

**COMMONWEALTH OF PENNSYLVANIA**  
**TREASURY INVESTMENT POLICY**

**Effective May 2013**



PENNSYLVANIA  
**TREASURY**  
Earn. Learn. Invest.

ROB McCORD, TREASURER

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## **I. INTRODUCTION AND BACKGROUND**

### **A. Statement of Purpose**

This document sets forth the Commonwealth of Pennsylvania Treasury Department Investment Policy (Policy), with the purpose of guiding the Treasury Department (Treasury) in fulfilling its Legislative and fiduciary responsibility. The Policy establishes investment standards that are consistent with The Fiscal Code, 72 P.S. §1 *et seq.*; The Administrative Code, 71 P.S. §1 *et seq.*; and all other applicable laws, rules, and regulations. The provisions of this Policy are intended to aid Treasury employees and financial professionals retained by the Treasury in making decisions about investment matters. The Policy is intended to be sufficiently specific to be meaningful to these audiences, yet flexible enough to be practical and responsive to changing circumstances.

### **B. Background**

The Pennsylvania Treasury Department is an independent executive office created by the Constitution of the Commonwealth of Pennsylvania, Article IV, § 1, 18. The Treasurer serves as statutory custodian of the funds of virtually all state agencies, with the responsibility for monitoring and safeguarding money and securities, according to 72 P.S. § 303. In addition, The Treasurer is entrusted with the exclusive management of and full power to invest moneys that exceed the ordinary needs of Commonwealth funds and that are not authorized to be invested by any other board, commission, or state official. As noted in, among other places, 72 P.S. § 301, the Treasurer has broad authority to place these moneys in any investments subject to a standard of prudence and diligence. In addition to moneys of these Commonwealth funds, Treasury has investment authority for moneys derived from other specialized program activities.

In making investments for Commonwealth funds, the Treasurer is charged with exercising that degree of judgment and care that experienced investors of prudence, discretion, and intelligence employ in the management of their own affairs regarding permanent disposition of their assets, as discussed in 72 P.S. § 301. Implementation of this investment standard, commonly called the Prudent Person or Prudent Investor test, requires the exercise of careful judgment in determining those investments that are appropriate for each Commonwealth Fund based upon income needs, cash flow requirements, investment time horizons, risk tolerance, and other

investment criteria. Investment decisions must also reflect any differing legal standards that authorize or limit the particular kinds of investments each Fund may hold.

The Treasury Department manages investments via a number of program specific investment pools. The investment strategy for each investment Pool reflects a unique application of the principles of Prudent Person investing, crafted specifically to balance the investment criteria in an appropriate manner for these particular investors.

### C. Scope of the Treasury Investment Policy

The Policy applies to the following programs and Pools administered by the Treasury Department:

1. Commonwealth Investment Program,
2. Pennsylvania 529 Guaranteed Savings Plan,
3. INVEST Program, and
4. Treasury Global Investment Fund.

With regard to these programs and Funds, the Policy covers the following areas:

- Responsibilities of the parties who carry out investment-related activities.
- Investment objectives, horizons, and limitations within the parameters of Treasury's legal authority.
- Basis for evaluating investment results.

The remainder of this Policy is divided into two sections. The first section, General Investment Principles, provides common standards that are applicable to all of the Treasury investment practices and decisions. The second, Program-Specific Investment Principles, provides separate standards for Treasury's investment practices and decisions for specific Commonwealth Funds and for other distinct Pools under Treasury management.

Unless otherwise noted herein, minimum ratings requirements established by this document shall be read as referring to the lowest of the credit quality ratings issued by Moody's Investors Services, Inc., Standard & Poor's Financial Services LLC, or Fitch Ratings Ltd.

D. Ethics and Conflicts of Interest Relating to Employees and Investment Officials

Treasury Department employees involved in the investment process shall refrain from any personal business activity that could conflict with the proper execution and management of any Treasury investment program or that could impair their ability to make impartial decisions. Treasury employees shall provide all disclosures required by 65 Pa.C.S. § 1101 et seq., commonly known as the Public Official and Employee Ethics Act, and any internal Treasury Code of Conduct that may be promulgated and amended from time to time. Financial professionals shall disclose in writing to the Investment Committee any material interests they hold in financial institutions with which they conduct business or any other sources of potential conflicts of interest. Such written disclosure shall be made immediately upon discovery of the potential conflict. Treasury reserves the right, in its sole discretion, to require financial professionals to sell or otherwise dispose of such material interests or to limit or terminate the financial professionals' engagements.

## II. GENERAL INVESTMENT PRINCIPLES

### A. Applicability of General Investment Principles

The policies established by these General Investment Principles are applicable, except where otherwise expressly noted, to the programs identified within the scope of this Policy.

### B. Roles and Responsibilities

#### 1. *Treasurer of the Commonwealth of Pennsylvania*

The Treasurer is the Chief Executive Officer of the Treasury Department, and has ultimate and final authority over and responsibility for the actions of the Treasury Department and the fulfillment of its legal mission. The Treasurer is responsible for managing the moneys of the various programs to preserve principal, provide liquidity, and generate returns that are consistent with both programmatic requirements and legal limitations. To achieve these objectives, the Treasurer has the right and responsibility to manage the various employees, agents, and contractors of Treasury. The Treasurer may designate specific agents, such as the Investment Committee and/or the Chief Investment Officer to carry out activities in fulfillment of these responsibilities. Acting alone, or through agents in the Department, the Treasurer shall:

- establish reasonable and consistent investment objectives, policies, and guidelines that will direct the investment of each program's assets in accordance with applicable law,
- meet the liquidity needs of each program's participants,
- prudently and diligently select qualified financial professionals in pursuit of these objectives,

- establish performance goals for each investment manager and communicate these goals in writing to the managers on a timely basis,
- regularly monitor the performance of the financial professionals to evaluate progress in attaining investment objectives,
- develop proper procedures to monitor compliance with this Policy,
- periodically review and revise the Policy to reflect changing circumstances or experiences, and
- establish and maintain due diligence guidelines.

The Treasurer seeks quality investments that will maximize the likelihood that each Pool will consistently satisfy its respective program requirements. Quality investments are those that protect principal while still projected to outperform the relevant market benchmarks, net of all fees and expenses, over the appropriate time horizon. Finally, the Treasurer will actively pursue investments offering a reasonable risk-adjusted rate of return, appropriate to each Pool and equal or superior to comparable alternative investments available to the Pool.

## *2. Chief Investment Officer*

The Chief Investment Officer is an employee of the Treasury Department, appointed by the Treasurer. The Chief Investment Officer assists the Treasurer, as desired, in monitoring and coordinating the investment functions of the Treasury Department.

The Chief Investment Officer or his designee(s) shall, unless otherwise directed, assume initial responsibility for coordinating the oversight of internal Treasury employees and external financial professionals; shall monitor the liquidity needs of the various Funds invested by the Department; shall receive and distribute all documents that are to be brought to the attention of the Investment Committee, and serve as Chairman thereof; and shall assume responsibility for notifying the Treasurer and other such individuals as the Treasurer may designate whenever a situation requires urgent attention. The Chief Investment Officer or his designee(s) shall fulfill any additional responsibilities that the Treasurer or his designee may, from time to time, assign to assist the Department in the fulfillment of its mission.

### *3. Treasury Department Investment Committee*

The Treasury Department shall utilize an Investment Committee to advise and assist the Treasurer in the discharge of his statutory duties. The Investment Committee shall consist of the Chief Investment Officer, who shall Chair meetings of the Committee; the Chief Counsel; and other persons whom the Treasurer may wish to appoint. The Investment Committee shall meet at least once each calendar quarter and on such other occasions as the Chair shall direct. A quorum for each meeting shall consist of not less than half the members of the Committee. Meetings may occur in person, by telephone conference call, or by such other means as the Chair deems to be appropriate.

The Investment Committee's responsibilities shall include the following, as the Treasurer may direct:

- Provide advice and recommendations the Treasurer may require pertaining to investment policy and investment issues.
- Evaluate investment strategies and particular investment options.
- Review waivers and exceptions to this Policy.
- Supervise and evaluate the performance of the financial professionals on behalf of the Treasurer.
- Monitor compliance with this Policy.
- Review progress towards achievement of the Treasury Department's investment objectives.
- Perform specific tasks and functions identified in this Policy or as directed by the Treasurer.
- Suggest amendments to revise this Policy as necessary.

### *4. Financial Advisors*

Treasury may retain one or more financial advisors to assist Treasury in achieving the investment objectives of the programs. The financial advisors shall offer advice concerning the management and investment of the

programs' assets that are consistent with the investment objectives, guidelines, and constraints established in the Policy. The investments under the specific purview of an investment advisor shall be defined in the initial employment contract. If no limiting scope is specified, it is assumed that the investment advisor is to offer services covering the entire scope of Treasury's investments.

The financial advisors' specific responsibilities shall include the following:

- Create quarterly and annual reviews of investment performance as detailed below.
- Conduct investment manager searches and make recommendations regarding the selection, scope of responsibility, and discharge of investment managers as required.
- Propose benchmarks for manager's evaluation under their purview for the Treasurer's final decision.
- Assist in the development and periodic review of the Policy.
- Design and present formal written recommendations for asset allocation plans and investment horizons for the respective programs, basing these recommendations on, and expressly including reference to, the investment risk tolerances of the various programs.
- Monitor and evaluate the performance of investment managers.
- Communicate matters of policy, investment manager research, and investment manager performance to Treasury.
- Recommend, in writing, appropriate alternative investment strategies.

a. Review of Investment Performance

On a monthly, quarterly and an annual basis, the financial advisor(s) shall prepare and submit to the Treasurer and the Investment Committee reports on investment performance for those investments that fall under their defined purview and responsibility. These reports should provide a comprehensive review of the investment performance of the portfolios for each program covered, comparing the performance to appropriate, pre-determined benchmarks and similarly situated portfolios, as directed by Treasury, as well as any analysis or review of any other such matters as the Treasurer

or his designee(s) may direct. The annual report shall also provide a comprehensive review of the aggregate investment performance of each program in comparison to the fiscal obligations or expenses for the program projected over a time horizon prescribed by Treasury, commentary on the performance of the managers and the portfolio as a whole, and suggestions for changes to the investment strategy, asset allocation, and investment policy for each program. The review shall also address any other matters that the Treasurer or his designee(s) directs the financial advisors to consider. The annual report shall be submitted no later than the last business day of February following the end of the preceding calendar year, or at some other such time as the Treasurer may direct.

#### b. Review of Manager Performance

All financial advisors shall submit monthly and quarterly reports summarizing manager performance to the State Treasurer and the Investment Committee. The monthly report shall be submitted no later than the last business day of the month following the close of the reporting period, and shall provide a current asset allocation summary and performance evaluation for each investment manager that they are assigned to monitor.

On a quarterly basis, financial advisors shall prepare and submit detailed and comprehensive written evaluations of the performance of each investment manager that they are assigned to monitor. The quarterly reports shall be submitted no later than the last day of the month following the close of the reporting period. The quarterly evaluations shall include, at a minimum, the following:

- review of actual investment performance versus the appropriate assigned benchmark(s), reflecting manager's performance both gross and net of fees,
- appropriate peer group comparisons,
- soundness of investment approach and philosophy,
- responsiveness and level of service provided,
- adherence to the terms of the investment manager's contract and this Policy,
- review of investment manager personnel assigned to the Treasury-administered investment programs,
- fees paid, both relative to performance and to other managers employed by Treasury. To the extent possible, fees should also be compared to publicly available information on average fee levels for managers similar to those under evaluation.

## 5. *Investment Managers*

Treasury shall retain investment managers in sufficient number and diversity to effectively manage the investment function as determined by the Investment Committee. The investment managers shall manage their portfolios subject to oversight by the Treasurer or his designee(s) and the Investment Committee, which shall receive advice and assistance on this oversight from the financial advisors.

Each investment manager shall have authority to make all investment decisions within their applicable asset allocation and specified portfolio investment style. Investment managers must exercise this authority consistent with the specific terms of their individual contracts, with other guiding or binding documents and within the provisions of this Policy. Investment managers are required to act at all times in conformity with applicable state and federal law.

The responsibilities of each investment manager include the following:

- Perform discretionary investment management, including decisions to buy, sell, or hold individual securities.
- Provide investment performance reports to the Investment Committee and relevant financial advisors as described in this Policy.
- Provide written notification to the Investment Committee and the appropriate financial advisors of any significant external factors, such as major changes in economic outlook or capital market trends or other relevant circumstances that may affect the investment strategy or the progress made toward accomplishing investment objectives.
- Inform the Treasurer and the Investment Committee, in writing, of any material internal change in its organization that may affect or materially alter their ability to carry out the investment strategy, including, but not limited to, modifications in portfolio management personnel, key investment personnel, ownership structure, investment philosophy or style.
- Notify the Treasurer and the Investment Committee, in writing, when external events have caused the manager's portfolio to include securities that are no longer consistent with the portfolio's intended composition or discipline.

- Request in writing to the Investment Committee waivers and/or exceptions to any provisions of this Policy.
- Provide a written report to the Investment Committee of each instance of non-compliance with the Policy within five days of discovery of the non-compliant event or circumstance.
- Comply with requests for information that may be submitted by financial advisors in pursuit of their stated advisory and reporting duties.

### C. Investment Objectives

Consistent with its obligation to act as a prudent person in carrying out its fiduciary responsibility, Treasury seeks quality investments that will maximize the likelihood that each Pool will consistently satisfy its respective program requirements. Quality investments are those that are suitably conservative while still projected to outperform the relevant benchmarks, net of all fees and expenses, over the appropriate time horizon. Finally, Treasury will actively pursue investments offering a reasonable risk-adjusted rate of return appropriate to each Pool, and equal or superior to comparable investments available to the Pool.

Treasury will discharge its duties by utilizing care, skill, prudence and due diligence under the circumstances prevailing that a prudent person, acting in capacity and familiar with such matters, would use in the conduct of a like character with like aims. The specific responsibilities relating to asset management include:

- Develop an understanding of each Commonwealth Fund’s financial needs and communicate the needs to the investment professionals as required.
- Assign each Funds’ assets to an appropriate Treasury investment structure.
- Develop risk tolerance and investment horizons for each Fund and effectively communicate these to the appropriate parties (investment professionals, staff and agencies).
- Establish reasonable and consistent investment objectives, policies and guidelines that will direct each Pool’s assets. Continuously monitor each Pool’s performance versus objectives.
- Prudently and diligently select qualified investment professionals, investment managers and custodians.
- Develop regular performance measurement monitors for each investment advisor as well as each investment Pool.
- Develop control procedures for the hiring and discharging of investment advisors and managers.

D. Investment Portfolio Composition

1. *Allocation Considerations*

Treasury shall determine the asset allocation strategy for each Pool under management. As the funding levels in some Pools can vary significantly throughout the course of the year, Treasury shall determine an optimal range for each Fund to be allocated to asset classes without requiring adherence to a fixed target.

In determining the asset allocation strategy, the Treasurer will make full use of all available asset classes, ensuring that the allocation meets the following goals:

- The allocation must provide sufficient security and an appropriate amount of liquidity for each Fund.
- The assets in the Pools should provide a prudent level of diversity to reduce risk. The Treasurer may seek to introduce assets into the funding structure which are not correlated with conventional indices to increase diversity and reduce risk.
- Consideration of the time horizon and risk tolerance of each Fund is essential. Funds that can experience greater short-term volatility or reduced short-term liquidity should be compensated for that flexibility with increased potential returns.

## 2. *Asset Classes*

The Treasurer will have the ability to invest in a diverse universe of asset classes, considering their relative liquidity, risk, and return characteristics. This section highlights some of the asset classes that may be considered, describing their characteristics and utility to a portfolio, and the unique parameters Treasury places on the various classes. Among the asset classes that will be considered are:

### a. *Equities*

Treasury invests in equities primarily to realize dividend income and growth through market appreciation of the securities in its portfolios. Treasury evaluates equity investment decisions and performance over horizons appropriate to this objective. No single equity holding in an investment manager's portfolio, measured on trade date, shall exceed 5% of the manager's portfolio, at market value, or exceed 5% of the issuer's outstanding equity.

From time to time, the Treasury Department may assign to an investment manager the task of maintaining a portfolio of securities that tracks a specific index of equities. In such cases, the investment manager's portfolio will not be subject to the provisions of Prohibited Investment Activity (as defined in Subsection 4) or any limitations on the proportions of any single holding within a portfolio, so long as such portfolio's investments are necessary and appropriate for such an investment strategy.

No investments may be made in the equity securities of a company where a significant portion of its business operations is related to the sale or distribution of tobacco products or alcoholic beverages, unless such an investment is made as part

of a specific index of equities. The determination of whether a company is subject to this prohibition will be made, upon request, by the Treasurer or his designee, given due consideration to all publicly available information.

b. Fixed Income (Including Cash and Cash Equivalents)

The Treasury Department invests in fixed income securities to provide a greater degree of stability and a predictable flow of income to the programs for which it serves as fiduciary.

Investment managers may only acquire fixed income securities that are rated investment grade on trade date or that the Treasury Department, prior to their acquisition, has deemed to be sufficiently credit worthy, unless that manager is specifically engaged in a fixed income strategy requiring investments of quality other than investment grade such as high yield or indexing. Investment managers shall provide prompt written notification to the Investment Committee when any fixed income security in the portfolio falls below investment grade and make a recommendation regarding retention or disposition of the security.

Short-term investment managers may transact in reverse repurchase agreements with the following counterparties: national banks subject to regulation by the Federal Reserve System, nationally recognized money center non-bank financial institutions, Pennsylvania banking institutions, and non-Pennsylvania banking and financial institutions that are authorized to act as principles for their own accounts. Reverse repurchase agreements may be transacted only with counterparties rated in one of the two highest short-term credit quality ratings categories by either Standard & Poor's, Moody's or Fitch.

Short-term investment managers transacting under tri-party agreements or under undeliverable agreements shall adhere to all collateral requirements contained in Appendix B of this Policy. For deliverable repurchase agreements, broker/dealers shall deliver collateral to a depository designated by Treasury. For tri-party agreements, broker/dealers shall deliver collateral to the Treasury's account with an independent third party subcustodian (either a money center bank or a nationally-recognized non-bank financial institution).

To maintain a diversified portfolio, a fixed income manager shall ensure that the cumulative value of any single issuer in the manager's portfolio shall not exceed 10% of the overall market value of the manager's portfolio on trade date. An investment manager's portfolio may not contain adjustable rate or variable rate fixed income securities whose total market value on trade date exceeds 15% of the portfolio's market value. Except as otherwise restricted by provisions of the program-specific investment principles described in Section III of this Policy, fixed income investment managers may invest in reverse repurchase agreements and in United States Obligations that are direct obligations of the United States or one of its agencies or instrumentalities, including all GSEs, without regard to the limitations of this paragraph.

No investments may be made in the debt of a company where a significant portion of its business operations is related to the manufacture, sale or distribution of tobacco products or alcoholic beverages, unless such an investment is made as part of a specific index of fixed income investments. The determination of whether a company is subject to this prohibition will be made, upon request, by the Treasurer or his designee, given due consideration to all publicly available information.

Treasury may seek investments in cash and cash equivalents to provide enhanced liquidity, diversification, or yield. The term "cash or cash equivalents" refers to securities with a high enough level of liquidity and principal protection to be considered as good as cash. The Financial Accounting Standards Board (FASB) defines cash equivalents for financial reporting purposes as any highly liquid security with a known market value and maturity, when acquired, of less than three months.

#### c. Alternative Investments

Alternative assets, such as venture capital, private equity, and real estate investment trusts, provide increased diversification and can reduce the overall risk profile of a portfolio. These non-traditional asset classes typically exist outside the auspices of well-established public markets, and are often only available to large institutional investors. Due to their funding structures, alternative assets typically involve reduced liquidity, but in exchange are able to offer an enhanced return profile and diversification.

An alternative investment manager's portfolio will not be subject to the provisions of Prohibited Investment Activity or any limitations on the proportions of any single holding within a portfolio, so long as such investments are made in accordance with the investment strategy defined in the investment manager's contract. The objective of these investments will be to provide additional portfolio diversification through incorporation of assets that bear little correlation to traditional market indices and the potential for enhanced returns averaged over the life of the investment.

### 3. *Derivatives*

Treasury permits managers to utilize derivative strategies, provided that the strategy is clearly defined and articulated fully, in accordance with the relevant guidelines of this section of the Policy, and approved in advance by the Treasurer or his designee(s). Such approval must be provided in writing, and will typically be included in the contractual documents governing the relationship with the manager.

The use of derivative strategies is designed to improve the potential for diversification, and in some cases, remove unwelcome risk through an appropriately and properly hedged position. Derivative strategies may be employed to reduce risk through hedged positions or to engage in trades on the public market of a representation of an underlying illiquid asset. In the use of derivative strategies, Treasury will prioritize commingled limited partnership funds over separate accounts, to limit the risk implied by additional leverage.

### 4. *Prohibited Investment Activity*

Treasury prohibits investing in the following:

- Options and futures contracts,
- Trading on margin,
- Commodities,
- Private placements (except 144a securities),
- Real estate properties, Interest-Only (IO), Principal-Only (PO), and Residual Tranche CMOs, and Letter stocks.

Alternative investment strategies and index fund strategies are exempt from prohibited asset restrictions. Managers pursuing a strategy including the use of derivatives may be specifically authorized to invest in certain prohibited asset categories. Such exemptions should be contained in the contract for that strategy.

Individual Treasury investment programs may have additional restrictions specified in Section III of this Policy.

### E. Strategic Factors

Although many of its programmatic investment objectives are characterized by relatively short horizons, Treasury manages significant assets for programs with extended investment horizons. The longer investment horizons of these programs obligate Treasury to enlarge its selection and retention analyses to include not only conventional fundamental factors but also strategic factors that could potentially affect an investment's long-term economic performance. In particular instances, a strategic factors analysis might also herald increased investment volatility for the near future, a risk that is anathema to short-term portfolios.

Strategic factors are not routinely included within a traditional fundamentals analysis. Indeed, it is likely that many investment decisions will address the acquisition, retention, or disposal of securities for which there are no particularly relevant strategic factors that need to be considered. Nonetheless, there is growing recognition that more complex considerations, not simply reflective of traditional company productivity and finance metrics, can have a significant bearing upon an investment's long-term value and performance in certain contexts.

No finite list of strategic considerations can be compiled. Such considerations will vary for different economic sectors, for international investments in different global regions, and for different periods of time. Traditional analytic approaches have failed to robustly incorporate strategic considerations in part due to these uncertainties, and in part due to the difficulty in applying quantifiable values to such considerations, which can make it difficult to compare one company to another, or one period of time to another. As the name suggests, strategic considerations can also frequently implicate forecasts and projections offered for periods of time that are longer than currently customary, introducing another basis for reluctance to take them into account in making decisions.

Nonetheless, it is clear that Treasury must consider identifiable drivers, such as geopolitical circumstances, environmental factors, governance practices, corporate ethics, and other considerations that can materially affect an investment's return to its stockholders. For example, the prospect of carbon emissions regulation offers both challenge and promise. Treasury will incorporate strategic factors analysis into its investment decision-making when, in the judgment of the Treasurer, there is a reasonable basis for identifying a consideration, or set of considerations, that is not

traditionally associated with investment decision-making but that may bear materially on the performance of an asset or sector during the time horizon for which the asset may be held. These considerations may, where appropriate, inform both affirmative decisions to acquire interests in companies not currently in Treasury's portfolios and decisions to implement procedures that may eventuate in divestment.

When Treasury's review of relevant strategic considerations leads it to conclude that the current business model of a company in which it has a position exposes it to unacceptable risk of volatility or underperformance, Treasury will generally first attempt to engage corporate management. This dialogue will be designed to develop a consensus that the company should alter its conduct to reduce the risks to its long-term value associated with its present business activities. Treasury may utilize shareholder advocacy strategies such as letter writing, filing shareholder resolutions, raising questions at shareholder meetings and attending informal meetings with management in order to bring its concerns to the necessary levels of attention.

In certain unusual situations, Treasury may determine that there is insufficient prospect of success from engagement with corporate management to warrant the effort and the prolonged period of exposure to risk. These situations may include instances where management has evinced hostility or intransigence over an extended period of time in response to strategic concerns similar to those identified by Treasury. Treasury may also forego engagement in instances where it can readily identify alternative investments in companies that have positioned themselves to enjoy competitive advantages that derive from the existence of one or more strategic factors.

Except as previously described Treasury views divestment of existing holdings as a tool of last resort in most instances. It shall only be employed where there is clear and convincing information that a company's current business practices engender unacceptable risks to its value or its role as a Treasury investment and where a deliberate strategy of corporate engagement is unable to produce an acceptable response.

In instances where Treasury's prudent investor responsibilities make divestment of a company's stocks or bonds the appropriate response it will pursue a strategy that is consistent with sound investment practice in light of the particular factors motivating its decision. Depending upon the circumstances, Treasury may elect to refrain from enlarging its position in a company, partially divest, or completely divest its holdings. Treasury will implement its divestment strategy according to a schedule that best effectuates its investment objectives considering the risks posed to the subject company as a result of its business activities. In establishing a

schedule, Treasury will consider the availability of appropriate alternative investments that might substitute for its position in the subject company and evaluate the potential returns from such alternative investments against the potential returns from the subject company, adjusted for the risks identified by Treasury as a result of the company's current activities.

1. *Specific Strategic Factors: Investing in State Sponsors of Terrorism*

Treasury recognizes heightened concerns arising from investments in firms that either directly or indirectly support countries that practice, or provide haven for those who practice, terrorism. Firms pursuing business activities in or with such countries expose themselves to a number of material risks that may not be adequately reflected or recognized in conventional fundamentals analysis.

Many examples of potentially vulnerable investments in terror states can be identified. Unfortunately, there is also no shortage of historic instances of state expropriation, at significant discount against value, of private assets.

These and other risks that are inevitably associated with business activities in terror sponsoring states represent strategic factors that Treasury, as a prudent long-term investor, must consider carefully in evaluating the wisdom of holding financial positions in companies that engage in such activities. The unconventional threats that confront companies in terror states are particularly resistant to easy or reliable quantification, whether in terms of likelihood of occurrence, imminence, or scope of impact. Thus, investment in these companies can impose a quality and degree of uncertainty upon Treasury that is inconsistent with its responsibility for prudence.

Treasury will exercise discretion in considering the following factors to identify whether an investment in any particular company, domestic or foreign engenders risks arising from that company's activities with or in a state sponsor of terrorism:

- Treasury will consider states to be sponsors of terrorism if they are currently on the list of such states maintained and published by the United States State Department.
- Treasury will consider a company to be doing sufficient business in a state sponsor of terrorism if, among other factors, the business activities performed in, or derived from, such state are a material portion of the overall business activities of the company.
- In determining whether a company is doing sufficient business in a state and exposed to unacceptable risks, Treasury will give consideration to criteria that help to better characterize the nature and scope of the company's activities with,

and in, the state. Examples of such criteria that may be applicable in particular contexts include:

- What proportion of the company's total assets, revenue, and employees are located in, derived from, or related to business with the state?
- Does the company provide revenue to the state, either directly or indirectly?
- Does the company provide arms or other military equipment to the state or any organizations sponsored or supported by the state?
- How long has the company been involved in business activities in the state? Is the company's presence in the state episodic or relatively consistent?
- Is there a discernible trend towards decreasing business activities by the company in the state?
- Do the company's activities in the state provide significant benefit to the social or economic welfare of its citizens?
- Is the company engaged solely or substantially in humanitarian activities?
- Do the benefits the company provides to the citizens of the state outweigh the negative consequences that its other business activities cause in the state?

## *2. Specific Strategic Factors: Environmental Considerations*

Treasury and other fiduciaries are called upon to make investment decisions about companies whose financial performances are more than ever subject to being greatly influenced by their interactions – broadly defined – with that environment. The nature of this influence can take myriad forms. It can range from alterations in climatic conditions affecting the market appeal or profitability of a company's products or limiting its ability to produce them to shortages or price volatility in critical components of production processes. Its nature may also involve profound regulatory changes.

These circumstances will not always manifest themselves in ways that are amenable to easy quantification. They are commonly not encompassed within conventional analyses of potential investment opportunities. Nonetheless, Treasury's mandate to exercise prudence in investing the Commonwealth's assets obligates it to incorporate these strategic considerations into its decision-making.

A number of specific trends or factors demonstrate the potentially pervasive impact of environmental drivers:

- Emerging large economies, especially in India and China, are demonstrating prodigious and rapidly enlarging appetites for common energy sources, creating significant upward distortion in the pricing of the most basic of materials for many economic sectors.
- At the same time, dwindling supplies of petroleum fuels and the high concentration of established reserves in politically antagonistic or unstable regions exacerbate fuel supply uncertainty and promote price volatility, making long-range planning exceedingly difficult.
- Global climate change threatens a wide spectrum of economic interests, including agriculture, recreation, real estate, shipping, offshore oil exploration, insurance, and any business structure located in coastal regions.
- Regulatory responses to climate-change causing greenhouse gas emissions are likely to include limits on carbon releases, introducing a new control requirement that is likely to be costly for many facilities.
- Affirmative regulatory initiatives in Pennsylvania and elsewhere are creating statutory requirements for renewable energy supplies, providing a jump-start for a nascent industry.
- Broad federal and state financing incentives to promote alternative and renewable energy sources are altering the economic prospects of many businesses.

Each of these strategic factors creates the potential for a prudent investor to realize opportunities for superior risk-adjusted rewards from firms positioned to benefit from one or more market trends. Conversely, these considerations obligate the prudent investor to take steps to avoid the risk of losses from investments in firms that have been unable to recognize and adapt to looming threats.

Treasury believes that prudence in the context of these broad and sweeping strategic considerations requires a diversified investment strategy that recognizes opportunities and challenges in a variety of asset categories. Treasury will examine especially closely investment opportunities in Pennsylvania firms that position themselves to benefit from valuable advantages of doing business in the Commonwealth.

## F. External Investment Manager Selection

Managers shall be selected pursuant to a publicly advertised solicitation in which all eligible managers will be able to participate. The Department will advertise for managers in a specific asset strategy on its publicly available internet website. The Department will perform an initial review of submitted applications and may invite firms to interview. The final selection will be made by the Treasurer in consultation with advisors and other individuals as he may deem prudent. When selecting managers, the Treasurer will take into consideration factors such as:

- the experience of the manager and past performance results,
- the estimated performance of the proposed strategy, including the risk-return profile,
- the positive contribution the manager can offer to the broader portfolio,
- the fit of the investment strategy within the overall goals of the portfolio,
- the fee structure, relative to both past and estimated future returns and to competitor firms, and
- all other factors being equivalent, preference may be given to Pennsylvania-based firms and firms owned and run by members of underrepresented groups, including women- and minority-owned firms.

## G. Execution of Investments

In placing portfolio transaction orders, investment managers shall utilize the Best Execution Rule. Investment managers shall execute trades in the best interests of the appropriate Pool or Fund. To the extent possible, managers should participate in Treasury's Commission Recapture Program. Financial professionals shall give preference to Pennsylvania banks, financial institutions, and non-financial institutions, when appropriate, in the purchase or sale of statutorily authorized investments.

## H. Policy Efficacy and Amendments

### 1. *Waivers and Exceptions*

The Treasurer maintains the authority to grant waivers and approve exceptions to any provisions of this Policy.

Following a written request to the Investment Committee from a financial professional seeking prior approval, the Treasurer may grant a waiver of a provision of the Policy if he determines that strict adherence would have a detrimental

economic effect upon one or more Treasury programs, or if a waiver would be appropriate and in the best interests of Treasury and the Commonwealth.

Following a discovery of an instance of non-compliance, the Treasurer may allow an investment manager a reasonable amount of time to liquidate or otherwise correct the Policy violation. Alternatively, the Treasurer may approve a temporary or indefinite exception to a provision of the Policy if he determines that actions required to bring a portfolio or position into compliance would have a deleterious economic effect upon one or more Treasury programs.

The Treasurer may delegate the authority to grant waivers and approve exceptions provided that whenever a waiver or exception is granted the Treasurer is notified, in writing within 72 hours from time of granting and that the Investment Committee is informed at or before its next meeting.

The Chief Investment Officer or his designee(s), or other such individual(s) designated by the Treasurer, shall maintain a record of all waivers granted and exceptions approved.

A waiver shall not be granted, nor an exception approved, that would result in an investment prohibited by law.

## *2. Policy Amendments*

The Investment Committee may make amendments to this Policy from time to time.

## *3. Annual Review*

The Investment Committee shall review this Policy annually.

## *4. Effective Date*

This Policy shall be effective upon written affirmation to such effect by the Treasurer. This affirmation shall include the names of members appointed to the Investment Committee, and shall be transmitted to the Investment Committee as so constituted.

## I. Correspondence

Any correspondence to the Treasury Department regarding this Policy shall be delivered to the address below:

Pennsylvania Treasury Department  
Attn: Investment Committee  
Room 123, Finance Building  
Harrisburg, PA 17120  
Email: [TreasuryInvestmentCommittee@patreasury.gov](mailto:TreasuryInvestmentCommittee@patreasury.gov)  
Fax: 717-787-7548

### **III. INVESTMENT PRINCIPLES OF THE VARIOUS PROGRAMS**

#### **A. Commonwealth Investment Program**

##### *1. Program Objectives and Investment Philosophy*

The Treasury Department manages and invests moneys of the Commonwealth through the Commonwealth Investment Program, or CIP. This money must remain available to the Commonwealth to make payments for various operational expenses and other obligations.

Treasury has created two separate Pools within the Commonwealth Investment Program, each with its own distinct investment strategies, goals, and holdings that reflect the differing needs of Commonwealth Funds for income, liquidity, and investment risk tolerance. A highly liquid vehicle, Pool 99, consists of short-term fixed income and cash equivalent investments and provides a high degree of liquidity and security. A somewhat less liquid vehicle, Pool 198, allows for investment in assets that offer potentially higher returns with commensurate risk.

Funds of the Commonwealth are invested in the Commonwealth Investment Program. Each Fund will be allocated either to Pool 99, Pool 198, or a mixture of both. The allocation shall take into consideration the liquidity needs, risk characteristics, and return objectives of the underlying Funds.

##### *a. Pool 99*

Pool 99 is designed to provide a high degree of liquidity and safety. Pool 99 is organized similarly to a money market fund, with an expectation of a stable net asset value per share. Pool 99 will be used as the investment vehicle for funds that are expected to be expended in a short time horizon.

b. Pool 198

Pool 198 is designed to provide an opportunity for Funds that can sustain a slightly higher degree of volatility and risk and a somewhat lesser degree of liquidity to earn a corresponding reward by investing in a wider variety of asset classes. Pool 198 will be used as the investment vehicle for funds that have a lower expectation of immediate expenditure.

2. *Liquidity Needs and Risk Tolerance*

Monies in the Commonwealth Investment Program pay the operating expenses of the Commonwealth and must therefore maintain sufficient liquidity to meet expected operating needs. Due to the significant variability in the liquidity needs of the Funds and the resulting variability of the Pools in which they are invested, these needs must be constantly monitored and frequently evaluated at both the Pool and Fund level. Intrinsic in this liquidity analysis is the need to estimate appropriate risk tolerances for anticipated Pool and Fund requirements. The monitoring must be ongoing and a formal evaluation should be done, at a minimum, on a monthly basis, with special attention to the cash flow needs of the Commonwealth over the next 30, 60, and 90 days. The Treasurer, or other such individual as the Treasurer may designate, shall be responsible for performing this liquidity review, including holding active discussions with other Commonwealth agencies to estimate their liquidity needs. In addition, the Investment Committee should perform a review of liquidity characteristics for the CIP on at least a quarterly basis.

a. Pool 99

Pool 99 will consist exclusively of fixed-income securities, primarily of short duration, which are held either directly or through the Consolidated Cash Pool, an investment instrument used to invest short-term monies. As the liquidity needs of Pool 99 are quite high, moreover, only the following types of fixed income securities are considered acceptable investments:

- Securities issued by the United States Government and its agencies.
- Corporate bonds rated Aa3/AA- or better at trade date.
- Municipal securities rated Aa3/AA- or better up to a maximum of 10% of the market value of the pool at trade date.
- Adjustable rate securities up to 15% of the market value of the pool at trade date.
- Domestic or Yankee negotiable certificates of deposit rated A-1 or better and P-1 or better.
- Repurchase agreements collateralized at 102% of the market value plus accrued interest.

- Commercial paper rated A-1 or better and/or P-1 or better.
- Money market funds rated AAAM or its equivalent.
- Sweep vehicles approved by Treasury.
- Bankers' acceptances with major U.S. banks and domestic offices of international banks.
- Non-rated Pennsylvania certificates of deposit are permitted but must be fully collateralized as to the principal amount plus any accrued interest for any amount above FDIC insurance. Treasury allows the following types of collateral:
  - U.S. Treasury and Government Agency Securities. The debentures must be fixed rate and have a call or maturity date of four years or less (102% of principal plus accrued interest).
  - Letters of Credit (@100% of principal plus accrued interest) purchased through the Federal Home Loan Bank.

The maximum term on securities in Pool 99 shall be 13 months unless the issue has been currently called or unless otherwise specified in this Policy. However, adjustable securities that reset no less frequently than quarterly may have a final maturity of two years. The maximum weighted average maturity of Pool 99 shall be 130 days.

Pool 99 seeks to maintain a stable net asset value per share of \$1.

The value of a share in Pool 99 is calculated daily, incorporating all realized and unrealized gains and losses, and any cash returned from investments. As minor fluctuations are expected in the value of shares, the Treasurer or designee(s) shall be notified at any time the value of one share in Pool 99 declines to or below a rounded value of \$0.9985 or exceeds 1.0015.

Pool 99's performance shall be compared to the yield on three-month Treasury bills.

b. Pool 198

Pool 198 will consist of cash, fixed income, equities, and alternative investments.

Fixed income securities in Pool 198 must adhere to the following guidelines:

- The maximum term for any single security shall be 40 years.
- The final maturity for mortgage-backed securities shall not exceed 40 years from trade date.

The asset allocation bands for Pool 198 are:

Fixed Income (including Cash & Cash Equivalents): 55-70%  
Equities and alternative assets: 30-45%

Pool 198 does not seek to maintain a standard value of \$1 per share. Share values are allowed to freely fluctuate. Gains and losses are distributed periodically to participants in the form of reduced or increased share totals.

Pool 198 shall be benchmarked to a blended index of the Russell 3000 and the Barclays Aggregate Fixed Income Index. For the non-cash portion of Pool 198, among the standard benchmarks to be reported will be a blend encompassing a 25% weighting towards the Russell and a 75% weighting towards the fixed income index.

The Treasurer, or his designee, may from time to time place additional restrictions on the characteristics of the portfolio to provide for liquidity needs.

### *3. Fund Valuation*

The valuation of the assets in the Commonwealth Investment Program is of key importance to the various state agencies which rely on these funds for operating and long-term expenses.

Both Pools maintain a share-based valuation structure (net asset value). At all times, the share price reflects both realized and unrealized gains and losses of any underlying security.

## B. Pennsylvania 529 Guaranteed Savings Plan

### 1. *Program Objectives and Investment Philosophy*

The Treasury Department is authorized, pursuant to the Pennsylvania 529 and College Savings Bond Act, 24 P.S. § 6901.101 *et seq.* (“the College Savings Act”), to administer two programs for postsecondary educational savings – the Pennsylvania 529 Guaranteed Savings Plan (GSP) and the Pennsylvania 529 Investment Plan (IP). The College Savings Act requires Treasury to administer both programs in such a manner as to ensure and maintain their status as “qualified State tuition programs,” as defined in Section 529 of the Internal Revenue Code, 26 U.S.C. § 529. The IP is currently managed by an external contracted investment management firm, and the guidelines set forth herein apply solely to the GSP.

The GSP is designed to hold a diversified portfolio of investments for families saving for college. Liquidity needs are relatively stable and predictable. These factors warrant the GSP being invested in less liquid instruments that can sustain increased volatility in exchange for the potential for enhanced return.

The portfolio of the GSP may consist of fixed income, equity securities, and alternative investments. The fixed income securities may include short, intermediate, and long-term securities. The equity securities may range from small capitalization (small cap) securities to large cap securities. The specific allocations of securities for the GSP reflect investment goals that incorporate data provided to the program by its actuaries.

On an annual basis, an independent certified public accounting firm and/or the Pennsylvania Department of the Auditor General audits the operations and financial statements of the GSP.

### 2. *Asset Allocation*

With a longer time horizon and greater need for sustainable returns, the TAP Fund should espouse an equity-weighted allocation. The optimal allocation to cash is minimal, assuming that cash needs can and should be funded by opportunistic liquidation, participant flows, and the normal course of re-balancing.

The asset allocation bands are:

Fixed income (including Cash & Cash Equivalents): 30-40%

Equities and alternative investments: 60-70%

### 3. *Benchmark*

The GSP will be benchmarked to a blended index of the Russell 3000 and the Barclays Aggregate Fixed Income Index. The blend shall encompass a 65% weighting towards the Russell and a 35% weighting towards the fixed income index.

### C. Pennsylvania 529 Investment Plan

#### **Plan Purpose and Objective**

The Pennsylvania 529 Investment Plan (the “Investment Plan” or “Plan”) is a 529 plan sponsored by the Commonwealth of Pennsylvania and is part of the Pennsylvania 529 College Savings Program (the “Program”). The Investment Plan is authorized by the Commonwealth of Pennsylvania, 24 P.S. §6901 *et seq.*, and is administered by the Pennsylvania Treasury Department (“Treasury”). The Program, established as an investing vehicle for higher-education expenses, is designed to qualify for treatment as a qualified tuition program under Section 529 of the Internal Revenue Code of 1986, as amended, and any regulations and other guidance issued there under (“Section 529”). Individuals who are currently investors in the Plan are referred to as “Account Owners.”

The Vanguard Group, Inc. (“Vanguard” or the “Investment Manager”) provides the investment options and investment management services as outlined in this Investment Policy and other agreements.

The Plan provides a broad range of investment options designed to accommodate the different time horizons and risk tolerances common among Plan participants investing for post-secondary educational expenses. Each Investment Option is composed of one or more mutual funds and/or other investment vehicles (the “Underlying Investments”). Each Investment Option and Underlying Investment selected for the Plan is subject to both Treasury and Vanguard approval.

This Investment Policy (“Policy”) defines the Plan’s investment objectives and establishes policies and procedures designed to ensure that these objectives are met in a prudent manner.

The Plan’s Investment Options include ten (10) static portfolios that offer the participants’ flexibility to manage their own asset allocation and three (3) age-based options based on an investor’s risk tolerance and the age of the account’s Beneficiary.

## **Roles and Responsibilities**

Treasury is responsible for the structure of the Plan, and selecting fiduciaries to act in the best interests of Account Owners. Treasury's specific responsibilities include:

- Establishing, maintaining, and reviewing this Policy;
- Selecting Investment Managers who will be responsible for identifying and selecting a mix of investment vehicles that offer an appropriate and diversified list of options;
- When appropriate, terminating Investment Managers and selecting replacements.
- Approving the Underlying Investments and Investment Options proposed by the Investment Managers when Treasury believes those recommendations are in the best interest of the Account Owners, provided that no single factor alone will determine whether an Investment Option or Underlying Investment should be added, retained, or eliminated, and factors may be unequally weighted in Treasury's final analysis;
- Monitoring the investment strategies, performance, and risk characteristics of the Underlying Investments and Investment Options;
- Taking appropriate action if Plan objectives are not being met or if the investment strategy employed by any of the Underlying Investments is no longer appropriate for an Investment Option; and
- Identifying and selecting service providers, including external investment consultants, to assist in meeting and maintaining Plan objectives.

The Investment Manager is responsible for the investment of the assets of the Plan and providing advice to Treasury about the Plan investment structure, and underlying investments. The Investment Manager shall make all decisions and recommendations pertaining to the Plan's investment options solely in the best interests of the Plan. The specific responsibilities of the Investment Manager include:

- Selecting underlying investments and recommending them to Treasury, along with a summary of why each Investment is being recommended considering its strategic fit within the Plan, historical performance, and any fees or costs associated with the investment;
- Suggesting, for Treasury's approval, appropriate benchmarks for underlying investments;
- Providing the information necessary to monitor underlying investments relative to benchmarks;
- Recommending, for Treasury's approval, the modification, addition or deletion of investment options.

## **Investment Policies and Objectives**

### *Investment Option Selection and Monitoring*

It is Treasury's intent to provide Account Owners with a range of Investment Options suited to different risk tolerances and investment horizons. The Investment Manager shall propose to Treasury investment options that are in keeping with the goals of the Plan. The Investment Manager will continually monitor the Underlying Investments' benchmarks to ensure that they are the most appropriate for comparison purposes.

The Investment Manager will meet with Treasury on a periodic basis, but no less than semi-annually, to report on the performance of the financial markets, the investment options, and the underlying investments. Meetings also will include Treasury's review of selected investment performance and characteristics.

### *Investment Objectives*

Underlying Investments shall be selected and managed in accordance with the prudent investor rule set forth in 20 Pa. C.S.A. Section 7203, that is (a) with the care under the circumstances then prevailing that persons of prudence, discretion, and intelligence exercise in the management of their own affairs, not in regard to speculation but in regard to permanent disposition of their own funds, considering the probable income as well as the probable safety of their capital, and (b) for the sole benefit of the Account Owner. The investment decisions of both Treasury and the Investment Manager shall be made in accordance with this prudent investor rule.

In accordance with these requirements, investment options will be using but not limited to the following parameters:

- Each investment option should be cost competitive and broadly diversified within its investment mandate;
- Each investment option should seek to achieve competitive investment returns on a risk-adjusted basis.

### *Investment Options Provided*

Although Treasury develops the investment parameters for each of the investment options offered by the Plan, account owners ultimately bear the investment risk of their investments in the Plan. The appropriate investment option(s) for each participant is a function of multiple factors, including beneficiary age, income, investment time horizon, and tolerance for investment risk.

Each underlying investment option, along with a defined relevant is shown below:

<b>Asset Category</b>	<b>Underlying Investment</b>	<b>Benchmark</b>
Fixed Income Securities	Vanguard Total Bond Market II Index Fund-Institutional Shares	Barclays Capital U.S. Aggregate Float Adjusted Index
	Vanguard Inflation Protected Securities-Institutional Shares	Barclays Capital U.S. Treasury Inflation Protected Securities Index
U.S. Equity Securities	Vanguard Institutional Total Stock Market Index-Institutional Plus Shares	MSCI US Broad Market Index
International Equity Securities	Vanguard Total International Stock Index-Institutional Shares	MSCI All Country World ex USA Investable Market Index (MSCI ACWI ex USA IMI Index)
U.S. Equity Securities	Vanguard FTSE Social Index-Institutional Shares	FTSE4Good US Select Index
Short-Term Reserves	Vanguard Prime Money Market-Institutional Shares	Institutional Money Market Funds Average <sup>1</sup>

<sup>1</sup> Peer group based upon data from Lipper, Inc.

#### 1. Static Portfolios

The Plan offers ten investment options that allow account owners to invest in a static asset allocation. The Static Portfolios are broadly diversified, providing a highly representative exposure to investment markets.

Treasury has approved the following ten Static Portfolios (Allocations to each fund are static (+/-1%)):

**Aggressive Growth Portfolio** - The Portfolio allocates 70% of assets to the Vanguard Institutional Total Stock Market Index Fund and 30% to the Vanguard Total International Stock Market Index Fund.

**Growth Portfolio** - The Portfolio allocates 55% of assets to the Vanguard Institutional Total Stock Market Index Fund, 25% to the Vanguard Total International Stock Market Index Fund, and 20% to the Vanguard Total Bond Market II Index Fund.

**Moderate Growth Portfolio** - The Portfolio allocates 45% of assets to the Vanguard Institutional Total Stock Market Index Fund, 15% to the Vanguard Total International Stock Market Index Fund, and 40% to the Vanguard Total Bond Market II Index Fund.

**Conservative Growth Portfolio** - The Portfolio allocates 25% of assets to the Vanguard Institutional Total Stock Market Index Fund, 10% to the Vanguard Total International Stock Market Index Fund, and 65% to the Vanguard Total Bond Market II Index Fund.

**Income Portfolio** - The Portfolio allocates 20% of assets to the Vanguard Institutional Total Stock Market Index Fund and 80% to the Vanguard Total Bond Market II Index Fund.

**Conservative Income Portfolio** - The Portfolio allocates 50% of assets to the Vanguard Total Bond Market II Index Fund, 25% of assets to the Vanguard Inflation-Protected Securities Fund, and 25% to the Vanguard Prime Money Market Fund.

**Money Market Portfolio** seeks income consistent with preservation of capital. This Portfolio allocates 100% of assets to the Vanguard Prime Money Market Fund.

**Total Stock Market Index Portfolio** – seeks to track the performance of a benchmark index that measures the investment return of the overall stock market. This Portfolio allocates 100% of assets to the Vanguard Institutional Total Stock Market Index Fund.

**Inflation-Protected Securities Portfolio** – seeks to provide inflation protection and income consistent with investment in inflation-indexed securities. The Portfolio allocates 100% of assets to the Vanguard Inflation-Protected Securities Fund.

**Social Index Portfolio** – seeks to track the performance of a benchmark index that measures the investment return of large- and mid-capitalization stocks that are screened on social and environmental criteria. The Portfolio allocates 100% of assets to the Vanguard FTSE Social Index Fund.

## 2. Age-Based Options

The Age-Based Options are constructed from different and rotating static plan options, and are designed to take into account the account owner's investing time horizon. Based on the Investment Manager's proprietary investment research, the age-based options are designed to become progressively more conservative as the beneficiary ages. In each age group,

account owners may choose from among three Age-Based Options, depending on their risk tolerance -- conservative, moderate, or aggressive within any particular Age-Based Option, assets are invested somewhat more aggressively when beneficiaries are younger to capitalize on the longer investment time frame and to seek to maximize returns. Over time, as the beneficiary approaches college age, assets in an Age-Based Option will be moved automatically to progressively more conservative portfolios.

It should be noted that, in general, options with higher concentration in equities and longer term fixed income securities have a commensurately higher risk profile.

The schedule below shows how assets in each Age-Based Option will be invested:

<b>Age of Beneficiary</b>	<b>Conservative Age-Based</b>	<b>Moderate Age-Based</b>	<b>Aggressive Age-Based</b>
Newborn through 5	Moderate Growth Portfolio 45% Domestic Stocks 15% International Stocks 40% Bonds	Growth Portfolio 55% Domestic Stocks 25% International Stocks 20% Bonds	Aggressive Growth Portfolio 70% Domestic Stocks 30% International Stocks
6 through 10	Conservative Growth Portfolio 25% Domestic Stocks 10% International Stocks 65% Bonds	Moderate Growth Portfolio 45% Domestic Stocks 15% International Stocks 40% Bonds	Growth Portfolio 55% Domestic Stocks 25% International Stocks 20% Bonds
11 through 15	Income Portfolio 20% Domestic Stocks 80% Bonds	Conservative Growth Portfolio 25% Domestic Stocks 10% International Stocks 65% Bonds	Moderate Growth Portfolio 45% Domestic Stocks 15% International Stocks 40% Bonds
16 through 18	Conservative Income Portfolio 75% Bonds 25% Short-Term Reserves	Income Portfolio 20% Domestic Stocks 80% Bonds	Conservative Growth Portfolio 25% Domestic Stocks 10% International Stocks 65% Bonds
19 or older	Money Market Portfolio 100% Short-Term Reserves	Conservative Income Portfolio 75% Bonds 25% Short-Term Reserves	Income Portfolio 20% Domestic Stocks 80% Bonds

*Investment Option Benchmarks*

The benchmark for each Investment Option shall consist of the benchmark for each Underlying Investment, weighted in the same proportion as the allocations for the Investment Option.

<b>Portfolio/Option</b>	<b>Composite Benchmark</b>
<b>Aggressive Growth Portfolio</b>	Aggressive Growth Composite: <ul style="list-style-type: none"> <li>• 70% MSCI US Broad Market Index</li> <li>• 30% MSCI ACWI ex USA IMI Index</li> </ul>
<b>Growth Portfolio</b>	Growth Composite: <ul style="list-style-type: none"> <li>• 55% MSCI US Broad Market Index</li> <li>• 25% MSCI ACWI ex USA IMI Index</li> <li>• 20% Barclays Capital U.S. Aggregate Float Adjusted Index</li> </ul>
<b>Moderate Growth Portfolio</b>	Moderate Growth Composite: <ul style="list-style-type: none"> <li>• 45% MSCI US Broad Market Index</li> <li>• 15% MSCI ACWI ex USA IMI Index</li> <li>• 40% Barclays Capital U.S. Aggregate Float Adjusted Index</li> </ul>
<b>Conservative Growth Portfolio</b>	Conservative Growth Composite: <ul style="list-style-type: none"> <li>• 65% Barclays Capital U.S. Aggregate Float Adjusted Index</li> <li>• 25% MSCI US Broad Market Index</li> <li>• 10% MSCI ACWI ex USA IMI Index</li> </ul>
<b>Income Portfolio</b>	Income Composite: <ul style="list-style-type: none"> <li>• 80% Barclays Capital U.S. Aggregate Float Adjusted Index</li> <li>• 20% MSCI US Broad Market Index</li> </ul>

<b>Conservative Income Portfolio</b>	Conservative Income Composite: <ul style="list-style-type: none"> <li>• 50% Barclays Capital U.S. Aggregate Float Adjusted Index</li> <li>• 25% Barclays Capital U.S. Treasury Inflation Protected Securities Index</li> <li>• 25% Institutional Money Market Funds Average</li> </ul>
<b>Money Market Portfolio</b>	Institutional Money Market Funds Average <sup>1</sup>
<b>Total Stock Market Index Portfolio</b>	MSCI US Broad Market Index
<b>Inflation-Protected Securities Portfolio</b>	Barclays Capital U.S. Treasury Inflation Protected Securities Index
<b>Social Index Portfolio</b>	FTSE4Good US Select Index

<sup>1</sup> Peer group based upon data from Lipper, Inc.

In the event that the asset allocation of an Investment Option is modified by the Investment Manager and approved by Treasury, the Composite Benchmark shall be adjusted accordingly.

## D. INVEST

### 1. *Program Objectives and Investment Philosophy*

The Fiscal Code authorizes the Treasury Department to receive and serve as custodian for any moneys deposited with it. The INVEST program currently serves as custodian for funds deposited by local governmental units (county, city, borough, incorporated town, township, school district, or other unit of government, authorities, boards, commissions) and by non-profit and charitable organizations (colleges, community colleges and universities, hospitals, libraries, and fire companies, etc.). INVEST currently combines these moneys into the Local Government Pool and the Community Pool, respectively. These Pools have identical investment characteristics and are used to distinguish between participants. There is no difference in investment strategy between the Pools, excepting the legal restrictions may limit the investment opportunities for certain government entities.

The Local Government Pool is available to all governmental entities, while the Community Pool is available to non-governmental entities. Both are rated Pools consisting of a single portfolio. The Program's objective is to provide maximum security and liquidity, maintaining the highest possible rating for both Pools.

The Pennsylvania General Assembly has enacted laws that impose restrictions upon the scope of assets and vehicles into which local government units may invest. Applicable statutory provisions limiting the investment authority for local government units are as follows:

- Second Class Counties: Section 1964 of the Second Class County Code (16 P.S. § 4964).
- Third through Eighth Class Counties: Section 1706 of The County Code (16 P.S. § 1706).
- Cities of Philadelphia, Pittsburgh, and others, as applicable: by Home Rule Charters.
- Third Class Cities: Section 1804.1 of The Third Class City Code (53 P.S. § 36804.1).
- Boroughs: Section 1316 of the Act of Feb. 1 1966 (1965) (P.L. 1656, No. 581) (53 P.S. § 46316), known as the Borough Code.
- Incorporated Towns: Section 1 of the Act of July 3, 1980 (P.L. 372, No. 93) (53 P.S. § 53154.1), relating to incorporated towns.
- Townships: Section 1705.1 of The First Class Township Code (53 P.S. § 56705.1).
- School Districts: Section 440.1 of the Public School Code of 1949 (24 P.S. § 4-440.1).

- Municipal Authorities: 53 Pa.C.S.A. § 5611 (relating to the Municipal Authorities Act).

This Policy establishes standards that restrict the two Pools to only those investment securities authorized by law for their respective governmental or community participants. In no event shall these standards be interpreted to authorize investments that are inconsistent with or contrary to the applicable statutory authority of the governmental or community participants.

To maintain their positions as rated Pools, the Local Government Pool and the Community Pool are further restricted to investments that also satisfy criteria established by Standard & Poor's. These criteria may be more or less limiting than the provisions of Pennsylvania statutory law authorizing permissible investment assets or vehicles, but the Department seeks to comply with both standards.

INVEST moneys and assets shall never be commingled with any Commonwealth moneys and assets, including those for which the Treasurer is custodian.

### *2. Liquidity Needs and Risk Tolerance*

INVEST funds should assume significant liquidity needs and minimum risk tolerance.

### *3. Asset Allocation*

Both INVEST Pools are managed in a manner consistent with the "2a7-like" pool requirements of statement No. 31 of the Government Accounting Standards Board and have been rated AAAM by Standard & Poor's, the highest rating awarded to such funds.

Within classes of statutorily authorized investment assets and vehicles, individual investments shall be consistent with maintenance of a rating of "AAAM" from Standard & Poor's.

All INVEST Pools are limited to investing in cash and cash equivalents and fixed income securities that are expressly authorized for their respective authorizing legislation.

Transactions in overnight repurchase agreements shall not exceed:

- with any S&P A1+ rated counterparty, 40% of the assets of each Pool, including any existing term repurchase agreements with the same counterparty.

- with any S&P A1 rated counterparty, 25% of the assets of each Pool, including any existing term repurchase agreement with the same counterparty.

Transactions in term repurchase agreements shall not exceed:

- for two to seven-day agreements
  - 25% of the assets of the Pool entered into with any S&P A1+ rated counterparty, or
  - 10% of the assets of the Pool entered into with any S&P A1 rated counterparty.
- for eight to thirty-day agreements
  - 10% of the assets of the Pool, or
  - 10% of the assets of the Pool entered into with any S&P rated A1+ counterparty, or
  - 10% of the assets of the Pool entered into with any S&P rated A1 counterparty.

An investment manager shall not transact in any term repurchase agreements that have maturity dates exceeding 30 days. Investment managers shall not transact in term repurchase agreements with counterparties who have ratings of A2 or lower.

Collateral pledged for INVEST Program tri-party and deliverable repurchase agreements must be secured by United States Government Obligations and/or Government National Mortgage Association Obligations only. For deliverable repurchase agreements only, the collateral must have a maturity of four years or less, with a preference given to United States Treasury Securities.

An investment manager may invest in domestic certificates of deposit and money market funds subject to the following limitations:

- Domestic certificates of deposit must be purchased from banks rated A or better by nationally recognized rating agencies.
- Non-rated Pennsylvania certificates of deposit are permitted but must be fully collateralized as to the principal amount plus any accrued interest for any amount above FDIC insurance. Treasury allows the following types of collateral:
  - U.S. Treasury and Government Agency Securities. Debentures must be fixed-rate and have a call or maturity date of four years or less. (102% of principal plus accrued interest)
  - Letters of Credit (@100% of principal plus accrued interest) purchased through the Federal Home Loan Banks.
- Money market funds must be rated AAAM or equivalent by nationally recognized rating agencies.

- No single issuer may exceed 5% of the assets, at market value, of any INVEST portfolio at trade date.
- The cumulative total of money market fund investments may not exceed 10% of the assets, at market value, of any INVEST portfolio.

Investments in United States Government Obligations are restricted to those with maturity dates no longer than 397 days (13 months) from trade date. Rates may be fixed or variable.

The Treasury Department shall manage the INVEST Pools to ensure that the weighted average maturity for each of the INVEST Pools will not exceed 60 days at any time.

#### 4. *Fund Valuation*

INVEST seeks to maintain a stable net asset value per share of \$1. Gains or losses in the fund are distributed to participants monthly to re-set the value to \$1.

The value of a share in INVEST is calculated daily, incorporating all realized and unrealized gains and losses, and any cash returned from investments. Within the course of a month, minor fluctuations are expected in the value of shares.

If the NAVPS declines to \$0.9985 or increases to \$1.0015, the Treasurer or his designee(s) and the Investment Committee is to be notified. The Treasurer or his designee(s) may consider realigning the specific Pool's portfolio, adjusting the weighted average maturity, or other appropriate actions to return the NAVPS to acceptance levels. The Treasurer may also determine that the NAVPS is likely to adjust back to acceptance levels without intervention and therefore take no further action. The Department shall report daily to Standard & Poor's as long as the NAVPS remains out of compliance as described above.

#### 5. *Benchmark*

The Government and Community Pool shall be compared to the yield on three-month Treasury bills.

### E. The Treasury Global Investment Fund

#### 1. *Program Objectives and Investment Philosophy*

The Treasury Department serves as custodian for the investment assets of various funds whose boards the Commonwealth has authorized to make investments. Typically, these boards retain their own investment managers to manage various portfolios and then allocate cash to the managers for the purpose of making investments. Treasury established the Treasury Global Investment Fund (TGIF,

also referred to in some instances as Pool 124) to serve as a short-term investment vehicle for the cash from such funds that the investment managers have not directly invested. The TGIF allows these cash balances to enjoy investment benefits but remain highly liquid for future use by the Funds' investment managers.

## *2. Liquidity Needs and Risk Tolerance*

The balances invested in the Treasury Global Investment Fund are the cash equivalent portion of previously-committed Manager allotments. As such, the money is, in essence, callable at any point with little notice. Given the purpose of the Pool, these funds should assume significant liquidity needs and minimum risk tolerance.

## *3. Asset Allocation*

TGIF seeks to maintain a stable NAVPS by investing exclusively in fixed income securities, primarily of short duration. It is designed to generate income while minimizing investment volatility by protecting principal and maximizing availability of balances by holding only very liquid investments. The only approved investments are cash and cash equivalents and fixed income.

The Treasury Department has approved the following instruments for investment:

- Securities issued by the United States Government and its agencies.
- Corporate bonds rated Aa3/AA- or better at trade date.
- Municipal securities rated Aa3/AA- or better up to a maximum of 10% of the market value of the pool at trade date.
- Adjustable rate securities up to 15% of the market value of the pool at trade date.
- Domestic or Yankee negotiable certificates of deposit rated A-1 or better and P-1 or better.
- Repurchase agreements collateralized at 102% of the market value plus accrued interest.
- Commercial paper rated A-1 or better and/or P-1 or better.
- Money market funds rated AAAM or its equivalent.
- Sweep vehicles approved by Treasury.
- Bankers' acceptances with major U.S. banks and domestic offices of international banks.
- Non-rated Pennsylvania certificates of deposit are permitted but must be fully collateralized as to the principal amount plus any accrued interest for any amount above FDIC insurance. Treasury allows the following types of collateral:

- U.S. Treasury and Government Agency Securities. The debentures must be fixed rate and have a call or maturity date of four years or less (102% of principal plus accrued interest).
- Letters of Credit (@100% of principal plus accrued interest) purchased through the Federal Home Loan Bank.

The maximum weighted average maturity of each portfolio is 130 days. The maximum term on securities should not exceed 13 months unless the issue has been currently called or unless otherwise specified in these standards. Adjustable securities that reset no less frequently than quarterly may have a final maturity of two years.

#### *4. Fund Valuation*

The Treasury Global Investment Fund is a short-term investment vehicle that seeks to maintain a stable net asset value per share (NAVPS) of \$1. The TGIF purchases or sells units of the Consolidated Cash Pool, a separate investment instrument used to invest all short-term monies, on a daily basis at \$1 per share depending on the net activity occurring within the Fund. Hence, the Fund does not directly hold securities, but rather shares of the Consolidated Cash Pool. Income earned on the Consolidated Cash Pool's investments is accrued daily and distributed monthly to each participant of the Consolidated Cash Pool. Following the distribution of the income participants in TGIF, that income is then distributed to each participant of Pool 124 based on a daily factor. Usually these distributions occur on the same day.

The value of a share of the Treasury Global Investment Fund is calculated daily, incorporating all realized and unrealized gains and losses, and any cash returned from investments. Within the course of a month, minor fluctuations are expected in the value of shares. The Treasurer or his designee(s) shall be notified if at any time, the value of one share in the Treasury Global Investment Fund declines to or below a rounded value of \$0.9985 or rises to or above \$1.0015.

#### *5. Benchmark*

The benchmark for the Treasury Global Investment Fund will be three-month Treasury bills.

## Appendix A – Overview of Treasury Programs

	Commonwealth Investments		TAP GSP	INVEST	TGIF
	Pool 198	Pool 99			
Investment objectives	Pool 198 provides an opportunity for funds that can sustain a slightly higher degree of volatility and risk to earn a corresponding reward by investing in equity and equity like asset classes.	Pool 99 is designed to provide a high degree of liquidity and safety.	The GSP is designed to hold longer-term investments for college savings. It should support principal growth over a long time horizon while maintaining sufficient liquidity to meet operating needs.	INVEST program currently serves as custodian for funds deposited by local governments and non-profits, and requires high liquidity and security.	Short-term investment vehicle for the cash of funds where Treasury serves as custodian but not manager.
Asset allocation	Fixed Income (including Cash & Cash Equivalents): 55-70% Equities and alternative assets: 30-45%	Cash and cash equivalents: 100%	Fixed income (including Cash & Cash Equivalents): 30-40% Equities and alternative investments: 60-70%	Cash, to include fixed income only as appropriate.	Cash, to include fixed income only as appropriate.
Benchmarks	25/75 Russell 3000 and Barclay's Ag Fixed income index	3-month Treasuries	65/35 Russell 3000 and Barclay's Ag Fixed income index	3-month Treasuries	3-month Treasuries

## Appendix B – Schedule of Eligible Repo Collateral

### Commonwealth Investment Program, GSP, TGIF

<b><u>UNITED STATES TREASURIES</u></b>	<b><u>MARGIN %</u></b>
Bills	102
Bonds	102
Notes	102
Strips (Principal Only)	102

  

<b><u>AGENCY DEBENTURES</u></b>	<b><u>MARGIN %</u></b>
FAMC	102
FCFAC	102
FFCB	102
FmHA	102
FHLB	102
FHLMC	102
FICO (Principal Only)	102
FLBB	102
FNMA	102
REFCO (Principal Only)	102
SLMA	102

  

<b><u>GNMA</u></b>	<b><u>MARGIN %</u></b>
Trust Receipts	102
GNMA I/II Single Family	102
GNMA I/II – Others – Fixed Rate	102
GNMA I/II – Others – Adjustable Rate (Overnight Only)	102

  

<b><u>AGENCY MORTGAGE BACKS</u></b>	<b><u>MARGIN %</u></b>
Trust Receipts	102
Pass Throughs – Fixed Rate	102
Pass Throughs – Adjustable Rate (Overnight Only)	102

  

<b><u>CASH</u></b>	100
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## INVEST

### UNITED STATES TREASURIES

Bills	102
Bonds	102
Notes	102
Strips (Principal Only)	102

### MARGIN %

### GNMA

Trust Receipts	102
GNMA I/II Single Family	102
GNMA I/II – Others – Fixed Rate	102
GNMA I/II – Others – Adjustable Rate (Overnight Only)	102

### MARGIN %

### CASH

100