
Prohibited investments are specified.	Yes
Delegations to the investment staff are explicit, as are the conditions for those delegations.	Yes
Decisions reserved for the Board are explicit.	Yes
If there are other retirement plans, for example DC or hybrid plans or healthcare plan, they have their own separate IPS document.	No

Conclusions

The authority for the CIO determining rebalancing decisions is included in the HPRS IPS; however, the Board has not articulated a rebalancing policy. We believe this philosophical approach should be outlined in either the Statement of Investment Beliefs or the IPS.

Clearstead conducts risk budgeting analyses on behalf of HPRS. This work establishes target asset returns and active risk and return objectives and could be summarized in the IPS. As HPRS makes extensive use of collective funds, documentation typically found regarding securities lending, execution responsibilities and foreign exchange capabilities are understandably not included in the HPRS IPS.

The HPRS IPS is lagging with respect to liquidity planning. HPRS has made significant investments in illiquid funds such as private equity, private real estate, hedge funds, and opportunistic fixed income that result in meaningful liquidity constraints. This should be addressed in the IPS, with the Board establishing a range for illiquid investments appropriate for the expected cash flow and risk profile of HPRS.

The HPRS IPS references each of the key asset classes and describes their purpose in the overall portfolio structure. Permissible Investments are noted in each of the major asset classes as well as benchmarks assigned in each asset class. These are prevailing peer practices. The IPS could be enhanced by establishing active risk and return targets for each area, which would inform readers regarding the overall approach being taken in the segment as well as the return and risks deemed acceptable by the Board to generate these outcomes.

Recommendations for Improvement

- **R3.1.3.1** The IPS should include a Board approved policy for the CIO to follow when executing rebalancing transactions.
- **R3.1.3.2** The Board should adopt a policy on liquidity management in its IPS that would include maximum allocations to illiquid asset categories and a discussion of expectations of incoming liquidity and disbursements for the HPRS pension and healthcare plans.
- **R3.1.3.3** The IPS should include a requirement for periodic investment structure risk reviews, with discussion of active risk assumptions and active return assumptions.

3.1.4 Linkage of Asset Allocation to the IPS

Evaluate whether the asset allocation is tied to the investment policy statement.

Expectations

Real time asset allocation is kept within the standards set by the IPS.

Linkage of Asset Allocation to the IPS Standards of Comparison and Findings

Linkage of Asset Allocation to the IPS Standards of Comparison	Findings
Investment Beliefs, IPS and asset allocation are consistent.	Yes
Processes in the IPS for the development, delivery, approval, and oversight of strategic and tactical investment plans, including rebalancing, are followed.	Yes
There are measures in place to monitor the asset allocation on a real-time, or reasonably real time, basis.	Yes
Where it is impractical to achieve the asset allocation in the IPS (for instance where there is a major change to a private asset class) there is a transition plan in place, and it is monitored and reported upon.	Yes
There are appropriate periodic reports on the actual asset allocation to the Board.	Yes

Conclusions

The reporting infrastructure linking the target asset allocation and benchmarks specified in the IPS to actual reported results is robust. As mentioned, rebalancing authority rests with the Chief Investment Officer, who appears to have solid communication linkage with Clearstead.

Clearstead acts as an independent party that is integrally involved in the establishment, implementation and monitoring of the investment portfolio, creating necessary reports as required. PNC's records are checked for accuracy and completeness by HPRS staff and Clearstead. Clearstead produces monthly reporting and has the ability to link into PNC custodial values should intra-month asset values be required to ensure investment allocations are within established guidelines.

Transition plans for asset allocation changes (increasing allocations to illiquid investments and reducing the allocation to hedge fund of funds) were developed for benchmarking purposes over the recent past. The transition to the public equity structure emphasizing global equity managers from a structure with many more managers focused on the US and international markets appeared to have gone well and was well implemented.

Recommendations for Improvement

No recommendations at this time.

3.1.5 IPS Compatibility with Asset/Liability Study and Experience Review

Evaluate whether HPRS investment policy is compatible with the most recent asset/liability study and five-year experience review.

Expectations

These overarching governance documents (e.g., SIB and the IPS) should be informed by the relevant studies (asset/liability study and experience study). Decisions to deviate from the findings of the studies in creating the IPS and asset allocation should be noted and explained.

IPS Compatibility with Asset/Liability Study and Experience Review Standards of Comparison and Findings

IPS Compatibility with Asset/Liability Study and Experience Review Standards of Comparison	Findings
The IPS is compatible with the most recent asset/liability study and five-year experience review.	Yes
Should there be major differences between the most recent asset/liability study or experience review, the reasons should have been made explicit and the Board should have taken affirmative action to accept them.	N/A

Conclusions

The October 2022 ALS focused on modeling the Defined Benefit retirement plan outcomes. Dynamic ALM Solutions (now affiliated with AndCo Investment Consulting) performed the study and acted as a subcontractor to Clearstead. Capital market assumptions developed by Clearstead were utilized in the study. Actuarial assumptions in place for the 12/31/21 valuation, which included the updates from the Foster & Foster Actuarial Experience Study performed in 2020, were utilized. An assumption for a payroll transfer of 3.36% to the Post-Retirement Health Plan was made for 2022. Subsequently all Employer and Employee contributions were assumed to be made into the DB Retirement plan.

The ALS study was thorough and in keeping with prevailing practices among similar retirement plans.

During our interviews with the trustees they demonstrated solid understanding of the actuarial issues at HPRS. The underfunded status of the Post Retirement Health Plan was well understood and the sensitivity to meeting actuarial assumptions for the Retirement Plan to payroll growth through new hires was also demonstrated. We understand the funded status of the Post Retirement Health Plan will likely change meaningfully following anticipated benefit changes currently under discussion. Reviewing the impact on funding and discussing the potential implications for future investment policy is warranted given the significant changes that have and will take place with this pool over the last few years.

Meeting minutes and trustee interviews suggest Foster & Foster has effectively explained the importance of these issues to the health of the HPRS plans. An ALS modeling exercise demonstrating likely future

outcomes for the Post Retirement Health Fund could help document Board understanding of this issue and the limited management choices available.

Recommendations for Improvement

R3.1.5.1 Consider developing an asset-liability study for the Post-Retirement Health Plan to document the anticipated funding of this plan and ability of the Board and staff to remediate this situation through investment performance.

3.1.6 Asset Allocation Review and Rebalancing

Evaluate the adequacy of the mechanisms and decision-making processes utilized for setting, periodically reviewing, and rebalancing the asset allocation.

Expectations

A written rebalancing policy should specify the criteria for rebalancing and procedures to faithfully implement that rebalancing policy and should be reasonably designed to achieve the approved asset allocation.

Asset Allocation Review and Rebalancing Standards of Comparison

Asset Allocation Review and Rebalancing Standards of Comparison	Findings
There are adequate processes in place to monitor actual asset allocation so as to be able to recognize the need to rebalance in a timely manner.	Yes
Rebalancing responsibilities, processes, and provisions are well defined.	Yes
Rebalancing decisions are well-documented. The files are reflective of the processes and actions undertaken and the reason for those actions is documented.	No
The actual process of rebalancing is risk-based, sophisticated, and consistent with the investment philosophy of the fund overall.	Yes

Conclusions

The authority to rebalance the portfolio within the strategic asset allocation ranges established in the IPS is clearly stipulated in the IPS as contained in the role of the Chief Investment Officer. The role of the Investment Consultant is also outlined and assigned the function of analyzing and determining if the current strategy is within the objectives established for the portfolio. This check and balance from independent parties is in keeping with prevailing practices. The process being used to monitor and identify rebalancing requirements is sound. There is not a formal reporting back to the Board on rebalancing decisions made; providing this documentation to the Board on a retrospective basis could keep the Board appraised.

Given the meaningful allocation to illiquid investments, the Board should be familiar with the concept of a pacing plan for future expected commitments and distributions from the illiquid portfolio. This analysis would provide the Board with projected portfolio flows and provide a window for anticipated necessary rebalancing activity. Although a pacing plan is developed by Clearstead, it is not presented to the Board. The CIO and/or Clearstead should add this analysis to the Board's materials to keep them aware of anticipated cash flows within the illiquid portfolio.

Recommendations for Improvement

R3.1.6.1 A rebalancing report and prospective pacing plan analysis should be included in the regular Board reporting documentation provided by Clearstead.
3.1.7 Due Diligence Documentation

Evaluate whether HPRS policy specifies to what extent the basis for particular investment decisions should be articulated in writing by the Board or HPRS staff.

Expectations

All investment decisions should be documented to the extent necessary for an observer to understand what information and analyses the decision maker had at the time, and the rationale for and appropriateness of the investment. This is a central function for demonstrating compliance with fiduciary duties.

In addition, investment policies should clearly describe the data, processes and determinations that are involved in conducting due diligence. Clarity of standards and practices Is essential to ensure prudence and consistency in the implementation of the investment program. This also guides documentation of due diligence and provides assurance to the board, system members and stakeholders that appropriate investment decisions are being made. Compliance, audit and other reassurance functions provide comfort that prudent policies are being followed.

Due Diligence Documentation Standards of Comparison	Findings
Due diligence processes and standards are well documented for:	
Investment fit	Partial
Investment due diligence	Partial
Operational due diligence	Partial
Due diligence activities and reports and investment memos are retained electronically to document strategy and processes.	Partial
Investment decisions and rationale are well-documented.	Partial
The files are reflective of the processes and actions undertaken.	Partial
The Investment Committee periodically (e.g., biennially/triennially) reviews strategic and decision-making documentation formats from time-to-time to enable assessment/ suggestions as to their fiduciary/communication effectiveness.	Yes

Due Diligence Documentation Standards of Comparison and Findings

Conclusions

HPRS has a heavy reliance on outside service providers for its investment selection and due diligence processes. No material due diligence issues were identified; however, HPRS documentation of contractual standards and compliance, adviser due diligence activities, and file development/retention practices central to demonstrating appropriate due diligence should be improved. Investment and operational due diligence conducted and documented by its external investment consultant should be sufficiently documented in HPRS files to demonstrate compliance with industry due diligence standards and facilitate

investment oversight regardless of any external consultant changes.

HPRS has indicated that formalization of its due diligence practices is currently a high priority. We concur and recommend that HPRS develop or update its policies to formally reflect actual internal and external investment, operational and legal due diligence practices.

Recommendations for Improvement

R3.1.7.1 HPRS should prioritize plans to develop and update policies to accurately formalize investment due diligence practices, including documentation of both internal and external due diligence processes. See also Recommendations in 3.2.1 and 3.2.6.

3.1.8 Implementation Compliance

Evaluate the extent to which HPRS observes its formal written investment policies and procedures, and identify what, if any, practical problems have resulted either on a systematic or isolated (but significant) basis.

Expectations

There is a comprehensive investment compliance program in place that incorporates pre-trade and posttrade compliance with investment guidelines, and compliance at the prohibited security, portfolio, asset class and fund levels. Other parties to the investment program (consultants, brokers, custodians) are utilized to increase the reliability of the compliance rules (including personal trading and ethics rules as well as investments).

Implementation Compliance Standards of Comparison	Findings
There is a comprehensive compliance program that monitors fund compliance with investment policies, and it is adequately resourced.	Partial
Compliance technology is used appropriately.	Yes
The Compliance function is independent of the Investment function.	Yes
Compliance has the access needed to books, records and personnel to perform its function.	Yes
Due diligence compliance checklists are used, and reviews are documented and monitored.	Partial
Due diligence is handled by competent personnel.	Yes
There are no perverse incentives regarding compliance or due diligence.	Yes
A policy for handling investment compliance exceptions is clearly articulated, including when the Board should be informed.	No
Compliance exceptions are documented.	Yes
Compliance applies to both externally and internally managed investments.	NA
An effective internal audit capability and process that monitors investment processes and controls.	No

Implementation Compliance Standards of Comparison and Findings

Conclusions

Responsibilities for investment compliance for the investment managers employed by HPRS for domestic assets are clearly laid out in the PNC operating agreement. As there is only one separate account in the domestic portfolio and all non-US investments and illiquid investments are held in collective vehicles (typically collective investment trusts or limited partnerships), compliance and audit functions are subject to the operating agreements of those investment vehicles and performed by the asset managers or agents

retained by those investment managers.

Responsibility for monthly reporting compliance within guidelines is part of the separate account investment manager agreement; the manager self-reports compliance on a monthly basis. Summit County Auditors perform an annual external audit of HPRS reviewing the financial statements and controls but don't audit the compliance with either separate account guidelines or the underlying audit and control functions of investment managers employed using investment vehicles they sponsor. PNC's compliance efforts on the sole separate account are in place but are not leading practice in the application of compliance technology.

Clearstead has a role in monitoring compliance as well as monitoring capital calls for the illiquid portfolio. As will be discussed further in this report, they perform due diligence reviews across all investment managers and their role is supplemented by the Chief Investment Officer due diligence on site visits (along with Board members) of a portion of the investment managers employed where compliance with portfolio guidelines is discussed. There is an annual review policy for the investment consultant to discuss and ensure compliance with this contractual agreement.

While there is an opportunity to consider improvements to achieve leading practice investment audit and compliance, this would require significant technology expenditures. HPRS can be considered following prevailing practices for compliance and audit among similar size retirement plans.

Recommendations for Improvement

No recommendations at this time.

3.1.9 Policy Review

Evaluate how often and by what process the board or staff reviews HPRS's written policies, guidelines, and procedures.

Expectations

Good governance practices create the formal infrastructure that guides fiduciary decision-making. The formality and accountability that derives from good governance practices, including the development and adoption of clear and comprehensive policies (and compliance with such policies), is essential to demonstrating prudence. The duty of prudence is a core fiduciary principle; while the standard of care may vary based on applicable state law, most states (including Ohio) apply a prudent expert standard which requires the fiduciary to exercise the care, skill, prudence, and diligence that a prudent expert would use in a similar enterprise.

Policy setting is one of the key powers reserved for a board. A comprehensive set of governance policies will provide consistency and guidance to the board and staff, establishing clear limits or standards to be met in the execution and implementation of board-approved objectives.

In establishing policies, it is important that trustees periodically benchmark their governance practices against that of their peers. Peer benchmarking requires ongoing education regarding evolving practices. This can be accomplished through structured board training and education programs. Peer benchmarking also requires fiduciaries to actively seek the advice of consultants, counsel and/or other experts who have access to such information. Reviewing and analyzing peer practices can assist fiduciaries in determining not only how their fund or system's governance practices align against their peers, but in identifying gaps and strengthening the system's governance practices and policies.

A prevailing practice among pension funds is to establish a governance policy framework and compile governance policies in a governance policy manual. The governance policy manual is a central repository for all of the board's governance documents and should be user-friendly, since it is an important resource for the board, staff, professional service providers, participants, and stakeholders.

Policy Review Standards of Comparison	Findings
Each policy includes a minimum timeframe (e.g., annually, biennially, triennially) for review and updating, as appropriate.	Yes
The Board obtains peer policy comparisons when reviewing each policy.	No
Policy review responsibilities are clearly assigned to the appropriate Board committees.	No
Policies are in place that address the issues which peer policies typically address.	No

Policy Review Standards of Comparison and Findings

Conclusions

HPRS policies are in need of updating. We understand that there are current plans to assign a staff member primary responsibility for coordinating the review and updating of all policies. We support this plan and recommend that it be treated as a high priority. The project should include assignment of a staff member and Board committee that is responsible for review of each policy and identify how often the policy should be reviewed.

During the policy update project, HPRS could review the HPRS InGov report (provided separately). Among other things, the InGov report identifies several areas where HPRS does not have policies that are in place at most peers. Consideration should be given to whether these policies would be relevant and useful at HPRS.

Recommendations for Improvement

R3.1.9.1 HPRS should prioritize the review and updating of its policies, with a staff member and Board committee responsible for each policy; policy review and update frequency should be defined, and new policies should reflect recommendations from this report.

3.2 Investment oversight and review.

Scope of Review

The Contractor will perform an evaluation of the oversight and control of investments. The Contractor will:

- 3.2.1 Evaluate the appropriateness of board and staff controls, procedures, and capabilities to regularly review and monitor the performance of the investments and the practices of investment managers, as well as ensuring compliance with policies;
- 3.2.2 Evaluate HPRS's process for measuring, evaluating, and controlling transaction costs, directed brokerage and commission recapture (if any), and compare the process to other funds as well as public or private third-party industry surveys.
- 3.2.3 Evaluate the process used to determine and measure investment performance, including how performance data is collected and verified and selection of appropriate benchmarks;
- 3.2.4 Evaluate the basis and methodology for the compensation of external investment managers and advisors and payments to others, if any;
- 3.2.5 Evaluate the written policies and procedures currently in place to monitor and guard against professional conflicts of interest; and
- 3.2.6 Analyze how investment managers are selected, including the transparency in the decision-making process, due diligence provisions, whether specific criteria and procedures govern the selection process, whether they are actually observed in the selection process, and whether there is adequate documentation of selection process.

Review Activities

For our assessment of the Board's Investment Policy and Guidelines Statement we utilized the following sources of information to complete our assessment and comparison to leading, prevailing and lagging practices:

- Current Investment Policy Statement (IPS) dated 12/15/22 and historical IPS from 2021 and 2020.
- Selection of Investment Manage and Agents dated 12/15/22
- Manager Search and Termination Policy dated 12/15/22
- Manager Review Policy dated 12/15/22
- Annual Investment Plan dated 12/15/22
- Interviews with HPRS investment staff
- Interview and emails with the HPRS general investment consultant Clearstead
- Interviews with HPRS Custodian PNC
- Interview with the HPRS actuary Foster & Foster
- Investment quarterly reports produced by Clearstead
- FAS investment policy and operations knowledgebase
- HPRS's annual CAFR investment reports since 2018
- HPRS's most recent asset-liability study from 2022
- HPRS's most recent five-year experience review
- Annual Actuarial Valuations delivered for both the Defined Benefit plan and the Post Retirement Health Plan
- HPRS's Board minutes
- Agendas and Meeting Minutes of bimonthly meetings and Annual HPRS Conference
- Relevant HPRS internal audit reviews
- HPRS Governance Manual
- HPRS's investment files related to specific investments
- Relevant HPRS's internal audit reviews documentation
- Investment Guidelines and fee agreements for HPRS's external asset managers

To develop our assessment, we utilized the knowledge of our team members and the FAS knowledgebase to assess the contents of the reporting and compliance function at HPRS. The FAS team reviewed the IPS, the Board reports, consultant reports, monthly investment summaries, structure analyses received by the board, actuarial studies including prior experience studies, ORSC reports, manager due diligence reports provided by staff and consultants, interviews with staff, consultants and trustees and other materials relevant to the oversight and control of the investment program.

3.2.1 Monitoring and Compliance

Evaluate the appropriateness of board and staff controls, procedures, and capabilities to regularly review and monitor the performance of the investments and the practices of investment managers, as well as ensuring compliance with policies.

Expectations

The IPS should allocate responsibility for monitoring investment performance at Board, staff and consultant levels. Monitoring by the Board should be frequent enough and detailed enough to be timely and provide complete information on critical issues yet should emphasize the oversight and policy roles of the Board and not be used as part of an investment decision-making process.

Monitoring reports should include whether portfolio, asset class and total fund performance are within expectations with regard to both performance and risk. Outliers should be explained, and, where appropriate, action plans detailed to the senior investment staff and/or Board, as appropriate.

Monitoring and Compliance Standards for Comparison	Findings
Performance and risk reports are compiled at least quarterly. Appropriate flash reports are available to the investment staff. A manager/GP monitoring policy defines frequency of due diligence visits, as well as whether in-person and/or on-site visits are required and conditions which dictate a special visit.	Partial
Monitoring policy and practice include benchmark comparisons, personnel and other organizational change notices, regulatory notices, etc.	Partial
Investment management agreements provide for external managers to provide notice to the system in the event of material personnel changes, changes in corporate structure, regulatory investigations or findings, etc.	No
Investment management agreements and broker agreements provide for annual ethics confirmations.	No
Investment management agreements with outside managers, and the equivalent policies for internal management, define appropriate benchmarks, expected risk profiles, permissible and prohibited investments.	Partial
A general investment consultant that is hired by the board, provides counsel to both the board and investment staff, and opines on investment staff decisions.	Yes

Monitoring and Compliance Standards of Comparison and Findings

Conclusions

Overall Controls and Framework

Three key policies provide the monitoring and compliance framework of the HPRS portfolio: Investment Policy Statement, Manager Review Policy, and Manager Search and Termination Policy.

The Board establishes performance objectives, identifies and reviews investment policies and guidelines, retains outside investment and actuarial counsel, reviews the performance of the fund, implements necessary changes in the investment policies, objectives, asset allocation and investment managers.

It has designated the Investment Committee to be responsible for ensuring the investment selection, termination and review processes adheres to the policies outlined in the Manager Review Policy and Manager Search and Termination Policy. It has delegated the day-to-day management of the investment program to the Chief Investment Officer who concurrently serves as General Counsel.

The Board has employed Clearstead (formerly "Hartland & Co" or "the consultant") since 2006, for general investment consulting services. These services include ongoing monitoring of the portfolio performance and investment managers, reviewing of asset allocation and investment strategy against objectives, and monthly investment monitoring reports. The current Clearstead team demonstrates knowledge and understanding of HPRS specific investment policies, asset allocation, investment manager selection criteria, and performance reporting.

The roles and responsibilities adopted for the Board, Investment Committee, Chief Investment Officer and consultant represent an appropriate delegation of responsibility and are consistent with other plans of this size.

The frequency and consistency of six meetings throughout the year allows the Investment Committee and the Board to remain attuned to all aspects of the investment program. The frequency of these meetings enables regular and efficient review of performance and investment decisions, especially for time-pressured investments like private markets.

The annual oversight dashboard provides a consistent workplan for the Board including review of strategic initiatives, IPS, portfolio/asset class reviews, performance, fees, benchmarking, and Board education topics, as well as tracking of any outstanding issues. However, with minimal documentation of the work performed, there is limited evidence of analytical work and comprehensive reporting that allows the various entities to monitor these areas outlined in the workplan effectively. Please refer to sections below for gaps in specific areas.

The Board is meeting prevailing practice by reviewing the three key policies annually. The System has the appropriate balance of controls, procedures, and capabilities to adequately monitor the performance of the investments and its managers.

Asset Allocation and Rebalancing

As defined by the Investment Policy Statement, asset allocation is reviewed quarterly to ensure compliance within target ranges. The IPS itself is reviewed at least annually, or as needed. There is adequate documentation and analysis of proposed asset allocation changes, consistent with prevailing practice.

The Board has delegated to the Chief Investment Officer the following responsibilities:

- Rebalancing the portfolio within the asset allocations guidelines in the IPS;
- Implementing tactical asset allocation positioning; and
- Raising cash for payment of benefits and capital calls.

Currently, the Chief Investment Officer, in conjunction with the consultant, reviews execution of these mandates during the third week of every month. The consultant may make tactical positioning or rebalancing recommendations subject to CIO approval for execution. These are prevailing practices for a fund of HPRS size and complexity. However, documentation of this process appears to be limited and could be improved.

Performance, Benchmarks, and Asset Classes

A high-level portfolio performance review is provided at least quarterly and monthly flash reports are available upon request. Quarterly portfolio returns and asset allocations are appropriately compared to a peer universe of public DB plans. These reports also include asset class benchmark comparisons against other plans. However, the policy benchmark utilizes asset class weights that do not correspond to those defined in the IPS and therefore, the monitoring of relative performance may be greatly affected. Please refer to Section 3.2.3.

The lack of attribution analysis (allocation, selection, and interaction effect) on the total portfolio and individual investment manager performance reporting is a lagging practice. Portfolio attribution analysis is an industry monitoring measure and should be provided in all quarterly reports. The analysis should cover the quarter and longer periods to include the effects of selection, allocation, and interaction. The investment consultant can provide this information and should educate the Board as this additional information is made available.

Information provided in quarterly performance reports of investment managers is inconsistent. Some investments have fund descriptions, portfolio characteristics, and allocations versus benchmarks, but others may have a single page on return comparisons/rankings only. Manager performance attribution, a common monitoring metric, is also lacking.

Most benchmark or asset class reviews are presented verbally and lack detailed analysis to support the monitoring work.

Investment Managers

The framework and criteria for investment manager monitoring and compliance are defined in the Manager Review Policy and the Manager Search and Termination Policy and are well-crafted for HPRS.

To that end, HPRS relies heavily upon its consultant for ongoing investment manager monitoring. The consultant is expected to present a Manager Review chart to include qualitative and quantitative information quarterly. Any manager flagged for certain qualitative criteria, failing specific performance metrics, or as determined by the CIO or Investment Committee Chair, is added to the Committee List. The Investment Committee will determine whether that manager should be added to the Review List for a comprehensive review by the consultant and a recommendation for possible action at the next meeting. The Investment Committee may also remove a manager from the Committee List.

HPRS follows the monitoring guidelines for marketable investments. There is a record of the Investment Committee decisions and evidence of additions and removal to the Committee List and Review List noted in the meeting minutes. However, the practice of providing a quarterly Manager Review chart, mandated in the Manager Review Policy, was only provided in one quarter.

Clearstead has provided no further documentation on the monitoring of alternative investment managers such as hedge funds, private equity, or infrastructure. It is common practice for consultants to offer periodic updates of their findings at onsite/offsite meetings or conversations with investment managers to the Chief Investment Officer and Investment Committee through a client portal. Any Investment Committee- or Chief Investment Officer-driven manager monitoring reports should also be housed in a central repository for easy access.

HPRS currently retains one separately managed account, Westfield Small Cap Growth. The investment manager self-reports monthly compliance to investment guidelines monitored by the investment consultant. Historically, the investment consultant reported adherence to those guidelines quarterly but have ceased to do so recently.

In some cases, weak documentation can render monitoring and compliance efforts ineffective. To the extent improvements to analytics and reporting can be made available to the Chief Investment Officer, Investment Committee, and the Board, they will enable each entity to become more effective in their roles and responsibilities. Enhancements can be made in the following areas: asset class reviews, benchmark reviews, private markets pacing, cash flow forecasting, risk budgeting and portfolio risk analysis, liquidity analysis, portfolio attribution review, and rebalancing. Progress toward funding goals identified in the annual review process should also be included along with other goals in an investment dashboard created for summary progress review by the Investment Committee and the Board.

Finally, the consultant plays a central role in supporting the Board in its monitoring and oversight efforts of the HPRS investment program. It serves as a long-term trusted advisor to the Board and often acts as an extension of investment staff. Maintaining such a long-standing relationship provides stability and institutional knowledge to the System. However, this can also result in an insular feedback loop. The investment consulting industry is dynamic and has undergone waves of consolidation and changes over the past two decades, of which Clearstead is also a participant. At the same time, HPRS has maintained vigilance in its annual service review of the consulting relationship. We would encourage continuation of this practice along with a biennial third-party independent assessment to ensure optimal adoption of services relative to the industry and the long-term needs of the portfolio.

Recommendations for Improvement

- **R3.2.1.1** The Board and CIO should maintain its current annual reviews of the consultant but consider retaining an independent qualified third-party for a biennial investment consultant review of services compared to peer practices.
- R3.2.1.2 The investment consultant should provide HPRS with access to a client portal to access all relevant investment manager monitoring updates, due diligence reports, and related information, as well as other key documents important to the oversight of the plan.

- **R3.2.1.3** Consider the addition of a Committee List and Review List (per Manager Review Policy) as modules to the Oversight Dashboard.
- R3.2.1.4 The Chief Investment Officer and the investment consultant should collaborate and prepare a 4-to-8-week cash forecast; tactical deviation outside of the cash target allocation should be monitored and evaluated for cash drag effect.
- **R3.2.1.5** Monthly review of rebalancing and subsequent allocation changes should be documented and made available upon request.
- **R3.2.1.6** Quarterly performance reporting for public market investment managers should be more consistent across managers.
- R3.2.1.7 Set investment manager monitoring standards for the investment consultant to include, for example, frequency of virtual and onsite visits; documentation of organization, personnel, or operational changes; changes in accountants, auditors, legal counsel, etc.
- R3.2.1.8 Resume compliance reporting of investment guidelines for the separately managed account and quarterly reporting of the Manager Review chart as mandated by the Manager Review Policy.

3.2.2 Transaction Costs

Evaluate HPRS' process for measuring, evaluating, and controlling transaction costs, directed brokerage and commission recapture (if any), and compare the process to other funds as well as public or private third-party industry surveys.

Expectations

The prevailing practice with respect to public asset brokerage includes a best execution policy which requires the pension fund and its managers to take all reasonable efforts to obtain the best possible result in trading securities on a consistent basis, taking into account both quantitative factors (e.g., price, commission, spread, implicit market impact, and size of the trade relative to volume) and qualitative factors (e.g., likelihood of execution within a desired time frame, market conditions, ability to act on a confidential basis, ability to handle large trades in securities having limited liquidity without undue market impact, creditworthiness, willingness to commit capital to a particular transaction, market knowledge, and back office infrastructure).

Another prevailing practice is to generally allow each investment manager to select their brokerage firms through which trading will be completed for the pension fund. Each investment manager is responsible for conducting all appropriate due diligence on the brokerage firms it selects.

These prevailing practices apply to Separately Managed Accounts ("SMA") whereby the Fund is the only investor in the vehicle and can influence the trading activity of the investment manager.

Public funds also provide the option for their investment staff or board to retain the right to direct brokers and enter into brokerage commission recapture agreements. Directed commission brokers are selected by the investment staff, often with consultant assistance. Investment managers mutually agree to direct a percentage of their portfolio under management to the fund's directed commission brokers. The objective is to select a percentage amount that generates substantial commission savings, without hindering the investment manager's ability to execute investment strategies that meet the objectives set forth in the investment management agreement (IMA). Conversely, funds may also choose to not utilize directed brokerage based upon a cost/benefit analysis and the desire to allow investment managers to make their own selection and be responsible for their net returns.

Each SMA investment manager is typically required to report on brokerage firms they are using and the terms of those relationships. The disclosure usually covers payment for order flow, soft dollars, covered expenses, and the nature of the broker selection process. The term "soft dollars" typically refers to the amount by which a commission exceeds the true price of executing a transaction. In some cases, that amount is converted to credits and given to the investment manager by the executing broker for the manager to pay third parties for certain research, trading software and subscriptions. Soft dollar practices are regulated by the Securities and Exchange Commission. However, critics argue that soft dollar trades are less transparent and may result in more benefit to the manager than the client or more benefit to clients other than the one for whom the broker was making the trade. There is also the issue of (real or perceived) conflict of interest. The use of soft dollars has been declining with public pension funds and is considered a lagging practice as many are now identifying "execution-only" brokers who are focused on strictly adhering to the trade instructions.

At a minimum, the investment staff reviews investment manager transactions and arrangements for compliance with the fund's policies through a best execution analysis. The investment managers and custodian provide the information necessary to conduct this review.

Leading practice is for a public pension fund to periodically engage a trade analytics firm to independently monitor public equity transactions over a specified period. Typically, the firm maintains a trading database with institutional averages for commissions, fees, the timing effect and market impact costs in most markets in which the public fund invests. Reports usually compare the trading costs of the fund's public equities investment managers against those benchmarks using actual trade data to arrive at a "cost" or "savings" generated by the manager's trading desk. While the trading analytics firms also provide similar services for fixed-income trades, this service is less often used and provides less benefit due to much lower fixed-income trading costs and different market dynamics.

Transaction Costs Standards of Comparison and Findings

Transaction Costs Standards for Comparison	Findings
There is a program to evaluate external trading to ensure that all securities transactions are affected to the best advantage of the system regarding price and execution.	No
For funds with internal management, a continuously updated and vetted database of broker-dealers qualified to perform execution services for all internally managed portfolios exists.	Partial

Conclusions

HPRS invests predominately in co-mingled funds and trusts where the application of best execution and directed brokerage policies are not applicable. In the past when HPRS held a much larger allocation to Separately Managed Accounts, an external evaluation firm was employed to evaluate the efficacy of their trading programs.

HPRS does have a directed brokerage policy in place for separately managed equity accounts that encourages investment managers to use brokers under contract with HPRS to provide execution-only brokerage. Additionally, per ORC statute 5505.068, investment managers are encouraged to use Ohiobased, and minority/female owned brokers when cost, quality and security of these firms is equal to other approved brokers. Lastly, investment managers <u>may not</u> accept soft dollars from approved brokers. Brokers are reviewed every five years and the Board may consider issuing an RPF if necessary.

It should be noted that HPRS does have one Separate Account representing just under 2% of the overall portfolio. Clearstead monitors the account to ensure compliance with HPRS directed brokerage policy. Abel Noser is one broker approved under the policy and the separate account manager utilized them for 80% of shares traded in 2021, a time the portfolio was restructured to emphasize global equity managers.

HPRS should create a Best Execution Policy and identify potential service providers that could perform

best execution analysis. In the event of an increased allocation to SMA's in the future, this policy would be in place before contracting and terms are agreed to.

Recommendations for Improvement

No recommendations at this time

3.2.3 Performance Measurement

Evaluate the process used to determine and measure investment performance, including how performance data is collected and verified and selection of appropriate benchmarks.

Expectations

There should be performance benchmarks appropriate to each asset class and investment strategy. The Total Fund benchmark should allow for a build up from the asset classes, which should incorporate the weighting scheme for the underlying strategies and managers. Performance should be monitored regularly at the strategy, asset class and total fund level by both the Board and the staff. The staff should also regularly monitor performance at the individual manager level.

Performance Measurement Standards of Comparison and Findings

Performance Measurement Standards for Comparison	Findings
There are appropriate performance benchmarks for every portfolio, whether internal or external.	Yes
There are appropriate performance benchmarks for all asset classes.	Yes
There are appropriate performance benchmarks for the entire fund that both benchmarks return relative to the market and return relative to liabilities.	Partial
Where there are aspirational benchmarks (i.e., a benchmark which is unrelated to the asset class such as S&P + some percentage used for private equity), there should be some basis for understanding if the fund can, or has, achieved that benchmark over a market cycle.	No
Benchmarks should be explicitly approved by the Board.	Yes

Conclusions

The investment consultant is exclusively responsible for the collection and analysis of performance data, calculation of portfolio returns, and monitoring of individual manager and total portfolio performance. The HPRS portfolio is assigned one primary senior performance analyst and a secondary back-up at Clearstead. The performance team is cross-trained and able to work on any client portfolio when needed.

The HPRS custodial data (market values and transactions) is aggregated electronically through Insignis, while the alternatives data is manually entered by the performance analyst. The analyst then ensures that each investment return reconciles with the manager's reported return and any discrepancies are investigated and corrected. Once the reconciliation is complete, the analyst generates the reports that are then distributed to HPRS. While it is common practice for a performance analyst at the generalist consultant practice to calculate performance returns, we typically see a review and approval process by a senior manager before results are posted to the client.

The System portfolio utilizes a blended benchmark of market indices based on the targeted asset

allocation. However, we observed the performance reports indicate different index weightings than the targeted allocations defined in the IPS. Target weights as defined in the IPS indicates 20% US Equity, 6% Non-US Equity, 22% Global Equity, 6% Absolute Return, 4% Real Assets, 15% Private Equity, 8% Real Estate, 6% Core Fixed Income, 9% Global Opportunistic Fixed Income, and 4% Cash. The weights used in calculation of the plan benchmark returns are 20%, 6%, **24%**, **7%**, **3%**, **14%**, 8%, 6%, 9%, and **3%** respectively. These variances have an impact on benchmark comparisons.

Benchmarks for the total portfolio and specific asset classes are listed in the IPS. Any changes to benchmarks require Board approval which is in-line with prevailing practice. The asset-based benchmarks are appropriately selected. However, there is limited documentation on how those benchmarks are conceived and the analysis behind the selections. Portfolio Benchmarking Reviews and asset class reviews are conducted as scheduled in the Oversight Dashboard but there was very little documentation of the reviews in any of the presentations to the Board.

Similar to other plans with private markets exposure, the timing of reported non-marketable values are a challenge. The investment consultant noted considerable delays in quarterly reporting due to private market reporting. There are discussions underway to change alternatives reporting to one quarter lag similar to most peers, including the other Ohio systems.

Review of performance returns against the liabilities are performed by Foster & Foster on an annual basis and meet the needs of the plan.

Recommendations for Improvement

- **R3.2.3.1** Policy benchmark asset class weights used in performance reporting should correspond to the target allocations as defined by the IPS.
- **R3.2.3.2** Portfolio returns should be reviewed and verified by a supervisor at the consultant before distributed to HPRS.
- **R3.2.3.3** Performance should be verified by the custodian or another independent third-party on an annual basis.
- **R3.2.3.4** The investment consultant should provide attribution analysis as part of performance reporting and asset-class reviews.
- **R3.2.3.5** There should be documentation of the analysis and process performed to arrive at benchmark selection or changes.
- R3.2.3.6 Separate performance analysis of each non-marketable asset class based on vintage, lifecycle, and strategy should be included in quarterly performance materials, including peer comparisons and rankings to commonly accepted benchmarks such as Cambridge Associates, NCREIF, etc.
- R3.2.3.7 All annual reviews of asset classes should be documented and available for review and should include performance attribution, benchmark fit, manager contribution and appropriate fit, active risk, exposure and look through analysis.

3.2.4 External Manager Compensation

Evaluate the basis and methodology for the compensation of external investment managers and advisors and payments to others, if any.

Review Activities

Much of the information for the FAS analysis of external investment manager fees was collected directly from internal interviews with Clearstead (the Investment Consultant) and Summit County Finance Dept. (Internal Auditors). FAS examined additional documentation including the Annual Consolidated Financial Report (ACFR) and the Annual Fee Review presented to the Board as well as the Clearstead Investment Advisory Agreement.

Expectations

Fees and payments due to an external investment manager are typically defined in an Investment Manager Agreement (IMA) or Limited Partnership Agreement (LPA) signed by the manager and the pension fund. Investment managers agree to a payment schedule, often on a quarterly basis in the case of an IMA. Public market investment fund fee terms are usually a straightforward calculation of a percentage fee based upon assets under management at a point in time or weighted across a defined time period. Occasionally, a manager of public assets, commonly a hedge fund investor, will receive an incentive fee based upon investment performance.

Private market (e.g., private equity, real estate) investment fund fee arrangements are often more complex, usually containing both a management fee and a performance fee. However, the basis of the private market calculations can be more variable (e.g., committed vs. invested capital) and there can be various offsets which reduce fees which are not visible to the pension fund. Unlike public funds, the invoicing of fees for private market funds lacks simplicity and standardization. Fees are commonly blended into capital calls and the levels of transparency vary greatly. The lack of standards and transparency from General Partners (GPs) have led to efforts on the part of the Institutional Limited Partners Association (ILPA) to use communications protocols and documentation requirements to enforce standards in information sharing, classifications, and terms. In a very recent publication, which will likely be embraced by the broader limited partnership (LP) community, inclusive of public pension plans, the SEC has proposed bringing much needed transparency and standardization to fee billing practices in the alternative investment space.

Leading and prevailing practices for the payment and verification of investment manager fees are designed to ensure that the public pension fund has processes in place which independently calculate invoiced fees and validate manager invoices on a regular basis. When there are discrepancies, the manager is contacted, and any differences are promptly resolved.

External Manager Compensation Standards for Comparison	Findings
There is a documented fee policy that is constructed around the concept of alignment of interests and articulates staff authority for fee negotiations.	No
Manager fee reporting annually summarizes fee levels (direct and indirect, including carried interest at all levels) by manager and in the context of relative and absolute performance.	No
Investment management costs are periodically benchmarked with peers by a third-party firm to compare costs on a basis adjusted for differences in asset allocation.	Yes
There is an effective process for ensuring payments to investment managers of public assets are appropriate.	Partial
There is an effective process for ensuring payments to managers of private assets are appropriate.	Partial
The system works with ILPA and peers in support of the Transparency Initiative.	Yes

External Manager Compensation Standards of Comparison and Findings

Conclusions

Clearstead prepares an Annual Fee Review for the Board which lists HPRS' investments by style category and arrays the estimated annual expense (in dollars) and the fund's expense ratio. The Morningstar average fee is used as the benchmark at both the individual fund level and at the broad mandate level. Only invoiced management fees are reported for the private market assets; to the extent that there are performance or incentive fees or carried interest, these are not reflected, nor are pass-through partnership expenses.

HPRS could consider periodic investment cost reviews by an independent benchmarking service such as CEM Benchmarking to ensure that the fees it is paying are reasonable and not rely solely on self-reporting by Clearstead.

As mentioned earlier, the Board should adopt an investment belief about the net return benefits of private market funds and on transparency of fee reporting.

In 2020 and 2021, the internal auditor (Summit County) reviewed Investment Management Fees (complete sample set) to ensure that the fees in HPRS' investment reconciliation and in the fee schedule agreed to the contracts. There were no issues noted. Summit County also automatically audits all new managers to validate fee payment processes.

Monthly payments for custody services to PNC Bank are prepared by the HPRS Executive Assistant and checked by the Finance Director and formally approval by the Executive Director before being sent to the Treasurer of State to authorize PNC to deduct the payment from HPRS' account.

HPRS joined the Institutional Limited Partners Association (ILPA) in 2022. This should help inform HPRS on the latest developments in private market fees and reporting. HPRS should have Clearstead encourage its general partners to report performance and fees consistent with the ILPA template.

Recommendations for Improvement

- **R 3.2.4.1** Supplement the Annual Fee Review to include an independent benchmarking service to better understand the relative cost of different managers, styles and mandates.
- **R 3.2.4.2** Define standards around private fund fee levels and reporting transparency to share with Clearstead for use in the due diligence process.

3.2.5 Conflicts of Interest Investment-related conflicts are addressed in Section 1.6

See section 1.6.

3.2.6 Investment Manager Selection

Analyze how investment managers are selected, including the transparency in the decisionmaking process, due diligence provisions, whether specific criteria and procedures govern the selection process, whether they are actually observed in the selection process, and whether there is adequate documentation of selection process.

Expectations

There should be a structured, thoughtful, documented process to:

- 1. Determine if a new portfolio or investment manager is needed;
- 2. Identify whether internal or external management is the best solution to the need;
- 3. Select the potential candidates, utilizing a process that includes:
 - a. Portfolio "fit" analysis;
 - b. Quantitative due diligence;
 - c. Qualitative due diligence; and
 - d. Operational due diligence.

Similar considerations should be given to new internal portfolios. The structure review process, outlined herein, should be updated on a periodic basis and presented to internal review bodies. The Board should be periodically updated on these internal structure reviews.

Investment Manager Selection Standards of Comparison and Findings

Investment Manager Selection Standards of Comparison	Findings
Investment sourcing processes are linked to identified investment needs.	Partial
Portfolio fit assessment is both qualitative and quantitative.	Partial
Policies clearly define operational due diligence requirements and responsibilities vis-à-vis staff and consultants.	No
The Board is properly aware of current due diligence processes utilized for each portfolio.	Yes
An internal investment decision-making committee or group reviews and approves each investment opportunity and includes other key staff such as general counsel, compliance, and operational due diligence, with the ability of non-investment office staff to either veto or escalate the decision on investments for operational or legal reasons. The above processes apply to both internal and external portfolios.	Partial
Pipeline reports of contemplated investment changes are provided to the Board, so as to, as much as possible, create a "no surprises" environment for the Board.	Partial
There are organizational checks and balances that provide effective controls	Yes

Investment Manager Selection Standards of Comparison	Findings
and minimize the potential for single point of failure decision making.	
Contract negotiations with outside managers are led by internal staff supplemented by outside assistance, as needed.	Partial
Actual due diligence procedures match the written policies in the IPS and in other relevant documentation. Deviations are documented and escalation procedures in place for approvals or rejections.	Partial

Conclusions

Given the size of the investment staff of HPRS, it is appropriate for the System to delegate manager selection and monitoring process to Investment Committee, CIO, and Investment Consultant. The investment selection criteria and process are explicitly defined in the Manager Search and Termination Policy. The policy also includes the details should an RFP be issued for an investment mandate. The practice of defining minimum investment criteria in the Manager Search and Termination Policy is consistent with prevailing practice and enables the investment selection process to be focused, transparent, and efficient.

The process itself is primarily driven and led by the Investment Consultant. A Task Force/subcommittee is formed by the Investment Committee Chair ("Chair"), includes the Chief Investment Officer, Investment Consultant, one or two other trustees (the Investment Experts) as appointed by the Chair. The investment consultant, with the approval of the CIO, recommends mandates for hire to the Chair. The Chair will formally approve the recommendation once the mandate is determined to be within the asset allocation set by the Committee and approved by the Board.

The consultant produces an initial list of investment managers with input from the appointed Investment Expert(s), if available. All candidates must meet the minimal criteria requirements as defined in the Manager Search and Termination Policy.

Each candidate for selection is interviewed by the Task Force. If the Task Force comes to a unanimous decision, then investment manager is selected and the hire is reported to the Investment Committee and full Board. If the Task Force does not come to a unanimous agreement, then the Investment Committee will make the final selection. This process allows for efficient and timely decisions in the selection process. For larger scaled mandates, an RFP, crafted by the consultant, has been issued and subsequently submitted to the Task Force for finalists' interviews.

The formation of a Task Force is appropriate for a fund of HPRS size and structure. The subcommittee, with suitable contributors, allows the decision-making process to be nimble and minimizes the risk of a single point of failure. However, the roles and responsibilities of the subcommittee in the investment selection process are not defined in the IPS and they were not explicitly delegated by the Board or Investment Committee Charter.

We were informed that in one instance, two of the minimum requirements were unmet, but the Investment Committee, as empowered by the Manager Search and Termination Policy, voted to waive the requirements and the investment manager was ultimately selected. The modification was recorded

in the minutes. However, the nature of the unmet criteria of this investment manager and reasons behind the modification by the Investment Committee were not disclosed nor well documented. The appropriateness of the waiver was no longer addressed after the modification by the full Investment Committee thereafter, even as the Task Force moved to approve the investment. For decisions made with exceptions to those standards, extra scrutiny and rigor of due diligence, and thorough documentation should be applied by all parties. Should an investment outside the broad HPRS Manager Search and Termination guidelines be seriously considered, HPRS should consider commissioning a third party operational due diligence report available from alternative consulting organizations to add an extra layer of due diligence protection.

The overall investment selection process from sourcing to approval is consistent with prevailing standards. However, documentation of the selection process should be tightened up and more details should be provided.

Currently, the executive summaries of investment selection provided to the Board contain limited to no rationale for portfolio fit. There is also insufficient documentation of operational review performed on the investment manager by the investment consultant or sub-committee. Typically, evidentiary support of investment decision includes a listing of candidates under consideration, description of the mandate and its objectives, overall firm history, historical performance metrics, investment team and staff information, biographies of portfolio investment professionals, and other key measures in determining appropriate fit for the portfolio. Reasons for eliminated candidates are noted so others may understand how the semifinalists or finalists were selected.

Finally, a comprehensive investment memo of the finalist candidate is produced for review. It incorporates quantitative and qualitative analysis of the strategy, observations from the investment and operational due diligence performed, description of risks, and appropriate fit for the portfolio along with any other requested data. Clearstead has these basic capabilities inhouse and can provide such investment memo documenting its research and diligence review.

The Oversight Dashboard currently outlines the workplan of the investment program. It should include a pipeline of investments under consideration or currently under due diligence to create a "no surprise" environment for the Investment Committee/Board. It may also report all investments approved by the subcommittee to the full Board.

Recommendations for Improvement

- R3.2.6.1 The delegation of investment selection authority to the Task Force (or subcommittee) by the Board and Investment Committee should be clearly stated and be documented as part of investment governance structure in the Investment Policy Statement and the Investment Committee charter.
- R3.2.6.2 Develop proposed due diligence standards and checklists, including operational due diligence, to include minimum standards across all asset classes, any unique requirements for individual asset classes, and responsibilities for conducting each step in the process.

- **R3.2.6.3** An investment memo for any new selection should be provided by the investment consultant with input from the subcommittee.
- R3.2.6.4 For any investment selection that does not meet minimum criteria as defined in the Manager Search and Termination Policy, reasons for the exception should be welldocumented and subject to additional scrutiny and discussion; HPRS should consider commissioning a third party Operational Due Diligence report for investments recommended by Clearstead that do not meet these guidelines.
- R3.2.6.5 All documents related to the selection process (list of candidates, write-ups, interview notes, research, etc.) should be made available to the Investment Committee or full Board upon request.
- **R3.2.6.6** The Oversight Dashboard should include a list of investment pipeline opportunities being considered along with recently approved decisions by the subcommittee.

3.3 Investment and fiduciary risk.

Scope of Review

The Contractor will perform an evaluation of the awareness of risk and management of risk in investments. The Contractor will:

- 3.3.1 Evaluate the processes by which the board is aware of the risks associated with the asset allocation they have adopted; and
- 3.3.2 Examine investment risk factors. Attention should be on the types, levels, and appropriateness of risks in the investment portfolios and overall funds as well as any internal controls in place at HPRS to ensure compliance with the adopted standards, policies, and procedure for managing investment and fiduciary risk. This examination should include a comparison to best practices.

Review Activities

For our assessment of the Board's Investment Policy and Procedures, we utilized the following sources of information to complete our assessment and comparison to leading, prevailing and lagging practices:

- HPRS's Investment Policy Statement and Guidelines and related Policy Statements associated with Broker Policies, Derivatives Policies, Proxy Voting, Divestiture Policies, Litigation Policies, Real Estate Policies, Private Credit Policies and Private Equity Policies.
- Periodic asset structure reviews performed by Clearstead for all the ALM specified asset classes.
- Interviews and follow-up discussions with HPRS staff, consultants, asset managers and custodian.
- Monthly Investment Monitoring Reports and Quarterly Investment Performance reports.
- HPRS Board minutes.
- HPRS staff job descriptions.
- Actuarial valuation reports and updates and experience review reports provided by Foster & Foster.
- Investment guidelines for HPRS External Investment Managers and Compliance reports compiled by HPRS staff.

To develop our assessment, we assessed the reporting function that exists between staff and Board based on our knowledge of the HPRS investment program and standard reporting templates used by asset owners. The FAS team:

- 1. Assessed the flow of risk monitoring actions among staff, consultant and Board and reports from staff and consultants to the Board relating to the how the investment program is structured and compared to leading and prevailing practices.
- 2. Reviewed the risk estimation approach utilized at HPRS and compared to FAS knowledge of leading practices.
- 3. Discussed with staff and consultants the concept of risk reporting and reviewed the reports provided to the Board on the concept of investment risks.
- 4. Reviewed the HPRS Benchmark development process and performance benchmarks in place paying particular attention to the Clearstead quarterly report.

3.3.1 Risk appetite

Evaluate the processes by which the board is aware of the risks associated with the asset allocation they have adopted.

Expectations

The Board adopts a risk appetite, either explicitly or implicitly, through the asset allocation discussion and decision. Non-volatility based risk sensitivities, such as liquidity, leverage, reputation, fees, ESG issues, etc., should be addressed.

Risk tolerances should be established and there should be methods to monitor whether the fund is within or outside those tolerances. There should be an approved escalation policy for exceptions. The system should have quantitative tools and resources (either internally, or provided by an investment consultant, or both) to perform risk analyses at the manager, asset class/strategy and total fund level. There should be some expertise among staff. Risk analyses should be inputs into investment decisions. The Board should receive appropriate risk analyses to assist it in its oversight function.

We would also expect a degree of interpretation by the Board regarding the unique characteristics of the pools of assets that are being invested. The Board should also be aware of the risks that are being undertaken in the implementation of the investment portfolio by external managers and the oversight of that implementation by staff.

The Board should have a periodic opportunity (at least annually) to discuss investment risks other than volatility, such as liquidity, leverage, conflicts of interest, geographic concentration, transparency, ESG factors, etc. Any consensus or determination by the Board with respect to those risks should be respected by the investment staff.

Risk Appetite Standards for Comparison	Findings
The IPS includes a risk tolerance framework that prioritizes the Board's perceptions of the largest risks to the system.	No
The IPS includes risk sensitivities in addition to volatility targets (e.g., liquidity, leverage, ESG, etc.)	No
Asset allocation processes address risk appetite.	Partial
The rationale for risk tolerances and limits is well documented in a Statement of Investment Beliefs (SIB) or included in the IPS.	No
Periodic risk and return reports, as well as operational reviews of internal and external managers summarize new and continuing risks, to allow the Board to oversee how the investment staff manages risk. Occasional presentations on cyclical economic and market risk are included from time to time (e.g., a biennial or triennial trustee educational update on drawdown risk controls and strategies).	No

Risk Appetite Standards of Comparison and Findings

Conclusions

Much of the risk discussion implied in questions in section 3.3 was included in the discussion and recommendations contained throughout sections 3.1 and 3.2. In general, investment risk analysis, benchmark development, and risk reporting should be enhanced at HPRS along with the Board education effort connected with this enhancement. It is unclear what specific views the Board may have on risk appetite as they are not discussed often nor clearly defined in typical investment governance documents. The 2022 ALS does take into consideration reduced portfolio volatility and drawdown risk and by inference the Board's risk appetite. We assume that those considerations were discussed by the investment consultant when delivering the report.

Quarterly performance reports do include risk/return metrics, including standard deviation, beta, alpha, Sharpe ratio, and Upward/Downside capture against the policy benchmark over the 5-year period. These risk statistics are also compared against the broader universe of public plans in the Investment Metrics universe. Additional metrics, such as attribution, information ratio, correlation, excess return, and tracking error, over wider investment period coverage are lacking in HPRS reports but would be considered industry prevailing practice.

Risk reporting is also not evident of individual marketable securities managers. Individual manager noninvestment risks should be included in the operational due diligence or monitoring reports delivered to the Investment Committee or staff.

The analysis of volatility and liquidity risks are not particularly robust; for example, the liquidity analysis performed in July 2021 only discussed the liquidity stack of "defensive assets" and did not include the rest of the portfolio. Asset class reviews also fail to discuss risk factors of the strategies within, such as credit, inflation, rates, and geographic/sector exposure.

The most in-depth review of risk performed for HPRS that included rate sensitivity was only in the context of potential asset allocation change. The last look through analysis performed in 2021 included global equity but did not include the total equity portfolio or a look through analysis of the credit portfolio. Finally, there should be a broader risk discussion beyond volatility or liquidity during annual risk reviews. A comprehensive annual review of broader risk factors of the portfolio, across asset classes, and a discussion of the risk budget is prevailing practice. The delivery of these analyses should occur not only during asset allocation change discussions, but as part of annual review of risks.

Recommendations for Improvement

- R3.3.1.1 The appetite for risk should be clearly defined and communicated in the Investment Policy Statement. See Section 3.1.2
- R3.3.1.2 Staff, in conjunction with the investment consultant, should establish a risk budget and review periodically with the Board; a comprehensive and robust risk analysis of the portfolio should also be reviewed and presented annually.

- **R3.3.1.3** Additional metrics such as attribution, information ratio, correlation analysis, and tracking error for the total portfolio and investment managers should be in the quarterly report or at the very least made available on the Board portal.
- R3.3.1.4 Strategic asset allocation reviews should include a clear comparison of current returns and volatility versus the forecasted return and volatility metrics of the near-term target allocation, and similarly of the long-term targets.
- **R3.3.1.5** Liquidity analyses should include projected cash flow build up from net flows from private equity, private credit and real assets, plus contributions and benefit payments assumptions.
- R3.3.1.6 Portfolio look-through should be performed consistently and across asset classes by Clearstead and made available in either the quarterly report or on the Board portal.

3.3.2 Investment risk factors

Examine investment risk factors. Attention should be on the types, levels, and appropriateness of risks in the investment portfolios and overall funds as well as any internal controls in place at HPRS to ensure compliance with the adopted standards, policies, and procedure for managing investment and fiduciary risk. This examination should include a comparison to best practices.

Expectations

There are adequate methods and resources to measure quantitative risk, to monitor qualitative risk, and to detect risk that is out of tolerance. There are working escalation policies when/if such out-of-tolerance risk occurs. There should be periodic (at least quarterly) reports on investment risk to the Board.

Investment	Rick Factors	Standards (of Comparison	and Findings
investment	NISK FACLUIS	Stanuarus	Ji Cumpansun	anu rinuings

Investment Risk Factors Standards for Comparison	Findings
There are periodic risk reports to the Board which provide appropriate risk contextualization and rationale. Out of tolerance risks are highlighted and action plans noted.	No
There is a dedicated investment analytical system that models risk.	No
Staff uses risk reports appropriately.	No
Internal audit periodically reviews investment risk management processes and verifies that the processes remain functional.	No
There is an ongoing plan for formal staff training (or required credentialing) in investment risk assessment and the quantitative risk tools used by the fund.	Partial
There is at least one external source of quantitative investment risk monitoring (consultant, custodial bank, specialty consultant) in addition to internal review.	Yes
Qualitative risk factors are evaluated appropriately, including operational risk and ESG factors.	Partial
Liquidity projections include buffers for unexpected private equity cash flows.	No

Conclusions

Much of the risk discussion implied in questions from section 3.3 was included in the discussion and recommendations contained throughout sections 3.1, 3.2 and 3.3.1. In general, we believe the concept of investment risk analysis, benchmark development and risk reporting should be expanded at HPRS along with the Board education effort connected with this expansion. We encourage the staff to work with the investment consultant in determining an appropriate quarterly reporting format that balances cost, understandability and completeness for use by HPRS staff and Board with detailed output, if desired, available on the Board portal.

In a resource-constrained environment, there is key person risk at HPRS in overseeing the investment function. Ongoing education for a staff peer as a backup for the work performed by the Chief Investment Officer would be prudent, including involvement in annual vendor management discussions with the HPRS Investment Consultant (currently Clearstead), to help alleviate some of the key person risk over the short term should unexpected turnover take place at the CIO level.

Recommendations for Improvement

- R3.3.2.1 The Chief Investment Officer should work with the investment consultant to determine an appropriate expansion of the quarterly reporting format in the area of investment risk monitoring and reporting (including some of the recommendations made under the previous section and 3.1 and 3.2).
- **R3.3.2.2** To alleviate key person risk for the CIO, another member of the executive team should receive training and be prepared to play a backup role in case of unavailability of the CIO.

3.4 Custodian policy

The Contractor will evaluate HPRS's relationship with its custodial bank. This will include:

- 3.4.1 The custodial bank's breadth of services, technological planning, and capability to address HPRS's needs.
- 3.4.2 The bank's structure and level of fees.
- 3.4.3 Cash management and analytical services.
- 3.4.4 Ability of HPRS to have oversight over custodial functions.
- 3.4.5 The custody model used by the Ohio Treasurer of State as custodian of financial assets for HPRS and evaluate the oversight provided as compared against other public systems and best practices.

Review Activities

For the assessment of custodian policy, the FAS team reviewed services provided by its custodian, PNC Bank. Activities included:

- Reviews of domestic operating procedures between PNC Bank, the Treasurer of State ("TOS") and HPRS; the RFP with PNC Bank;
- Interviews with HPRS Finance Director;
- Interviews with the TOS staff who oversees custodial relationships;
- Interviews of custodial bank operational and relationship management personnel.
- Interviews with the investment consultant (Clearstead)
- Review of the custodial RFP; investment management agreements; Federated Hermes Government Obligations Money Market Fund prospectus; monthly custody invoice approvals.
- We also utilized the FAS InGov[©] peer benchmarking database and the experience of the FAS team with similar public pension systems in our assessment.

3.4.1 Breadth of Services

The custodial bank's breadth of services and technological capabilities to address HPRS' needs.

Expectations

The primary role of a custodial bank is the safekeeping of assets. A custodian providing core domestic custody services typically settles trades, invests cash balances as directed, collects and posts income, processes corporate actions, prices holdings/positions, and provides recordkeeping and daily/monthly reporting services.

When an institutional investor selects a custodial bank, it is typically looking to take advantage of a critical resource: the technology platform and the support staff which facilitates their transactions and reporting.

An effective custodian is at least as much a technology and data management facility as a lockbox. Leading custodial banks offer the services of a technology platform to their institutional investor clients which could not be replicated on a cost-effective basis by an individual fund on a stand-alone basis.

In addition to the core services listed above, the custodian typically offers a number of other "valueadded" functions. These are available at the fund's discretion and include: fund accounting; portfolio analysis; compliance monitoring; performance measurement; derivative services; proxy voting; class actions claims; tax reclaim services; securities lending; and foreign exchange.

At most retirement systems, a senior member of the system staff who is independent of the investment office (often the CFO) is responsible for leading the selection process and managing the day-to-day relationship with the custodial bank on an ongoing basis.

It is a leading practice to have a service level agreement (SLA) with the custodian. The SLA is a description of the operational, escalation and communication framework under which the fund, the custodian, and other service providers will operate. SLAs typically contain contact details, operational responsibilities, description of workflows, responsibilities, deliverables and timeline for delivery, and other key metrics. The primary objective of an SLA is to ensure that the custody and related processes are documented, achievable and will result in a satisfactory service being delivered.

Breadth of Services Standards of Comparison	Findings
The system receives services comparable to most peer public funds.	Yes
The system receives effective information technology systems and support from its master record keeper.	Partial
The custody and recordkeeping service processes work effectively and relationships with service providers are collaborative.	Yes
The system has a service level agreement (SLA) with the custodian and utilizes quantitative metrics to assess the custodian's performance.	Partial

Breadth of Services Standards of Comparison and Findings

Conclusions

For the purposes of the Fiduciary Audit, FAS was limited to assessing only the basic asset safekeeping services provided to HPRS by PNC. Comparing the breadth of custodial services for HPRS against other peer public funds proves to be elusive due to the limited services required by HPRS as a small and non-complex system.

The banking relationship is managed through the TOS, who performs this function for all Ohio state public pension plans and other agencies with asset safekeeping needs. RFPs are issued every four years. Additional fee-based service offers provided by the banks are contracted directly with the custodian. The custodian performs external manager oversight through a monthly reconciliation.

In summary, our analysis concludes that existing (limited) services offered by PNC to HPRS are operationally sound, form the basis of a highly collaborative relationship, and are supported by an effective scorecard and oversight program. While TOS owns the custodial contracts, HPRS is considered a partner to it, provides significant input to the RFP process and in the review of ongoing annual scorecards. Detailed operating procedures are in place across all processes for the custodian and kept current through the Treasurer of State.

All parties view the currently defined service levels and scorecard reporting process as very effective. The TOS, PNC, and HPRS meet annually to update and review the official scorecard. The scorecard process is considered industry leading insofar as it measures the custodians' performance in support of HPRS against the banks' overall performance across ten key support functions. PNC Bank is required to submit SOC reports to the Treasurer of State / Auditor of State (there are four reports). The Ohio Highway Patrol Retirement System Board does not play a role in either the approval of contracts or review of custodial service performance.

PNC Bank offers its iHub portal technology to improve workflow for its clients. The technology, which is well-supported by the Bank, would allow HPRS to set up capital calls in advance and allow for automated approvals based on agreed upon rules. This would eliminate a potential bottleneck at the callback stage. Additionally, iHub allows for invoices to be viewed in advance of payment, a task that HPRS has been performing manually with some challenges.

HPRS does not utilize PNC Bank for compliance monitoring of Separately Managed Accounts (SMAs); HPRS currently has one such account. Typically, a custodian providing compliance monitoring would notify its client and the investment manager about breaches and would provide regular compliance reports to the client. This would be useful to HPRS.

HPRS has not proactively asked PNC Bank what additional services it could offer that would be beneficial to HPRS. Since HPRS has a small staff, augmenting operations with outsourced services, offerings or technology can offer great benefit. These services can be contracted directly between HPRS and PNC Bank and do not require prior approval from TOS.

Recommendations for Improvement

- **R3.4.1.1** Employ use of PNC Bank's iHub portal technology to improve workflow.
- R3.4.1.2 Proactively engage with PNC Bank's relationship management on a regular basis (standing meeting) to learn of new service offerings from the Bank to determine if they can assist HPRS.
3.4.2 Structure and Fees

Evaluate the bank's structure and level of fees.

Structure and Fees Standards of Comparison and Findings

Structure and Fees Standards for Comparison	Findings
The amount the system pays for its custody and recordkeeping services is	Yes
comparable to its peers.	

Conclusions

The uniqueness of the Ohio custodial service model – statutorily limiting results to a state-domiciled provider – makes it challenging to perform an effective economic comparative analysis of services received. However, the 0.75 basis point fee (for all-in services) that HPRS pays is competitive and reasonable; any potential lower bid would not be material to the overall absolute cost of custodial services.

Additional information about the custodial model may be found in *Section 3.4.5*.

TOS is to be commended for their use of third-party professional consulting support in both the development of RFPs and the custodial contract.

With respect to extended custodial services, HPRS does not require foreign exchange transactions or engage in securities lending, so no additional oversight is required for these functions.

At the time of this fiduciary performance audit, HPRS is not contemplating lending domestic securities due to the nature of its holdings.

Recommendations for Improvement

No recommendations at this time.

3.4.3 Cash Management and Analysis

Evaluate the custodial bank's cash management and analytical services.

Expectations

While returns from cash deposits and overnights have been minimal in recent years, investment managers and their technical platforms have become far more savvy and demanding in their handling of cash and cash-relevant information intraday. Custodians typically provide the day's ending cash balance and activity and the next morning's projected available cash, and managers have sought to integrate this information into a more dynamic, intraday framework in order to have better visibility into real-time cash balances so as to generate excess returns.

The term "cash management" in the context of a public pension plan relates to both strategic and tactical decision making, execution, and oversight over a broad range of functions. Cash, as an asset class, can carry a targeted weight and specified range in the pension system's overall investment allocation plan. The control of cash drag (holding too much cash) is commonly prescribed in external investment management agreements, and oversight of cash balances of third-party managed accounts are often central to a pension plan's compliance monitoring function. Additionally, a holistic approach and ongoing diligence applied to the major inflows of money originating from employer contribution, fund redemptions and distributions, and to the outflows to support retiree pension payments, subscriptions, and capital calls, can facilitate an organization's near-term investment plan to ensure that cash balances remain available when needed (holding too little cash) to avoid overdrafts and are otherwise invested on a timely basis when not.

For the purposes of this fiduciary performance audit, FAS has been requested to focus on cash management functions at the custodian.

Custodial cash management services may appear within a standard service contract with the public pension plan or as a separate agreement. Most commonly, a custodian will establish a sweep account which will contain a single investment commonly known as a short-term investment fund ("STIF") so that the Fund can obtain interest on a daily basis (commonly referred to as an "overnight rate"). A STIF product may exist in either the form of a separate account or a commingled vehicle into which many institutional asset management clients invest. The custodian provides detailed documentation on the terms and conditions of the STIF (commonly called fund declaration documents), and if registered, provides historical performance values and fees.

All investment accounts containing publicly traded assets are typically investors in the sweep account, both internally and externally managed. For the latter, it is common for the investment management agreement between the public pension plan and the investment advisor to reference the use of a sweep account for investing daily cash. In accordance with the terms and conditions (or prospectus) of the sweep account, all available cash within the investment accounts is "swept" at a specific time of day, and the sweep account purchases units in the STIF for all investment accounts. The next morning, the sweep account sells units in the STIF as required to deliver cash balances back to the investment accounts that are needed for daily purchase settlements and other investment related outflow events. The interest from the STIF is typically accrued daily and is credited to the investment account or aggregated and transferred into a main DDA account of the public pension plan to use as desired.

Cash Management Standards of Comparison and Findings

Cash Management Standards of Comparison	Findings
For portfolios utilizing a STIF or money market product for cash management, all investment separate accounts for publicly traded securities, internally and externally managed, are set up to sweep cash daily. The custody bank provides regular reports on all accounts that invest cash in these products.	Yes
Formal contracts are in place between the pension plan and custodian for sweep account and STIF investing. Language in the agreement includes eligible investments and liquidity requirements.	Yes
The public pension plan conducts a periodic review of the sweep account performance and overall STIF or money market fund statistics against other custodial and third-party comparative offers.	No
Procedures are documented clearly describing both the operational and reporting aspects of the custodian in managing the sweep account and within the public pension plan for performing oversight functions.	Yes
Procedures for daily cash reconciliation between the System and custodian are clearly documented and understood when a central DDA type product is used across multiple portfolios	Yes

Conclusions

HPRS receives standard cash management services from PNC Bank which includes the posting of the endof-day cash position and the next day cash available for the Investment Managers. A sweep account is utilized by PNC and all uninvested cash in trust accounts as of 4 p.m. each day is invested at the prevailing overnight rate. This process is unwound the following morning before the trading day begins. HPRS has elected to use the money market fund described below as their sweep vehicle (investment management decision).

HPRS also maintains a Demand Deposit Account ("DDA") – or checking account – at PNC which is used to pay benefits and other expenditures. The DDA is purposely kept at a minimal level since it only earns a de minimis return.

The bulk of short-term investments are invested in a U.S. Government money market mutual fund. The MM Fund complies with SEC Rule 2a-7 which requires it to hold at least 10% of its total assets in daily liquid assets and at least 30% of its total assets in weekly liquid assets. From a credit-rating perspective, no more than 3% of assets can be invested in securities that do not fall within the first or second-highest ranking tier. Liquidity and credit quality are strong.

HPRS transfers funds monthly from the MM Fund to the DDA account for expected disbursements.

HPRS has also recently purchased Treasury bills to enhance the cash yield of the portfolio and plans to roll them over upon maturity. Cash has been overweight the past 2 years due to market volatility. The overweight cash position is more than 100 basis points versus the target and the concern is that over a longer performance period, the "cash drag" could negatively impact portfolio returns. HPRS should periodically review the decision to hold excess cash above target and update the Board as appropriate.

Recommendations for Improvement

No recommendations at this time.

3.4.4 Custodial Oversight

Evaluate the ability of HPRS to have oversight over custodial functions.

Expectations

Oversight of the custodial bank, as with most key external service providers, includes the following elements:

- Identification of business requirements
- Selection of the third-party provider and contractual negotiations
- Setting of customer service standards
- Day-to-day relationship management and contractual oversight
- Performance monitoring and feedback

Prevailing practice is for the Board of Trustees to have approval authority in custodial bank selection, but all other custodial oversight activities are delegated to system staff.

The custodial bank relationship is usually central to investment operations for a fund and there are many users of information across the fund. Consequently, it is critical that processes and procedures are defined and well documented, and that issues are escalated appropriately in a timely matter to achieve resolution.

Typically, there is someone specifically charged to manage day-today relationship matters and pursue resolution of any issues. Often, this person is in the Investment Operations function since the Investment Office relies heavily on the custodian on a day-to-day basis.

Custodial bank contracts are typically of long duration, at least four or five years, with options for one- or two-year renewals, because a transition to a new custodial bank is difficult and time consuming, often taking a year or more to fully realize the benefits of the services of a new custodial bank. A system will usually only make a change from its incumbent bank to a new custodial bank when there is a clear cost and/or service advantage.

Custodial Oversight Standards for Comparison	Findings
The retirement system board of trustees has final approval authority for selection of the custodial bank.	No
There are effective policies and processes in place for oversight of the custodial bank for:	
Identification of business requirements	Partial
Selection of the third-party provider and contractual negotiations	Partial
Setting of customer service standards	Partial
Day-to-day relationship management and contractual oversight	Partial
Performance monitoring and feedback	Yes

Custodial Oversight Standards of Comparison and Findings

Conclusions

The Ohio Treasurer of State (TOS) is the statutory custodian of the HPRS funds with the authority to hire the custodial bank for HPRS. The lack of authority for the HPRS Board of Trustees to select its custodial bank is considered a lagging practice (prevailing practice at over 90% of U.S. public retirement systems), as is the lack of authority for HPRS staff to directly manage the custodial bank relationship on a day-today basis. However, the involvement of TOS in the selection, oversight and relationship management of the custodian bank is very beneficial to HPRS as a small system. With minimal staff, it would be challenging for HPRS to administer an RFP process and to negotiate fees as a stand-alone entity. TOS bundles multiple Ohio-based systems into a single RFP which provides HPRS with economies of scale in services received. Additionally, TOS defines the standard workflows employed by HPRS, PNC and TOS, which are prevailing practice in nature. Lastly, TOS administers an annual scorecard which is collaborated on by all three parties and serves as a strong proactive measure of vendor management. Ten broad categories are scored and any issues within them are identified, and remediation plans are established and executed. There is an escalation process, facilitated by TOS staff, for any unresolved issues. Although a service-level agreement (SLA) does not exist between HPRS and PNC (which is a lagging practice), the TOS scorecard serves as a mechanism to ensure that controls remain strong and HPRS receives the level of support it needs and expects. The overall relationship is extremely positive, and all parties operate within welldefined roles and responsibilities, making the three-way process work smoothly and effectively.

During the most recent Custodian Bank selection process (2019), TOS included HPRS staff in the development of the RFPs and in evaluation of proposals. The selection process resulted in HPRS receiving services from the custodial bank it wanted. However, HPRS was not part of the contractual negotiations.

In summary, the lack of statutory authority for the HPRS Board of Trustees to select the custodial banks is considered a lagging practice, as is the lack of authority for HPRS staff to directly manage the custodial bank relationship on a day-to-day basis. Having said that, the current TOS staff are to be commended for taking a constructive and collaborative approach to working with HPRS to select and contract with the appropriate custodial banks and proactively monitoring and managing performance. Under the current statutory requirement for the TOS to serve as custodian of the HPRS funds, this could be considered to be an effective approach.

In the past, under different Treasurers of State, we have learned that the role of TOS staff was not as constructive and collaborative as it currently is, and that oversight processes were not as effective. There is concern that with a different TOS and potentially new Trust Department staff, some or all of the current effective processes could be degraded or stopped. There is currently no Memorandum of Understanding or any other document that formalizes how TOS and HPRS work together in overseeing and managing the custodial bank relationships to provide a basis for continuous improvement going forward and, more importantly, to codify the policies and processes for future Treasurers and Administrations.

Recommendations for Improvement

R3.4.4.1 The Treasurer of State and HPRS should develop a Memorandum of Understanding that documents current policies and procedures with respect to selection and oversight of the custodial bank to ensure that these effective processes that benefits HPRS remain in place, despite a change of Treasurer.

3.4.5 The Custody Model

Review the custody model used by the Ohio Treasurer of State as custodian of financial assets for HPRS and evaluate the oversight provided as compared against other public systems and best practices.

Review Activities

The FAS team reviewed the current custody model of HPRS under the Ohio Revised Code and compared it with practices at peer state retirement systems in the U.S. We interviewed HPRS executives, TOS Trust Department staff who oversee the custody relationships, and staff at the custodian bank; and utilized the FAS public retirement benchmarking knowledgebase to assess HPRS's custodial bank services.

Expectations

Prevailing practice for an integrated public retirement system and for public investment boards is for the Board of Trustees to approve the selection of the custodial bank and to oversee the ongoing relationship. Typically, the system staff, (upon approval by the Board and under the direction of the CFO, as explained above) prepares an RFP, receives proposals, evaluates the bids, and makes a recommendation to the Board for approval. A contract is typically for four or five years, with options for extensions. Funds do not want to change custodians frequently due to the high level of effort and disruption; nonetheless, it is important to do periodic RFPs to benchmark market service levels, fees, capabilities, legal terms, and pricing.

The Custody Model Standards of Comparison and Findings

As mentioned earlier, in recent decades, for public retirement systems, custody has expanded from safekeeping of securities to include many services that are essential to the smooth and effective functioning of today's public funds. As a result, nearly all states in the U.S. have transitioned the custodian responsibility to the fiduciary Board of Trustees who are entrusted with overseeing the fund assets.

Ohio is in a small minority of U.S. states (along with Iowa, Pennsylvania & Tennessee) where, by statute, the Fund cannot select the custodial bank for the state retirement system DB plans. FAS considers that a lagging practice. In each of these four states, selection of the custodial bank has been reserved by statute for the State Treasurer. While this can operate effectively, it depends significantly upon the relationship between the retirement system and the State Treasurer. As mentioned, the custodial bank is an integral part of the day-to-day operations of a public retirement system, and a third-party in between the investment operations staff and the custodial bank can lead to operational challenges unless all three parties are working in harmony.

There is no precedent of which we are aware where a private sector institutional investor has an external third party to select their custodial bank and manage the relationship and service standards. This is such a central investment operations function for any institutional investor that outsourcing the relationship management is not even a consideration in the private sector.

In addition, there are three states (Kentucky, New Mexico, and New York (for Teachers)) which, although the State Treasurer is the custodian of record, the Board of Trustees selects the custodial bank, either through statute or by delegation.

Among 43 Largest U.S. State Integrated Retirement Systems with an Investment Staff	Custodian of Record	Selects Custodial Bank
Treasurer	14	8 *
Board of Trustees	29	35

Peer Comparison of Custodian of Record and Custodial Bank Selection HPRS Compared to the 43 Largest U.S. State Retirement Systems

* Includes Iowa (1); Ohio (4); Pennsylvania (2); Tennessee (1)

Conclusions

As previously mentioned, leading practice would allow HPRS Board to select its custodian bank and HPRS staff to put in place the metrics and standards for governing the relationship. Having TOS act as an additional party to the custody process may also drive inefficiencies and duplicative tasks. However, in the case of HPRS, the Ohio-based rules are beneficial in providing the RFP process "service" and the oversight framework to manage the working relationship with PNC. Additionally, to date the three parties have worked well together and avoided any workflow conflicts.

Custodial Bank Selection

Ohio Revised Code Section 5505.11 states that "The treasurer of state shall be the treasurer of the state highway patrol retirement system and the custodian of its funds. All disbursements therefrom shall be made by him only upon instruments authorized by the state highway patrol retirement board and bearing signatures of the chairman, or vice-chairman in the absence of the chairman, and the secretary of the retirement system. Such instruments may bear the facsimile signature of the chairman of the board. No instrument shall be drawn unless it has been previously authorized by a specific or general resolution adopted by the board."

As a result of this statute, the contracting of custodial bank services is conducted on HPRS' behalf by the Treasurer of State (TOS), who also oversees the ongoing relationship between HPRS and its custodial bank.

The most recent search was conducted by the TOS in a very collaborative and timely manner, and HPRS was satisfied with both the selection process and the bank chosen. Although the RFP process was conducted for a bundle of nine Ohio systems (including HPRS) totaling \$187 billion in assets under management, custody services pricing was not favorably impacted (via cost sharing) for HPRS. The custody fees are addressed in section *3.4.2 Structure and Fees*.

Additionally, as addressed in section 3.4.1 Breadth of Services, HPRS receives a narrower range of services from its custodial banks than most state retirement systems due to its smaller scope and size and less-complex investment structure.

Recommendations

No recommendations at this time.

4. Legal Compliance

The Contractor will evaluate the adequacy of HPRS's legal compliance with applicable state and federal law and regulations. The evaluation will include an analysis of:

- 4.1 Legal compliance and adherence to IRS regulations;
- 4.2 Adequacy of internal and external counsel;
- 4.3 Adequacy of ethics training, disclosure, and monitoring of compliance; and
- 4.4 Board and staff compliance with legal requirements.

Legal Compliance Review Activities

We utilized the following sources of information to complete our assessment and comparison to leading, prevailing and lagging practices:

- IRS filings over the past three years;
- Most recent IRS Determination Letter;
- Example investment counsel due diligence memorandum;
- Clearstead contract;
- Model private transaction side letter form;
- Reports on fees and legal services obtained over the past three years;
- Ethics training materials used by system;
- Compliance reports on ethics training for Board members and staff;
- Interviews with legal, compliance and investment staffs; and,
- FAS project team experience and the FAS knowledge base.

The FAS team utilized interviews with internal and external legal counsel, peer information on level of legal staffing and external fees. We assessed the adequacy of legal services over the past three years. Using the information described above, the FAS team:

- 1. Reviewed communications with the IRS to identify potential compliance deficiencies;
- 2. Reviewed the process by which the system monitors compliance with IRS requirements and responds to compliance issues;
- 3. Assessed legal services in comparison to peers over the past three years;
- 4. Reviewed the ethics training and compliance programs, as well as compliance reporting processes, and compared them to leading practices; and,
- 5. Reviewed the legal due diligence process used by HPRS.

4.1 System Legal Compliance

Evaluate legal compliance and adherence to IRS regulations.

Expectations

Public pension plans like HPRS are typically considered governmental plans under Section 414(d) of the Internal Revenue Code and receive favorable tax treatment as a qualified employee retirement plan under Section 401(a) of the Code. Other laws may also confer tax exemption, such as IRC section 501(a) or implied statutory immunity. It is important for HPRS to ensure it meets the applicable tax qualification requirements to avoid exposing the plan employer and participants to payment of unnecessary taxes.

Public pension plans that obtain periodic confirmation of compliance with tax qualification requirements from either the IRS or outside tax counsel minimize the risk that the IRS will disqualify the plan on audit because the plan document does not satisfy the applicable tax-qualification requirements. Peers typically have a policy and process in place to address this.

Employee retirement plans qualified under section 401(a) of the Code must satisfy the Code's requirements both in form and operation. Prior to 2017, plans would request determination letters from the IRS to confirm that the form of the plan satisfies the Code's requirements. HPRS used to take advantage of this opportunity. However, in 2016 the IRS eliminated use of its determination letter process, except in certain limited circumstances. Public pension plans like HPRS now typically rely on outside legal counsel to advise on changes to federal tax law and on Code compliance when plan provisions are amended.

Public pension plans like HPRS may also have tax reporting obligations in foreign jurisdictions where investments are made or with respect to any entities wholly owned by the pension plan, such as real estate title holding companies. Determination of holding company and foreign tax exposure and compliance is usually handled by outside tax counsel in the relevant jurisdiction. Public pension plans usually qualify for tax exempt or other favorable tax treatment.

System Legal Compliance Standards of Comparison	Findings
Communications with the IRS regarding the system's qualification as a governmental plan qualified under 401(a) appear to be reasonable and consistent with leading practices.	Yes
Policies, procedures, and practices for monitoring compliance with Internal Revenue Code and foreign tax exposure requirements are reasonable and consistent with peer practices.	Partial

System Legal Compliance Standards of Comparison and Findings

Conclusions

HPRS does not have a formal tax compliance policy that provides for receipt of periodic assurance from outside tax counsel with respect to the plan's Internal Revenue Code compliance. However, since the plan has not been substantively amended since receipt of the last IRS favorable tax determination letter was received in 2017, HPRS legal staff has informally determined that the plan remains qualified for public pension plan favorable tax treatment.

We recommend that HPRS formalize procedures for obtaining periodic confirmation from outside tax counsel that the plan complies with Code requirements. While HPRS has relied upon outside advisers to handle foreign and title holding company tax compliance, the policy could also address procedures for addressing those tax exposures.

Recommendations for Improvement

R4.1.1 HPRS should formalize its tax compliance procedures in a policy that provides for periodic receipt of written confirmation from tax counsel that the plan qualifies for favorable tax treatment.

4.2 Legal Counsel

Evaluate the adequacy of internal and external counsel.

Expectations

Internal and external legal counsel play vital roles in helping retirement systems to manage risk, conduct legal diligence, ensure compliance with applicable laws/rules/regulations, support fiduciary oversight, and partner and support business units in implementing board policies and administering benefits.

The size of and internal expertise within legal departments at retirement systems can vary greatly depending on the size of the system, total staff, the complexity of its operations, and whether or not investments are managed internally. Similar size public retirement systems without significant internal investment management typically have an internal or external general counsel and rely heavily on outside legal counsel with subject matter expertise in areas relevant to the system's operations (e.g., benefits, investments, litigation, etc.).

At some funds, the compliance function is also supervised by the legal office. The general counsel is typically hired and supervised by the executive director (with input from the board) and serves as primary counsel for the executive director, staff, and board, with ultimate legal obligations to the system.

In a survey conducted by FAS, 93% of public pension plans reported that their general counsel was appointed by and reported to the executive director. Nevertheless, the position nearly always has "dotted line" reporting obligations to the board whenever legal compliance, legal staff conflicts of interest are present, or board fiduciary obligations to the fund and its beneficiaries are involved. The general counsel usually attends all board and most committee meetings as the board's advisor and primary counsel on pension law.

It is a prevailing practice for public pension funds to engage outside litigation, tax, and investment counsel, as well as other outside legal experts when circumstances require specific legal expertise. It is also a leading practice to engage independent fiduciary counsel, typically selected by the board with general counsel participation, who represents the board, but whose ultimate legal obligation is to the system. Fiduciary counsel can often be used to provide counsel to the board on matters where the general counsel has a conflict. In addition, outside fiduciary counsel typically advises the boards of multiple systems and has a broad understanding of peer practices. Fiduciary counsel may also assist with fiduciary and governance training.

While the Attorney General maintains control over public pension fund engagement of outside legal counsel in some states, prevailing practice is for public pension funds to be granted authority either by statute or delegation form the Attorney General to hire outside legal counsel.

Legal Counsel Standards of Comparison and Findings

Legal Counsel Standards of Comparison	Findings
The legal function is staffed appropriately.	Yes
The Board has access to its own independent counsel, as necessary.	No
Outside counsel is qualified.	Yes
Outside counsel is utilized when there are internal experience, capability, or capacity gaps.	Yes
A pool of outside counsel firms is identified, and agreements/contracts are in place before specific needs arise to ensure timely support is available.	Yes
Legal fees appear to be reasonable in comparison to peers.	Yes

Conclusions

HPRS legal staff consists of a 0.5 general counsel position plus a paralegal. Because of HPRS' small staff size and business model that emphasizes reliance on outside service providers, legal functions appear to be reasonably staffed at this level and are consistent with similar size peers.

HPRS legal staff appear to be well qualified. Outside counsel firms are also experienced legal advisors to public pension funds in their respective areas of expertise. They have been retained for matters where internal counsel does not have the necessary capacity or expertise. Although this FAS review was not a fee audit, overall legal fee levels appear to be reasonable and in line with peer expenditures.

However, section 5505.23 of the Ohio Revised Code provides that the attorney general shall be the legal counsel to the Board. The attorney general's office has assumed responsibility for selecting outside counsel and approving billing rates and invoices from outside counsel. HPRS does not have the authority to control engagement and supervision of its own counsel.

Although HPRS does not see the current process as problematic, it is a lagging practice amongst peer funds and could become problematic if the Attorney General, key personnel or practices change. Pushback from the Attorney General on fees charged by highly specialized outside counsel could compromise HPRS' ability to obtain adequate representation in complex investment transactions. That presents the potential for future compromise of the duty of prudence. We recommend that the Board either collaborate with other Ohio public pension systems to seek a statutory change or engage with the Attorney General over negotiation of an acceptable Memorandum of Understanding that better aligns fiduciary responsibilities with delegated authority.

Recommendations for Improvement

R4.2.1 HPRS should seek legislative authority to select external legal counsel for investment and fund management matters, or engage with the Attorney General about formalizing a Memorandum of Understanding that provides a process which recognizes the fiduciary duties that HPRS has in selection of and contracting with outside legal counsel.

4.3 Ethics

Evaluate the adequacy of ethics training, disclosure, and monitoring of compliance.

Expectations

Prevailing practice at peer public retirement systems is to have conflict of interest policy and a separate code of ethics or code of conduct. Typically, there are also state statutory requirements and often ethics disclosure and reporting requirements.

A code of ethics, along with a standards of conduct policy, will typically include guidance on board confidentiality, conflicts of interest, financial disclosures and/or statement of economic interests, insider trading and material non-public information, whistleblower process, referral of investment opportunities and service provider candidates, and undue influence.

Training in these important topics for trustees is generally included during an initial onboarding process and then on an annual basis to ensure that it remains fresh in the minds of each trustee. To the extent that any policy changes are made, these are communicated immediately as they take effect.

Monitoring of board compliance with statutes and policies is often monitored by a state ethics commission or panel, or sometimes by the State Auditor. In other cases, boards self-monitor. It is important that there is a monitoring and reporting process in place to ensure that ethics and conduct standards are adhered to.

Ethics Standards of Comparison and Findings

Ethics Standards of Comparison	Findings
Sufficient opportunities are provided to Board members and employees so that they may meet their ethics training requirements.	Yes
There is a robust investment ethics compliance reporting system that appears to be operating satisfactorily.	Partial

Conclusions

Section 171.50 of the Ohio Revised Code requires the Ohio retirement systems to jointly develop a retirement board orientation program for new trustees and a continuing education program for trustees that have served more than a year. The orientation program and the continuing education program must both incorporate ethics considerations. New trustees must complete the training within 90 days of their election or appointment. Trustees that are not newly elected or appointed must participate in at least two continuing education sessions per year.

Section 5505.063 of the Ohio Revised Code (the "Code") requires the HPRS Board, in consultation with the Ohio Ethics Commission, to develop an ethics policy governing the Board and HPRS employees. The Board has accordingly adopted a Board ethics policy with standards of conduct and travel reimbursement provisions (Admin. Code 5505 9-02) and an employee ethics policy. The Code also requires HPRS to

periodically provide ethics refresher training to Board members and employees. HPRS trustees and employees attend biennial training sessions to meet that requirement.

HPRS has ethical standards of conduct in place and provides regular ethics and fiduciary duty onboarding and continuing education training. While HPRS cooperates with the Ethics Commission on monitoring and enforcement of ethics standards, there is no dedicated internal HPRS compliance function. We recommend that ethics and standards of conduct policy compliance monitoring and reporting duties be explicitly assigned to a board committee and incorporated into an internal compliance reporting program that is assigned to a staff position.

Recommendations for Improvement

R4.3.1 HPRS should assign monitoring and reporting on compliance to a staff member who assumes overall compliance program responsibilities; a Board committee should also be tasked with compliance oversight for the board.

4.4 Board and staff compliance

Evaluate Board and staff compliance with legal requirements.

Expectations

Fiduciary duty requires that funds exercise prudence in both selection, instruction and oversight of agents when delegating duties to staff, outside managers and other agents. This includes monitoring compliance with associated contracts and policies.

As noted in Section 4.3, board compliance oversight obligations extend beyond investment approvals to include compliance with standards of conduct, conflicts of interest, travel cost reimbursements, statutory mandates and other matters. While many peers combine compliance with internal audit, leading practice is to keep the two functions separated in order to preserve independence of the internal auditor, who may also be responsible for auditing compliance. When not combined with internal audit, peers vary on where the compliance function reports, with some reporting to the executive director, general counsel, audit committee or elsewhere. In any event, compliance responsibilities should be delineated and assigned.

Board and Staff Compliance Standards of Comparison and Findings

Board and Staff Compliance Standards of Comparison	Findings
There is a comprehensive set of policies that define required practices.	Yes
A Chief Compliance Officer leads efforts to monitor compliance and has ready access to the Board, as necessary.	Partial
The compliance function is adequately staffed or is supplemented by external resources to meet requirements or obtain specialized capabilities.	Partial

Conclusions

As noted elsewhere, the HPRS Board and Investment Committee have retained authority to approve external investment managers. While most large public pension plans have delegated almost all investment authority to staff, the majority of boards at peer funds of HPRS size that outsource nearly all investment responsibilities also retain investment manager approval authority. [See Section 1.8.]

FAS reviewed a sample of key Board delegations and related contracts to determine compliance with the legal requirements and policies. Among other things, fiduciary duties require that investment decisions and the exercise of other discretionary powers be done prudently. Documentation of the basis for investment management decisions is essential to demonstrate compliance with this duty of prudence.

HPRS lags its peers in oversight of, and reporting on, compliance. We recommend that HPRS address this issue by establishing and resourcing a compliance monitoring and reporting function. Compliance duties should be assigned to a staff position and a Board committee should be tasked with advising the Board regarding compliance oversight responsibilities.

Given the extensive investment authority that has been delegated to the HPRS investment adviser (Clearstead) and the board's resulting reliance on Clearstead, documentation of the adviser's investment decisions is essential to demonstrate compliance with the duty of prudence. In addition, legal staff relies upon outside investment legal counsel to conduct the bulk of legal due diligence activities and negotiate terms of investment documents. File documentation of how those roles were implemented, as well as overall structure and terms of the investment, both demonstrates compliance and facilitates HPRS personnel transitions, changes in outside service providers, investment audits, and future understanding of deal negotiations in the event of litigation or document amendments.

Accordingly, we recommend that HPRS due diligence policies include file documentation standards to establish that investment, operational and legal due diligence have been prudently conducted (e.g., inclusion of (a) a pre-closing comfort letter from outside legal counsel confirming that appropriate legal diligence has been done in accordance with HPRS investment policies or (b) an annotated legal due diligence memorandum from outside legal counsel showing what document provisions were modified during transaction negotiation).

We also recommend that legal staff consider leveraging knowledge gained from its new membership in the Institutional Limited Partner Association (ILPA) and work with outside investment counsel and Clearstead to develop checklists that provide guideposts for service providers in conducting investment, operational and legal due diligence. In addition, legal staff should consider whether the potential benefits outweigh the added costs of authorizing outside investment legal counsel and Clearstead (as the primary HPRS agents in the conduct of investment due diligence) to directly communicate with each other and coordinate in their negotiation of deal documentation and fulfillment of due diligence obligations.

Recommendations for Improvement

- R4.4.1 HPRS should consider use of due diligence checklists and establishment of file documentation standards to demonstrate that appropriate investment, operational and legal due diligence have been conducted; materials confirming the roles played by Clearstead and outside investment legal counsel should be included in HPRS files. See also section 3.2.6.
- R4.4.2 Legal and investment staff should consider authorizing Clearstead and outside legal counsel to directly communicate with each other and coordinate in their negotiation of deal documentation and completion of due diligence on behalf of HPRS, subject to staff oversight.

5. Risk Management and Controls

The Contractor will evaluate the risk review and control procedures of HPRS. The Contractor will also evaluate the HPRS management process by analyzing, as appropriate, the essential components of its internal control structure. These components include segregation of duties, availability of information, timeliness, accessibility, and accuracy of information, policy manuals, supervision and review, audits, and training and planning. A review of this task area should also encompass an assessment of whether the pension system utilizes a holistic view of risk management.

The evaluation will include an analysis of:

- 5.1 The appropriateness and utility of regular reports provided to the Board and management, and how that reporting compares to industry standards and leading practices;
- 5.2 The adequacy of financial controls and integrity of financial statements. This includes an analysis of the purchasing policy and adherence to that policy;
- 5.3 The adequacy of the current accounting process;
- 5.4 Sufficiency of internal and external audit procedures; and
- 5.5 The adequacy of the record-keeping system.

Risk Management and Control Review Activities

FAS endeavored to review HPRS' approach to enterprise risk management (a holistic approach). Because of its overall importance to all public pension plans and the System's members and beneficiaries, we have covered a broad spectrum of disciplines in this section of the report.

The team conducted interviews with the Audit Committee Chair and all Audit Committee members, the Executive Director, the Director of Finance and Benefits, internal and external audit resources, and the CIO/GC. We also interviewed third parties, including custodial and investment advisor representatives.

We compared the HPRS's policies and procedures with leading practices at peer state retirement systems in the U.S., guidance promulgated by American Institute of Certified Public Accountants (AICPA), the Government Accounting Standards Board (GASB), and the COSO Internal Control Framework. We also examined HPRS' job descriptions for references to imbedded risk and compliance responsibilities given the absence of a defined 2nd line risk/compliance role within the organization.

In addition, we reviewed numerous years of internal audit reports from Summit and financial audits from Rea & Associates. We also reviewed the System's financial accounting and reporting policies, internal control documents, and other policies and practices documents.

We compared the system's policies and practices with guidance promulgated by The Institute of Internal Auditors, Inc. (IIA) in their International Professional Practices Framework (IPPF). We reviewed the Internal Audit charter, the audit risk assessment approach for prioritizing Internal Audit activities, and communications to the board. Our activities do not replace a formal external quality assurance review

(QAR) performed in conformance with IIA's International Standards for the Professional Practice of Internal Auditing (Standards).

We also conducted a review of the purchasing policy and purchasing card policy for compliance with policy and leading practices.

We utilized the following sources of information to complete our assessment and comparison to leading, prevailing and lagging practices:

- Risk Management Internal Control Policy;
- Purchasing and Purchasing Card Policies;
- Internal Controls Manual;
- External audit reports (GAGAS letters, Audit Reports and Opinion Letters) 2019 through 2022;
- Summit County internal audit reports for the prior three years;
- April 19, 2023 Board meeting materials;
- Records Retention Schedule;
- Interviews with Executive Director, Director of Finance and Benefits, CIO/GC, members of the Audit Committee, representatives from Summit County Internal Audit and Rea & Associates External Auditor, TOS and PNC Bank, and Clearstead;
- HPRS PNC Operating Procedures
- 2022 Audit Committee Charter and Workplan
- Numerous HPRS Job Descriptions
- FAS project team experience and the FAS risk and reporting knowledgebase; and
- InGov[®] and Fiduciary Priorities Surveys.

5.1 Financial Controls, Financial Statements, and Purchasing Policy

Evaluate the adequacy of financial controls and integrity of financial statements and financial reporting process. This should include an analysis of the purchasing policy and adherence to that policy.

Financial Controls

Assess the adequacy of the financial control framework, including segregation of duties, supervision and review, and audit activity

Expectations

Various governmental regulatory and self-regulatory bodies have promulgated internal control standards and guidance that comprise internal control frameworks. Public pension systems have taken the standards and guidance and frameworks and established policies and practices to create appropriate enterprise risk management structures. An effective internal control framework can be designed to reduce the risk of asset loss and help ensure that information is complete and accurate, financial statements are reliable, and its operations are conducted in accordance with the provisions of applicable laws and regulations. An effective system of internal control within the appropriate framework helps to protect the organization in two ways:

- By minimizing opportunities for unintentional errors or intentional fraud that may harm the organization. Preventive controls, which are designed to discourage errors or fraud, help accomplish this objective.
- By discovering small errors before they become big problems. Detective controls are designed to identify an error or fraud after it has occurred.

Internal control is a process effected by management and other personnel and overseen by those charged with governance. Internal control is designed to provide reasonable assurance regarding the achievement of objectives in the reliability of financial reporting. The organization's policies, procedures, organizational design, and physical security are all part of the internal control process. The following are some general characteristics of satisfactory internal control over financial reporting:

- Policies and procedures provide for appropriate segregation of duties to reduce the likelihood that deliberate fraud can occur.
- Personnel are qualified to perform their assigned responsibilities.
- Sound practices are followed by personnel in performing their duties and functions.
- A system that ensures proper authorization and recording procedures for financial transactions.

The Committee of Sponsoring Organizations of the Treadway Commission's (COSO) Internal Control — Integrated Framework (*Framework*) provides detailed information about internal controls. The COSO *Framework* has been recognized by external auditors, internal auditors, executives, board members, regulators, standard setters, and professional organizations as an appropriate and comprehensive framework for internal control. The *Framework* has three categories of objectives: reporting, operations and compliance.

The role of the external financial auditor is to communicate to the Board and others in the organization

whether there are certain deficiencies or weaknesses in internal controls over the plan's financial reporting. The external auditor is focused primarily on evaluating the accuracy and fairness of the financial statements, whereas an effective system of internal control for a pension plan should be designed to address all operations, all risks, and more than just financial reporting.

All external plan auditors follow Generally Accepted Auditing Standards (GAAS) as well as the GAO's Governmental Auditing Standards, which requires that "significant deficiencies" and "material weaknesses" (as defined) identified during the annual independent audit be communicated to the Administration/Audit Committee and management in writing.

These communications must be made every year in which a significant deficiency or material weakness exists, even if it has already been communicated to the organization in the past. These must include an explanation of the potential effects of the significant deficiencies and material weaknesses identified. Such communications will improve awareness of the importance of internal control over financial reporting, and to help assess the costs and benefits of implementing adequate controls, weigh the risks of each significant deficiency or material weakness, and determine if and how to address them.

In this respect, the role of the Board is to oversee the effectiveness of the system of internal control including establishing and promoting an effective "tone at the top".

Management's responsibility is to provide reasonable assurances to the Board that they have established control processes and procedures. Control activities include identifying and assessing risk, implementing controls to mitigate risks, and communicating activity to internal stakeholders and, if necessary, the Board.

Leading practice is to have executives and management certify their assurances to the Board and implement monitoring activities under the oversight of executive management. Such monitoring includes, for example, enterprise risk management and compliance activities. Key to these functions is risk identification, assessment, and mitigation. The leaders of these activities typically report to the executive director.

The role of the Internal Auditor (and others independent of operating management) is to provide independent reassurance about the reliability of management's assertions about governance, risk management and controls, including how management ensures compliance with policies, laws, and regulations. Internal Audit is not responsible for overall operational compliance, with the exception of its own compliance requirements for the internal auditing function.

The scope of Internal Audit work is determined through risk-based planning, resource allocation based upon risk levels and coverage by external auditors or other independent parties engaged by the Board or the state auditor's office and direction of the Board through the Administration/Audit Committee. Leading practice is for Internal Audit to liaise with external auditors and focus primarily on strategic, operational and compliance objectives.

Financial Controls Standards of Comparison and Findings

Financial Controls Standards of Comparison	Findings
There is a strong tone at the top emphasizing internal controls and that reinforces ethical behavior.	Yes
Senior management and staff appear firmly committed to doing the "right thing" for the members, employers, and the organization by adhering to the organization's Code of Ethical Conduct.	Yes
The Board relies on management to implement control processes and provide reasonable (but not absolute) assurances that the processes are functioning as intended.	Yes
Items that ought to be of concern to the Board follow a pre-determined escalation process.	Partial
The essential components of the financial control structure are consistent with peer pension and benefit systems and the essential components of the remainder of the control structure should be appropriate to the organization's purposes. For example, some pension systems manage the state employee health benefits systems, but most do not.	Yes
A process is in place, administered by an independent internal activity (usually internal audit) or external provider (or combination thereof), to allow for the reporting, evaluation, and disposition of suspected wrongdoing. This reporting is summarized, and the results are routinely reported to senior management and the board.	Partial

Conclusions

Overall, HPRS is a high performing organization with a strong tone at the top, middle and bottom. Governance, risk and compliance are taken very seriously and commitment to improvement is evident throughout. However, HPRS has lacked the development of capabilities in governance, enterprise risk management, and compliance for many years and largely lags in prevailing practice capabilities in many areas. In general, the organization has effective policies, processes and procedures to ensure that individual decisions are well considered and execution of those ensuring compliance with statutes and policies is consistently achieved.

Significant differences exist between HPRS' operating model and the "Three Lines" model according to the Institute of Internal Auditors. While an organization of smaller size such as HPRS would not be expected to follow the standard model largely because of economics, there are key lessons that the plan can learn and deploy to improve overall controls and risk informed decision making. Many of our conclusions and recommendations are offered to better align and standardize the 1^{st,} 2nd, and 3rd line responsibilities within the organization.

HPRS performs three principal business functions: Investment Management, Benefits Administration, and Healthcare Administration. Each of these is considered a 1st line function and are tightly controlled from

a segregation of responsibilities and checks and balances perspective to prevent inadvertent or fraudulent issues. Accordingly, the 2nd line is then comprised of all enterprise-wide functions such as Legal, IT, HR, Finance, and Accounting. Processes that fall under these functions are also well defined at HPRS. Additional key control functions such as Compliance and Risk Management, intended to provide an effective level of assurance and governance of the overall operation at a public pension plan, are much less developed at HPRS. In fact, the organization has not conducted a formal risk assessment in over a decade. The 3rd line, internal audit, is intended to offer independent verification and advice and is provided by Summit County Internal Audit. At HPRS, internal audit plans and activity are largely informed by the Executive Director and the Finance Director as opposed to the Audit Committee of the Board, thus bringing true independence into question.

HPRS Risk is guided by the Risk Management and Internal Controls Policy. The document describes four types of risk – Hazard, Financial, Operational and Strategic. More common designations of risk categories include Financial, Investment, Operational, Legal and Compliance, and Strategic. Core to a true Risk Management and Internal Controls Policy is the construction of an organization wide risk register, which contains the following:

- Description of Risk categorized by business or support functions, a description of risk and designation of type.
- Criticality of Risk a subjective triaged-based prioritization that differentiates critical risks from necessary risks and important risks.
- Primary and Secondary Impact of Risk Incident description of potential impact to the organization if risk were to transpire. Types of impact may include "reputation / headline, legal (statutory, legislative, contractual), investment (performance), financial, or organizational (HR related).

Historically, risk assessments had been largely subjective, including aspects of likelihood and impact. More recently, these subjective assessments have been replaced by a definition of risk that describes it as "deviations from actual performance regardless of cause". This approach is supported by the establishment of performance tolerances, often using a Red/Yellow/Green (RYG) stoplight format. Monitoring and reporting of actual performance against the tolerances over time is a leading practice for risk management and is a very useful basis for informing the development and execution of audit plans to address potential and evolving issues.

Accompanying the risk registers at leading asset management firms is a detailed description of their controls. Although considered a very high priority from a top-down perspective at HPRS, the details of key controls within processes described in the Internal Controls Manual are largely absent of details including an assessment of control strength and evidence of controls.

Finally, leading practice for public pension plans also references key risks within the organizational strategic plan, which is notably absent at HPRS.

In examining risk management, compliance and governance at HPRS, one finds an environment that is well intentioned but inconsistent when viewed from a bottom-up and top-down perspective. A strong culture of controls persists across key functional areas and can be evidenced in the steps of the processes. Examples include segregation of responsibilities, reconciliations, 2nd party verifications, and periodic

internal audits. This key focus demonstrates that HPRS has a clear and consistent focus over its bottomup processes – which for the purposes of this report is referred to as the "what" of control standards.

Comparatively, HPRS bottom-up functions are less informed by an overarching enterprise risk management and compliance overlay. The lack of a formal risk assessment and clear definition (and understanding) of risk appetite and criticality of risks lags its peers from a top-down, governance perspective. Creating and deploying these disciplines and guiding practices raises the understanding, effectiveness and efficiency of risk and control management by ensuring an overarching view of enterprise risk, known as the "why" or "so what".

FAS believes that HPRS may strengthen its governance without the need to establish new, segregated organizational positions to support risk management and compliance. Updating the organization's risk assessment, last performed in 2012, is an appropriate starting point to inform all staff and the Audit Committee of where the most critical risks to the organization reside. Deploying ongoing practices to monitor actual performance of functional operations against pre-defined tolerance levels is considered a simple, but powerful way to monitor evolving risks that can minimize potential future impacts and provide a robust assurance methodology that assures controls are operating as intended.

Recommendations for Improvement

- R5.1.1 Refresh the organization-wide risk assessment for HPRS, determine "vital sign" critical risk factors, and assign operational performance tolerance levels and strength of controls assessments to each.
- **R5.1.2** Expand the Risk Management Internal Controls Policy Document to describe new risk assessment and controls governance processes.
- R5.1.3 Monitor performance against tolerances for vital signs and develop a cadence of reporting to the Audit Committee; use the risk assessment and ongoing performance monitoring to inform the internal audit plan.

Financial Statements

Evaluate the integrity of financial statements and reporting

Expectations

The financial statement and reporting process is governed by standards set forth by the AICPA as well as the Governmental Accounting Standards Board (GASB). Furthermore, an independent public accounting firm performs an annual audit of financial statements as well as reviews its annual public disclosures contained within the Annual Comprehensive Financial Report (ACFR) of the Ohio Highway Patrol Retirement System. Ultimately, financial reporting should possess these basic characteristics: understandability, reliability, relevance, timeliness, consistency and comparability.

Financial Statement Standards of Comparison and Findings

Financial Statements Standards of Comparison	Findings
Financial statements and reports are provided to senior leadership frequently and the Board periodically.	Yes
The HPRS Comprehensive Annual Financial Report is issued within 6 months of their December 31, fiscal year end.	Yes
Financial statements are audited on an annual basis by a qualified independent auditing firm.	Yes
The external auditor's reports have not identified any material or internal control issues that would affect the integrity of the financial report.	Yes
The external auditors issue an annual report on "The Auditor's Communication with Those Charged with Governance" containing a Summary of Significant Accounting Estimates and the basis for their conclusion on the reasonableness of the estimates.	Partial
The Executive Director and Chief Financial Officer sign a Management Representation Letter as part of the issuance of the annual audited financial statements, confirming that all the information contained in the financial statements is true and correct and that all relevant disclosures of business practices and compliance with laws and regulations have been made.	Yes
Monthly reports are provided to senior leadership with discussion and analysis of various key financial indicators.	Partial
Monthly or quarterly budget analysis process is in place with reporting to management and the board.	Partial
Compliance with financial-related legal or contractual requirements is part of the financial reporting process.	Partial
Review procedures are up to date to ensure that financial staff are following approved procedures.	Yes

Conclusions

In accordance with the culture of HPRS to seek a high level of integrity and supporting details of financial transactions from the bottom-up, the production of financial reports, formal and informal alike, adheres to the important tenets of segregation of responsibility, proper checks and balances, and attention to detail. The underlying transactions that comprise monthly, quarterly, and annual reporting are well vetted and commonly subject to one or more reconciliation tasks. The proper attention to data integrity at the elemental level is the strongest contributor to ensuring that both official and unofficial reporting is largely free from errors and omissions, even though much of it at HPRS is largely manual in nature.

As described further in Section 5.4, HPRS' external auditor, Rea & Associates has performed an annual audit of financial statements in accordance with General Auditing Standards. Audits for fiscal years 2020, 2021, and 2022 have been clean with no deficiencies or weaknesses cited in the *Report on the Audit of the Financial Statement, Independent Auditor's Report* and the *Independent Auditors Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards".* The review is inclusive of supplementary schedules of administrative expenses, investment expenses, and payments to consultants.

HPRS' use of key financial indicators throughout the course of the fiscal year is limited to budget variances and investment performance. The former is subject to mandatory reporting if certain thresholds are breached. With respect to the latter, responsibility for the delivery of investment performance information is shared between Clearstead, the CIO and the Finance Director, keys to ensuring segregation of responsibility. Both are considered prevailing practices in the public pension plan space.

Recommendations for Improvement

R5.1.4 As part of a future initiative to potentially replace QuickBooks with a more modern and expansive accounting solution, incorporate requirements for automating the production of financial reporting at HPRS.

Purchasing Policies and Procedures

Evaluate purchasing policies, practices and compliance with policies

The FAS team compared policies, procedures, and compliance with prevailing and leading practices of state retirement systems in the U.S. Specifically, we reviewed the purchasing policy and any recent Internal Audit reports related to procurement activities. This review focused on major purchases for operations of the System and excluded investment purchases.

Expectations

Public pension systems are often required to comply with purchasing standards and requirements of the plan sponsor such as the state, county or municipal government. Nonetheless, purchasing policies and procedures should be designed to provide a single purchasing policy and process with centralized monitoring of completeness and compliance throughout the contracting process.

The standards promulgated by the plan sponsoring government may represent leading practice for purchasing. However, aspects of the purchasing and procurement activities of public pension systems are often not anticipated in the operations of the plan sponsor and therefore require the system to modify the application of such rules and regulations to enhance internal control and provide for effective and efficient procurement while also considering the fiduciary requirement to expend system resources for the exclusive benefit of plan members and beneficiaries.

Purchasing Standards of Comparison and Findings

Purchasing Standards of Comparison	Findings
The System has a written purchasing/ procurement policy.	Yes
The procurement process consistently includes:	
A minimum of three qualified bids or proposals	Yes
 An internal review of the proposer's qualifications, proposal, and fee schedule. 	Yes
 A determination that the proposal meets external laws and internal standards, mandates, and policies. 	Yes
 A written recommendation to, or approval by, the appropriate level of management. 	Yes
Appropriate legal counsel sign-off on compliance.	As Needed
Execution of a written agreement or contract.	Yes
Workflow functions support development of new contracts and allow electronic approvals according to delegated authorities.	Partial
Automated support for development of Requests for Proposal (RFPs).	No

Purchasing Standards of Comparison	Findings
Standard contracting terms and conditions checklists are provided for each type of procurement in a central repository.	Partial
Contract expiration dates are automatically monitored, and HPRS staff are alerted appropriately in advance and proactive consideration is given to expiring contracts.	Yes
Compliance with the policies and procedures is monitored.	Yes
Approval authorities are clearly defined by department and management level to facilitate efficient procurements with appropriate levels of control.	Yes
Major purchases are included in the budget approved by the Board.	Yes
The general counsel collaborates to ensure consistent contracts.	Yes
Vendor performance is monitored and compared to the contract terms.	Partial
Purchasing activities are reported separately from accounts payable to ensure appropriate segregation of duties.	Yes

From a leading practice perspective, Ohio HPRS boasts of a highly granular and tightly controlled purchasing policy. In fact, the organization maintains two distinct purchasing policies. The first, entitled Purchasing Policy, seeks to ensure effective budgetary controls and compliance with laws and rules. Requirements that establish a competitive bidding process and/or formal purchase orders are well defined, with the notable exception of purchases below a low dollar threshold or those made in accordance with an agreed-upon emergency. The policy also requires a mandatory requirement for rebid after five years. Key responsibilities for the Finance Director, Executive Director and Board are specified in accordance with key variables that include dollar thresholds, budgeted versus non budgeted expenses, anticipated cost variances, and others.

Leading practices that can be observed within the policy document include (1) specific rules and levels of supervisory controls based on dollar value of purchases; (2) defined processes for budgeted, unbudgeted and emergency-based purchases; (3) specifications for mandatory renewal periods; (4) payment of invoices subject to acceptability / approval of goods and services received; and (5) protections against fraud through strong segregations of responsibility.

The second purchasing policy document pertains to the use of the HPRS issued credit card for small dollar purchases (< \$1000) or for travel. A direct link to both the Travel and Expense policies are included in the description. While considerably briefer than the purchasing policy document, its existence adds another layer of control and guidance for both board members and executive staff that promotes accountability and transparency, including potential ramifications for non-compliance.

Conclusions

HPRS procurement policies and processes are considered fundamentally sound. The policies are updated regularly, and the processes contain key checks and balances throughout. One observation is that the Internal Controls Manual dedicates a section to the procurement policy and another to the procurement card policy. Within the controls document, these sections appear identical to the language contained

within the policy documents themselves; however, they lack specific language regarding control descriptions, evidence of controls, and an assessment of control strengths. Assessing control strength may be accomplished using standard practices in the industry based on control design and operating effectiveness. Emphasizing these three key aspects of the process would better augment what HPRS has already included within their policy documents.

Recommendations for Improvement

- R5.1.5 Enhance the language about purchasing and purchasing card policies within the Internal Controls Manual document to include descriptions of controls, evidence of controls, and an assessment of control strength (weak, adequate, strong) based on a formulaic assessment.
- R5.1.6 On a periodic basis, but no less frequently than biennially, have internal audit (Summit County Internal Audit) perform a sampling of purchases to assure adherence to policy.

5.2 Accounting Processes

Evaluate the adequacy of the current accounting process.

Expectations

Financial accounting information must be assembled and reported objectively and in the context of industry norms. For this reason, financial accounting relies on "Generally Accepted Accounting Principles" (GAAP). GAAP principles include:

- **Regularity:** Regularity is defined as conformity to enforced rules and laws.
- **Consistency:** The consistency principle requires accountants to apply the same methods and procedures from period to period.
- **Sincerity:** The accounting unit should reflect in good faith the reality of the company's financial status.
- **The Permanence of Methods:** This accounting principle aims to provide coherence and allow comparison of the financial information published by the company.
- **Non-Compensation:** One should show the full details of the financial accounting information and not seek to compensate (offset) a liability with an asset, a revenue with an expense, etc.
- **Prudence:** All reporting of financial data is to be factual, reasonable, and not speculative and aligned with industry accounting norms. Typically, revenue should be recorded only when it is certain, and a provision should be entered for an expense which is probable.
- **Continuity:** When stating financial information, one should assume that the business will not be interrupted, I.e., it is a going-concern.
- **Periodicity:** Each financial accounting entry should be allocated to a given period and split accordingly if it covers several periods. If a client pre-pays a subscription (or lease, etc.), the revenue given should be split over the entire timespan and not accounted for entirely on the date of the transaction.
- **Full Disclosure/Materiality:** All material⁴ financial accounting information and values pertaining to the financial position of a business must be disclosed in the records.

⁴ Materiality is a modifying convention and subjectively determined. If the difference in reported financial condition or operations is not material between two alternative accounting principles, then management is free to decide which principle is applied. The concept of cost/benefit often is a consideration in making the decision.

Accounting Processes Standards of Comparison	Findings
There is an adequate accounting system that is the repository of all accounting transaction information and provides effective accounting reports, providing various journals and ledgers that are appropriate to the needs of the System.	Yes
The accounting and investment operations are adequately staffed to provide:	
 A robust financial function with investment middle office (e.g., capital calls, liquidity management, counterparty risk) and back office (e.g., investment accounting, valuation, performance reporting) capabilities; 	Yes
Effective internal controls and segregation of duties; and	Yes
 Opportunities for key person backup, cross-training, and career development. 	Partial
The organization structure effectively supports segregation of duties to enhance internal controls.	Yes
Securities prices provided by the custodian are from independent sources.	Yes
Annual external audits result in unmodified opinions.	Yes

Accounting Processes Standards of Comparison and Findings

Conclusions

Accounting and related processes and financial controls at HPRS are well documented within numerous documents including the HPRS Accounting Policy & Procedures, the HPRS Purchasing Policy and the Internal Controls Manual. The level of details in these documents is highly thorough not only from a procedural perspective but also as it relates to imbedded control structures throughout end-to-end processes. Accounting is appropriately governed by four overarching tenets – segregation of responsibility, proper authorization, adequate documentation and effective physical security of assets. Each of these themes is imbedded and evidenced throughout the details of the aforementioned documents.

The breadth of financial transactions that are described in the documents and that feed the HPRS accounting ledgers is expansive and complete. They range from investment transactions, cap stock activity, funds transfers, accounts payable and purchasing, human resources based financial transactions (i.e., payroll and travel reimbursement) and benefits administration. Roles for counterparties in performing financial transactions or assurance functions are also clearly defined on a transactional basis where applicable. The path from initiating financial transactions through the generation of journal entries, accompanied by the consistent application of strong controls (I.e., multiple reconciliations both before and after the fact, imbedded checks and balances), ensures an end accounting record for the system with a high degree of integrity and accuracy.

With attention to detail using a bottom-up approach, HPRS employs a very high standard of care over its financial and accounting operations. The breadth and depth of accounting process and control documentation at HPRS is arguably as robust as one would expect to find at a much larger and complex public pension plan. Emphasis on segregation of responsibility, proper authorization, accountability, and authority across the spectrum of inputs to the organization's books and records can be found in both the

HPRS Accounting Policy & Procedures and the Internal Control Manual.

Moreover, the documentation and standards of performance are extended to key roles for external stakeholders including external investment managers, PNC (custodian), and Treasurer of State, as examples. Although many of the operations documented contain many steps and handoffs that are quite manual in nature, the steps are thoughtfully crafted to ensure effective controls in both a preventive and detective fashion.

Detailed process documentation suggests a high degree of manual processing, which although traditionally error prone compared to automated alternatives, is well mitigated by what can be described as numerous (checks and balance) assurance steps imbedded within end-to-end accounting and financial processes. As part of a potential future initiative to convert general ledger platforms from QuickBooks to MS Dynamics (or an alternative solution), HPRS is completing its process analysis across all end-to-end processes to better leverage automation, streamline operations, and strengthen controls.

FAS observes that HPRS' external auditor, Rea & Associates, has consistently reported a clean audit in their review of both internal controls of financial reports and the tests of compliance & other matters over the past three years. The results of the audit are testimony to the effective design and operational strength of the control structures, culture, and tone from the top at HPRS.

Recommendations for Improvement

R5.2.1 HPRS should seek to transition manual processes at PNC to better leverage the custodian's new client portal. See R3.4.1.1

5.3 Reporting to the Board

Evaluate the appropriateness and utility of regular reports provided to the Board and management, and how that reporting compares to industry standards and best practices.

Expectations

Overall, management's reports are structured so that information is easily accessed. Information is clear and accurate, and the Board annually, at a minimum, has the ability to discuss staff and third-party reporting and to ensure that it meets the needs of the Board.

In advance of each Board or committee meeting, materials are provided to each trustee electronically through a Board portal. Initial materials are provided at least a week in advance of the meeting; any subsequent modifications to reports, which are infrequent, are uploaded to the portal with a notification to each trustee about the nature of the changes.

For key strategic or policy decisions, the board is presented with the range of options available, the related pros and cons of each option, and management's recommendation. It is a leading practice to have a systematic process for engaging the board and its committees in identifying and evaluating policy options.

For oversight of system operations, exception-based reporting (sometimes called "dashboards" or scorecards) is utilized to highlight when any goals are not being met, with the ability of the to drill-down into details as desired.

All reports are as free from jargon as possible, and terms are well explained. Reports are discussed in a manner that is comfortable for Trustees to ask fundamental questions to support Board understanding. All conclusions are clearly stated in plain language, whether in oral discussion or in written reports.

It is the Executive Director's responsibility to understand the needs of the Board and to understand the expectations of staff and third parties. Reporting on matters of importance are part of the Board's annual calendar and the Board knows when to expect certain information and presentations. This annual scheduling cascades to the schedules for committee work and contracting with third parties for annual audits and reviews. A standard board calendar enables the Board to ask for certain education or supplementary information in advance of important presentations and votes.

Reporting Standards of Comparison and Findings

Reporting Standards of Comparison	Findings
An electronic board portal is used to provide easy, secure access to all board reports and facilitate linkages to more detail and prior reports, as appropriate.	Yes
Reports to the Board are consistently relevant, accurate, and reliable.	Yes
Reports are linked to the strategic plan and strategic objectives.	Yes
Reporting dashboards provide an overview of performance and trends for key metrics.	No
Performance reports are structured to provide a summary level understanding with an ability to drill down to details where appropriate.	Yes
The Board clearly articulates the acceptable range of expected performance and the limits, both positive and negative, that require performance to be brought to the Board's attention.	Partial
All reports to the Board highlight performance that is outside expected limits through the use of exception-based reporting.	Partial
Reports focus on variance analysis that describes why performance is outside the expected "normal range" and what management is doing to rectify any poor results.	Partial
The Board periodically reviews all regular reports with staff and identifies opportunities to improve or streamline reporting and eliminate unnecessary reports.	Νο
The reporting process is periodically independently reviewed by the internal audit function to determine reliability.	No
Board members are adequately educated so that they are financially literate generally about pension system financial requirements, risk management, and the importance of consistent and reliable controls within the system, so that they understand the reporting and could ask meaningful questions.	Yes

Conclusions

The HPRS Board utilizes a Board portal, a confidential section of the HPRS website, primarily for transmission of the Board agenda and accompanying materials to trustees in advance of each meeting. Board books are distributed at least a week in advance of meetings. Trustees have the opportunity to ask questions of staff in advance of the meetings. When updates to the original materials have been made they are highlighted in the subsequent versions.

Board meeting materials are retained in the Board portal for a year and are organized by meeting date and committee. There is not a key word search capability so trustees need to know when a topic was discussed if they are searching through the archives.
All of the trustees expressed satisfaction with the materials provided by management and key service providers. The summaries provided by the Executive Director are considered helpful. Board members said there is enough detail available to be informed and to ask good questions.

The general reporting approach by management for oversight is to report on an exception basis when performance is not what is expected. Formal limits have been identified for budget reporting and procurement. Exception reporting in other areas is less formal.

- R5.3.1 Information contained in the Board portal should be expanded to include Board policies, training materials, and other reference documents to improve access; the portal should have search capabilities.
- R5.3.2 Periodically, perhaps at the annual Board off-site meeting, there should be a discussion about the reports received by the Board, including potential useful new reports to be added as well as any reports that could be eliminated due to minimal utility.

5.4 Internal and External Audit

Evaluate the sufficiency of internal and external audit procedures

Internal Audit

Expectations

Internal Audit (IA) is one of several sources available to the Board for independent reassurance regarding the reliability of operating management's assurances. IA also consults with operating managers to improve controls. Guidance and certifications for Internal Audit, primarily the CIA and CISA designations, are promulgated by the Institute of Internal Auditors (IIA) and the Information Systems Audit and Control Association (ISACA), respectively.

The IIA's International Standards for the Professional Practice of Internal Auditing (Standards) focus is on Internal Audit management and performance of Internal Audit activities. Likewise, ISACA's Information Systems (IS) Audit and Assurance Standards focus on the minimum level of acceptable performance required to meet the professional responsibilities set out in the ISACA Code of Professional Ethics. Additionally, the GAO's Generally Accepted Government Auditing Standards (GAGAS) focus on the delivery of performance audits, attestation engagements and financial audits. Occasionally, State Audit Offices are directed to comply with GAGAS.

A leading practice for quasi-government and non-government entities is to conform with the IIA's *Standards* unless otherwise directed by legislation. The *Standards* are part of the IIA's International Professional Practices Framework (IPPF) which also includes the Mission and Definition of Internal Audit, Code of Ethics, Core Principles, *Standards*, and recommended guidance for performing Internal Audits.

The purpose of Internal Audit is best captured in the IPPF's mission of Internal Audit, definition of Internal Audit and core principles for the professional practice of Internal Auditing.

<u>Mission of Internal Audit</u> - To enhance and protect organizational value by providing risk-based and objective assurance, advice, and insight.

<u>Definition of Internal Audit</u> - Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.

Core Principles for the Professional Practice of Internal Auditing

- Demonstrates integrity.
- Demonstrates competence and due professional care.
- Is objective and free from undue influence (independent).
- Aligns with the strategies, objectives, and risks of the organization.
- Is appropriately positioned and adequately resourced.
- Demonstrates quality and continuous improvement.
- Communicates effectively.

- Provides risk-based assurance.
- Is insightful, proactive, and future-focused.
- *Promotes organizational improvement.*

For a public pension board of trustees to obtain effective independent reassurance from Internal Audit, leading practice is for Internal Audit to implement a program that includes:

- Governance practices approved by the board;
- An environment that is ethical, independent, and objective;
- Risk-based approaches;
- Competent people;
- Adequate tools; and,
- Quality and continuous improvement ⁵

Internal and External Audit Standards of Comparison and Findings

Internal and External Audit Standards of Comparison	Findings
The Administration/Audit Committee of the Board has a committee charter (AC Charter).	Yes
The Board or Administration/Audit Committee are actively engaged with the Chief Audit Executive (CAE) and provide direction and oversight to the CAE, including reviewing and approving the annual internal audit plan, and reviewing results.	Partial
The Board has hired a competent CAE.	No - Outsourced
There is a control environment and tone at the top that enables the Internal Audit Department to be ethical, effective, independent, and objective.	Yes
There is an Internal Audit Charter (IA Charter) that describes the roles and responsibilities of the CAE and the internal audit function.	Yes (through Summit)
The CAE and Board have established a quality and continuous improvement program.	No
The CAE has implemented a risk-based approach to audit planning.	No
A quality assurance review (QAR) is conducted on a regular basis	Partial
Tools used by the CAE appear to be appropriate.	Yes

⁵ The Institute of Internal Auditors, website <u>https://www.theiia.org/en/standards/what-are-the-standards/</u>

Conclusions

Ohio HPRS has outsourced its internal audit function to Summit County (Ohio) internal audit. The vendor has served HPRS for eleven years, following the completion of an Ohio HPRS risk assessment, in lieu of retaining an internal audit function within the organization. This operating structure is clearly advantageous, providing access to well-trained auditors and certified audit leadership, who possess the scale to serve HPRS and many other organizations (i.e., school systems, county agencies) on an economically advantageous basis. Ohio HPRS engages Summit County Internal Audit via Inter Governmental Agency Agreement. To create a comparable function internally, HPRS would likely need to increase their current headcount by 20% or more.

According to the Ohio HPRS Internal Controls Manual (2022), the role of internal audit is described as -

The internal auditor is responsible for performing internal audits at HPRS. Internal audits assist management by providing independent and objective analyses of activities and controls. Audit scopes can range from a single process to all business activities. The internal auditor makes recommendations as a result of those analyses. Internal Audit makes regular reports to the audit subcommittee of the Board of Trustees and the Executive Director on the results of internal audits and the completion status of audit recommendations.

The internal auditor focuses on both financial reporting and regulatory compliance risks facing the Organization. A risk assessment is performed and testing procedures are designed around that assessment. The internal auditor will work with management in designing and updating internal control procedures to improve effectiveness and efficiency. Primary responsibilities include:

Compliance audit: review and analysis to determine whether HPRS is adhering to laws, regulations, policies and procedures (Ohio Revised Code section 5505).

Internal control review: examines and evaluates systems of internal control; ensures reliability and integrity of information, compliance with policies, plans, procedures, laws and regulations; safeguarding of assets; economical and efficient use of resources; and accomplishment of established objectives and goals for Highway Patrol Retirement System Internal Controls Manual operations and programs.

Reporting: communicates audit results via written reports and oral presentations to HPRS Audit Committee.

Summit County's auditors follow a common process for conducting their audit on an annual basis. After initial scoping meetings with the Head of Finance and Benefits Administration in the spring, the Auditors meet with the Executive Director to confirm a confined set of business operational functions for the upcoming audit. These can be informed by changes in regulation or legislation since the prior year's review. Audits are being conducted onsite over a period of a few weeks following the publication of the external auditor's report in early summer. The publication of the external audit control objectives can inform Summit of the work ahead, but it is rare for the internal and external auditors to be in communication with each other. Year end audit reports are distributed to the Executive Director in the late fall and delivered and presented to the HPRS Audit Committee at (calendar) year end.

On a five-year rotating basis, the general areas of review by Summit County include:

- Ohio Revised Board Compliance
- Investment Houses audited the investment managers.
- Accounts Payable and Receivable
- Healthcare and Benefits
- IT Security

Additionally, the internal auditor will perform a post-audit review of the implementation and operation of major initiatives, as they performed recently for the Medicare Healthcare conversion effort. Summit also executes standard reviews of external manager fees for new managers that have been added during the prior year. Summit County does not perform any advisory work for HPRS.

Although the outsourced internal audit operating model provides an economically advantaged, valuable service for HPRS, there are some structural and operating aspects of it that lag other public pension plans:

- Summit County primarily takes direction from HPRS executive management. In a true three-lines (of defense) model, the internal audit role (3rd line) reports directly to the Audit Committee in the development of the annual audit plan and in the reporting of results. The intermediation of the relationship between the internal auditor and the Audit Committee of the Board effectively relegates Summit County to a 2nd line assurance function (such as a compliance or risk management role) more than a truly independent 3rd line audit function.
- The Audit Committee takes a more reactive approach to overseeing internal audit. Although the auditors are complimentary of the Audit Committee's participation and questioning, they traditionally meet with them only once or twice annually during the presentation of the results of the annual internal audit. The leadership of an internal audit organization typically attends all Audit Committee meetings.
- It is prevailing practice for the annual audit plan to be informed by a pension plan's overarching
 risk assessment. HPRS has not formally conducted a risk assessment since 2012. A living risk
 assessment is essential to understanding the "vital signs" of the organization, and as importantly,
 the performance of the operation as compared to pre-established and acceptable tolerance
 levels. Performance deviations from tolerance or the absence of effective controls inform the
 basis of risk for the organization from which annual audit plans should cascade.
- Leading practice for internal audit prescribes a complementary role in providing advisory support services for strategic or transformational initiatives prior to and during implementation.

- R5.4.1 Refresh the 11-year old audit risk assessment for HPRS and include key aspects of Investment Risk, Compliance Risk, Operational Risk, Technology Risk, and Strategic Risk; provide a refresh of the risk assessment no less frequently than every five years.
- **R5.4.2** Monitor and report performance internally and to the Audit Committee on a regular basis.
- **R5.4.3** The Audit Committee should play a more proactive role in reviewing and approving the audit plan; internal auditors should interact directly with the Audit Committee.
- R5.4.4 Engage Summit County, as needed, to perform advisory work on upcoming and in-process initiatives to ensure that policies are developed and control structures are designed into new operating processes.
- R5.4.5 Request that Summit County provide HPRS with notifications of changes in personnel (including certifications acquired, hirings, transitions) for senior management, client relationship management and assigned auditors.

External Audit

Expectations

The United States Government's Department of Labor developed guidance on selecting external auditing firms for the purposes of auditing employee benefits. In addition, the American Institute of Certified Public Accountants (AICPA) has established the Employee Benefit Plan Audit Quality Center, a firm-based voluntary membership center for firms that audit employee benefit plans to help ensure quality audits and provide resources to its members.

Based on these sources, guidance focuses on these selection criteria:

- The personnel, size, and reputation of the firm in the industry;
- The firm's clientele;
- The firm's proven and demonstrated experience in examining the financial statements of a state or local governmental employee retirement agency; and,
- The firm's audit methodology, audit approach and use of information technology tools.

External Audit Standards of Comparison and Findings

Standards of Comparison	Findings
The independent external auditor firm is selected and approved by the Board or its Administration/Audit Committee	No
The external auditors meet with the Administration/Audit Committee periodically throughout the year to discuss:	
Audit plans,	Partial
Audit results and reports,	Partial
 Any material findings and recommendations. 	Yes
Proposed audit adjustments are few, if any.	Yes
The external auditor meets with the Audit Committee in executive session, without system staff present, at least once annually.	Yes, as needed
Audits are completed on a timely basis.	Yes
Annual audit opinions are clean and not modified.	Yes

Conclusions

Ohio HPRS contracts with Rea & Associates for external auditing needs. The Ohio State Auditor's Office selected Rea & Associates via a formal bidding process in the Fall of 2020. Their current contract spans four years.

Currently the auditor supports the review of annual financial statements, which are developed and presented at fiscal yearend in the summer. The auditor is required to submit the annual financial statement audit to the Auditor of State. Rea & Associates commonly performs a desk review before the audit is released to the public. The auditor possesses a strong relationship with the HPRS Board's Audit Committee, which includes the following practices:

- a. Sometimes present pre audit
- b. Speaks with audit committee about potential issues before the audit process
- c. Holds direct communication if need be
- d. Presents end of audit present audit results

The audit itself is conducted over a three-to-four-month process during the first six months of the year. Rea & Associates may occasionally attend Audit committee meetings outside the cycle, which is not atypical. The audits performed by Rea & Associates are well aligned to leading practices in the industry, and communication with the staff is considered timely and positive. The external auditors have not found any deficiencies, significant deficiencies, or material weaknesses in their recent audits.

The external auditors are not currently engaged by Ohio HPRS for other types of audit reviews that are common to other clients. Notable examples that are highly applicable at HPRS today would include cybersecurity reviews and enterprise risk management assessments. While not a specific recommendation at this time, HPRS may wish to engage its external auditor when it believes it to be beneficial to perform a more forensic examination of high-risk aspects of the operation.

We found no exceptions to the standards of comparison listed above for external audit.

Recommendations for Improvement

No recommendations at this time.

5.5 Record-keeping systems

Evaluate the adequacy of record-keeping systems

Expectations

The purpose of an effective enterprise-wide record-keeping program is to promote efficient administration, compliance, management and retention of the records. The program also supports past and present reported assets and liabilities, investment decisions and performance and member services.

- Prevailing practices for records management activities include ISO 27001 as an Information Security Management Systems standard that incorporates several management, physical, and technical controls. The standard provides guidelines and principles to enhance security and protection in the Records Management Lifecycle.
- AICPA discusses the importance of designing security and privacy into an organization's records management program and how security and privacy are accomplished using Generally Accepted Privacy Principles (GAPP).
- DoD 5015.2 (Department of Defense) standard provides implementation and procedural guidance on the management of records and record-keeping systems. DoD 5015.2 is the de facto standard for Records Management tools.

Note: In Section 6, we also discuss HPRS procedures for electronic records compared to EBSA Cybersecurity Program Best Practices. Please refer to section 6 and in particular "Review IT Security and Confidentiality of the Records Systems."

Record Keeping Standards of Comparison	Findings
A record-keeping plan with scope, objectives and clearly understood applicable regulatory obligations.	Yes
A governance model for managing record-keeping policy and providing oversight.	Partial
An enterprise-wide taxonomy and inventory including the following:	
Definition of a record.	Partial
Classifications for records.	Partial
 Retention schedule based upon record classification and format (paper and digital). 	Partial
A disciplined approach to the management of the retirement system's records to include:	
 Policies and procedures to comply with all legal and regulatory requirements and the retention of multiple copies and formats. 	Yes
Guidance for destroying and transferring records.	No

Record Keeping Standards of Comparison and Findings

Record Keeping Standards of Comparison	Findings
Guidance to secure records per applicable regulations.	Partial
Procedures to retrieve information.	Partial
Training and awareness to educate staff on the enforcement of the record-keeping policies.	No
Ensuring that the records are protected in accordance with the enterprise data and information security program, including HPRS records retained at vendor sites.	Partial
Ensuring that technology is available to read the offsite storage media until the retention period is over.	Yes
Ensuring that the appropriate history and level of transactional detail is retained and easily accessible within cost/benefit constraints.	Yes
Establishing a compliance monitoring framework and baseline metrics.	No
Having a plan for continuous program improvement.	Partial
The system has developed adequate policies and procedures for the retention, destruction, and governance of records; records and security should be cross-referenced in the records management policy.	Partial
There is a document retention and destruction tool that retains the custody and authorization trail after destruction of the record.	No
The system educates and raises awareness among staff about record-keeping through the record-keeping administration and record agent relationship.	No
Management can articulate tasks being performed for records management.	No
There is an overall records management strategy that has been documented and formally agreed upon by executive management.	Yes
Member service and history records are complete and accurate to support the work of the independent actuary.	Yes

Conclusions

HPRS is largely exempt from following the State of Ohio Records Management practices; however, it seeks to abide by the Ohio Public Records Act.

Section 7.18 of the HPRS Administrative Policies document describes the pension system's practices for adhering to the spirit and letter of the Ohio Public Records Act. Details of the policy include handling of requests, adjudicating / determining eligibility and responding to requestors. Additionally, HPRS maintains a detailed, documented records retention schedule which identifies the categories and detailed types of records that need to be retained. The schedule also contains the prescribed retention periods for each record type. The schedule was approved and is reviewed periodically by the Board of Trustees. The most recent update of the policy was four years ago.

Examinations of counterparty operating procedures (I.e., Custody Operating Procedures between HPRS, TOS and PNC) do not contain explicit requirements for the counterparty to store investment positional, transactional or performance records.

The records retention schedule lacks accompanying documentation that formalizes purge/destruction procedures to ensure that stale records are no longer kept by the organization. Additionally, HPRS does not maintain hold procedures in the event that the destruction of identified records needs to be postponed for a legal, regulatory or business reason. Finally, it is common practice for an organization to identify staff to serve as the point persons for the records program and any related inquiries or issues by document type, (e.g., Board reports, investment reports, benefits administration reports, accounting reports.)

Presently, a review of (operational based) job descriptions and training requirements documentation across HPRS reveals no mention of records retention as a core responsibility or a mandated skill/ knowledge requirement respectively. It should be noted that in the absence of a Compliance department, such as is the case with HPRS, selected individuals would take on responsibility for both the execution of records retention tasks and the assurance of their proper completion. Further, internal audit functions would include a review, inclusive of sampling, to ensure that the records management function is operating in accordance with the policy across all document types.

- **R5.5.1** Conduct periodic assessments (e.g., random sampling) of records to assure adherence to the records retention policy; document results and present them to the Board accordingly.
- **R5.5.2** Update records retention policy documentation to capture records disposal, assurance reviews, and hold functions.
- R5.5.3 Develop process documentation to capture specific processes to categorize, store and dispose of documents; develop process documentation to perform periodic assessments of controls.
- **R5.5.4** Review all key counterparty procedural and contractual documentation to ensure the inclusion of language regarding records retention.
- R5.5.5 Add records retention to the schedule of internal audit reviews conducted by Summit County.

6. IT Operations

The Contractor will evaluate the control, accuracy, and integrity of the HPRS information technology system. This should include a review of HPRS data integrity; security and confidentiality of its records system; contingency and continuance planning; and incident management system. The Contractor will evaluate the overall risk level for HPRS IT operations. The analysis will include an analysis of:

- The quality of processes and controls for the organization and management of IT operations and governance; IT project and portfolio management; data management; application development and maintenance; local area network infrastructure; security; business continuity plan and disaster recovery; and
- Areas of high risk and HPRS's mitigating controls for those defined high-risk areas. The analysis will compare the HPRS's control structure with IT industry best practices.

FAS organized this assessment into the following section:

- 6.1 IT operations and governance
- 6.2 IT project and portfolio management
- 6.3 Data management
- 6.4 Application development and maintenance
- 6.5 Local area network (LAN) infrastructure
- 6.6 Data integrity
- 6.7 Security
- 6.8 IT disaster recovery and business continuity planning
- 6.9 Incident management
- 6.10 Areas of high risk and mitigating controls

IT Operations Review Activities

For the IT Operations and IT Security review, we utilized the following sources of information to complete our assessment and comparison to leading, prevailing and lagging practices:

- 1. IT governance processes;
- 2. IT service contracts;
- 3. IT planning policy and procedure documents;
- 4. Network diagrams;
- 5. IT disaster recovery plans;
- 6. IT outage procedures;
- 7. Interviews with the Operations Manager who oversees IT, General Counsel and the IT consultant;
- 8. FAS project team experience and the FAS IT knowledgebase.

IT Operations Standards of Comparison

The primary standards used as the basis of this evaluation are listed below. There are other standards that address specific areas of concern and are referenced as required.

- The COBIT 19 Framework: Governance and Management Objectives. COBIT 19 is a framework for the governance and management of information and technology, aimed at the whole enterprise. Enterprise IT means all the technology and information processing the enterprise puts in place to achieve its goals, regardless of where this happens in the enterprise. In other words, enterprise IT is not limited to the IT department of an organization but certainly includes it.
- COBIT Focus Area: Information & Technology Risk. In formulating a business or operational strategy, the board of directors and senior management often decide explicitly to accept some level of risk to achieve enterprise objectives. In COBIT, this practice is known as risk appetite, that is, the amount of risk, on a broad level, that an entity is willing to accept in pursuit of its mission (or vision) and the achievement of business objectives. Risk governance and management primarily focus on leveraging resources and activities to help reduce the business impact from a realized risk or the likelihood (or probability) of a risk materializing that exceeds acceptable levels.
- Employee Benefits Security Administration (EBSA) Cybersecurity Program Best Practices. This document provides guidance for use by recordkeepers and other service providers responsible for plan-related IT systems and data, and for plan fiduciaries making prudent decisions on the service providers they should hire. While it is specific to cybersecurity it is also applicable more broadly to information security as a whole.
- National Institute of Science and Technology (NIST) Framework for Improving Critical Infrastructure Cybersecurity, also known as the NIST Cybersecurity Framework. While nominally focused only on deliberate and malicious attacks on information systems, the framework addresses information security more broadly, while also proposing specific measures to deal with cyberattacks.
- The Health Insurance Portability and Accountability Act (HIPAA). This law states requirements for data privacy and security for those entities providing health insurance and their associates. The law captures all of the requirements for privacy that are included in the American Institute of Chartered Public Accountants (AICPA) Generally Accepted Privacy Practices (GAPP).

The FAS team:

- 1. Assessed the system's overall IT governance structure, policies, procedures, and control structure;
- 2. Assessed the organizational structure of IT to support the ongoing performance of the fund operations;
- 3. Reviewed the technology infrastructure and applications portfolio;
- 4. Evaluated systems and data infrastructure;
- 5. Assessed project management policies, procedures, and capabilities;
- 6. Reviewed security documentation from a third party managing HPRS' investment information;
- 7. Evaluated data integrity, confidentiality and security policies and practices and compared to industry leading practices;
- 8. Reviewed the cyber security capabilities of HPRS's operations and systems, including the technology environment delivering applications and data;
- 9. Reviewed the disaster recovery and continuity planning policies, plan and practices and compared to leading practices;
- 10. Reviewed incident reporting system; and,
- 11. Assessed risks associated with IT operations.

6.1 IT Operations and Governance

Assess the quality of processes and controls for the organization and management of IT operations and governance.

Expectations

There is clarity of authority and responsibilities in achieving the System's missions, goals, and objectives. Moreover, there is a consistent approach to the governance of IT, integrated and aligned with the overall approach to governance within the System. IT decisions are made in line with the System's strategies, objectives and desired values. To that end, IT-related processes are overseen effectively and transparently, including governance involvement by the Board of Trustees.

IT Operations and Governance Standards of Comparison and Findings

COBIT 19's Evaluate, Direct and Monitor domain addresses establishing and maintaining a Governance Framework to ensure benefits delivery, risk optimization, resource optimization and stakeholder engagement. In this domain, the Board evaluates strategic options, directs senior management on the chosen strategic options and monitors the achievement of the strategy. COBIT 19 recommends addressing these objectives with manageable component sub-processes under the heading of Evaluate, Direct and Monitor (EDM). The standards included in the five sub-processes under the EDM heading are:

IT Operations and Governance Standards for Comparison	Findings
A governance framework is in place.	Yes
Delivery of benefits is tracked.	NA
There is a process for risk optimization.	No
There is a process for resource optimization.	NA
Stakeholders are engaged through multiple Steering Committees.	NA

Conclusions

All IT Operations functions are performed by an IT consultant, with the oversight of the Operations Manager. The IT consultant is a sole practitioner, not a member of a firm, doing business as Novatec, Inc. He has been retained by HPRS since the mid '00s. From all indications, including the respect shown to him by management and our review of some of his work products, the IT consultant is very capable and is performing to the satisfaction of his client.

However, considering that the IT consultant is a sole practitioner with such long tenure at HPRS, the system faces considerable key person risk. He would be quite difficult to replace. If he were incapacitated or absent should an IT-related emergency occur, HPRS would encounter serious problems with continuing

operations, including making pension payments. There is an IT Disaster Recovery Plan (discussed in more detail below) but it is questionable whether anyone other than the IT consultant could execute it expeditiously, if at all.

In order to relieve this key person risk, HPRS might retain a managed service provider (MSP) to supplement the work of the IT consultant. Some MSPs specialize solely in providing IT expertise as needed, while others manage ongoing infrastructure, remote storage, servers and cybersecurity needs. We have separately discussed these servicers with management and have passed along some reference material to enable HPRS to make an informed judgment of the ways in which an MSP might help alleviate its key person risk. If HPRS decides to follow this path, we recommend that management determine what services it would need from an MSP and obtain information on the ones provided by a representative sample of such organizations that specialize in assisting small businesses.

Alternatively, HPRS might consider outsourcing its key applications, predominantly related to Benefits Administration, to a third party servicer. There are many Benefits Administration servicers that HPRS might evaluate. While such a transition would likely be disruptive in the short run, such a move would provide HPRS with a more stable basis for long-term maintenance and enhancement of its information systems than reliance on a sole IT consultant.

HPRS has documented some IT-related policies and procedures, some of which are discussed in further detail below. However, there are also certain gaps, including an IT risk management policy and project management procedures. By management's own admission, policies and procedures are "not where they ought to be". The Operations Manager is reviewing what HPRS needs and is preparing to upgrade IT-related documentation.

- R6.1.1 HPRS should consider means to mitigating the key person risk in IT Operations; a Managed Service Provider (MSP) or use of third-party systems could achieve this objective.
- R6.1.2 HPRS should continue the effort to document necessary IT policies and procedures; the development of policies and procedures should be focused on effective management of the system and not generate more documentation than is needed to that end.

6.2 IT Project and Portfolio Management

Assess the quality of processes and controls for IT project and portfolio management.

Expectations

IT projects are based on enterprise goals and other design factors. The roles and responsibilities for IT project and portfolio management, and the required skills and competencies to achieve relevant management objectives, are well defined and communicated. The portfolio of application systems is consistent with the needs of the business.

IT Project and Portfolio Management Standards of Comparison and Findings

COBIT 19's Align, Plan and Organize domain sets forth management objectives for ensuring that IT manages activities and projects in alignment with the needs of the business. This domain addresses the management of certain areas relevant to this aspect of the audit.

IT Project and Portfolio Management Standards of Comparison	Findings
The IT function includes oversight of the system's portfolio of applications and projects.	Yes
Budgets and costs are tracked.	Yes
There is a process for vendor management.	Yes
There is a process for managing the overall quality of IT services.	Partial
Responsibilities for managing risk are defined and there is a risk management methodology in place.	No
Responsibilities for information security are identified and resources are available.	Yes

Conclusions

HPRS does not have a large number of applications, nor is there a great deal of application development. The main application and related database is MembersLink. HPRS' web site, known as Members Website, is run internally in its data center. Other applications include email and Microsoft 365. In the absence of a list of applications, we were not able to verify if other applications are running at HPRS. Given the limited number of applications and the size of HPRS' staff, the lack of an application list is not critical. However, this is another ramification of the key person risk that HPRS faces. Should there ever be a need for someone to take over from the current IT consultant, the lack of such a list would make the transition more difficult.

HPRS does not have a documented project management process for IT systems or other projects. This has not been an issue for some time, as HPRS has not been undertaking significant IT projects. However, we have been informed that this is about to change; the fund is considering significant enhancements to both the Members Website and MembersLink in the coming years. In addition to a Systems Development Life

Cycle (discussed below), HPRS will need the ability to manage major projects as these systems are upgraded.

The organization will be well-served to have a project management process in place prior to undertaking the aforementioned system upgrades. At that time, HPRS should consider hiring or engaging a person with relevant project management experience to oversee the work involved.

There is no IT risk management process in place nor are day-to-day IT operations processes assessed for their risk to the organization. Given the criticality of IT systems to HPRS' ability to fulfill its mission, both the Trustees and management should be informed about the state of IT-related risks, controls and security.

- **R6.2.1** HPRS should maintain a list of all applications and infrastructure systems that it uses.
- R6.2.2 HPRS should develop a formal project management process for major IT initiatives, as well as other major projects.
- R6.2.3 The risks involved in IT Operations should be regularly assessed as a part of an overall risk Management process. See R5.4.1.

6.3 Data Management

Assess the quality of processes and controls for data management.

Expectations

There is a Data Management function to administer the use of data and a Database Administration function to control the use of electronic databases. These functions evaluate and categorize data according to sensitivity, privacy, and classification. The Data Management functions put processes in place to minimize or eliminate data duplication.

Data Management Standards of Comparison and Findings

Data Management Standards of Comparison	Findings
Key data is identified and there is an adequately resourced data management function.	Partial
Data management policies and processes are documented and effectively implemented.	No

Conclusions

Ohio's Department of Administrative Services (DAS) sends HPRS a bi-weekly file containing information on all the system's members, including new hires, terminations, etc. This file is considered to be authoritative and overwrites the previous data in HPRS' databases.

HPRS has neither a Data Management nor a Database Administration function. These would not be expected in an organization the size of HPRS and we do not recommend that HPRS acquire them.

Recommendations for Improvement

No recommendations at this time.

6.4 Application Development and Maintenance

Assess the quality of processes and controls for application development and maintenance.

Expectations

Processes are in place to ensure that applications developed or acquired are aligned with the needs of the business and to manage application development complexity and technical dependencies.

A systems development life cycle (SDLC) is defined, documented, and observed. It requires that application testing involve formal user acceptance and that application development projects have defined endpoints and a process for transfer to a maintenance state. The SDLC ensures that project risk is minimized through review and oversight processes.

Access to production software is controlled and monitored.

Application Development and Maintenance Standards of Comparison and Findings

COBIT 19's Build, Acquire and Implement domain treats the definition, acquisition and implementation of IT solutions and their integration in business processes. This domain addresses the management of certain areas relevant to this aspect of the audit.

The COBIT Focus Area: Information & Technology Risk addresses project risk advisory services. These services help to ensure new/changing business strategies, programs, projects, processes, and technology maintain an optimized level of risk.

Application Development and Maintenance Standards of Comparison	Findings
There is a clear management structure within IT.	Yes
There is a documented system development process.	No
There is a disaster recovery plan that includes a means of operating IT systems during an event that makes offices unavailable.	Yes
There are defined processes for IT interaction with the business and system users.	No
There is a documented change management procedure that includes user acceptance testing.	No
There is an effective training program for IT staff.	NA
There is a defined process for management of IT application assets.	NA
The IT application configuration is managed by IT Operations.	Yes
There is a process for managing quality embedded in each IT project.	Partial

Conclusions

HPRS does not have a formal, documented System Development Life Cycle (SDLC). Inasmuch as in recent years there has been very little system development (the key application, MembersLink, was developed in 2010) there is not an informal one either. We have been informed that there are plans for major upgrades to HPRS' IT systems in the next few years, so the development and implementation of a thorough SDLC is becoming a matter of some importance. The SDLC need not be a large, detailed document but it should be comprehensive enough that it will define the steps necessary for significant system upgrades. When the organization embarks on new application development and implementation programs, the SDLC can be applied to the needs of those projects at that time.

The change management process for HPRS's application and infrastructure systems is quite simple. All eight personnel may request modifications to the systems. The Operations Manager approves the requests. More significant upgrades are reviewed and approved by the Executive Director. Once the changes are made, the IT consultant tests them and puts them into production. There is no separate standalone testing environment or database, no formal user acceptance testing and no final signoff by the Operations Manager or the Executive Director. Again, HPRS does not require an elaborate procedure but at the very least the process should be documented. The person requesting a change should have the responsibility for ensuring that the request was appropriately satisfied and the Operations Manager should also sign off on completion of the change. All approved changes should periodically be reconciled to the Revision Control System.

There is a Revision Control System used to track all maintenance activity and to reverse changes if there are any problems. The Revision Control System is not reconciled to approved requests.

- R6.4.1 HPRS should document a System Development Life Cycle (SDLC).
- R6.4.2 The IT change management process should be formalized.

6.5 Local Area Network (LAN) Infrastructure

Assess the quality of processes and controls for managing the local area network (LAN) infrastructure.

Expectations

All assets on the local area network are identified and managed with appropriate configuration management tools. The LAN and VLAN are documented and mapped.

LAN Infrastructure Standards of Comparison and Findings

COBIT 19's Build, Acquire and Implement domain addresses configuration management. As noted above, this domain addresses the management of certain areas relevant to this aspect of the audit.

- Availability and Capacity
- Assets
- Configuration

LAN Infrastructure Standards of Comparison	Findings
The disaster recovery plan addresses network availability.	No
There is a defined process for management of IT network assets.	Yes
The IT network configuration is managed by IT Operations.	Yes

Conclusions

HPRS' local area network (LAN) is adequately documented. Our concerns relate to broader issues of network reliability and security. The IT Disaster Recovery Plan, discussed in greater detail below, does not address either wide area or local area network outages. HPRS is connected to a single telecommunications central office via a single line, making it vulnerable to network outages.

If the LAN were unavailable, personnel could work remotely, as they did during the earlier stages of the Covid-19 pandemic. If wide area connectivity, including internet access, were lost HPRS's systems could be brought up at HPRS' backup data center and accessed remotely.

Personnel are enabled to work remotely on their own home computers, connected to HPRS information systems by software known as the Remote Desktop Protocol (RDP), which encrypts data in transit. RDP has known security vulnerabilities but is nonetheless very widely used. One source states that "there are more than 4.5 million RDP servers exposed to the internet alone, and many more that are accessible from within internal networks." One alternative might be Virtual Private Network (VPN), which we were informed has been tried and discontinued at HPRS due to user dissatisfaction. Another, Zero Trust Network Access (ZTNA) is probably too sophisticated for HPRS' current needs.

Recommendations for Improvement

No recommendations at this time.

6.6 Data Integrity

Assess the quality of policies, processes, and controls for ensuring data integrity.

Expectations

There are processes in place to ensure:

- Segregation of duties regarding the use of program data.
- Reconciliations are performed in a timely and complete manner.
- Variances are identified and rectified in a timely manner.

Data Integrity Standards of Comparison and Findings

COBIT 19 Align, Plan and Organize, addressing the overall organization, strategy and supporting activities for IT. This domain addresses the management of certain areas relevant to this aspect of the audit.

Data Integrity Standards of Comparison	Findings
Separation of duties regarding the use of program data.	No
Reconciliations are performed in a timely and complete manner.	NA
Variances are identified and rectified in a timely manner	Yes

Conclusions

HPRS' systems maintain a log of all database changes and the identity of the person who made them. This log has been consulted to identify errors and omissions.

The IT consultant retained by HPRS is the only individual with administrative privileges for access to the fund's systems and data. There is an elaborate process involving cards in a safe that contain passwords for administrative access. It is unclear whether any of the managers would know what to do with these passwords or whether their use would be effective in an actual disaster. These limitations are discussed below.

Given the small size of HPRS' staff and its dependence on a single consultant, we see no alternative at this time to the absence of separation of duties regarding access to data. This current situation underscores our previous recommendations for consideration of ways to overcome HPRS key person risk in IT Operations.

Recommendations for Improvement

No recommendations at this time.

6.7 Security

Assess the quality of policies, processes, and controls for IT security and the confidentiality of the records systems.

Expectations

There is an Information Security function that ensures processes in place that result in:

- Only authorized individuals have access to databases required for their job functions.
- Access permissions are revoked or revised when an individual is transferred or terminated.
- Access credentials are validated whenever an individual attempts to access program records.

The requirement for the confidentiality of the program's records should be incorporated in program policy.

Security Standards of Comparison and Findings

EBSA Cybersecurity Program Best Practices. This document addresses a broad range of information security concerns, all of which are relevant to the prevention, detection, and response to cyberattacks, but also have broader applicability.

NIST Cybersecurity Framework, Protect domain has six categories. This domain defines major activities for an Information Security function relevant to this audit:

- Identity Management and Access Control
- Awareness and Training
- Data Security
- Information Protection Processes and Procedures
- Maintenance
- Protective Technology

COBIT Focus Area: Information & Technology Risk: Key Roles and Structures identifies specific responsibilities for certain functions related to those of the Information Security function:

- Enterprise risk management (ERM)
- Chief risk officer (CRO)
- Audit department
- Compliance department
- IT risk officers/ managers

Security Standards of Comparison	Findings
There is a formal, well documented cybersecurity program.	No
Prudent annual risk assessments are conducted.	No
Reliable third-party firms conduct an audit of security controls annually.	Yes
Information security roles and responsibilities are clearly defined and assigned.	Yes
Access control procedures are strong.	No
Any assets or data stored in a cloud or managed by a third-party service provider are subject to appropriate security reviews and independent security assessments.	NA
Cybersecurity awareness training is conducted periodically.	Yes
The system development life cycle (SDLC) program addresses information security adequately.	No
There is a business resiliency program addressing business continuity, disaster recovery, and incident response.	Business Continuity – No IT Disaster Recovery – Yes Incident Response – No
Sensitive data, both stored and in transit, is encrypted.	No
Strong technical controls are implemented in accordance with best security practices.	Yes
Any past cybersecurity incidents had received appropriate responses.	Yes

Conclusions

HPRS is threatened by the possibility of cyberattacks, as are all organizations, large and small. While HPRS' cybersecurity program is not documented, the fund is taking a number of technical measures to deter attacks. There is monthly training for all personnel on cybersecurity. However, in the absence of a SDLC (see above) there are no procedures for ensuring that adequate security is included in system development and maintenance processes.

HPRS did suffer a ransomware attack from which it recovered quickly and without consequences. It is not clear that it could withstand future attacks, but HPRS has implemented many essential controls to deter them, including firewalls, antivirus software, security software on all local and remote personal computers and intrusion detection and prevention software. However, HPRS' databases containing sensitive member information are not encrypted, which is a widely recommended leading practice and would deter the theft of member information caused by a cyberattack.

There is no differentiated access control for HPRS' internal systems; all personnel have access to all data. (Access to accounting systems is more limited.) Given the small size of the organization, it is inevitable

that separation of duties would be hard to enforce. HPRS relies on the trustworthiness of its personnel and the fact that only certain people would have the knowledge and skill to misuse its data.

Clearstead, the organization that oversees HPRS' investments, has custody of nearly all information regarding the fund's portfolio. We were provided with a description of Clearstead's policies and procedures regarding information security. While we cannot offer an opinion on the effectiveness of these measures without testing them (which was outside our scope) we can say that Clearstead has given thorough consideration of its information security requirements.

- **R6.7.1** HPRS should encrypt its sensitive information, including its membership databases.
- R6.7.2 The inclusion of an appropriate level of information security in development projects should be a part of the SDLC. See R6.4.1.

6.8 IT Disaster Recovery and Business Continuity Planning

Assess the quality of policies, processes, and controls for business continuity planning and disaster recovery.

Expectations

There is a plan for recovering IT systems and data within the requirements of the business as well as a plan for continuity of the business in the event of an IT disruption. These plans are based on a thorough understanding of the needs of the business. They are tested and maintained on a regular basis.

IT Disaster Recovery and Business Continuity Planning Standards of Comparison and Findings

ISO Standard 27031, Information technology — Security techniques — Guidelines for information and communication technology readiness for business continuity describes a management system which complements and supports an organization's business continuity and/or information security program, to improve the readiness of the organization to:

- Respond to the constantly changing risk environment.
- Ensure continuation of critical business operations supported by the related IT services.
- Be ready to respond before an IT service disruption occurs, upon detection of one or a series of related events that become incidents.
- Respond and recover from incidents/disasters and failures.

The NIST Cybersecurity Framework, Recover domain has three categories that are relevant to this audit:

IT Disaster Recovery and Business Continuity Planning Standards of Comparison	Findings
There is a Business Continuity Plan and an IT Disaster Recovery Plan.	Business Continuity Plan – No IT Disaster Recovery Plan - Yes
The information security program is regularly updated.	Prevailing
The Business Continuity Plan includes provisions for communications in the event of a disruption.	Lagging

Conclusions

HPRS' IT Disaster Recovery Plan is a very technical document, which we consider to be an example of a leading practice. It describes in detail how to recover HPRS' systems and data in the event of a disaster to its primary site in HPRS' offices. There are some procedural (rather than technical) steps in the plan that we consider problematic. These have been communicated to management.

The IT Disaster Recovery Plan anticipates the availability of the IT consultant or other person with equivalent technical skills. To our knowledge, there is no one with the skills and understanding of HPRS'

systems other than the IT consultant. Inasmuch as the IT Disaster Recovery Plan has never been tested, neither we nor HPRS management can have confidence that it would work if ever needed.

Another major shortcoming in HPRS' IT Disaster Recovery Plan is that the recovery site for its systems is located approximately three miles from HPRS' offices, subjecting the fund to the possibility of the same event (e.g., tornadoes, toxic spills) incapacitating both at the same time.

HPRS should conduct regular tests of its IT Disaster Recovery Plan. Initially, the tests should be conducted by HPRS' IT consultant, who has the greatest understanding of the plan. Subsequently, there should be an IT recovery test performed by someone other than the IT consultant, to validate that someone else could recover HPRS' applications, infrastructure and data should the IT consultant be unavailable.

HPRS does not have a Business Continuity Plan to address on-going service to active and retired members in the event of a business disruption. It should be noted that HPRS was able to continue operations during the pandemic without a documented plan.

HPRS should develop a high-level Business Continuity Plan to guide its activities if there is an extended disruption affecting its offices or its IT systems. This plan would also be valuable if a cyberattack affected the availability of its IT systems for a prolonged period of time.

- R6.8.1 HPRS should conduct regular, perhaps annual, tests of its IT Disaster Recovery Plan.
- R6.8.2 HPRS should consider a more remote site to recover its IT systems in the event of a regional disaster; alternatively, HPRS might use cloud-based services instead of or in addition to its current IT recovery site.
- R6.8.3 HPRS should develop a high-level Business Continuity Plan in the event there is an extended disruption affecting its offices or its IT systems.

6.9 Incident Management

Assess the quality of processes and controls for incident management policies, procedures, and reporting.

Expectations

An organizational unit is in place to respond promptly and thoroughly to reported incidents, with incident management policies, procedures and reporting requirements that address cyber incidents and other disruptions to IT operations and breaches of program policy (e.g., privacy breaches).

Incident Management Standards of Comparison and Findings

NIST Cybersecurity Framework, Response domain has five categories:

Incident Management Standards of Comparison	Findings
There is a documented incident response procedure.	No
There are incident logs that document any system incidents.	Yes
Procedures for mitigating the effects of incidents are included in incident planning and control procedures.	No
Incident plans have been tested.	Partial

Conclusions

While HPRS does not have a documented incident response procedure, it is questionable whether it needs one at this time. In an organization with as few managers and personnel as at HPRS, there is a reasonably clear understanding of who the decision-makers would be, how they would communicate and who would take the appropriate actions. Should HPRS implement our recommendation above to use a managed service provider or to outsource its Benefits Administration systems there would be a greater need to document incident response procedures.

Recommendations for Improvement

No recommendations at this time.

6.10 Areas of High Risk and Mitigating Controls

Assess areas of high risk and HPRS's mitigating controls for those defined high-risk areas. The analysis will compare the HPRS's control structure with IT industry best practices.

Expectations

With regard to IT, there is an established risk appetite with identified acceptable tolerances (i.e., variances) and capacity, with Key Risk Indicators (KRI) to monitor operations. Controls are in place to mitigate risks when they approach the risk appetite and tolerances. Moreover, stakeholder needs are considered when developing indicators of risk.

Areas of High Risk and Mitigating Controls Standards of Comparison and Findings

In discussions with HPRS management, we mutually determined that the greatest areas of risk regarding IT Operations were reliance on a key person (discussed above), cybersecurity and the privacy of members' information.

The NIST Cybersecurity Framework lists five domains for dealing with potential cyberattacks:

Areas of High Risk and Mitigating Controls Standards of Comparison	Findings
Identify – Develop the institutional understanding to manage cyber security risk to organizational systems, assets, data, and capabilities.	Yes
Protect – Develop and implement a prioritized set of safeguards to ensure delivery of critical infrastructure services.	Yes
Detect – Develop and implement the appropriate activities to identify the occurrence of a cyber security event.	Partial
Respond – Develop and implement a prioritized set of activities, including effective planning, to respond to a detected cyber security event.	Partial
Recover – Develop and implement a prioritized set of processes to restore critical infrastructure and business operations after a cyber security event.	Yes

The (AICPA) Generally Accepted Privacy Practices lists ten attributes of a data privacy program:

Areas of High Risk and Mitigating Controls Standards of Comparison	Findings
Management – The entity defines, documents, communicates and assigns accountability for its privacy policies and procedures.	No
Notice – The entity provides notice about its privacy policies and procedures and identifies the purposes for which personal information is collected, used, retained and disclosed.	Partial
Choice and consent – The entity describes the choices available to the individual and obtains implicit or explicit consent with respect to the collection, use and disclosure of personal information.	Yes

Areas of High Risk and Mitigating Controls Standards of Comparison	Findings
Collection – The entity collects personal information only for the purposes identified in the notice.	Yes
Use, retention and disposal – The entity limits the use of personal information to the purposes identified in the notice and for which the individual has provided implicit or explicit consent. The entity retains personal information for only as long as necessary to fulfill the stated purposes.	Yes
Access – The entity provides individuals with access to their personal information for review and update.	Yes
Disclosure to third parties – The entity discloses personal information to third parties only for the purposes identified in the notice and with the implicit or explicit consent of the individual.	Yes
Security for privacy – The entity protects personal information against unauthorized access (both physical and logical)	Partial
Quality – The entity maintains accurate, complete and relevant personal information for the purposes identified in the notice.	Yes
Monitoring and enforcement – The entity monitors compliance with its privacy policies and procedures and has procedures to address privacy-related complaints and disputes	No

Conclusions

Any organization, including HPRS, needs to consider at least three matters regarding both cyberattacks and privacy breaches (which may be the same in many instances). These are prevention, detection and recovery.

- Our observations and recommendations regarding prevention are addressed above (Security).
- While the IT consultant does monitor HPRS' systems for misuse and potential attacks, the key person risk referred to above is especially worrisome with regard to his ability to detect all types of penetration at all times throughout the year.
- We have also addressed recoverability above under Disaster Recovery, but cyberattacks, especially ransomware, pose the particular challenge of operating for an extended period without information systems. There are some measures that HPRS could take to mitigate the impact of a destructive attack, which we have communicated separately to management. While HPRS has been able to recover its systems from the one ransomware attack it has suffered, it is unclear how quickly it could have its systems back in operation if there were malware inserted into the systems for a prolonged period prior to affecting the availability of the systems.

Certain aspects of privacy have not been attended to. For instance, there is no formal data privacy policy. The most visible statement of HPRS' policies with regard to the privacy of members' information is contained in the privacy statement on the organization's website. That statement, dated April 2, 2010, is misleading, if not inaccurate, and has not been reviewed since it was published.

A person should be assigned to document HPRS' privacy policies and review and update existing policies (e.g. the website privacy statement).

- R6.10.1 HPRS should acquire services and tools to monitor the security of its systems and data on an everyday, round-the-clock basis; should HPRS choose to retain a managed service provider this might be a task assigned to it.
- R6.10.2 HPRS should determine, document, and test a plan for how it could continue operations on a manual basis while its systems are being recovered, in preparation for destructive attack on those systems.
- **R6.10.3** Accountability for data privacy should be formally designated.

Exhibits to the 2023 HPRS Fiduciary Performance Audit

Exhibit A – The Ohio Retirement Study Council

The Ohio Systems

Ohio's five public state retirement systems are the State Teachers Retirement System (STRS), created in 1920 for teachers in public schools, colleges, and universities; the Public Employees Retirement System (PERS), created in 1935 for state employees and expanded in 1938 to cover local government employees; the School Employees Retirement System (SERS), created in 1937 for non-teaching school employees; the State Highway Patrol Retirement System (SHPRS), created in 1944 by the withdrawal of all state troopers from PERS; and the Ohio Highway Patrol Retirement System (HPRS), created in 1967 after the consolidation of 454 local police and fire relief and pension funds.

As of January 1, 2022, the five state retirement systems have combined assets of approximately \$266 billion with approximately 655,000 active contributing members, 1,100,000 inactive members, and 486,000 beneficiaries and recipients. The State of Ohio has a long tradition of providing benefits to public employees. These benefits are managed by the five systems and funded through employer and employee contributions and investment earnings on those contributions.

Annual Comprehensive Financial Report (ACFR)	5-Year Experience Review
Annual Valuation Report	 Introduced Legislation with a Financial Impact
Annual Health Care Report	New Travel Policy
Annual Disability Report	Dissemination of Information to the Public
System Budgets	Ethics Policy
Annual Iran/Sudan Divestiture Report	5-Year Mitigating Rate Analysis
Annual Internal Auditor Report	Periodic Investment Reports (twice per year)
 30-Year Funding Plan (90 days after valuation indicates that it exceeds 30 years) 	

With respect to HPRS, the ORSC reviews the following:

Exhibit B – Policy Topic Recommendations

The following list is a summary of policy recommendations contained in the Report, organized into the Board powers reserved framework. The framework is intended to bring greater clarity to the different roles played by the Board. The policy topic recommendations may contemplate creation of a new policy or modification of an existing one. They are categorized by whether they primarily relate to:

- Conducting business of the Board and its committees
- Setting standards to provide direction; then delegating implementation
- Approving delegated matters
- Overseeing and monitoring implementation of delegated authority
- Verifying that data, reports and information are reliable

Conduct the business of the Board and its committees.

- Adoption of Powers Reserved Framework. Consider adoption of the Powers Reserved Governance Framework to clarify lines of reporting, improve governance effectiveness and provide more efficient use of Board and meeting time.
- Referral of Investment Opportunities and Service Provider Candidates. Adopt a policy that sets the procedure and standards for handling trustee referrals of investment and vendor candidates.
- Integrate Comprehensive Board Education and Self-Assessment Policies. Revise the Board education policy to establish core Board skill set competencies and training requirements; establish a process to use Board self-assessment results for identification of skill gaps; provide for development of annual education plans (covering individual trustees and the Board as a whole); make use of in-house, online and external education opportunities; and provide for tracking and reporting of implementation.
- Board Meeting and Materials Accessibility. Consider video streaming of committee meetings and provide archives of Board and committee meeting videos on the website. Provide access to the public meeting materials from Board books on the website in advance of Board meetings and archive the materials for future access.
- Board Committee Assignments. The Board Chair should discuss committee assignments with each trustee; the Board should approve committee assignments recommended by the Board Chair.

Set policy and delegate implementation.

- COLA and Healthcare Contributions. The policy for determining the granting of pension COLA's and the allocation of funding to the Healthcare Trust should be documented.
- Investment Policy Statement. The IPS should address the actuarial assumptions for both the HPRS DB plan and the Healthcare Trust, and perhaps have separate IPS statements. The IPS should include a Board approved policy on liquidity management and for the CIO to follow when

executing rebalancing transactions. The IPS should include a requirement for periodic investment structure risk reviews. The appetite for risk should be clearly defined and communicated.

- Investment Beliefs. Consider development of HPRS investment beliefs to guide investment strategy development and implementation.
- Authority for HPRS to Select Outside Legal Counsel on Investment Matters. Seek alignment of HPRS fiduciary responsibilities and authority through legislation or negotiation of a Memorandum of Understanding with the Attorney General granting HPRS authority to select and manage external legal counsel engaged on investment-related matters.
- Custodian Selection. Develop a Memorandum of Understanding with the Treasurer of State confirming HPRS participation in selection, contracting and management of its custodian.

Approve delegated matters.

- Investment Delegations. The delegation of investment selection authority to the Task Force (or subcommittee) by the Board and Investment Committee should be clearly stated and be documented as part of investment governance structure in the Investment Policy Statement and the Investment Committee charter.
- Confirmation of Tax-Exempt Status. Formalize HPRS tax compliance procedures in a policy that provides for periodic receipt of written confirmation from tax counsel that the plan qualifies for favorable tax treatment.

Oversee and monitor implementation.

- Whistleblower and Ethics Complaints Reporting Policy. Provide guidance on use of HPRS processes for reporting wrongdoing.
- External Manager Certification. Adopt a policy provision for annual certification by outside managers and service providers.
- Conflict of Interest. Adopt a policy that prohibits trading with material, non-public information.
- Risk Management. Expand the Risk Management Internal Controls Policy Document to describe new risk assessment and controls governance processes

Verify Reliability; Then Trust.

• Audit Committee Responsibilities. The Audit Committee should provide direction to the internal and external auditors and meet with the internal and external auditors without staff present at least once annually.

Exhibit C – 10 Key Internal Audit Topics for Audit Committee Consideration



August 2013 Audit Committee Brief

10 Key Internal Audit Topics for Audit Committee Consideration

By Richard J. Anderson, MBA, CPA J. Christopher Svare

Submitted to Journal of Accountancy

Introduction

One of an audit committee's most important responsibilities is to oversee the organization's internal audit function, which plays a major role in the areas of risk management and corporate governance. Typically, a Chief Audit Executive, or CAE, will have a direct reporting line to the audit committee, which has functional oversight of internal audit activities. To assist audit committees with this oversight, and to provide a strategic framework for the direction and orientation of internal audit, the authors outline 10 suggested topics for discussion between the CAE and the audit committee. These topics, framed as questions, stem from the results of the largest-ever global survey of internal auditors, which identified 10 'imperatives' for internal audit focus.

Every five years, the Institute of Internal Auditors (the "IIA") conducts its Global Internal Audit Survey to gain a current snapshot of the profession. The IIA's most recent survey included responses from more than 13,000 internal auditors around the world. During 2011, the Institute of Internal Auditors Research Foundation (IIARF) published a series of reports to discuss the results of the global survey. One report, "The Global Internal Audit Survey, Imperatives for Change: The IIA's Global Internal Audit Survey in Action," used the data as a springboard to take a forward look at the profession and suggest 10 areas for scrutiny and focus in the years ahead.

Although developed for internal auditors, the Imperatives for Change report also suggests a roadmap of important topics for joint consideration by the audit committee and chief audit executive. They also point to the linkages between topics and the need to consider the implications of their interrelationships.

10 Key Questions for Audit Committees

Outlined below are the 10 imperative topics for internal auditors recast into thetorical questions for audit committees. Each question is followed by a short discussion of the topic, examples of related internal audit activities, and additional topics and/or questions for audit committee consideration.

Q1: What is the internal audit coverage of the organization's risk management and governance processes?

In recent years, internal auditors have been increasing their focus on the risk management and governess processes of the organizations they audit and assess. At the same time, audit committees have stepped up their interest in risk management and governance, reflecting the heightened oversight of these areas on the parts of regulatory and supervisory bodies in both the public and private sector. Given the



Guidance from the Board of Governors of the Federal Reserve System on the relationship between the risk assessment and the audit plan

"Risk assessments should be revised in light of changing market conditions, or laws and regulations and updated during the year as changes are identified in the business activities of the institution or observed in the markets in which the institution operates, but no less than annually. When the risk assessment indicates a change in risk, the audit plan should be reviewed to determine whether the planned audit coverage should be increased or decreased to address the revised assessment of risk."

Supplemental Policy on the Internal Audit Function and It's Outsourcing, January 23, 2013 importance of these areas, the audit committee needs to evaluate the current and projected scope of internal audit coverage of risk management and governance.

In organizations in the initial stages of risk management implementation, the role of internal audit is often that of a catalyst or facilitator to help foster development of the organization's risk management processes. In such situations, internal auditors' knowledge of the organization and its risks can be very helpful. And as the organization's risk management processes mature, internal audit can serve in more of an assurance capacity, providing audit coverage of the risk practices that have been implemented.

On a similar note, internal audit also can provide advice and assurance over the organization's governance processes. Of note, the IIA's International Standards for the Professional Practice of Internal Auditing (the "Standards") now require internal auditors to address both risk management and governance processes in their audit coverage.

Q2: How responsive to change and flexible is internal audit's risk-based audit plan?

Internal auditors are required by the Standards to conduct a risk-based audit plan. While there is no one approach to conducting risk assessments and developing the related audit plan, many internal audit groups conduct an annual risk assessment and prepare an annual audit plan. In today's world of complex and dynamic risks, however, more and more internal audit groups are updating their risk assessments and audit plans on a more frequent and timely basis than just annually. For example, survey results indicate that it is becoming more common for internal auditors to update their audit plans on a quarterly basis. What's more, a number of internal audit groups have moved to "rolling" audit plans of that only cover six-month periods. By taking a more timely approach to their audit planning, organizations are helping to ensure that their audit coverage is focused at the most critical issues in a given time period.

The audit committee needs to understand how, and with what frequency, internal audit updates their risk assessment and how responsive and flexible they are with their audit plans. In addition to recommended changes to the audit plan, the audit committee needs to ensure that internal audit provides it with a rundown on changes to the organization's risk profile or new emerging risks that are driving audit plan changes. By reviewing changes to the organization's risk profile, the audit committee can gain comfort that the recommended audit plan changes will address current risks.

One further point: The audit committee should have a clear understanding that the CAE's role extends beyond audit plan execution to ensure that the internal audit process is identifying changes to the organization's risks and addressing these risks on a timely basis.

Q3: How does internal audit use technology to enhance its auditing and monitoring activities? Technology tools are increasingly being used by internal auditors to enhance both the efficiency and effectiveness of their auditing activities. For example, powerful data mining tools enable internal auditors to perform audit tests on entire populations of data as opposed to testing data samples alone. In addition, data mining tools enable internal auditors to monitor controls, risk and fraud indicators, and performance metrics. Given the scope of these capabilities, many internal auditors find that such tools offer significant opportunities to improve and enhance their auditing efforts.

Audit committees need to determine how their internal auditors are using technology, their plans for leveraging technology further, and what types of support the internal audit function needs to be successful. To make these determinations, the audit committee also needs to be aware of the specialized skills and budgetary support required by internal audit to achieve its technology objectives. These are all topics of possible inquiry by the audit committee.

Q4: What is the strategic vision and plan for internal audit?

With the rapid changes in commerce today, strategic planning has taken a new and elevated



focus in many organizations. Internal auditing is no different. For internal auditors to keep current with new developments in auditing, technology and business, they must plan effectively. As the IIA Global Survey indicates, "A well-conducted strategic planning exercise will allow the CAE to develop his or her mission and various approaches and strategies to achieving that mission."

To assess the strategic orientation of their internal audit functions, audit committees should ask questions such as these:

- What is internal audit's vision for the nearand mid-term future?
- Does internal audit have a strategic plan?
- How does internal audit plan to keep pace with the risks and processes in the business?
- Has internal audit identified gaps between where its processes and practices are today and where they need to be in the 3-5 years?
- Does the internal audit strategy align with and support the organization's strategic plans?

The IIA's Global Internal Audit Survey in Action - The need to develop strategies and actions to meet stakeholder expectations

To deal appropriately in a demanding operating environment, it is vital that the CAE, in concert with both the audit committee and senior management, achieve agreement on the specific areas of focus for the internal audit activity. It is also imperative for the CAE to determine the specific expectations of his or her chief stakeholders and to develop strategies and tactics to address these expectations. Moreover, it is critical to monitor stakeholder feedback in an ongoing, systematic manner and to update internal audit plans as needed to address changing expectations.

Q5: What perceived value does the organization receive from its internal audit activities?

According to the definition of internal auditing promulgated by the IIA, internal auditing activities are designed to "add value" to an organization. How an internal audit function goes about adding value differs from one organization to another, depending on the expectations of internal audit's key stakeholders. Thus the challenge for audit committees and internal auditors alike is to define clearly what those expectations for adding value are and then to tailor their processes to meet those expectations. .

For any internal audit function, providing assurance is a core and expected value driver. But what other types of value do stakeholders expect internal audit to provide? For example, some internal auditors today add value by providing high quality talent to their organizations. Others assist management by providing monitoring and data mining capabilities that contribute to improved businessunit performance, or assist in enhancing risk management and governance processes.

Irrespective of the specific value drivers of an organization, however, there should be clarity and agreement among internal audit, executive management and the audit committee as to stakeholder expectations and the specific internal audit activities to which stakeholders ascribe value. It's then up to internal audit to address those expectations and value drivers and assess how well it is doing so. By operating in this manner, stakeholder perceptions become real and tangible and increase the likelihood that internal audit will deliver sought-after value.

Q6: How do we strengthen communications and relationships between internal audit and the audit committee?

Ideally, the relationship between internal audit and the audit committee will be characterized by open communications, respect and trust. To achieve and maintain such a relationship demands ongoing attention by both parties. For their part, members of the audit committee should continually ask themselves how they might enhance their relationship with internal audit, particularly with regard to informal communications.

One way to enhance audit committee/ CAE relationships is joint training involving the audit committee chair and chief audit executive. In another example of effective relationship building, a CAE's direct reports meet periodically with the audit committee chair and are invited to make presentations to the audit committee. Such interactions



provide opportunities for the audit committee to see key members of the internal audit staff in action, a factor contributing to effective succession planning for the CAE.

Q7: How does internal audit ensure that its activities are in full compliance with "The International Standards for the Professional Practice of Internal Auditing?"

The IIA is the global standards-setting body for the internal audit profession. In this capacity, the IIA promulgates *The International Standards for the Professional Practice of Internal Auditing* (the "Standards").

Most internal audit functions have charters stating that internal audit conducts its activities in accordance with these Standards. In the same manner that the audit committee expects its external auditors to comply fully with their professional standards, it should also expect its internal auditors to comply fully with their Standards. To this end, the audit committee should request periodic confirmation from their internal auditors that they do, indeed, comply fully with the IIA Standards.

Of note, the IIA Standards require an external assessment of the internal audit function at least every five years. The audit committee should ensure that this requirement is met and that it receives the report from the external reviewer.

Q8: How does internal audit acquire and develop top talent for the organization?

The quality of an organization's internal audit function is heavily dependent on the quality of its people. This is especially true today where the amount of change and complexity of risks facing most organizations create significant and varying challenges. Traditional auditing and accounting skills remain highly valued in today's environment, but must be augmented with non-traditional auditing skills ,. Data-mining specialists and staff with in-depth industry knowledge are just two types of talent being sought after by today's internal audit functions.

A true measure of internal audit staff quality is the degree to which the internal audit function is perceived to be a source of talent for other parts of the organization. Some companies have formal rotational programs wherein highly talented staff members are assigned to internal audit for a specific time period to gain valuable experience that can then be taken back to the business units. At other organizations, members of the internal audit staff are recruited by other organizational entities because of their in-depth knowledge of the business and its risks and controls. It is important for audit committees to be aware of the role that internal audit either *is* playing or *could be* playing to address the broader talent needs of the organization.

Q9: What types and levels of training necessary for internal audit to accomplish its mission?

For internal auditors to keep pace with the dynamic changes in business, technology and risk today, they must have access to continuous, current and robust training. An effective training program needs to go beyond basic accounting or auditing skills to address critical areas such as data mining and analysis, risk management, governance processes, new-product marketing and new technological applications. Softer skills - such as how to make good decisions, how to interview effectively, and how to think critically - also need to be stressed. In particular, the audit committee should inquire as to whether the training is adequately equipping the internal audit staff to conduct auditing activities appropriate for the organization's current and evolving risk profile.

Q10. Does internal audit periodically inventory and assess its skills to identify gaps and, if so, how are they being addressed?

The dynamic nature of organization's and their risks places a continuing demand on internal audit to periodically assess its skills inventory. In addition to audit and accounting capabilities, the organization's risks may drive needs for specialists in languages, social media, data security, mathematics and beyond. In this environment, most internal audit functions will experience some sort of skills gap from time to time. When they do so, they are increasingly turning to third parties to supply needed skills on an "as needed" basis.



Audit committees need to have a critical discussion of skills with their internal audit leadership. In posing questions to the CAE and senior auditors, the audit committee should start with the internal audit risk assessment, not the audit plan. The central question: Has internal audit identified all the skills needed to address the organization's risk profile and where does it stand relative to acquiring those needed skills? The audit committee should encourage the CAE to consider various approaches to addressing those needs, including third parties as well as tapping corporate resources outside of internal audit to address particular needs.

The primary concern is that internal audit has the breadth of skills necessary to provide coverage and assurance over the organization's control and risk management processes. This is an issue that can be particularly critical to small- and medium-sized internal audit functions that lack the size or budget to have in-house access to the broad range of skills needed to address their changing risk profiles.

Conclusion

The 10 topics of discussion listed above can form a useful framework for in-depth discussions between an audit committee or audit committee chair and their chief audit executive. Such discussions can help both parties come to a better understanding and agreement on where their internal audit function stands relative to the profession and point to needed areas of focus moving forward. Audit committees are encouraged to take advantage of the discussions above in seeking to gain additional insight on the quality and direction of the internal auditing activities being conducted under their oversight.

List the 10 questions

- What is the internal audit coverage of the organization's risk management and governance processes?
- How responsive to change and flexible is internal audit's risk-based audit plan?
- How does Internal audit use technology to enhance its auditing and monitoring activities?
- 4. What is the strategic vision and plan for internal audit?
- What perceived value does the organization receive from its internal audit activities?
- How do we strengthen communications and relationships between internal audit and the audit committee?
- How does Internal audit ensure that its activities are in full compliance with "The International Standards for the Professional Practice of Internal Auditing?"
- How does internal audit acquire and develop top talent for the organization?
- What types and levels of training are conducted by Internal audit?
- Does internal audit have skill or staffing gaps and, if so, how are they being addressed?

Author's Bio

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