



**City of Philadelphia
Board of Pensions and
Retirement**

Investment Policy Statement

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Section 1 - Introduction

The principal purpose of the Municipal Pension Fund (hereinafter the “Fund”) is to assure the availability of resources adequate to provide retirement benefits for its members and their beneficiaries. Investment decisions will be based upon safety of principal and optimal total return in that order.

The members of the Board of Pensions and Retirement (hereinafter, “Board” or “Board Members”) shall be the trustees of the fund and shall have exclusive control and management of the Fund and full power to invest and preserve the same subject, however, to the exercise of that degree of judgment, skill and care under the circumstances then prevailing which persons of prudence, discretion and intelligence, who are familiar with such matters would use in the conduct of an enterprise of a like character and with like aims. The Board shall appoint an Investment Committee comprised of all of its members. The Director of Finance shall serve as Chairman of the Investment Committee. Oversight of investment activities shall be the responsibility of the Investment Committee.

Section 2 – Responsibilities of Parties

Policy 2.1 - Responsibilities of Chief Investment Officer and Investment Staff

The day-to-day oversight and management of the Fund's investment program are delegated to the Chief Investment Officer (CIO) and the Investment Staff. The CIO is responsible for execution of those elements of the Investment Policies and Procedures identified to the CIO and for keeping the Investment Committee informed of developments regarding the Fund, its investments including asset classes, manager strategies, and managers, and developments within the financial marketplace which may impact the Fund.

The Investment Staff is responsible for the monitoring of asset classes, manager strategies and managers and for preparation of recommendations and other materials that will be submitted to the CIO for review and approval prior to being placed on the Investment Committee agenda for action.

It is intended that the role of the Investment Staff be proactive in bringing matters of concern and opportunity to the attention of the CIO and Investment Committee. The CIO shall recommend to the Investment Committee that independent consultants be retained as required to supplement the resources of the Investment Staff and to provide an independent source of review to the Investment Committee.

Rationale:

It is the desire of the Investment Committee that the CIO and Investment Staff assume a larger role in the review and control of the Fund and its investments. The Investment Committee will be relying upon the Investment Staff to prepare the monitoring and review reports mandated by these Policies and Procedures and with the endorsement of their recommendations by the CIO, provide actionable proposals to the Investment Committee for approval.

Procedure:

1. The CIO shall divide responsibility for asset classes, manager strategies, and managers among the members of the Investment Staff.

In order to provide for a diversity of ideas and to protect the integrity of the CIO review and approval process, it is not the desire of the Investment Committee that the CIO assume primary responsibility for any asset class, manager strategy, or manager in which Fund managers are selected pursuant to Philadelphia Code Chapter 17-1400.

2. The CIO shall organize and chair periodic meetings of the Investment Staff to review the Fund's investments and determine which recommendations and materials are to be presented to the Investment Committee.

Policy 2.2 - Responsibilities of Investment Managers

The Investment Committee has delegated to various investment managers (hereinafter "Investment Managers", or "managers"), subject to the Investment Policy and manager-specific guidelines and restrictions, the responsibility to manage a portion of the assets of the plan.

The relevant portions of the Investment Policy and manager-specific guidelines and restrictions shall be incorporated into the individual Investment Manager contracts and their compliance shall be certified by the manager and reviewed by the Investment Staff on an annual basis.

In order to provide an opportunity for the Investment Committee to interact directly with the Fund's Investment Managers, each Investment Manager will meet with the Investment Committee upon request of the Investment Committee.

Rationale:

The Investment Committee has, at present, determined that external Investment Managers will be used to manage assets of the Fund. The responsibilities of external Investment Managers shall be defined by their contracts and all other applicable legal requirements.

Procedure:

1. The CIO will schedule meetings with external Investment Managers upon the request of Investment Committee members at the next scheduled Investment Committee meeting.

Policy 2.3 - Responsibilities of Investment Consultants

While the Investment Committee places primary responsibility to provide analysis and recommendations with the CIO and Investment Staff, the Investment Committee may utilize external generalist and specialist consultants (each a "Consultant") to provide additional expertise and Investment Manager oversight.

Rationale:

As the Fund's investments increase in scope and complexity, it would be beneficial to the CIO and Investment Staff to utilize Consultants to provide additional human and analytical resources to the Plan. These Consultants can supplement the resources available to the CIO and Investment Staff and address issues for which internal development of those resources is not feasible or cost effective.

Procedure:

None is required for implementation of this policy.

Policy 2.4 - Responsibilities of Actuarial Consultants

While the Investment Committee approves the Actuarial Return Assumption (the investment return objective) for the Fund, the Actuarial Consultant ("actuary") provides guidance on the appropriate Actuarial Return Assumption or target rate of return for the Fund. The actuary will also share accurate and timely legislative impact statements, regulatory updates (e.g., GASB), stress tests and projections with the CIO, investment consultant, Investment Staff and the Investment Committee.

Rationale:

The actuary is a specialist resource and provides independent, thorough and detailed analysis to provide guidance on prudent actuarial assumptions for the Investment Committee's consideration.

Procedure:

None is required for implementation of this policy.

Section 3 - General Operations

Policy 3.1 - Operating Cash

It is the policy of the Investment Committee to minimize the amount of short-term fixed income or cash equivalents given the potential to adversely impact performance of the Fund over the long-term. Such cash equivalents may also adversely impact the investment process of the active Investment Managers.

In furtherance of the above, the Investment Committee has established a cash allocation within the approved asset allocation. The level of cash and equivalents will be reviewed and determined by the CIO on an ongoing basis and the Investment Committee will be advised at the earlier of 30 days or the next Board meeting.

Rationale:

The Plan, in the ordinary course of its operations, has substantial cash inflows from periodic contributions by the City, dividends, coupons, distributions and redemption proceeds and outflows necessary to make payments to beneficiaries. Fund assets maintained in cash equivalents for long periods of time either awaiting investment or held to fund future benefits payments may have an adverse impact on the fund's performance.

Procedure:

1. The level of cash and equivalents will be reviewed and determined by the CIO on an ongoing basis and the Investment Committee will be advised at the earlier of 30 days or the next Board meeting.

Policy 3.2 - Generation of Required Cash Balances

Should cash be required for benefits payments or other plan expenses beyond that available from the cash allocation, such cash shall be generated with steps taken in the following order:

1. Managers should be requested to transfer income cash when received to the Fund.
2. Managers with un-invested cash not required to settle already-traded purchases shall be requested to transfer the cash required to the Fund.
3. External managers will be requested to make sales based on an identification of the least attractive securities presently held, based on their investment strategy and process, and to transfer the cash so generated to the Fund. This step shall be continued until the funding requirements are met.

In all cases, it is the objective of the Investment Committee to minimize the potential disruption to investment processes of the Fund's Investment Managers.

To the extent not already contained in the Board's investment management agreements with managers, all such agreements shall reserve to the Board the explicit right to demand from managers income cash, un-invested cash, proceeds from prospective sales, and sales of the least attractive securities presently held.

The Investment Committee delegates to the CIO the authority to permit exceptions to the strict application of the procedure with respect to any given manager or transaction if the best interests of the Fund are enhanced by that exception.

Rationale:

While undesirable, it is occasionally necessary to request funds from the managers in order to maintain an appropriate level of liquidity. The process established in this policy is intended to minimize the impact on the Plan's performance and the performance of each Investment Manager.

Procedure:

1. The CIO will ensure that steps 1-3 are completed and report any exceptions to the Investment Committee at the earlier of 30 days or the next scheduled Investment Committee meeting.

Policy 3.3 - Investment of Available Excess Cash Balances

The investment of available excess cash balances shall be used, to the extent possible to rebalance the asset class weights to the policy targets. Should the cash allocation exceed the upper limit of the target range, such cash shall be distributed as follows:

1. Those asset classes which are below the target levels for the current asset allocation shall be increased to target levels. The cash shall be distributed to Investment Managers demonstrating the ability to meet their stated investment objectives. No manager currently on the Watch-list (as defined in Policy 8.5) or in the process for addition to the Watch-list will be the recipient of excess cash allocations.

The Investment Committee pre-delegates to the CIO the authority to deviate from the strict application of this policy if the interests of the Fund are best served by that flexibility.

Rationale:

If additional cash is available for investment, it should be used to increase asset classes with current allocations below target. To ensure the CIO has flexibility to decide on use and distribution of excess cash balances when necessary or appropriate to advance the best interests of the Fund, the Investment Committee has delegated authority to the CIO to deviate from the policy.

Procedure:

1. Upon the identification that excess cash is available, the CIO shall advise the Investment Committee and direct the Investment Staff to identify which managers and asset classes are to be impacted.
2. After advising the Investment Committee of the actions to be taken, the CIO shall advise the managers of the forthcoming cash.
3. The CIO will report to the Investment Committee any use of the flexibility to deviate from the strict application of the policy.

Policy 3.4 - Permitted Deviations from Asset Allocation Weights and Rebalancing Procedures

In order that the asset allocation implemented will generate the desired Fund performance, it is necessary to manage asset class deviation from the target allocations. Effective management of asset class deviations will ensure that under normal circumstances the deviations have minimal impact on the ability to meet desired return and risk objectives. The CIO and Investment Staff may recommend modest deviations from the approved asset allocation targets, within target ranges, in order to better manage risk and capture excess returns. Any planned deviations from the target and approved asset allocation should be communicated to and approved by the Investment Committee.

In the event that the CIO determines that changes required are de-minimis and adjustments are not in the best interests of the Fund, the Investment Committee pre-delegates authority to the CIO not to perform the rebalancing operations.

Rationale:

In order that the asset allocation implemented will generate the desired Fund performance, it is necessary to manage asset class deviation from the target allocations.

Procedure:

1. The CIO and Investment Staff, as part of the annual asset class review, shall compare actual asset class allocations with target ranges.
2. If the actual allocation is beyond the limits, the policy steps above shall be implemented to rebalance the portfolio.
3. If the CIO determines that rebalancing is not in the best interests of the Fund and elects to use the pre-delegated authority not to rebalance, the CIO shall report that finding to the Investment Committee.

Policy 3.5 - Manager Transition Processes

The transition of assets from one manager to another can generate significant expense for the Fund, both in terms of commissions and in diminished value from market impact of trades. It is therefore desirable to minimize that financial impact when a transition is required.

As the facts and circumstances of transitions can vary significantly, it is not possible or desirable to prescribe a procedure for all cases. However, the Investment Committee desires to minimize the impact of transitions by employing all means available, including:

1. The CIO may consider the use of a transition manager.
2. To the extent possible, the CIO should endeavor to transfer assets in-kind from the legacy manager to the successor manager as to minimize transaction and other frictional costs.
3. The CIO shall establish when the evaluation of the new manager's performance begins.

Rationale:

In order to minimize the transaction costs associated with transitioning assets between managers, the CIO is authorized to consider cost-minimization strategies, including the use of a transition manager and an in-kind transfer of assets between the legacy and successor managers. Appropriate evaluation of the successor manager's performance needs an inception date and therefore the CIO is granted authority to specify when the evaluation of the manager's performance begins.

Procedure:

1. In the event of a transition of assets between managers, the CIO will have the responsibility to implement the steps of this Policy.
2. The CIO will make the determination as to the commencement of the evaluation period which will become the inception date of that manager's responsibility for the Fund's assets for future evaluations.

RESERVED

Section 4 - Investment Philosophy

Policy 4.1 – Management Approaches

It is the policy of the Investment Committee to pay active or alternative management fees only for those manager styles where there is demonstrated value added over passive management, adjusted for the fees involved with both methods.

Rationale:

In order to achieve the long-term goals of the Fund, the Fund's capital must be invested in assets which provide a return. The management of those assets entails costs, both in terms of professional fees for management and expenses as well as direct and indirect transactions costs. As these fees and expenses are a direct charge against the assets of the Plan, it is desirable to minimize their impact on the performance of the Fund.

Procedure:

The CIO and Investment Staff shall consider the performance of a broad style universe versus its relevant benchmark, adjusted for fees, when determining the amount of active, alternative and passive exposure.

Policy 4.2 - Risk Tolerance

In view of the public trust of the Fund, the risk tolerance of the Investment Committee is commensurate with that which would be appropriate for a public retirement fund in a similar financial position. Investment Staff, the actuary, and the investment consultant(s) will work together to develop and review the appropriate stress tests as a means to measure the risk(s) associated with various asset classes and the Fund as a whole.

The Fund is prepared to assume the risks inherent in commonly used alternative and traditional asset classes and strategies. Additionally, the Fund will consider Opportunistic Investments that offer higher risk-adjusted returns.

Rationale:

The ultimate level of risk taken by the Fund should be discussed and reviewed in the course of the annual asset allocation review so that the Investment Committee can determine their comfort with the overall level of risk of the Fund.

Procedure:

1. Prior to the adoption of the annual asset allocation, the CIO and Investment Staff shall report the current and projected level of risk to be assumed by the Fund. The Investment Committee should review reasonable worst-case scenarios, including by not limited to liquidity by asset class, and be confident that the risks are acceptable and should the scenario occur, they are confident they could maintain the policy until there is a recovery.

Section 5 - Investment Policy Statement

Policy 5.1 - Maintenance of Investment Policy Statement

In order to document and communicate the objectives, restrictions, and guidelines for the Fund's Investment Staff and investments, a continuously updated Investment Policy Statement will be maintained. The Investment Policy Statement shall be reviewed annually and updated on an as needed basis.

Rationale:

It is necessary to have a document which can be shared with appropriate parties which provides, in an authoritative manner, a codification of parameters for operating and investment.

Procedure:

1. Annually the Investment Policy Statement should be reviewed, and updated on an as needed basis.

Policy 5.2 - Contents of Investment Policy Statement

The Investment Policy Statement should contain all information, with the exception of manager specific objectives, restrictions, and guidelines, that are required to understand the investment protocol employed by the Fund. The information will include but is not limited to a discussion of the purpose of the fund, the source of legal authority for its management, roles of staff, board and consultants, investment goals and objectives, definitions of permitted asset classes, and asset allocation percentage weight targets and target ranges.

Rationale:

The Investment Policy Statement is a document which can be provided to appropriate interested parties which concisely provides an authoritative overview of the Fund's investment strategy.

Procedure: None Required for Implementation

Policy 5.3 - Incorporation of Relevant Portions of Investment Policy Statement in Manager Contracts

Relevant portions of the Investment Policy Statement shall be incorporated into each manager's investment manager contract.

Rationale:

Incorporation of the relevant portions of the Investment Policy Statement into each manager's contract provides an authoritative communication of the responsibilities, guidelines and context under which their management should function. Incorporation also insures consistency between the manager contracts and the overall structure and design of the Plan.

Procedure:

1. During the process of preparing manager contracts, the appropriate sections of the Investment Policy Statement shall be incorporated.
2. The Fund will strive to have contracts approved and executed within 45 days of Board implementation. This timeliness provision shall apply to all investment related contracts.

Section 6 - Asset Allocation

Policy 6.1 - Authority of Asset Allocation Process

The asset allocation of the Fund is the most significant factor in development of the Fund's investment structure and the Fund's long-term investment performance. The asset allocation expresses the allowable asset classes and investment strategies, forecasts expected returns and risk and correlation among diversified asset categories. The process provides an opportunity to address forward looking expectations and select benchmarks for the Fund, Investment Managers and asset classes by which those expectations will be measured over short, intermediate and longer-time periods.

The current asset allocation is the authoritative source for the expectations and benchmarks. No benchmark or expectation shall be changed in a manner materially inconsistent with the assumptions for the current asset allocation.

Rationale:

The Investment Committee believes that the Fund's investment structure will reflect the assumptions in the asset allocation and that this alignment will improve the portfolio's ability to achieve the Fund's long-term objective of meeting the actuarial rate of return

Procedure:

1. The asset class return and risk expectations and benchmarks developed for each asset class and incorporated into the asset allocation shall be consistent with those benchmarks used for performance measurement purposes and evaluation purposes.
2. The expectations and benchmarks developed for each asset class shall be weighted to reflect the percentage of the Fund invested in each asset class.
3. The expectations and benchmarks developed for each Investment Manager shall be appropriate for the Investment Manager's style.

Policy 6.2 - Determination of Asset Classes to be Included

Asset classes included in the asset allocation must be defined herein and approved by the Investment Committee. Investment staff and the CIO may recommend the inclusion of a new asset class only upon the review of the overall asset allocation. This may occur during the scheduled annual review or at any regularly scheduled Investment Committee meeting.

Rationale:

The Investment Committee recognizes that new asset classes develop over time and herein provides for their inclusion.

Procedure:

1. Prior to consideration for inclusion in the Fund's portfolio, each asset class must be defined and the appropriate level of analysis provided to the Investment Committee by the CIO and Investment Staff.

Policy 6.3 - Periodic Reviews of the Validity of Asset Class Assumptions

As part of the asset allocation review, the Investment Committee will consider asset class assumptions used in the asset allocation study. These assumptions will include but not be limited to expected return and risk for each asset class.

On an annual basis, the validity of the each of the assumptions utilized in the current asset allocation will be evaluated by Investment Staff and or the Consultant. If during that annual review, an assumption is determined not to be valid, adjustments will be made to the asset class assumptions.

Rationale:

Assumptions used for the asset allocation should be reviewed on an annual basis to give the Investment Committee confidence that the basis of the annual asset allocation review and recommendations are valid.

Procedure: Review validity of assumptions relied upon for the asset allocation annually and in conjunction with the actuarial rate of return.

Policy 6.4 - Periodic Reviews of Fund's Asset Class Performance

Not less than annually, the performance of the Fund's investment in each asset class shall be reviewed. If the asset class performance assumptions remain valid but the Fund's asset class performance fails to meet performance objectives the overall structure of the asset class must be reviewed including manager style weightings within the asset class, the selection of active, passive or alternative modes of management, or the actual selection of managers.

Rationale:

Under-performance by the Fund must be addressed by reviewing each asset class performance: the weighting of manager styles, the use of active, passive or alternative management or the actual selection of managers.

Application of this process can lead to adjustments including weighting between the manager styles and modes of management comprising the asset class.

This comparative performance analysis should be done on periods greater than one year. Fund asset class performance may deviate from asset class performance assumptions if review is done inflexibly on an annual basis.

Procedure:

1. Not less than annually, the performance of the Fund in each of the asset classes represented in the present asset allocation will be reviewed and compared to the assumptions used for the present asset allocation.

Policy 6.5 - Periodic Reviews of Manager Performance

It is the policy of the Investment Committee to review each manager's performance on a monthly basis through the prepared Flash Report.

Rationale:

As the overall performance of the Fund's assets is ultimately the result of the performance of individual managers, the performance of the managers should be reviewed with sufficient frequency to permit identification of substandard performance as quickly as possible. Conversely, managers with substandard short-term performance should be given sufficient time for improvement and to permit differentiation between chronic poor performers and good managers whose strategy is temporarily out of favor.

Procedure:

1. Investment Staff and/or the Consultant should prepare a monthly Flash Report displaying the performance of the Fund's managers over short-term and long-term time periods.
2. The Investment Committee shall review the monthly Flash Reports and may make recommendations to add or remove managers from the Watch-list.
3. Managers on the Watch-list will be evaluated more closely on a month to month basis and may be required to appear before the Investment Committee.

Policy 6.6 - Extraordinary Reviews of Managers

It is the policy of the Investment Committee that if an event occurs within a manager's organization or is likely to impact the manager's organization, the CIO shall make a determination whether such event compromises the investment process or in any other manner might negatively impact the management of the Fund's assets.

Such events would include but are not limited to:

- a) Change in ownership or control.
- b) Sale, offer for sale, or offer to purchase the manager's business to/by another entity.
- c) Significant alteration of the investment manager team responsibilities.
- d) Loss of any significant investment professional directly involved with the management of Fund assets or of such significance to the manager's overall investment process as to call into question the future efficacy of that process.
- e) Significant financial difficulty or loss of a sizable portion of the manager's assets under management.
- f) Criminal indictments of a member of the manager's team

- g) Violations of investment guidelines or non-compliance with the other stated terms of the investment management agreement.
- h) Deviation from stated investment style and/or philosophy.
- i) Filing or announcement of regulatory action of non-trivial nature, particularly that involving violations of the Investment Advisers Act of 1940, the Securities Act of 1933, or the Securities Exchange Act of 1934, or any state Blue Sky Law to which the manager is subject.
- j) Material litigation involving the Investment Manager.
- k) Any other event which in the discretion of CIO appears to put the Fund's assets at risk of loss, either actual or opportunity.

As time may be critical, the Investment Committee shall delegate to the CIO authority, after consultation with the Chair of the Investment Committee, to take such action as required to protect the assets of the Fund. The Investment Committee must be notified of such action within 30 days or at the next Investment Committee meeting.

Rationale:

There are circumstances which can quickly develop which can adversely affect an investment manager's capability to properly manage the Fund's assets. There needs to be in place a procedure to permit appropriate action to be taken should the Fund's assets appear to be at risk.

Procedure:

1. The CIO and Investment Staff, with the assistance of consultants as required, shall continuously monitor the Fund's investment managers for occurrence of events that involve the circumstances addressed in the policy.
2. Upon the occurrence of any of these events, the CIO shall take such steps as are required to ensure compliance with this Policy and to protect the Fund's assets, including the recommendation for the Investment Committee to place Investment Managers on the Watch-list.

Section 7 - Asset Class Management and Structure Policy 7.1 -

Definition and Inclusion of Asset Classes

An asset class used by the Fund should be defined herein. During the asset allocation review, the Investment Committee, Investment Staff or Consultant may recommend the addition of asset classes not presently used by the Fund. The CIO or Consultant shall evaluate the impact of the addition of that asset class when used in conjunction with the existing asset classes. In the event that multiple additional asset classes are to be considered, the CIO or Consultant shall evaluate all combinations of new asset classes in conjunction with those presently used.

Rationale:

As the financial markets evolve, additional asset classes, not currently used by the Fund, may present an attractive alternative investment. To ensure that due consideration is given to the inclusion of one or more additional asset classes, a process must be developed to fully explore the impact on the Fund.

Procedure:

1. At any Investment Committee meeting, the Investment Staff, CIO, Consultant or a Board Member may recommend the inclusion of a new asset class. A recommendation must include a full, impartial, and complete briefing to the Investment Committee that includes return characteristics, risks, and potential liabilities of that asset class.
2. The CIO or Consultant shall develop a precise definition and specifications including appropriate assumptions of the asset class for inclusion herein.

Policy 7.2 - Elimination of an Asset Class

Asset classes which are found not to be contributing to the performance and diversification of the Fund may be eliminated upon recommendation to the Board by the Investment Staff, CIO, Consultant or a Board Member during any Investment Committee meeting.

Rationale:

Asset classes which are not continuously contributing to the long-term goals and objectives of the Fund should be eliminated.

Procedure:

1. At any Investment Committee meeting, the Investment Staff, CIO, Consultant or a Board Member may recommend the elimination of an existing asset class. A recommendation must include a full, impartial, and complete briefing to the Investment Committee.

Policy 7.3 - Alternative Investments

The Fund may, from time to time, make investments in products and programs other than traditional stocks, bonds and cash equivalents. These investments, which can be broadly classified as alternative investments, may consist of hedge funds, private equity, private debt, real estate equity, real estate debt,

real assets and opportunistic investments resulting from market dislocations and niche investment opportunities which do not fit with other alternative investment categories.

In order to ensure that there is adequate accounting and review of these investments, the CIO shall establish responsibility for accounting, monitoring, and reviewing these assets within the Investment Staff. External resources may be used to assist the Investment Staff in sourcing, review and monitoring alternative investments.

Rationale:

The Fund will achieve return and diversification benefits from non-traditional strategies.

Procedure:

1. The CIO will review on a semi-annual basis with the Investment Committee the assets of the Fund deemed alternative investments.
2. The CIO will establish, within the Investment Staff, responsibility for alternative investments.
3. The CIO will establish, within the Investment Staff or by use of a Consultant, a structure to ensure appropriate accounting and oversight of alternative investments.
4. Additional information on alternative asset classes can be found in the Board's "Private Market Guidelines."

Policy 7.4 - Number of Managers Used for Implementation

Except as required to provide access to emerging managers, the Investment Committee shall determine the number of managers used to implement the asset allocation.

Rationale:

It is the belief of the Investment Committee that diversification comes from multiple asset classes and styles and that the use of too many managers can drive results towards mediocrity. An excessive number of managers increases costs due to the sliding scale or marginal management fees used by most managers, and increases the review and monitoring effort required by the Investment Committee and Investment Staff.

Procedure:

1. The CIO with the assistance of the Investment Staff and Consultants shall make a recommendation to the Investment Committee regarding the addition of any new managers to implement the asset allocation.

Policy 7.5 - Manager Weightings

In the absence of an investment case, the Investment Managers utilized to manage the Fund's assets in a given asset class manager style shall be funded approximately equally. In making the manager weighting decision with respect to an emerging manager, the Investment Committee shall use criteria such as but not limited to the size and maturity of the management organization, the total assets of the management

firm and in this manager style, and an assessment by the CIO of the inherent risks involved with the manager style.

Rationale:

External managers in a given asset class manager style shall be funded approximately equally unless there is an investment case to weight the managers differently.

Procedure:

1. Managers utilizing similar styles with a particular asset class should be weighted approximately equally. The CIO may make an investment case for unequal weightings.
2. Manager weights shall be rebalanced annually pursuant to Policy 3.4. The tolerances permitted from the normal weight are within 10% of the normal allocation.
3. If, in the judgment of the CIO, that tolerance is not in the best interests of the Fund in a given market environment, the CIO shall recommend and the Investment Committee consider a proposal to defer the rebalancing until such time as the CIO believes the rebalancing can be accomplished with no material negative impact on the Fund.

Section 8 - Manager Management

Policy 8.1 - Manager Search Requirements

Managers of appropriate expertise, and experience, and who have demonstrated an extremely high level of business integrity. Additionally, in order to ensure that the best investment managers are considered to manage assets for the Fund, it is necessary that minimum qualification criteria be established and approved by the relevant Investment Sub-Committee. The same criteria may be considered for new managers that are used to evaluate existing managers. To prevent the appearance of a conflict of interest, protect the independence and integrity of the Board's decision-making process, ensure that investment decisions are made for the sole benefit of the Fund's members and beneficiaries, and avoid payment of unnecessary costs or fees, Investment Staff will deal directly with any manager or partnership/general partner relating to the management of the Fund's assets and will not use (or authorize use of) any placement agent, third-party marketer, or other intermediary ("placement agent"). Consequently, the Fund will not pay or contribute towards payment of any fees, expenses, or other compensation of any such placement agent.

In general, the following requirements will be applied to all investment managers included in searches, except those granted dispensation as Diversity and Local Managers pursuant to Policy 8.2 or considered to be alternative investment managers:

- a) SEC registration under the Investment Company Act of 1940 and state Blue Sky Laws as required.
- b) A minimum of five years of firm experience in the management of tax-exempt, institutional assets. Three of these years may represent experience by individuals with other firms, provided there is a contractual representation that individuals utilizing experience from other firms are directly involved with the management of the Fund's assets.
- c) Experience with and current client mandates with allocation of funds of a size similar to that to be invested on behalf of the Fund. In general, except for managers granted dispensation as Diversity and Local Managers, the Fund does not desire to represent more than 10% of the assets managed by the firm and more than 20% of the assets invested in the particular manager style or strategy. These tests shall be applied at the time of engagement and reviewed at each annual manager review.

Additional requirements may be imposed for specific mandates or may be required by the Philadelphia Code, the Laws of the Commonwealth of Pennsylvania, or any authoritative Federal legislation. In the event the foregoing is in conflict with any legal requirement, that legal requirement shall have precedence.

Based on the Investment Committee's desire for the inclusion of more Diversity and Local Managers (as defined in Policy 8.2), the Investment Staff and/or Consultant will include at least one Diversity or Local Manager in all searches.

Rationale:

The rationale is contained within the policy.

Procedure:

1. Investment Staff will establish Minimum Qualifications for each manager search and seek approval from the relevant Sub-committee prior to commencement of the search. The criteria will reflect the methodologies by which current managers are evaluated.
2. The Investment Staff and/or Consultant will include at least one Diversity or Local Manager who meets the minimum criteria in all searches. If no Diversity or Local Manager meets the minimum criteria, the Investment Staff/Consultant will seek to include Diversity or Local Managers who meet the criteria of Policy 8.2.
3. The Investment Staff and/or Consultant will first review the existing diverse, emerging, and local managers in the Fund in order to identify a suitable candidate for inclusion in the search.
4. The Investment Staff and/or Consultant will include an appendix in all search material which details the reasons those Diversity or Local Managers not included were excluded.

Policy 8.2 - Provision for Diversity and Local Managers

It is the belief of the Investment Committee that it is desirable to increase participation of minority-, women-, disabled-, and local-owned investment managers (“Diversity and Local Managers”). The Investment Committee acknowledges that an obstacle to access to and participation in the investment management industry is the limited history, relatively small asset size, and other barriers faced by these firms.

It is the policy of the Investment Committee to facilitate access to the industry for these firms by reducing certain of the initial screening criteria which would disadvantage or preclude participation in the competition for the management of the Fund's assets.

As such, during a manager search process, if the Investment Staff and/or Consultant is unable to identify qualified Diversity or Local Managers who meet the criteria in Policy 8.1, the Investment Staff and/or Consultant will seek to include Diversity or Local Managers who meet the criteria set forth below.

For the purpose of this Policy, a "Diversity Manager" shall mean a corporation, company, partnership, firm, business or other entity in which more than fifty percent (> 50%) of the beneficial ownership interests are held by one or more persons who are a woman, a minority person, or a disabled person. For purposes hereof, a "minority person" and a "disabled person" shall have the definitions as set forth in the Mayor's Executive Order 03-12, as may be amended from time to time. A “Local” firm will have an established office located in Philadelphia and meet the requirements of Section 17-109 of the Philadelphia Code.

The dispensations granted in the provisions of Policy 8.1 to Diversity and Local Managers are:

- a) A minimum of **three** years of firm experience in the management of tax-exempt, institutional assets. **Two** of these years may represent experience by individuals with other firms, provided there is a contractual representation that individuals utilizing experience from other firms are directly involved with the management of the Fund's assets.

- b) The firm has experience with and current client mandates with allocation of funds of a size similar to the reduced size of that to be invested on behalf of the Fund. The Fund will accept representing up to **25%** of the assets managed by the firm and up to **60%** of the assets invested in the particular manager style. These tests shall be applied at time of engagement and reviewed at each quarterly manager review.
- c) Minimum firm assets under management need to be greater than \$100 million.

In the event that dispensations are granted pursuant to Policy 8.1 to a Diversity or Local Manager, use of such a manager is limited as follows:

- a) No more than five percent (5%) of Fund assets at time of initial allocation.

Rationale:

The rationale is contained within the policy.

Procedure:

1. The Investment Staff/Consultant will include at least one Diversity or Local Manager who meets the minimum criteria of Policy 8.1 in all searches. If no Diversity or Local Manager meets the minimum criteria of Policy 8.1, the Investment Staff and/or Consultant will seek to include a Diversity or Local Manager who meets the criteria of Policy 8.2
2. The Investment Staff and/or Consultant will first review the existing Diversity or Local Managers in the Fund in order to identify a suitable candidate for inclusion in the search.
3. The Investment Staff and/or Consultant will include an appendix in all search material which details the reason those Diversity or Local Managers not included were excluded.
4. Annually, the CIO and Investment Staff shall review the qualifications under the Diversity or Local Manager status.

Policy 8.3 – Manager Contracts and Manager Objectives, Guidelines, and Restrictions

It is the policy of the Investment Committee that prior to assumption of investment management responsibility for a portion of the Fund, each Investment Manager shall have developed for it a specific set of manager objectives, guidelines, and restrictions. These objectives, guidelines, and restrictions shall be incorporated into each manager's contract and the manager's conformance with those guidelines will be reviewed by the Investment Staff as part of their ongoing monitoring process.

The manager's objectives will include specific investment performance targets and benchmarks, both in terms of return as well as standard deviation.

In order to enforce its rights and to better communicate its expectations, each manager with responsibility for the management of Fund assets shall have a current management contract with the Fund. In addition to standard language required for contracts and by the Philadelphia Code, the following investment specific information shall be included:

1. The manager specific objectives, guidelines, and restrictions developed for that manager.
2. A statement that the objectives, guidelines, and restrictions are fully binding on the manager and investments beyond those guidelines and restrictions including securities not defined as being with the asset class are at the risk of the manager and that the Fund can and will pursue recovery for losses, both actual and opportunity.

Rationale:

In order to provide information as to the permitted boundaries of its activities, each Investment Manager must receive specific objectives, guidelines, and restrictions and understand that it is being held to them.

Procedure:

1. Prior to inception of management responsibility, a manager specific contract shall be agreed, approved, and processed as required, incorporating the objectives, guidelines, and restrictions appropriate for that manager to assume its role in the management process of the Fund.
2. Prior to inception of responsibility for a manager, the CIO shall cause to be developed manager specific objectives, guidelines, and restrictions. These are incorporated into the manager contracts and retained by the Investment Staff for incorporation in the periodic manager review process.
3. Annually on the anniversary of the inception of responsibility of each manager, the CIO shall review the established objectives, guidelines, and restrictions for appropriateness and make adjustments as required. These adjustments are binding on the manager as a condition for continuing as a manager for the Fund.

Policy 8.4 - Manager Monitoring

It is the policy of the Investment Committee that each manager, at minimum, be monitored monthly for performance in conformance with its benchmarks and events impacting the management organization or other events with a potential for detrimental impact on the management of the Fund's assets. In the event that concerns about a manager's performance arise, additional analysis may be required, including potential inclusion of the manager on the Watch-list, as described in Policy 8.5.

Rationale:

In order to objectively evaluate managers who add value to the Fund and merit retention, ongoing evaluation is required.

Procedure:

1. On a monthly basis, a monthly Flash Report will be presented to the Investment Committee detailing the performance of the manager relative to established benchmarks.

2. The Investment Staff, CIO, Consultant or a Board Member may make a recommendation for any action including Watch-list designation or termination at any monthly Investment Committee meeting.

Policy 8.5 – Watch-List

The CIO and Investment Staff will maintain a “Watch-list” as a means to enhance the standard manager monitoring procedures for any Investment Manager by:

1. Reporting chronic underperformance against its benchmarks or peer universe, or
2. Experiencing adverse firm changes, a failure to comply with guidelines or other issues that would be considered detrimental to the investment process

Either of which in the opinion of the CIO, Investment Staff or Consultant could make the manager a possible candidate for future termination. The Watch-list is an intermediate step toward either resolving the manager problem or terminating the manager.

The Investment Committee, CIO and Investment Staff recognize that manager termination can be costly to the Fund and that even the most skilled investment managers will invariably exhibit periods of performance below absolute or relative targets, index benchmarks and peers, and that specific investment strategies could potentially underperform for longer than anticipated periods of time.

Board Authority and Watch-list Policy

The Board of Pensions and Retirement holds the authority to terminate the Investment Management Agreement for any reason and at any time regardless of whether an investment manager is on the Watch-list. There is no minimum time requirement for an investment manager to be on the Watch-list prior to termination

Although the Watch-list incorporates longer-term, one, three, and five-year time horizons for evaluating manager performance relative to benchmarks and peers, the investment managers are monitored by the CIO and Investment staff through a daily P&L report. Based on this daily report, any significant unexpected underperformance by a manager, as determined by the CIO and Investment Staff, will result in the manager being contacted and asked to provide an explanation. If the CIO and Investment Staff believe that the manager has failed to adequately provide a reasonable rationale for underperformance, then the investment manager will be recommended for inclusion on next month’s Watch-list.

The CIO and Investment Staff, in conjunction with the Fund’s consultant, will ask each manager on the Watch-list to meet face-to-face to review the manager’s process, rationale for underperformance, and plan for corrective action. A report will be produced by Investment Staff and/or the Fund’s consultant detailing the meeting and will provide a recommendation to the Board for action.

It is the policy of the Investment Committee that if an event occurs within a manager's organization or is likely to impact the manager's organization, the CIO shall make a determination whether such event compromises the investment process or in any other manner might negatively impact the management of the Fund's assets.

Such events would include but are not limited to:

Firm Structure:

- g) Change in ownership or control.
- h) Sale, offer for sale, or offer to purchase the manager's business to/by another entity.
- i) Significant alteration of the investment manager team responsibilities.
- j) Loss of any significant investment professional directly involved with the management of Fund assets or of such significance to the manager's overall investment process as to call into question the future efficacy of that process.
- k) Significant financial difficulty or loss of a sizable portion of the manager's assets under management.
- l) Criminal indictments of a member of the manager's team

Compliance:

- l) Violations of investment guidelines or non-compliance with the other stated terms of the investment management agreement.
- m) Deviation from stated investment style and/or philosophy.
- n) Filing or announcement of regulatory action of non-trivial nature, particularly that involving violations of the Investment Advisers Act of 1940, the Securities Act of 1933, or the Securities Exchange Act of 1934, or any state Blue Sky Law to which the manager is subject.
- o) Material litigation involving the Investment Manager.

Performance:

- k) Manager unexpectedly underperforms in the short-term, defined as a period of less than one-year, and does not adequately provide the CIO and Investment Staff with a reasonable explanation for their underperformance.
- l) One, Three, and Five-year performance net of fees below specified benchmark

- m) One, Three, and Five-year performance net of fees below the median performance of the manager's peer universe
- n) Performance is incongruent with the manager's style and/or risk profile

Other:

- o) Failure of the manager to respond to reasonable requests for information or providing unsatisfactory client service
- p) Any other event which in the discretion of CIO appears to put the Fund's assets at risk of loss, either actual or opportunity.

The CIO or Investment Staff will communicate with any investment manager that is added to the Watch-list, including the reason the manager was added to the Watch-list, the requirements for removal from the Watch-list and the time frame for corrective action. If the CIO and Investment Staff are satisfied that the manager has taken corrective action and has resolved the issues that cause them to be placed on the Watch-list, then Investment Staff and/or the consultant will prepare a report detailing the progress made and provide a recommendation to have the manager taken off the list.

The CIO or Investment Staff will maintain the Watch-list, and report to the Investment Committee monthly on any notable updates to managers on the Watch-list. After presentation of the formal review of a manager and upon the recommendation of Investment Staff, the Consultant or a member of Investment Committee, the manager may be added to or removed from the Watch-list. A majority vote of the Board will determine whether such manager is added or removed.

For private market and private real estate managers, the Investment Committee, the CIO and Investment Staff acknowledge that the long-term nature of private market and private real estate investments reduces the level of flexibility with regard to investment management relationships, allocation and termination processes. For these investments, the CIO, Investment Staff and/or Consultant will monitor performance on an on-going basis. This monitoring could result in a recommendation for the Investment Committee to place the manager on the Watch-list.

Rationale:

The use of a Watch-list establishes a robust reporting framework for the evaluation of underperforming managers and managers experiencing adverse developments, and provides an effective framework for Investment Manager notification of the Investment Committee's heightened concerns regarding the manager, including a timeline for manager corrective action before possible termination.

Procedure:

1. The CIO or Investment Staff will maintain the Watch-list, and report to the Investment Committee monthly on managers being recommended for addition to or removal from the Watch-list, and any notable updates to managers on the Watch-list.

2. The CIO or Investment Staff will communicate with any Investment Manager that is added to the Watch-list, including the reason the manager was added to the Watch-list, the requirements for removal from the Watch-list and the time frame for corrective action.

Policy 8.6 – Manager Termination

Managers will be terminated in a manner to minimize the costs to the Fund if in the opinion of the Investment Committee, based on recommendation of the CIO, Investment Staff, or Consultant their retention does not serve the prudent management of the Fund's assets.

This finding can be the result of an Extraordinary Review of the manager as described in Policy 6.6, Watch-list designation or ongoing manager monitoring. The assets of terminated managers are generally transferred to the other manager in the manager style category pending the engagement of a replacement manager.

Rationale:

Managers which can adversely impact the Fund's assets in a material way require termination. This policy provides examples of the rationale and identification of an interim management process during the search for a new manager.

Procedure:

1. The Investment Staff, CIO, Consultant or a Board Member may make a recommendation for any action including Watch-list designation or termination at any monthly Investment Committee meeting.

Investment Goals

The Fund investment goal is to earn a rate of return sufficient to meet the actuarially assumed earnings projection over the long-term. Accordingly, the Fund's investment program will pursue its aforesaid total rate of return by a combination of income and appreciation, relying upon neither exclusively in evaluating a prospective investment for the Fund. Any exceptions, an investment made solely for income with no prospect of appreciation or an investment made solely for appreciation prospects with no income contribution, will be made only upon recommendation of the Fund's Investment Committee and approval by the Board.

Approved Asset Allocation

As of September 26, 2016, the approved target portfolio composition is as follows. The permitted range for each asset class is +/- 5% with the exception of opportunistic real estate, whose range is +/- 1%. More granular ranges will be reviewed and discussed as part of the Board's asset allocation review with Staff and the consultants.

Broad Fixed Income	10.00%
Global Fixed Income	2.00%
Emerging Market Debt	2.00%
U.S. Large-Cap Core	22.00%
U.S. Mid-Cap Core	3.00%
U.S. Small-Cap Core	5.00%
ACWI ex-U.S.	15.00%
Non-U.S. Small Cap	6.00%
Emerging Markets	4.00%
Public REITs	1.00%
Real Estate Core	11.00%
Real Estate - Mezzanine	1.00%
Real Estate - Opportunistic	1.00%
Infrastructure	5.00%
Private Equity	10.00%
Private Debt	2.00%

Asset Classes Approved for Use

As of September 26, 2016, the Board has approved for investment the following asset classes

1. Cash
2. Domestic Equity
3. International Equity
4. Emerging Markets
5. Investment Grade and Opportunistic Fixed Income
6. Private Equity and Debt
7. Real Estate Equity and Debt
8. Hedge Funds
9. Real Assets
10. Infrastructure

Asset Class Definitions

Domestic Equity

Domestic Equity securities include common and preferred stocks of U.S. corporations or investment company shares (closed-end or open-end) holding by investment policy only or nearly only common and preferred stocks of U.S. corporations and cash equivalent securities.

Domestic equity specifically excludes American Depository Receipts (ADRs) and other U.S. traded instruments whose prices are derived directly or indirectly from the prices or price changes of non-U.S. common stocks except:

- a) For managers which have a designated benchmark containing ADRs, ADRs are permitted up to the percentage represented in the benchmark, and
- b) If ADRs are permitted by (a) above, such usage of ADRs is limited strictly to those issues which have characteristics similar to the type of securities that would normally occur in the portfolio given the managers stated management style.

Also specifically excluded are market-basket securities such as index futures, index options, or options on index futures.

The domestic equity asset class contains stocks of all capitalization ranges and style-based selection parameters. Only issues which are fully registered and tradable are permitted.

International Equity

International Equity securities include common and preferred stocks of non-U.S. corporations or investment company shares (closed-end or open-end) holding by investment policy only or nearly only common and preferred stocks of non-U.S. corporations and cash equivalent securities.

International Equity can include American Depository Receipts (ADRs), Global Depository Receipts (GDRs), or direct ownership of non-U.S. shares. Specifically excluded are market-basket securities such as index futures, index options, or options on index futures.

As these securities are priced in and pay dividends in foreign currencies, there is a decision required as to whether or not or to what degree to hedge the foreign currency exchange risk.

Emerging Markets

Emerging Market securities include common and preferred stocks of non-U.S. corporations domiciled in countries not considered established markets or investment company shares (closed-end or open-end) holding by investment policy only or nearly only common and preferred stocks of non-U.S. corporations domiciled in countries not considered established markets, and cash equivalent securities.

Emerging Market securities can include American Depository Receipts (ADRs), Global Depository Receipts (GDRs), or direct ownership of non-U.S. shares. Specifically excluded are market-basket securities such as index futures, index options, or options on index futures.

As these securities are priced in and pay dividends in foreign currencies, there is a decision required as to whether or not or to what degree to hedge the foreign currency exchange risk.

Fixed Income

Fixed income includes debt-based fixed income securities. Included in fixed income securities are mortgage-backed, asset-backed, and other pass-through securities. All fixed income securities have a time to maturity of at least one year at time of purchase.

Fixed income includes domestic government and corporate debt securities and further includes bonds and other interest-paying debt securities issued by entities domiciled outside the United States. These entities can include states (sovereign debt), political subdivisions of states such as provinces or municipalities, public authorities, and various corporate-like entities whether private sector, quasi-private, or public.

Private Equity

Private Equity consists of assets which do not fit into other, more standard classifications and do not trade on public markets. They include venture capital, tangible assets, and other non-traditional investments.

Real Estate

Real Estate consists of collective funds, partnerships, and investment companies invested entirely in domestic real estate as well as separate account domestic real estate interests. These investments may from time to time also hold substantial cash positions awaiting property acquisitions, property improvements, and distributions to holders.

This asset class includes all types of improved real estate generally used by institutional investors including office, commercial, industrial, and multi-family residential. Raw land held as a long-term speculative investment is specifically excluded from the definition of new real estate. Land held as part of a planned improvement program is permitted.

Real Assets

The Real Assets Asset Class may take the form of passive, active or alternative strategies where returns are derived from exposure energy, infrastructure, industrial and precious metals, agriculture, livestock, inflation-linked securities and commodity indices. Managers for this asset class may include index funds, enhanced index funds, commodity equity managers, commodity hedge funds, commodity trading advisors and private real asset partnerships.

Hedge Funds

Hedge fund strategies generate returns by exploiting mis-pricings and inefficiencies in global capital markets, while reducing exposure to primary market factors/risks (e.g. equity and credit), through various hedging techniques. These strategies have historically delivered returns that are less correlated to equity and fixed income markets than traditional investment strategies. The addition of hedge funds presents an opportunity for the Fund to enhance returns and reduce portfolio volatility.

The long-term objectives of the hedge fund Program are as follows:

- a. Enhance the Fund's long-term risk-adjusted returns;
- b. Preserve capital and lower the Fund's overall volatility;
- c. Provide diversification benefits to the Fund.

Hedge Funds may employ leverage, and enter into long, short and/or derivative positions, with the goal of performing well, providing positive absolute returns, in all market conditions.

**CITY OF PHILADELPHIA
BOARD OF PENSIONS AND RETIREMENT
PRIVATE MARKET INVESTMENT GUIDELINES**

Adopted September 28, 1995

Restated and Amended February 24, 1999 and

Amended June 22, 2000

Amended June 24, 2004

Amended March 22, 2006

Amended October 19, 2007

Amended January 22, 2009

Amended November 22, 2010

Amended April 25, 2013

Amended August 21, 2013

Amended March 21, 2019

I. GENERAL

The City of Philadelphia Board of Pensions and Retirement is an independent board of the City of Philadelphia vested with the exclusive authority and discretion to manage and control the retirement funds for the City of Philadelphia Public Employees' Retirement System (the "System"). As used in this document, the "Board" is the City of Philadelphia Board of Pensions and Retirement, acting through its Investment Committee.

The Board's primary duties in this regard include, but are not limited to, the following:

1. To serve as custodian of the System's retirement funds and to manage them on an actuarially sound basis;
2. To act as fiduciaries of the System's retirement funds solely in the interest of the participants and beneficiaries;
3. To select and retain competent investment managers, where required, that will execute investment strategies designed to achieve the Board's investment objectives; and
4. To monitor investment performance and to alter established investment strategies as required.

The following private market investment guidelines (the "Guidelines") serve to provide direction as the Board or its Subcommittee (hereinafter defined in Section IX), with the assistance of the private market consultant, identify, evaluate and make commitments under the private market asset class allocation and manages the private market portfolio.

The Board has engaged a consultant with specialization in the private market field to develop an investment plan, perform due diligence, make recommendations, assist in negotiation of business terms and conditions, and monitor the private market portfolio.

II. RATIONALE FOR DEVELOPMENT OF THE-PRIVATE MARKET PROGRAM (the “Program”)

A. General Definition. Private market investments are opportunities that have not been identified by the traditional public equity or fixed income capital markets. The private market asset class offers the potential for significantly greater returns than those available in the public market. The returns are commensurate with the risks presented by this class, such as illiquidity or lack of standard historic evaluation data.

B. Opportunities for the Board. There are several potential opportunities afforded to the Board by the private market asset class. Among them are:

1. *Prospective returns on investment which are significantly greater than the expected returns from other asset classes, and greater than the expected rate of inflation;*
2. *Prospective returns on investment in excess of the assumed actuarial minimum rate; and*
3. *Returns as set out in (1) and (2) above which are achievable from investment structures with prudent and reasonable levels of risk and liquidity.*

C. Actions of the Board. Taking the foregoing into account, the Board adopted these Guidelines in a decision at the meeting held on September 28, 1995. The Board restated and amended these Guidelines in decisions at meetings held on February 24, 1999, June 22, 2000, June 24, 2004, March 22, 2006, October 19, 2007, January 22, 2009, November 22, 2010, April 25 and August 21, 2013, and March 21, 2019.

III. FORMAL DEFINITION OF PRIVATE MARKETS

For purposes of these Guidelines, the private market asset class shall consist of certain investments that fall outside the traditional fixed income and public equity asset classes. Investments specifically designated as private market shall be those private placements that represent interests in limited partnerships or similar vehicles, or direct interests in privately held operating companies.

The private market asset class will be divided into two sub-categories: private equity and private debt.

Generally, private equity will include the following strategies:

- **Venture capital:** Equity or equity-like investments in development stage companies that raise capital for the financing of the development of a new technology or service.
- **Corporate Finance:** Equity or equity-like investments in mature or expansion stage companies typically made through the financing of growth, acquisitions, spin-offs, mergers or changes in capitalization.
- **Distressed:** Investments in equity, equity-like, or debt securities in companies with financial or operating issues, including, but not limited to, investments in debt securities or other obligations often trading at discounts to par value.

Generally, private debt will include the following strategies:

- Mezzanine: Investments in subordinated debt often used in conjunction with the financing of acquisitions or recapitalization of companies.
- Other Strategies: Investments that have similar risk-return characteristics and cash flow profile as Mezzanine and, including, but not limited to, Secondaries (i.e. acquisition of interests in mature private market funds), and Royalties (i.e. acquisition of royalty interests in pharmaceutical products and companies).

Within the private market asset class, the following categories of investments shall be eligible for funding.

1. *Venture capital funds;*
2. *Buyout funds;*
3. *Mezzanine debt funds;*
4. *Growth capital funds;*
5. *Turnaround funds;*
6. *Distressed debt funds;*
7. *Special situation funds;*
8. *Royalty funds; and*
9. *Any non-traditional investment approved by the Board as an eligible investment.*

The following investment structures of private market funds shall be eligible for investment.

1. *Primary Funds: closed-end vehicles that invest directly in companies through privately negotiated transactions. The private market fund manager serves as the general partner, with capital committed from investors, or limited partners. Primary funds are typically structured as limited partnerships with 8 to 12 year terms. Primary funds will be the predominant investment vehicle for the Program.*
2. *Secondary Funds/Interests: secondary transactions involve the purchase of an existing interest in a private market fund or portfolio of funds. Unlike primary funds, the buyer has the opportunity to evaluate an existing portfolio, which may be partially or fully invested, in order to determine a price.*
3. *-/Direct Investments: interests in operating companies, typically alongside a sponsoring general partner. The Board is generally not expected to make such investments, except in certain rare circumstances.*
4. *Fund-of-Funds: closed-end vehicle that invests in other primary and/or secondary funds. Similar to primary funds, a fund-of-funds is managed by a general partner over a specified term.*
5. *Structured Products: encompass investment vehicles of existing privately held assets that may incorporate features such as current income, insurance or classes of interests ranging from senior debt type securities to equity.*

IV. ALLOCATION TO ASSET CLASS

The target allocation for the Private Markets asset class is specified in the most recent Board approved asset allocation based on a study performed by the Plan's general investment consultant. This allocation is further broken into the two sub-classes previously defined as private equity and private debt, with the allocation targets as specified by the most recent asset study performed by the Plan's general investment consultant. This allocation shall be reviewed on an annual basis to determine its appropriateness in light of current market conditions, changes in the Board's investment return objectives and liquidity requirements, and other relevant factors.

V. INVESTMENT OBJECTIVES

The primary investment objective for the System's private market portfolio is to maximize total risk-adjusted return, with particular emphasis to be placed on preservation of capital for the entire private market portfolio as well as each individual fund or investment, and achievement of real capital appreciation (i.e. growth in excess of the expected rate of inflation). Within this context, the Board shall seek long-term investment returns greater than those available from traditional debt and equity securities, and shall make investments with demonstrable safeguards against loss of capital. For purposes of these Guidelines, short-term fluctuations in value will be considered to be secondary to the attainment of long-term investment returns with safeguards against the loss of capital.

At a minimum, investments in this asset class should project returns in excess of the System's assumed actuarial rate of interest and also be designed to achieve long-term investment returns greater than those anticipated for the System's fixed income and equity investment components. The target rate of return for the overall private market portfolio is the ten-year average annualized return of the Russell 3000 Index Public Market Equivalent (PME) benchmark, plus a 300 basis point premium. The determination of the target expected rate of return on any individual investment should be based upon the particular investment strategy employed.

- 1. If investment commitments will be used by the investment sponsor, general partner or principals to make equity investments in private companies in which equity risk factors predominate the risk profile, then the target for expected long term returns on the investment is the 10-year average annualized return of the broad public market, plus a 300 basis point premium.*
- 2. If the investment commitments will be used to make debt investments, then the target for expected returns shall be at least 400 basis points in excess of the yield-to-maturity on U.S. Government obligations of similar maturities, net of fees.*

The Board may waive any of the foregoing criteria, provided that unusually strong security provisions can be demonstrated. Such waivers shall be contingent upon full review and approval by the Board. Strong security provisions involve exceptionally effective ways to preserve capital and generate the expected returns.

These security provisions may arise from protective covenants included in the documentation which governs the investment, the investment concept, the expertise of

co-investors, the seniority of claims in a partnership in an investee company, from the manner in which a fund is managed, or from other aspects of the investment.

Additional objectives to be achieved include participation in investments that:

1. *Produce returns commensurate with levels of investment risk and liquidity that are generally considered to be prudent and reasonable; and*
2. *Comply with all applicable laws, regulations and internal Board policies with respect to investment of the System's assets.*

The private market asset class shall be managed to achieve:

1. *A consistent flow of qualified investment opportunities that represent the most attractive investment vehicles currently available in the marketplace; and*
2. *A diversified and balanced portfolio of private market investments structured so that the risks inherent in these illiquid and long-lived assets may be minimized.*

The System does not seek to promote the elimination of public sector jobs held by employees of the City of Philadelphia through its private market investments. It is unlikely that the System would make investments that are dependent on strategies aimed at eliminating jobs held by employees of the City of Philadelphia. When performing due diligence prior to making a capital commitment to a private market fund, the Investment Staff and the System's consultant shall use reasonable efforts to ascertain whether such investment is dependent on privatization strategies that would likely result in the elimination of jobs held by employees of the City of Philadelphia. If a private market fund is dependent on such strategies, the Investment Staff and the Board's consultant shall disclose such information to and seek guidance from the Board.

VI. PRIVATE MARKET INVESTMENT SELECTION GUIDELINES

In addition to the overall asset allocation percentage and investment return objectives described above, certain additional portfolio selection criteria will be applied to prospective investments under the Program. These criteria shall be reviewed on an annual basis in order to reflect changes in the Board's investment objectives, cash flow requirements, overall market conditions and applicable law.

Any prospective private market investment candidate will be reviewed for compliance with the following criteria before any level of detailed evaluation is undertaken.

A. Documentary Maturity Arrangements and Exit Strategy. Any private market investment made by the Board shall:

1. *Contain documented maturity arrangement, which offer reasonable assurance that the System shall recover its original commitment in cash or readily marketable securities after a period of time that shall be set out in the investment agreement. In general, maturity provisions in investment agreements shall call for final winding up and orderly liquidation of portfolio investments within twelve years and include a clawback provision in any partnership with performance related compensation.*

2. *Feature a viable exit strategy or set of strategies through which assets shall be disposed of or liquidated.*

Such strategies may involve the private divestiture of portfolio companies, an initial public offering of shares in such companies, the sale of shares through a management buyout, or employee stock ownership plan, a recapitalization under which a portfolio company may borrow funds to buy back shares from stockholders, or through other means.

B. Asset Quality and Risk Profile Restrictions and Limitations. Private market investments shall offer an investment concept, a fund management structure, a specific plan for use of proceeds and investment documentation which shall provide reasonable assurance of protections against loss of capital, lack of ultimate liquidity of underlying assets, excessive shortfalls from expected investment returns, or loss of normal and customary rights or influence by the investor class of which the System is a part.

In addition, depending upon the risks posed by any particular investment, the Board may mandate further asset quality enhancement measures. Subject to the amount of the System's pro rata interest in a proposed investment partnership and its ability to negotiate changes in the investment's terms and conditions, the Board or its Subcommittee shall seek to obtain the following additional security provisions:

1. *Preferred returns for the investor class of which the System is a part;*
2. *Strengthened security provisions - Such provisions shall include covenants in the investment documentation to allow cancellation of investor commitments and the specification of the representations and warranties to be met by the general partner as a condition precedent to a commitment in the investment; and*
3. *Increases in the usual level of influence over the investment structure through such practices as membership on advisory boards, valuation committees, or through expanding the voting powers of the investor group of which the System is a member.*

C. Investment Size. With respect to primary partnership commitments, the Board shall, in general, make minimum investments that are the greater of \$5 million or an amount that the Board deems appropriate to provide adequate influence over a private market investment. This influence shall be sufficient for the Board to reasonably protect its rights under the respective investment agreement, in a manner consistent with other participants in the same investor class. In general, the Board shall not make investments that exceed an amount equal to 20% of the amount raised for a proposed fund or direct investments, but in no event shall investments exceed 35% of the amount raised for a proposed fund or direct investment.

With respect to secondary transactions, single transactions will be limited to no more than \$20 million in value, with annual limitations of up to three transactions and up to \$40 million of aggregate value. No single secondary investment may account for more than 10% of the Board's total private market exposure and the total value of secondary investments may not exceed 20% of total private market exposure.

D. Investment Structure. The agreements governing a private investment shall feature acceptable provisions concerning termination of commitments, winding-up procedures, responsibilities of management, fund management expenses and cost allocations, the determination of distributions of earnings and capital to investors and the investment sponsor, management fees, carried interest and other fees, freedom from potential conflicts of interest, co-investment policies, tax considerations and the organization and role of the advisory board, if any.

The Board has endorsed the Institutional Limited Partners Association's (ILPA's) Private Equity Principles. The Principles are suggested best practices to: (i) better align interests between general partners (fund managers) and limited partners (investors), (ii) enhance limited partner governance of funds, and (iii) provide greater transparency to limited partners. The Principles also outline: (1) preferred terms for Limited Partnership Agreements ("LPA Preferred Terms"), and (2) best practices for Limited Partner Advisory Committees ("LPAC Protocol"). The Board's endorsement of the Principles is not a commitment to abide by the Principles, but rather a statement that the System will use the Principles as a guideline for industry best practices.

The role and participation of the System in private investments shall be restricted to those of a passive investor that has made financial resources available to the investment vehicle with the expectation of financial returns. The Board shall not engage in management or financial planning, investment banking or other activities. In general, the role of the Board shall be consistent with that of a limited partner in a partnership.

E. Portfolio Diversification. The private market portfolio should be structured to maximize risk adjusted return. In order to achieve desirable diversification within the private market portfolio, the target sub-allocations (and corresponding target allocation ranges) to private equity and private debt shall be used as an overall target for commitment levels within the portfolio. When determining actual commitments to the sub-allocations, appropriate consideration should be given to then-current market conditions or other circumstances that may warrant a temporary departure for the recommended ranges. Funds that focus on investing primarily outside of the U.S. may be approved provided the total value of International investments may not exceed 30% of total private market exposure. Within private equity, venture capital investments may not exceed 20%.

F. Restricted Activities. Certain private market investment categories that shall not be eligible for initial evaluation or potential funding commitments are: Investments which will utilize capital solely for seed financing; Investment plans which in substance will use proceeds for natural resource exploration and development projects which lack reliable information on proven accessible resources or deposits; or Investments known collectively as "Prohibited Investments", that shall be found in the Plan's most recent side letter or Investment Management Agreement template as amended from time to time.

The Board may elect to waive certain of the foregoing prohibitions, provided that strong security provisions or other mitigating factors can be demonstrated. Such waivers shall be contingent upon full review and approval by the Board. Security provisions and other mitigating factors may include: protective covenants included in the partnership documentation which governs the investment, unique aspects of the proposed investment strategy, the expertise of co-investors, the seniority of

claims of a partnership in an invested company, the manner in which a fund is managed, or other special features of the investment.

VII. RISK IDENTIFICATION GUIDELINES FOR EACH INVESTMENT OPPORTUNITY

The private market asset class carries with it a higher degree of potential investment risks, generally in direct proportion to the opportunity for enhanced investment returns. Investment risks shall be assessed for each private market investment in cooperation with the private market consultant. Each investment must be reviewed and a determination must be made concerning the following risk categories and risk factors:

A. Risks Pertaining to the Specific Investment Opportunity.

1. *Events which could cause an investment to fail to return original commitments and lead to loss of capital;*
2. *Events which could lead to illiquidity of underlying assets or ineffectiveness of the exit strategies;*
3. *Events which could lead to variation in returns or shortfalls from expected levels of returns;*
4. *Events or characteristics that could potentially lead to negative public exposure or sentiment for the Board;*
5. *Characteristics of the investment which might lead to reduced diversification within the investment structure itself, or the expected diversification that an investment is expected to afford the overall private market portfolio;*
6. *Changes in circumstances, including investment sponsor management, which could lead to the possibility that the execution of an investment fund's strategy could be jeopardized; and*
7. *Signs of excessive levels of capital commitments in the industry, economic sectors, or transactional form for which proceeds would be used.*

B. Risks Pertaining to the Economic Environment of Each Investment Opportunity.

1. *Ways in which the proposed investment is vulnerable to identifiable economic cycle;*
2. *Ways in which an investment may be vulnerable to adverse changes in regional economies;*
3. *Exposure to adverse developments in debt or equity markets, interest rates, foreign exchange rates or availability of financing through sectors of the capital markets which lack depth, such as recapitalizations, or commercial real estate financing; and*

4. *Aspects of an investment proposal which are vulnerable to adverse changes in regulations or to increased uncertainties as to outcome depending on changes in federal, state, or local laws or regulations.*

C. Risks Pertaining to the Structure of the Overall Portfolio. In addition to a review of the specific investment, the Board shall avoid concentration of the private market portfolio in any single manager, vintage year, investment strategy, industry, geographical region, exit strategy or target market for exit, or investments with returns which are closely correlated with other asset classes.

VIII. INVESTMENT MANAGEMENT GUIDELINES

The Board will follow procedures to minimize the inherent incremental risks associated with this asset class. Certain of the principal risks have been enumerated in the risk identification guidelines set out in Section VII. In addition, all phases of investment identification, evaluation, negotiation, and monitoring shall conform in their entirety to the “prudent investor”¹ rule. These procedures shall be the responsibility of the Board’s private market consultant and shall include:

A. Prudent, formalized investment due diligence and selection. Comprehensive due diligence is essential to screening and selecting investments suitable for the private market portfolio. Major issues to be considered during the due diligence and evaluation process will consist of:

1. *Experience (if applicable) of the investment sponsor, general partner or principals with projects similar to the one proposed and/or direct relevant experience in the market targeted by the stated investment strategy. In particular, the investment sponsor, general partner or principals must demonstrate:*
 - *Relevant work experience directly applicable to the project they plan to undertake;*
 - *The requisite skills to be able to successfully execute the proposed project, including evidence from similar endeavors of their ability to work together;*
 - *Independence from other interests which may conflict with representation of the investors;*
 - *Successful investment results in applicable prior projects. Quartile rankings will not be the sole factor considered when reviewing prior performance;*

¹ A fiduciary shall invest and manage assets held in a fiduciary capacity as a prudent investor would, taking into account the purposes, terms, distribution requirements expressed in the governing instrument, and other circumstances of the fiduciary estate. To satisfy this standard, the fiduciary must exercise reasonable care, skill, and caution. A “prudent investor” diversifies assets to obtain an investment strategy that incorporates suitable risk and returns based on the projected needs of all beneficiaries and based on the responsibilities described in the trust document.

- *Adequate organizational depth with resources necessary to execute the contemplated investment strategy and support the reporting and administration of a partnership with third party institutional capital; and*
 - *High ethical standards and an understanding of fiduciary responsibility, generally assessed through extensive professional reference and background checks on the principals.*
2. *Viability of the investment premise and strategy, including analysis of, and market research covering, the general investment environment related to the proposed strategy;*
 3. *Assessment of projected investment returns, risk factors and exit strategies. In this regard, the business plan or strategy describing the investment must be in writing, and be prepared in sufficient detail to permit substantive and meaningful review of the opportunity, its projected returns, its risks, and its exit program;*
 4. *Compatibility with other private market investments held by the System in order to achieve appropriate diversification in terms of investment strategy, industry focus, stage of development of portfolio companies, geographical focus, etc. In accordance with this objective to provide sufficient diversification within the private market portfolio, no one investment shall represent more than 10% of total System exposure². Furthermore, no one investment sponsor shall represent more than 25% of total System exposure;*
 5. *Discernible competitive advantages over groups pursuing similar strategies. Competitive advantages may include access to proprietary deal flow channels, strategic relationships, reputation/brand or specialized industry expertise that allow the manager to generate above-market returns.*
 6. *Interviews with, and confirmation of the participation of, other sophisticated institutional investors;*
 7. *Relative size of the System's contemplated investment vis-a-vis the total amount of capital being sought by the investment sponsor;*
 8. *Evaluation of any perceived or potential conflicts of interest;*
 9. *Environmental/social/governmental issues/compliance;*
 10. *Compliance with all federal, state and local regulatory/legal requirements;*
 11. *Comparison of projected returns from the prospective investment with those of other private market investments with similar risk characteristics available in the marketplace.*

² System exposure defined as aggregate reported value of existing investments, plus unfunded commitments.

B. Review and negotiation of key investment terms and provisions in order to provide maximum investor protection and value. Procedures to be employed by the Board's private market consultant will comprise:

1. *In-depth review of all investment offering documents for identification of key investment terms and provisions offering the opportunity for improved investor protection;*
2. *Evaluation of the terms of the offering document which govern all remuneration, payment of investment returns, and return of capital to the principals, sponsors, or general partners in comparison to limited partners or financial investors;*
3. *Comparison of remuneration of the sponsor's principals or general partner with those of similar parties in comparable investments;*
4. *Comparison of distribution policies of the investment with those of other private market investments;*
5. *Interface with the Board's internal and external counsel to discuss key issues to be negotiated and the relative responsibility for executing such negotiations;*
6. *Direct negotiation with investment sponsors for amendments/enhancements to investment structure and terms; and*
7. *Evaluation of terms governing the principals, sponsors or general partners' time commitment to the investment and remedies in the event such principals, sponsors or general partners' leave or fail to devote the appropriate time to the investment.*

C. Effective investment monitoring, analysis, and reporting, with timely intervention as required. Effective investment monitoring procedures will be required for all private market investments in order to minimize the risk resulting from illiquidity and long-term investment horizons. These procedures will be the responsibility of the Board's private market consultant and shall include:

1. Periodic communication with investment sponsors, in order to obtain timely information on investment performance;
2. Quarterly reporting to the Board on end-of-period investment performance, valuations, and manager compensation.
3. The consultant's quarterly report should include summaries of key terms, any key issues, funds in a clawback position, economic outlooks, and other factors affecting the investment;
4. Analysis of special situations or circumstances requiring decision-making by the Board, as required, including investment provision amendments, special investment opportunities, etc.;
5. Where requested by the Board or its Subcommittee, attendance at investor meetings on its behalf;

6. Annual reporting to the Board of all material investment activities and results under the private market program;
7. Recommendations for the improvements in private market activities and periodic workshops for the Board on topics which will provide the Board with greater familiarity with private market and thereby facilitate the execution by the Board of its chartered responsibilities; and
8. At least semi-annual reporting on the universe of minority, disabled and women owned private market managers, including a review of (i) such managers evaluated or examined by the consultant in the applicable preceding quarters, (ii) efforts made by the consultant in the applicable preceding quarters to bring suitable minority, disabled and women owned managers to the Board's attention, and (iii) new funds owned by such managers being brought to market in upcoming quarters.

IX. M/W/DS-DBE and Philadelphia based OPPORTUNITIES

In accordance with Chapter 17-500 of the Philadelphia Code, and Mayor's Executive Order 3-12, it is the expressed intent of the Board to actively (i) seek out, through a variety of means, M-DBE (Minority Disadvantaged Business Enterprises), W-DBE (Woman Disadvantaged Business Enterprises), DS-DBE (Disabled Disadvantaged Business Enterprises) private market managers and (ii) provide such managers with opportunities to compete for capital commitments, consistent with the portfolio's performance objectives, investment strategy and fiduciary standards.

M-DBE, W-DBE, and DS-DBE (collectively referred to as "M/W/DS-DBE") private market managers include firms owned by persons as defined below:

- M-DBE – a person who is African American, Asian American, Hispanic/Latino American or Native American.
- W-DBE – a person of the female gender.
- DS-DBE – a person who has a physical or mental impairment which substantially limits one or more of his or her major life activities.

In addition to the provisions for M/W/DS-DBE firms, investment in firms that are headquartered or have a majority of operations in Philadelphia will also be considered.

M/W/DS-DBE and Philadelphia based opportunities include private market strategies as defined in Section III above; managed by firms with majority ownership by minorities, disabled, and/or female persons or private market strategies as defined in Section III above managed by firms with headquarters or a majority of operations in Philadelphia.

Opportunities managed by firms that are in compliance with the Mayor's executive Orders and City's overall OEO guidelines will also be considered. In this way, the opportunity to enhance portfolio returns is greater and the spirit of establishing relationships with firms having diverse owners and workforces is expanded to include firms that demonstrate a commitment to diversity.

Investments with the M/W/DS-DBE and Philadelphia based private market managers will be diversified in order to reduce volatility associated with concentrated portfolios and to

limit the probability of large losses on individual managers. Capital commitments with M/W/DS-DBE and Philadelphia based private market managers will have greater flexibility in size to allow for the opportunity to support smaller managers and tactically allocate across a diverse range of strategies. Eligible firms for investment are those with total AUM of \$100 million or more. The Board's investment with these firms shall not exceed 10% of the firm's total AUM.

X. AUTHORITY TO MAKE INVESTMENTS

The final authority to make investment commitments under the private market asset allocation shall be vested solely with the Board. Except as provided below, no other party shall have discretionary control to commit funds in this class.

The Board may designate a subcommittee ("Subcommittee") consisting of at least three Board members. Investments shall be reviewed and approved by a majority of the members of the Subcommittee voting in favor of such investment prior to the investment being brought to the full Board for approval. The Board hereby authorizes the Subcommittee to perform all actions stated herein except those actions which the Board reserves for itself, described herein or upon other action of the Board.

Generally, the Investment Staff will adhere to the following procedures when recommending a private market investment to the Board:

A. For situations when an investment will be the Board's first with an investment manager, the private market consultant will present a formal recommendation to the Board during an investment committee meeting, and the Board will vote whether to invite the investment manager in for a presentation to the Board. If voted in favor, at a subsequent investment committee meeting, Staff will present their independent report to the Board followed by a presentation from the investment manager. The Board will then vote whether to make an investment in the investment manager's fund.

On occasion, an over-subscribed fund having a short fundraising period may warrant expedited approval by the Board. In such situations, the private market consultant's recommendation, Staff's report, the investment manager presentation and the Board's vote will occur at the same investment committee meeting.

B. For situations in which the Board has made a previous investment with the investment manager, the private market consultant and Staff will present a formal recommendation to the Board during an investment committee meeting, and the Board will vote whether to make an investment in the investment manager's fund. Where the Board deems it appropriate, the Board may elect to bring in an existing manager for a presentation prior to voting for or against making an investment in the fund.

The Subcommittee may, without Board approval, and upon the favorable recommendation of the Investment Staff of the Board and the Board's private market consultant, approve an investment or divestment in a direct secondary transaction with an investment level not to exceed \$20 million. Investments and divestments of this nature will only be presented to the Subcommittee if the timeframe of the transaction does not allow for it to be presented to the full Board.

Any investments approved by the Subcommittee shall be presented to the Board at the following Investment Committee.

XI. REVIEW AND MODIFICATION OF PRIVATE MARKET INVESTMENT GUIDELINES

These guidelines shall be reviewed periodically, but not less than annually, by the Staff and the Board's private market consultant, to determine any additions or modifications that may be required.