PSERS regularly seeks the assistance of skilled external specialists to provide perspective and execute unique strategies in areas where investment office professionals (IOP) lack the resources or abilities to do so themselves. When introducing a new external manager relationship, it is critical for IOP to establish a familiarity with the manager, their strategy, its limitations and expected result. This knowledge allows an allocator to avoid the trap of undue reliance on recent performance. Both the PSERS investment policy statement and financial industry standards make clear that investment professionals have a fiduciary duty to demonstrate care and prudence in the selection of such external agents yet both recognize that effective underwriting is bespoke to the particular circumstances of the mandate in question. IOP has therefore developed this manager underwriting policy to serve as a guide in executing this critical responsibility. It applies a principles-based approach to the endeavor while offering a system of guidelines, processes and industry best practices. IOP will review and revise this policy at least bi-annually as part of its investment program.

**Purpose:**

The purpose of the External Manager Underwriting policy is:

* To offer a format which investment professionals may use to plan and organize their due diligence.
* To provide the Asset Implementation Committee (AIC) and the Board with consistent underwriting documentation to serve as evidence that a thorough evaluation has been completed.
* To reduce the risk that key elements of underwriting are omitted particularly when multiple participants are involved in the underwriting process or when time constraints are present.

**Scope:**

While many of the principles outlined in this policy are directly applicable to non-traditional asset classes, this policy has been designed specifically to apply to traditional asset classes including:

* Fixed Income
* Public Equity (irrespective of vehicle structure)
* Commodities
* Master Limited Partnerships
* Risk Parity

**Roles and Responsibilities:** The Investment Policy Statement provides a comprehensive outline of the responsibilities assigned to various individuals, groups and committees within PSERS. The descriptions below detail the specific aspects of these responsibilities with regard to manager underwriting.

* The Board: The Board, as the ultimate governing fiduciary, defines and approves investment policies and carefully monitors compliance with its policies and progress made toward stated goals. It is anticipated that members of the board will have eclectic backgrounds and varied levels of investment sophistication. It is also understood that the demanding professional and personal schedules of board members will require them to rely on the expertise and recommendations of career professionals including the IOP and external consultants when executing their fiduciary duty in the hiring of external managers.
* External Consultants: External consultants have been hired to support the IOP in implementing the policy objectives of the board. It is expected that the IOP will regularly task external consultants with key elements of this underwriting policy. The general consultant in particular has the responsibility to convey evolving industry diligence standards and best practices to the IOP.
* PSERS Investment Office Professionals (IOP): This includes the investment office professional staff whose primary function is managing investments both internal and external. IOP will direct the selection and underwriting of external managers utilizing third party resources as needed.
	+ CIO— Serves as the senior staff administrator on all investment matters. The CIO in conjunction with the external consultants will provide guidance to the board regarding investment strategy for the system. The data and other information collected through the due diligence process should serve as a resource to inform this guidance.
	+ DCIO Traditional Investments—Is responsible for implementing strategy relating to the traditional asset classes. A core component of this role is directing Senior Portfolio Managers and external consultants in recommending external managers.
	+ Senior Portfolio Managers—Are responsible for conducting manager diligence in their respective asset classes in conjunction with the Senior Portfolio Manager (External Managers). They are also charged with improving and enhancing the manager underwriting policy.
	+ Senior Portfolio Manager (External Managers)—Is responsible for organizing the due diligence of new external manager relationships in the traditional asset classes unless delegated to another Senior Portfolio manager. The External Manager team in conjunction with the external consultants is charged with producing investment memoranda recommending new manager relationships. Most importantly, the Senior Portfolio Manager (External Managers) is to serve as a resource to the AIC and Board in answering questions regarding a recommended manager, its strategy, role in the portfolio or potential risks.
	+ Investment Risk Manager—Is responsible for assessing and monitoring risks across the system’s assets. With respect to manager underwriting, the risk manager is responsible for ensuring that a newly recommended manager does not introduce intolerable risks to the portfolio as a whole through duplicative exposures, imprudent sizing or operational factors. Finally the Investment Risk Manager will offer guidance to the Senior Portfolio Managers and external consultant regarding operational due diligence.
	+ Investment Operations Group—Ensures that the introduction of new manager relationships including any potential asset transfers is appropriately documented and consistent with the requirements of the Commonwealth. This entails coordination with consultants, custodians and administrators. Importantly, the operations group oversees the contracting of new managers working with the Senior Portfolio Manager (external managers) and PSERS legal staff to negotiate required Commonwealth terms.
	+ Asset Allocation Committee (AAC)—Recommends to the board and then monitors the strategic asset allocation (SAA). The AAC also votes on tactical asset allocation decisions (TAA), which decisions are made within Board-approved ranges around the SAA.
	+ Allocation Implementation Committee (AIC)—Approves and directs the specific implementation of the SAA and TAA, which can include individual manager additions, re-sizings, terminations and guideline revisions. The AIC also evaluates and approves the remuneration structures of external managers assuring that they are aligned with PSERS goals and consistent with prevailing market standards.
	+ Risk Oversight Committee (ROC)— Assesses the internal control environment and evaluates appropriate objectives for it, and identifies, measures, and responds to risks throughout PSERS’ investment program.

**Objective:**

Thorough underwriting serves three primary goals for the IOP:

* To Develop A Robust Understanding of The Manager, Their Organization and Strategy: Investments are ultimately a series of choices. It is impossible to recommend entrusting capital to a manager without understanding how these choices are made. Thorough due diligence allows an allocator to develop a credible thesis for a manager’s future success. Documented underwriting helps the allocator to improve their own choices over time by providing the basis for analysis of historical manager recommendations.
* Set Appropriate Ex Ante Performance Expectations: Manager allocations are made and sized based upon expected outcomes, the range of anticipated deviations from those expectations (i.e. mean/variance analysis) and the expected interaction with other holdings in the portfolio. Underwriting allows the allocator to contemplate economic environments that are not reflected in a discrete historical data series.
* To Provide Context For Manager Retention/Termination Decisions: Over time allocators will likely be confronted with organizational and exposure changes by the manager including AUM growth, personnel turnover, strategy modifications and new product introductions. Often these changes are natural evolutions that allow a manager to maintain historical success. Occasionally, they are precursors to underperformance. Knowledge gleaned through the underwriting process will provide the foundation for these decisions.

Implementation of this policy is divided into the following thirteen elements:

* Element 1: Sourcing and Identification
* Element 2: Manager Interviews: Meetings and Calls
* Element 3: Performance Analysis
* Element 4: Document Review
* Element 5: Public Information Review
* Element 6: Reference Calls
* Element 7: Operations Review and Due Diligence
* Element 8: Establishment of Investment Guidelines (where applicable)
* Element 9: Memoranda of Recommendation
* Element 10: AIC Review and Approval
* Element 11: Operational Preparation
* Element 12: Board Approval
* Element 13: Contracting/Legal negotiations

**Element 1: Sourcing and Identification**

*Principle:* The manager universe is not static. A relentless evaluation of the ever-changing opportunity set allows an allocator to gain comfort that their existing manager slate is optimal. Truly talented mangers achieve maximum capacity quickly, spend less time marketing and are motivated by performance rather than asset growth. A robust sourcing effort is required to secure capacity early and under attractive terms.

*Process:* There is no single solution for sourcing outperforming managers. IOP, especially the external manager team should seek to cultivate new potential categories of sources over time. Examples of sources with whom the external manager staff should speak regularly include:

* Prime Broker / Capital Introduction Teams
* Consultants
* Investment Office Personnel of Peer Institutions
* Seeding/Fund of Fund Managers
* Investment Professionals at existing managers
* Business Development Professionals
* Respected and trusted contacts from previous professional experience
* Databases
* Industry trade publications

The vast majority of manager introductions will not be an appropriate fit and may be eliminated from consideration quickly. Manager ideas should only be added to the MUC (managers under consideration) list (see appendix A for an example) if in the view of the Senior Portfolio Manager they might reasonably be recommended to the AIC. IOP External Manager staff will meet monthly to review the MUC list. Once a manager is added to the MUC list, IOP will create a Tamale profile for the manager. Within two years of addition to the MUC list, IOP will either remove the manager from current consideration or elevate the manager for additional diligence and recommendation to the AIC. In either case the manager will be removed from the MUC list.

MUC lists will be stored in Tamale under the category “MUC Traditional Asset Classes”.

**Element 2: Manager Interviews: Meetings and Calls**

*Principle:* Effective hiring and termination decisions are made with a view toward prospective performance. Thoughtful structured interviews allow the allocator to anticipate a manager‘s ex ante performance by understanding the decision makers, their philosophies, organizational structures and motivations. Exhibit B provides a guide for analysts conducting manager interviews, highlighting information to be gleaned and offering sample questions. Key areas to cover include:

* Background and History (of both the firm and the key individuals)
* Organizational Structure (ownership, influences, capitalization and break-even AUM)
* Assets Under Management (growth, capacity, investor concentration, internal assets, vehicles)
* Investment Team Structure (roles, responsibilities, remuneration philosophy)
* Investment Philosophy (why a persistent inefficiency exists and how the manager exploits it)
* Investment Process (decision making, work flow)
* Portfolio Construction (concentration, limits, beta/market capitalization mismatch, expected exposure levels, use of derivatives, geography)
* Examples (including mistakes and lessons learned)

*Process:* IOP may leverage the resources of external consultants throughout the underwriting process; however, IOP staff will not recommend a manager’s inclusion without thoroughly interviewing the manager independently. The process can be broken down into the following components:

* **Preliminary Discussions:** These interviews will be conducted by the IOP Portfolio Managers and/or the Portfolio Manager (external managers). PMs will draft notes of the discussions and evaluate the manager’s potential relative to other potential offerings.
* **Manager Meeting with AIC:** When the Senior Portfolio Manager has preliminarily determined that he/she intends to recommend an allocation, he/she will arrange for the AIC to meet with the manager at PSERS offices. After the meeting, the Senior Portfolio Manager leading the underwriting will discuss the merits of an allocation with the AIC. Diligence may proceed with approval of the AIC.
* **Follow Up Discussions:** IOP will then notify the external consultant of the AIC’s decision to proceed with diligence. If the consultant has not done so already, they will arrange for on site diligence with the manager. IOP may join these meetings either physically or by video conference. Both the external consultant and IOP will conduct additional interviews until they are satisfied that they understand the firm/strategy and they are comfortable formally recommending the investment to the AIC and the Board. Notes from all interviews will be stored in Tamale under the due diligence heading.
* **Negotiation of Business Terms:** Terms should be consistent with the Investment Management Fee Policy. PSERS will always attempt to use its scale, reputation and long duration capital to reduce the cost of external management and align manager incentives. Evidence of these conversations will be stored in Tamale under the category “Due Diligence Fee Negotiations”.

**Element 3: Performance Analysis**

*Principle:* The goal of performance analysis is to understand how the results have been achieved in order to properly compare a manager’s results with other available options. A review of historical results will inform IOP allowing for a more robust dialogue with the manager and ultimately a better understanding of the strategy and possible future outcomes.

*Process:* IOP may lean on the software and data resources of external consultants in reviewing performance. In circumstances where the external consultant has performed the underlying quantitative analysis, IOP will conduct calls with the consultant to review the results and methodologies used. Nuances in manager strategy call for an individualized review of each manager in question; however, common analysis completed for traditional investments managers will include:

* Calendar year returns vs. comparable benchmarks and AUM growth
* Rolling annualized returns of various tenor
* Measures of risk (standard deviation, tracking error, drawdown)
* Comparisons against peers
* Up/Down Capture Analysis
* Risk adjusted returns (Sharpe ratios, information ratios)
* Exposure analysis and exposure adjusted returns
* Correlations (against other managers and against benchmarks)
* Attribution analysis
* Passive replication

Analysis both internal and external will be stored in Tamale under Due Diligence.

**Element 4: Document Review**

*Principle:* A review of current and historical materials published by the manager makes interviews more robust, uncovers potential inconsistencies and reveals additional sources of information about the manager.

*Process:* Document review cannot easily be outsourced to external consultants because it is pivotal to understanding the manager’s strategy and firm. While each manager will have different current and historical documents available, items to be reviewed fall into the following categories:

* **Current Due Diligence Questionnaires and Presentation Materials:** Review the most recent versions as a basis for manager interviews.
* **Historical Client Letters and Communications:** Look for repeatable patterns of historical analysis, inconsistencies with stated strategies, individuals no longer with the firm, demeanor during periods of success and failure. Review up to 10 years if available.
* **Audited Financial Statements:** Look for inconsistencies with stated AUM or performance, qualified opinions, reinvestment of performance allocation, firm profitability, change in auditors, auditors lacking PBAOC accreditation. Review at least three years when available.
* **Legal Offering Documents:** This will include Private Placement Memoranda, Limited Partnership Agreements, Articles of Association, Subscription Documents, Investment Management Agreements, Separate Account Agreements, and other documents. Understand the rights of the Limited Partner vs. the General Partner. Understand the liquidity provisions, gating mechanisms, operation of key person clauses, allocation of expenses and operation of incentive allocation/high watermark.

All collected documents should be stored in Tamale under the Due Diligence category.

**Element 5: Public Information Review**

*Principle:* External managers are ultimately viewed as business partners and extensions of staff. A review of publicly available information is a normal part of the interview process.

*Process*: IOP will work with the external consultant to gather and review all information that is publicly available about the manager and the key individuals (CIO, CFO, authorized signatories) at the firm. This element will work in conjunction with formal background checks which are covered under operational due diligence in element 7. Key areas of publicly available information include:

* Basic Internet Search
* Review of publicly available information via Convergence or other aggregators
* Form ADV Review (review of filings with foreign regulators such as MAS, FCA and HKSCF if applicable)
* Licensing and Registration Review (ex: FINRA)
* Professional social media profiles (LinkedIn)

**Element 6: Reference Calls**

*Principle:* References provide a window into a manager’s behavior during specific situations, their character and abilities. Taken in aggregate, they represent a qualitative track record that complements historical return data and offers superior context.

*Process:* IOP will coordinate with the external consultant to understand which references the consultant intends to contact in order to avoid redundancy. Whenever possible, IOP will attempt to find references that are not on the manager’s official reference list. Such “off list” references are to be offered confidentiality. Notes of any such calls are to be marked confidential and are not to be shared outside of the investment office. Names and contact information are to be redacted. Key areas of inquiry during reference calls include:

* Information that can confirm attribution of the manager’s track record
* Character references
* Examples of historical behavior in stressful situations
* Investing strengths and weaknesses
* Evidence of hubris/humility

**Element 7: Operations Due Diligence:**

*Principle:* Operational failures can be just as costly to a manager and their clients as investment failures. Understanding the organizational strengths and weaknesses of a manager also provides a window into the manager’s organizational style, priorities and demeanor.

*Process:* The PSERS operational and risk group will work in conjunction with the external consultant to conduct a full operational review (or will fully delegate this task to the external consultant). The Senior Portfolio Manager leading the investment diligence may join any parts of this process. Upon completion of operational due diligence, the Senior Portfolio Manager leading the underwriting will review any materials prepared by the external consultant and/or PSERS risk group. A brief meeting or call should be arranged to discuss the results of their diligence with a focus on the following areas:

* Controls and Processes Governing the Movement of Cash
* Trading Authority, Processes and Controls
* Technology, data security and disaster recovery
* Valuation
* Results of Formal Background Investigation
* Compliance, Personal Trading and Regulatory Correspondence
* Service Provider Review

After reviewing the results of operational due diligence the Senior Portfolio Manager leading the underwriting should meet with the PSERS operations team to discuss any potential issues regarding account origination, targeted funding dates, reporting and/or liquidity.

**Element 8: Establishment of Investment Guidelines (where applicable)**

*Principle:* Guidelines offer a useful tool to managers and allocators by providing an ex-ante agreement surrounding the scope of the mandate. As such, it is important that the manager and allocator agree that such parameters define the mandate but do not restrict the manager’s ability to achieve it. Poor outcomes are likely to result if one side simply acquiesces to the demands of the other.

*Process:* The Senior Portfolio Manager leading the underwriting shall engage with the manager to discuss reasonable guidelines that reflect the mutual understanding of the strategy’s bounds. Examples of these parameters include limitations on leverage, exposure, instruments used, credit quality, geography or market capitalization. The Senior Portfolio Manager leading the due diligence may solicit input from the risk manager during discussions with the manager. Although it is generally not possible to tailor the investment constraints when underwriting a co-mingled vehicle, it remains important to review the parameters described in the funds legal documentation and discuss scenarios during manager meetings. Either the guidelines or a description of the exposure profile should be included in the materials distributed to the AIC and to the Board.

**Element 9: Memoranda of Recommendation**

*Principle:* A formal written recommendation communicates the results of the diligence completed to the individuals asked to approve an investment. Drafting the document forces the writer to consolidate the vast array of information collected during diligence into a cogent thesis that demonstrates a thorough understanding of the investment. Finally, a written memorandum serves as a legacy document for reference by current or future staff in making termination decisions.

*Process:* While the process will be altered to meet the facts and circumstances of the manager in question, the IOP Senior Portfolio Manager leading the underwriting will organize the workflow as follows:

* IOP will draft both a public memo and a confidential memo. The memos should address key aspects of the investment including:
	+ The organization, principals, team structure, founding and history
	+ The investment strategy, philosophy and process
	+ Historical and anticipated performance
	+ Exposure and portfolio construction
	+ Key terms (as negotiated)
	+ Risk factors

Generally, the manager in question will be given the opportunity to request that information be moved from the public memorandum to the confidential version, which will only be shared with the IOP and the Board.

* The external consultant will draft a public investment memorandum and a confidential investment memorandum. Operations due diligence may be addressed within the confidential memorandum or on a standalone (confidential) basis.
* IOP and the external consultant will coordinate to resolve any inconsistencies or other issues before circulating recommendations.

**Element 10: AIC Review and Approval**

*Principle:*  A critical review of a recommended investment by individuals not directly involved in the underwriting process broadens the overall perspective and ensures that key items are addressed.

*Process:* Prior to delivering materials to the Board for review, the Senior Portfolio Manager leading the underwriting will distribute the public and confidential memoranda from both the IOP and the external consultant. IOP will also include a due diligence checklist demonstrating that this process has been followed. Materials should be distributed via Tamale by creating a note under the “Due Diligence AIC Approval Request” field. The Senior Portfolio Manager will then schedule a formal AIC meeting to present the materials and answer questions. Upon approval by the AIC, the initial manager tear sheet will be stored in Tamale and an email will be sent to the CIO providing key investment points for reference during the Board meeting.

**Element 11: Contracting /Operational Preparation**

*Principle:* As a sovereign entity, PSERS will require specialized legal documentation from most entities with which it does business. Effective management of the process can minimize broken deals, sunk costs and time to funding.

*Process:* The Senior Portfolio Manager leading the underwriting will be responsible for negotiating the business terms of any prospective allocation. The PSERS legal staff has responsibility for negotiating the legal terms. Contracting will generally occur in three phases:

* **Legal Preparation:** Prior to distributing recommendations to the AIC, IOP will send a draft copy of PSERS standard side letters and/or Investment Management Agreement to the targeted manager. Copies of the manager’s legal documents will also be shared with PSERS legal team. The Senior Portfolio Manager leading the due diligence will then conduct brief calls with the manager to identify potential “deal breaker” terms and with PSERS legal team to discuss any unusual items that may present challenges going forward.
* **Operational Preparation:** Prior to distributing recommendations to the AIC, IOP will meet with the Investment Operations Group to discuss the structure, funding and targeted timing of the potential investment as well as any other issues that might arise from an operational perspective. When necessary IOP will renegotiate with the manager to remove any issues that are insurmountable from an operational perspective.
* **Document Review:** The Senior Portfolio Manager leading the due diligence may request that that PSERS legal team begin document review when they are confident that both the AIC and the Board are likely to approve an investment. This requires the PM to balance the time sensitivity of the investment against the risk that PSERS resources may be deployed inefficiently (i.e. reviewing documents for an investment that is ultimately rejected). After review of the relevant legal documents, the PM will meet with legal to discuss required changes, relevant context and negotiating strategy. Correspondence will be stored in Tamale under the field Legal Contracts/Negotiations.
* **Negotiations:** PSERS legal will begin discussions with the manager and their counsel bring documentation in line with Commonwealth requirements. The Senior Portfolio Manager involved should be present for all discussions. Once documents are satisfactory to the PSERS legal and investment teams, contracts will be sent for signature.

**Element 12:** **Board Approval**

*Principle:* A thorough understanding of a manager, their investment strategy, organizational issues, competitive alternatives and the inherent risks/return of an investment requires the dedication of career professionals. While the Board has retained the fiduciary responsibility associated with hiring external managers, Board members will generally lack the time and expertise required to execute thorough manager underwriting and therefore will rely heavily on the advice and judgement or IOP and external consultants in making such decisions.

*Process:* Memoranda of recommendation will generally be distributed to the Board two weeks in advance of a Board meeting. During the time prior to the Board meeting IOP will be available to provide any additional detail requested or answer specific questions. While informal questions may be addressed in an impromptu fashion by voice or email dialogue, the following venues for discussion are also provided:

* **Pre-Board meeting discussion:** In the weeks prior to the Board meeting, IOS will conduct pre-board meeting discussions with any members wishing to explore the underwriting of specific managers or other Board topics.
* **Early arrival discussions:** IOS will be available in the hour prior to the start of each Board meeting to discuss any investment related topics.
* **Action Item Reviews:** The CIO will provide a brief synopsis of each manager recommended at a given Board meeting on the day prior to the formal vote. IOP will be present at the meeting to address any remaining questions or provide additional detail.
* **On-going dialogue:** Board members interested to learn more about the underwriting process generally or potential upcoming recommendations are encouraged to contact IOS.

Recommended managers will be approved with a majority of Board members voting in the affirmative. Once approved by the Board IOP and legal staff will complete contract negotiations. As noted in the resolutions, all investment approvals are subject to successful completion of these negotiations.

 **Element 13: Contracting/Legal Negotiation**

*Principle:* IOP are responsible for negotiating the business terms of any potential manager mandate; however, IOP and the Board rely on the legal expertise of the Office of General Counsel to assure that all documentation meets the Commonwealth’s unique legal requirements.

*Process:* After the Board has approved an allocation to a manager, the Senior Portfolio Manager leading the underwriting will coordinate with the legal staff assigned by the Office of General Counsel to review and discuss the legal documentation required to complete the investment. Identified issues will be addressed via side letter when necessary. Legal staff in coordination with IOP will negotiate and resolve any remaining issues. When contracts have been completed and approved by the Office of General Counsel, they will be sent to the Attorney General for signature.

**Review and Revision**

IOP will review and revise, if necessary, this policy at least bi-annually as part of its investment program. Any changes to the policy must be approved by the AIC.

**Approval:**

Recommended by: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_

Recommended by DCIO: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_

Recommended by AIC: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_

Approved by CIO: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_