



# COMMONWEALTH OF PENNSYLVANIA TREASURY DEPARTMENT INVESTMENT POLICY STATEMENT

## Pennsylvania 529 Investment Plan

June 27, 2019



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# INVESTMENT POLICY STATEMENT

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Pennsylvania 529 Investment Plan



## INTRODUCTION

This Investment Policy Statement (“IPS”) is designed to provide a framework within which to manage the investments for the Commonwealth of Pennsylvania 529 College and Career Savings Program. 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. In 2017, the IRS Code was amended to allow the use of GSP and IP accounts for qualified elementary and secondary education and Treasury comply to continue to be a qualified plan under the IRS Code. This document will assist the Treasury Department (“Treasury”) in fulfilling its Legislative and fiduciary responsibility. The IPS establishes investment standards that are consistent with The Fiscal Code 72 P.S. §301 *et seq.*; The Administrative Code, 71 P.S. §1 *et seq.*; and all other applicable laws, rules, and regulations. The provisions of this IPS are intended to aid Treasury employees and financial professionals retained by the Treasury in making decisions about investment matters related to the Pennsylvania 529 IP.

Pursuant to Fiscal Code directive, the Treasurer maintains the authority to grant waivers and approve exceptions to any provisions of the IPS.

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 IPS if there is a determination 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.

### Background

The IP is a 529 plan sponsored by the Commonwealth of Pennsylvania and is part of the Pennsylvania 529 College and Career Savings Program. The IP is authorized by the Commonwealth of Pennsylvania, 24 P.S. §6901 *et seq.*, and is administered by the Pennsylvania Treasury Department. 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 pursuant to Fiscal Code (72 P.S. § 302-303). The Pennsylvania 529 IP, 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.”

## Purpose of the IPS

This IPS has been adopted by the Treasury Department in order to provide a strategic framework for managing the investments for the IP. The IPS is intended to:

- Define the investment philosophy for the IP;
- Define and assign the responsibilities of all involved parties;
- Establish a clear understanding of the investment goals and objectives of the IP;
- Establish a methodology and criteria for retaining and terminating the IP relationships with investment professionals;
- Establish the criteria and procedures for selecting the investment manager and underlying investment portfolios for the IP;
- Offer guidance and limitations to all third-party investment funds/managers (“Investment Managers”) regarding the investment of the IP assets;
- Establish a basis for monitoring and evaluating the IP investment results.

This IPS only addresses the investments for the IP and does not address duties or responsibilities with respect to any other aspects of the establishment or maintenance of the IP, including without limitation, its administration, operation, or compliance with tax laws.

In general, the purpose of this IPS is to outline a philosophy which will guide the investment management of IP assets toward the desired results. This IPS is intended to serve as a reference tool, an operating code, and a communication link among the Treasury, the Investment Committee, the Investment Consultant, and the Investment Manager. Deviation from this IPS is not permitted without prior, explicit, written permission from the Treasurer.

## Scope

This IPS applies to all assets within the IP. The investment strategy for IP reflects a unique application of the principles of Prudent Person investing, crafted specifically to balance the investment criteria in an appropriate manner for the IP Account Owners.

# STANDARD OF CARE

## Prudence

Guidelines respecting prudence have been developed in light of investment objectives related to the IP. Accordingly, these guidelines are, as a part of this IPS, intended to present broad and balanced considerations to guide incumbent and successor Treasury, Investment Committee and all other parties concerned, seeking appropriate investment, safekeeping, monitoring and evaluation of the IP assets.

Plan fiduciaries shall discharge their responsibilities and assets shall be invested in a manner consistent with this IPS, and generally accepted fiduciary standards. All transactions undertaken on behalf of the IP shall be solely in the interest of Plan participants and their beneficiaries.

In selecting investment portfolios for the IP, 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 Fiscal Code (72 P.S. § 301 *et seq.*). Implementation of this investment standard, commonly called the Prudent Person test, requires the exercise of careful judgment in determining an appropriate range of investment portfolios that are appropriate for the IP and will span the risk/return spectrum. Investment decisions must also reflect any legal standards that authorize or limit the particular kinds of investments that the IP may hold.

### **Ethics and Conflicts of Interest**

Treasury 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 internal Treasury Code of Conduct, which prohibits by way of example Treasury employees receiving anything of value from a vendor or anyone doing business with the Treasury. 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.

### **Delegation of Authority**

Authority to manage IP assets is granted to the Investment Manager(s). Investment Manager(s) shall act as an agent of the Treasury and abide by the same Standard of Care applicable to Treasury. No person may engage in an investment transaction except as provided under the terms of this IPS and/or the Investment Manager Agreement(s). The Investment Manager(s) shall be responsible for all transactions undertaken and shall establish a system of controls to regulate the activities of subordinate officials.

## **DISTINCTION OF RESPONSIBILITIES**

### **Responsibilities of the Treasurer**

The Treasurer is the Chief Executive Officer of the Treasury and has ultimate and final authority over and responsibility for the actions of the Treasury and the fulfillment of its legal mission. The Treasurer is responsible for the IPS, the selection of investment portfolios and the administration of assets of the program.

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, consistent with the Prudent Person investment authority, shall:

- Comply with §529A of the Internal Revenue Code and the proposed regulations thereunder;
- Establish reasonable and consistent investment objectives, policies, benchmarks and guidelines that will direct the selection of investment portfolios of the IP in accordance with applicable law;
- Adopt proposed and reviewed number and types of investment portfolios to be made available for investment;
- Adopt proposed and reviewed asset allocation targets, ranges and step-downs for risk selected, age-based investment portfolios;
- Prudently and diligently select qualified financial professionals in pursuit of these objectives;
- Regularly monitor and evaluate performance, risk and ongoing suitability of the investment portfolios;
- Regularly monitor the performance of the financial professionals to evaluate progress in attaining investment objectives;
- Maintain compliance monitoring to ensure adherence to this IPS;
- Periodically review and revise the IPS to reflect changing circumstances or experiences, and
- Establish and maintain due diligence guidelines.

### **Responsibilities of Tuition Account Programs Advisory Board**

The board shall be composed of the State Treasurer, the Chairman of the Board of Directors of the Pennsylvania Higher Education Assistance Agency, the Commissioner of Higher Education within the Department of Education, the Chairman of the Council of Higher Education and the Chancellor of the State System of Higher Education, and fourteen (14) other members to be selected pursuant to 1992 Act 11 § 304.

The Tuition Account Program Advisory Board responsibilities shall include the following:

- Consider, study, and review the work of the Tuition Account Programs Bureau;
- Advise Treasury on request and make recommendations on its own initiative for the improvement of the GSP;
- Report annually to the Governor and to the General Assembly and may make such interim reports as are deemed advisable.

### **Responsibilities of the Investment Committee**

The Treasury 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 Investment 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 Treasurer shall direct.

The Investment Committee's responsibilities shall include the following:

- Advise the Treasury on the IPS and monitor implementation thereof;
- Evaluate outside professionals related to the IP investment program;
- Use available information and resources, including advice from the Investment Consultant, to evaluate Investment Manager, investment portfolios and other professionals as needed to assist in the administration and implementation of the IPS;
- Review the number and types of investment portfolios to be made available for investment;
- Review recommended asset allocation targets, ranges and step-downs for risk selected, age-based investment portfolios;
- On a quarterly basis, monitor the asset allocation, investment performance, risk, suitability and diversification of investment options, and conduct of all professionals associated with the IP investment program;
- Perform specific tasks and functions identified in this IPS or as directed by the Treasurer;
- Post, maintain, and update this Investment Policy on its publically accessible Internet website.

### **Responsibilities of the Investment Consultant**

The Treasury has retained an Independent Investment Consultant to assist in fulfilling its investment goals and objectives in accordance with this IPS; The Consultant's responsibilities shall include the following as the Treasurer may direct:

- Provide advice to the Treasurer and Investment Committee to determine the most effective investment program for the IP, including, but not limited to; Investment Policy, Asset Allocation, Diversification, Investment Management, Fees and assignment of Portfolio Benchmarks;

- Monitor and measure quarterly, the IP investment performance and risk metrics, evaluate the investment program, and advise the Treasurer and Investment Committee as to the performance, risk and continuing appropriateness of the Investment Manager and investment portfolios;
- Review the number and types of investment portfolios to be made available for investment;
- Review recommended asset allocation targets, ranges and step-downs for risk selected, age-based investment portfolios;
- Review this IPS on a regular basis and recommend modifications as appropriate;
- Promptly inform the Treasurer and Investment Committee regarding significant matters pertaining to the investment of the IP assets;
- Adhere to the applicable investment consulting agreement between the Treasury and Investment Consultant.

### **Responsibilities of Investment Manager**

Assets will be invested by a third-party Investment Manager. The Investment Manager is responsible for investing the self-directed assets in accordance with the Manager's agreement with the IP, and in accordance with any other governing documents, such as fund prospectus, to achieve assigned investment objectives. In addition, the Investment Manager has the following responsibilities:

- Manage the self-directed IP assets within their investment portfolios in accordance with this IPS and any applicable management agreement or prospectus;
- Propose the number and types of investment portfolios to be made available for investment;
- Propose asset allocation targets, ranges and step-downs for risk selected, age-based investment portfolios;
- Provide reports and data sheets to the Investment Consultant, on a monthly basis detailing investment performance and positioning for the most recent period;
- Promptly inform the Investment Consultant regarding significant matters pertaining to the investment of the assets, including, but not limited to changes in ownership, organizational structure, investment strategy, portfolio design, or configuration of the investment team;
- Exercise the proxy voting rights related to securities held within the investment portfolios that they manage;
- Adhere to the applicable investment manager agreement between the Treasury and Investment Manager and comply with applicable laws, regulations and rulings;
- Investments shall be made with the care, skill, prudence and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims.

## Responsibilities of the Record Keeper

Certain responsibilities for day-to-day plan administration and operation have been contracted to a third-party record keeper, which shall perform the following primary functions, among others, as will be detailed in a formal services agreement.

- Maintaining individual Account Owner records;
- Processing Account Owner contributions and distributions;
- Administering existing Investment Options and any new Investment Options;
- Maintaining custodial and Investment Option provider records;
- Valuing all Account Owner accounts;
- Distributing Account Owner statements and summaries of quarterly financial data;
- Providing enrollment and services;
- Providing assistance and information to the Treasurer, Investment Committee and Investment Consultant as needed.

## Responsibilities of Account Owners

The Account Owners are responsible for selecting an appropriate investment portfolio or portfolios within the IP program and making adjustments as appropriate for their unique time horizon, risk tolerance, return expectation and asset class preferences. Since each Beneficiary's risk tolerance is different, each Account Owner is ultimately responsible for the investment results of their account.

## INVESTMENT BELIEFS

Treasury maintains a set of investment beliefs about its own office, the companies and securities in which it invests to earn a return, and the capital markets through which Treasury transacts. These investment beliefs inform specific investment policies and guidelines which guide the investment activities of Treasury as fiduciary of Commonwealth assets.

**Treasury Office:** Treasury Office investment staff are governed by these investment beliefs in their partnership with managers and in selection of investment securities. In order to integrate fully these investment beliefs, Investment staff will partner with Policy, General Counsel, and other offices within Treasury.

**Investments:** Treasury Investment staff invest across multiple asset classes and security types in their stewardship of investment programs under Prudent Person. These beliefs hold across all assets.

**Capital Markets:** Treasury investments benefit from well-functioning capital markets, where those investing and seeking investment can do so fairly. Pennsylvania, a large state with vast financial assets, is endowed with a responsibility to advance healthy capital markets.

529 Plan Investment Options: Treasury believes that to ensure a successful education savings program, the investment menu should be deemed prudent for the objectives of the beneficiaries, namely; liquid, transparent, low cost and diversified with numerous step-down age-based options.

Treasury will address issues which are material, consistent with policy and these investment beliefs, and for which the Investment Office has the expertise and capacity to improve outcomes.

For a more thorough review of these beliefs, please see Appendix A.

## INVESTMENT OBJECTIVES

Consistent with its obligation to act as a Prudent Person in carrying out its fiduciary responsibility, Treasury will exercise due care to provide a broad range of investment options designed to accommodate the different time horizons and risk tolerances common among beneficiaries for whom Account Owners are investing for educational expenses. Underlying Investments shall be selected and managed in accordance with the prudent investor rule set forth in Fiscal Code directive (72 P.S. § 301 *et seq.*), 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 Owners and their Beneficiaries.

In accordance with these requirements, Treasury intends to provide Account Owners with a selection of diversified passively managed Investment Options that represent a broad risk/return spectrum in order to achieve their own investment goals based on the following:

- Each Investment Option should be broadly diversified within its investment mandate and managed to a strategic benchmark;
- Each Investment Option should be transparent, liquid and cost-competitive relative to a peer universe of like passively managed funds;
- Each Investment Option should seek to meet benchmarks from a risk-adjusted return basis over a market cycle;

Each Investment Option's investment strategy should be easily communicated to Account Owners.

### Asset Classes

In developing strategic asset allocation guidelines for the Program, Treasury places an emphasis on the long-term characteristics of individual asset classes, and the benefits of diversification among multiple asset classes. Treasury also considers the proper long-term level of risk for Account Owners, particularly with respect to the long-term nature of the investments and the impact of asset allocation on investments.

The Underlying allowable Investments are to be invested in the following broad asset classes:

- Short-Term Reserves, including Cash;
- U.S. Fixed Income Securities;
- International Fixed Income Securities,
- U.S. Equity Securities;
- International Equity Securities;
- Real Estate Investment Trust (REIT's);
- Treasury Inflation Protection Securities (TIP's).

### **Investment Options**

The primary goal of the Investment Options is to ensure that Account Owners are provided with diversified investment opportunities that meet benchmarks over a market cycle to help the Beneficiary achieve their post-secondary education savings goals. The appropriate Investment Option(s) for each Account Owner is a function of multiple factors, including the age of the Beneficiary, investment time horizon, and tolerance for investment risk.

Two different types of Investment Portfolios are offered to account owners in the IP:

- Risk Selected, Age-Based, Portfolios;
- Individual Portfolios.

More specific information on each type of Investment Portfolio and corresponding Strategic Benchmark can be found in Appendix A and B respectively of this IPS.

#### **Risk Selected, Age-Based Portfolios**

Account Owners will be offered age-based options which will be managed according to the age of the Beneficiary and the Account Owner's risk tolerance through a series of investment portfolios that gradually change over time.

The Investment Manager offers conservative, moderate, and aggressive age-based investment options which "step down" over time. Within each selected risk category, age-based portfolios offer Account Owners pre-diversified investment portfolios that become more conservative as the Beneficiary nears his/her intended year of enrollment into post-secondary education. Portfolios represent a weighted allocation among a pre-determined number and type of investment strategies that "step down" in equity allocation over time. This change in asset allocation helps smooth the shift from capital accumulation in the earlier years to capital preservation in post-secondary education years. The glide path adjusts this allocation every two years to create a smooth transition from equities to fixed income.

The Investment Manager rebalances the underlying asset allocation of the age-based portfolios on a daily basis if the allocations fall outside the strategic targets.

### **Individual Portfolios**

The Individual Portfolios are stand-alone options which allow Account Owners to allocate their account into one or more passive Investment Portfolios. The goal in offering the Individual Portfolios is to provide Account Owners with the ability to construct diversified portfolios by asset class and investment style that match their risk tolerance, asset class preferences, time horizons and expected returns.

The Investment Manager provides four diversified passive blended portfolios (blend of stock and bond portfolios), five bond and short-term investment portfolios, and five stock portfolios, including REIT's and Social Investment Options.

## **INVESTMENT GUIDELINES**

The Investment Manager shall conform to the Investment Guidelines set forth in each mutual fund's prospectus. Given the nature of mutual and other commingled funds, it is recognized that there may be deviations between the objectives, intent or specific requirement of this IPS and the stated objectives, intent or content of any mutual or other commingled fund. However, every effort shall be made, to the extent practical, prudent and appropriate, to select mutual or other commingled funds that have investment objectives and policies that are consistent with this IPS.

## **REVIEW PROCEDURES**

### **Policy**

The Treasurer, Investment Committee and the Investment Consultant shall perform an annual review of this IPS and, as needed, recommend appropriate modifications. Key environmental or operational occurrences, which could result in a Policy modification, include:

- Changes in federal and/or state legislation and regulations;
- Significant changes in Account Owner investment objectives;
- Changes in time horizons;
- Convincing arguments for change presented by the Treasurer, Investment Committee, Investment Consultant or Investment Manager.

As Trustee, the Treasurer acknowledges that this Policy should be responsive to changing conditions, particularly those affecting Account Owner investment objectives and the requirements of the Internal Revenue Code and the Enabling Legislation.

### **Asset Classes**

The Treasurer, Investment Committee and the Investment Consultant will review at least annually to determine the continued appropriateness to the Program of the asset classes included in the Investment Options.

## Investment Manager

The Treasurer, Investment Committee and the Investment Consultant will monitor the Investment Manager and mutual fund portfolios, reviewing performance monthly, on a net-of-fees basis. The ongoing performance monitoring will emphasize, but will not be limited to, the following:

- Each Investment Manager and mutual fund's adherence to this IPS, Investment Manager's guidelines and each prospectus, as applicable;
- Comparison of Investment Manager and mutual fund results to the benchmarks identified in Appendix B;
- Comparison of Investment Manager and mutual fund results to a relevant peer universe;
- Material changes to the Investment Manager's organization, including mergers or acquisitions and changes in its investment philosophy, additions and losses of customer accounts, assets under management, ownership, etc.

The Treasury will consider several qualitative and quantitative factors when selecting and monitoring any Investment Option or Underlying Investment. However, no single factor will determine whether an Investment Option or Underlying Investment should be added, retained, or eliminated; and certain factors may carry more weight in the Treasury's final analysis.

With regard to performance evaluation, the Treasurer, Investment Committee, Investment Consultant and Investment Manager will continually monitor the Portfolio's and Underlying Investments' benchmarks to ensure that they are the most appropriate for comparison purposes.

The Treasurer and Committee reserve the right to recommend and terminate a relationship with any Investment Manager(s) at any time. In addition, the Treasurer and Committee reserves the right to remove assets, in part, at any time.

## Risk Metrics

At least quarterly, the Treasurer, Investment Committee and the Investment Consultant will closely monitor volatility and downside risk metrics relative to each portfolio's strategic benchmark.

## Asset Allocation

Asset allocation of the risk selected, age-based and individual portfolios will be reviewed at least annually, or more frequently should the changing circumstances dictate a review of investment objectives and/or risk tolerance or if capital markets moves warrant. Additionally, glide-path analysis of the age-based portfolios will be reviewed at least annually and where appropriate, an asset allocation study will be conducted as a part of this review process.

## Fees

All management fees, trading costs, and other program expenses will be monitored, and carefully controlled, and publicly reported. Investment manager fees, costs and expenses will be reviewed on a quarterly basis and compared to industry averages. The Treasury believes that reducing costs will enhance expected return without increasing risk.

## APPENDIX A

### INVESTMENT BELIEF MATRIX

	Investment Office	Managers & Holdings	Capital Markets
Transparency provides a basis for trust.	Treasury will make publicly available asset allocations, fees, and other material investment information for Pools. Tax payers, contributing agencies, employees, and other stakeholders have the right to know why and how Commonwealth funds are invested.	Investors can best manage risk when companies seeking investment provide adequate disclosure of material risks.  Manager transparency helps align interests.	Capital markets that promote transparency are key to risk management and optimizing outcomes for stakeholders.
Accountability enforces trust.	Investment staff will articulate portfolio objectives, identify benchmarks, and analyze outcomes.	Treasury will monitor and engage with investment managers and the issuers of securities to minimize risk and maximize return for stakeholders.  Treasury's fiduciary duty to Pennsylvanians includes actively engaging with companies on key issues of governance, sustainability, and social responsibility in order to hold them accountable for outcomes that affect Pennsylvanians.	Entities regulating capital markets should hold stakeholders accountable for their actions.

<p>Costs have a material impact on returns.</p>	<p>Skilled investment staff who can directly oversee portfolios provide operating leverage to cost effectively manage Treasury's investment programs.</p>	<p>Fees are a critical contractual consideration to align investment partners with the outcomes Treasury seeks for the Commonwealth.</p>	<p>Belief in the fairness and reliability of information found in capital markets can increase investor participation, and lower transaction costs for both borrowers and investors.</p>
<p>Simplicity facilitates responsible stewardship of funds.</p>	<p>Treasury is limited in the control of all factors and will therefore scale the management of the portfolios and the capital markets accordingly.</p>	<p>Complexity adds risk to investment portfolios with uncertain reward. Treasury favors understandable, rules-based, measurable index strategies with regular rebalancing.</p>	<p>Efficient capital markets benefit both investors and those individuals and businesses seeking capital. Treasury will engage in efforts to support efficient and fair capital markets.</p>
<p>Time Horizons of portfolios and stakeholders influence portfolio management.</p>	<p>Investment decisions will be informed by the Pool and its stakeholders, not the term of office of the Treasurer.</p>	<p>Time constraints inform liquidity demands and thus asset allocation of risk and cost sharing investment Pools.</p>	<p>The Commonwealth is a perpetual entity. Treasury will work to make capital markets and investment decisions that support intergenerational equity.</p>
<p>Risk is both qualitative and quantitative, and future risks may differ from historical risks.</p>	<p>Treasury will set and stress test quantitative investment risk measures appropriate for the risks of each program. Staff will endeavor to minimize operational risk.</p>	<p>Material, forward-looking risks exist that are not captured by historical measures such as market volatility. Environmental, social, and governance risks must be evaluated and managed.</p>	<p>The Commonwealth may be affected by systemic risks created irrespective of Treasury's investment decisions. As a universal owner, Treasury seeks to proactively call attention to and manage these risks.</p>

## APPENDIX B

### Investment Options:

#### PA 529 Investment Plan - (IP)

Age-Based Portfolio Benchmarks		Age of Beneficiary								
Aggressive Option		0-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19+
Asset Class	Portfolio Name Underlying Fund	Aggressive Growth	Aggressive	Aggressive	Growth	Blended Growth	Moderate Growth	Disciplined Growth	Conservative Growth	Conservative
Domestic Equity	Vanguard Inst. Total Stock Market Index Fund	60%	52.50%	52.50%	45%	37.50%	30%	22.50%	15%	7.50%
International Equity	Vanguard Total International Stock Index Fund	40%	35%	35%	30%	25%	20%	15%	10%	5%
Domestic Fixed Income	Total Bond Market II Index Fund	-	8.75%	8.75%	17.50%	26.25%	35%	43.75%	52.50%	61.25%
	Vanguard Short-Term Inflation Protected Securities Index Fund	-	-	-	-	-	-	-	-	-
Foreign Bonds	Vanguard Total International Bond Index Fund	-	3.75%	3.75%	7.50%	11.25%	15%	18.75%	22.50%	26.25%
Short Term Fixed Income	Vanguard Short-Term Reserves Account	-	-	-	-	-	-	-	-	-
Age-Based Portfolio Benchmarks		Age of Beneficiary								
Moderate Option		0-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19+
Asset Class	Portfolio Name Underlying Fund	Aggressive	Growth	Blended Growth	Moderate Growth	Disciplined Growth	Conservative Growth	Conservative	Blended Income	Blended Income
Domestic Equity	Vanguard Inst. Total Stock Market Index Fund	52.50%	45%	37.50%	30%	22.50%	15%	7.50%	-	-
International Equity	Vanguard Total International Stock Index Fund	35%	30%	25%	20%	15%	10%	5%	-	-
Domestic Fixed Income	Total Bond Market II Index Fund	8.75%	17.50%	26.25%	35%	43.75%	52.50%	61.25%	34.50%	34.50%
	Vanguard Short-Term Inflation Protected Securities Index Fund	-	-	-	-	-	-	-	18%	18%
Foreign Bonds	Vanguard Total International Bond Index Fund	3.75%	7.50%	11.25%	15%	18.75%	22.50%	26.25%	22.50%	22.50%
Short Term Fixed Income	Vanguard Short-Term Reserves Account	-	-	-	-	-	-	-	25%	25%

Age-Based Portfolio Benchmarks		Age of Beneficiary								
Conservative Option		0-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19+
Asset Class	Portfolio Name Underlying Fund	Blended Growth	Moderate Growth	Disciplined Growth	Conservative Growth	Conservative	Blended Income	Moderate Income	Balanced Income	Interest Acc.
Domestic Equity	Vanguard Inst. Total Stock Market Index Fund	37.50%	30%	23%	15%	7.50%	-	-	-	-
International Equity	Vanguard Total International Stock Index Fund	25%	20%	15%	10%	5%	-	-	-	-
Domestic Fixed Income	Total Bond Market II Index Fund	26.25%	35%	43.75%	52.50%	61.25%	34.50%	23%	11.50%	-
	Vanguard Short-Term Inflation Protected Securities Index Fund	-	-	-	-	-	18%	12%	6%	-
Foreign Bonds	Vanguard Total International Bond Index Fund	11.25%	15%	18.75%	22.50%	26.25%	22.50%	15%	7.50%	-
Short Term Fixed Income	Vanguard Short-Term Reserves Account	-	-	-	-	-	25%	50%	75%	100%

Benchmarks: Risk Selected Portfolio Options							
Asset Class	Portfolio Name Underlying Fund	Aggressive Growth	Growth	Moderate Growth	Conservative Growth	Income	Conservative Income
Domestic Equity	Vanguard Inst. Total Stock Market Index Fund	60%	45%	30%	15%	12%	-
International Equity	Vanguard Total International Stock Index Fund	40%	30%	20%	10%	8%	-
Domestic Fixed Income	Vanguard Short-Term Inflation Protected Securities Index Fund	-	-	-	-	-	25%
	Vanguard Total Bond Market II Index Fund	-	17.5%	35%	52.5%	56%	35%
International Fixed Income	Vanguard Total International Bond Index Fund	-	7.5%	15%	22.5%	24%	15%
Short Term Fixed Income	Vanguard Short-Term Reserves Account	-	-	-	-	-	25%

Benchmarks: Individual Investment Options									
Asset Class	Portfolio Name Underlying Fund	Total Stock Market Index Portfolio	Total International Sotck Index Portfolio	Social Index Portfolio	Real Estate Index Portfolio	Total Bond Market Index Portfolio	Total International Bond Market Portfolio	Interest Accumulation Portfolio	ST Inflation Protection Securities Index Portfolio
Domestic Equity	Vanguard Institutional Total Stock Market Index	100%	-	-	-	-	-	-	-
	FTSE Social Index	-	-	100%	-	-	-	-	-
	Real Estate Index	-	-	-	100%	-	-	-	-
International Equity	Vanguard Total International Stock Index	-	100%	-	-	-	-	-	-
Domestic Fixed Income	Vanguard Total Bond Market Index	-	-	-	-	100%	-	-	-
	Vangurad Short-Term Inflation Protected Securities Index	-	-	-	-	-	-	-	100%
International Fixed Income	Vanguard Total International Bond Index	-	-	-	-	-	100%	-	-
Short Term Fixed Income	Vanguard Short-Term Reserves Account	-	-	-	-	-	-	100%	-



Age-Based Portfolio Benchmarks		Age of Beneficiary								
Conservative Option		0-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19+
Asset Class	Portfolio Name Benchmark	Blended Growth	Moderate Growth	Disciplined Growth	Conservative Growth	Conservative	Blended Income	Moderate Income	Balanced Income	Interest Acc.
Domestic Equity	CRSP US Total Market Index	37.50%	30%	22.50%	15%	7.50%	-	-	-	-
International Equity	FTSE Global All Cap ex Us Index	25%	20%	15%	10%	5%	-	-	-	-
Domestic Fixed Income	Bloomberg Barclays US Agg Float Adjusted Index	26.25%	35%	43.75%	52.50%	61.25%	34.50%	23%	11.50%	-
	Bloomberg Barclays US 0-5 Yr. Treasury Inflation Protected	-	-	-	-	-	18%	12%	6%	-
Foreign Bonds	Bloomberg Barclays Global Agg ex-USD Float Adjusted RIC Capped Index	11.25%	15%	18.75%	22.50%	26.25%	22.50%	15%	7.50%	-
Short Term Fixed Income	10% Ryan Labs 3 Year GIC Index and 90% FTSE 3-Month U.S. Treasury Bill	-	-	-	-	-	25%	50%	75%	100%

Benchmarks: Risk Selected Portfolio Options							
Asset Class	Portfolio Name Benchmark	Aggressive Growth	Growth	Moderate Growth	Conservative Growth	Income	Conservative Income
Domestic Equity	CRSP US Total Market Index	60%	45%	30%	15%	12%	-
International Equity	FTSE Global All Cap ex Us Index	40%	30%	20%	10%	8%	-
Domestic Fixed Income	Bloomberg Barclays US Agg Float Adjusted Index	-	-	-	-	-	25%
	Bloomberg Barclays US 0-5 Yr. Treasury Inflation Protected Securities Index	-	17.5%	35%	52.5%	56%	35%
International Fixed Income	Bloomberg Barclays Global Agg ex-USD Float Adjusted RIC Capped Index Hedged	-	7.5%	15%	22.5%	24%	15%
Short Term Fixed Income	90% Ryan Labs 3 Year GIC Index / 10% Citigroup 3-Month U.S. Treasury Bill Index	-	-	-	-	-	25%

Benchmarks: Individual Investment Options									
Asset Class	Portfolio Name Benchmark	Total Stock Market Index Portfolio	Total International Sotck Index Portfolio	Social Index Portfolio	Real Estate Index Portfolio	Total Bond Market Index Portfolio	Total International Bond Market Portfolio	Interest Accumulation Portfolio	ST Inflation Protection Securities Index Portfolio
Domestic Equity	CRSP US Total Market Index	100%	-	-	-	-	-	-	-
	FTSE 4Good US Select Index	-	-	100%	-	-	-	-	-
	MSCI US Investable Market Real Estate 25/50 Index	-	-	-	100%	-	-	-	-
International Equity	FTSE Global All Cap ex Us Index	-	100%	-	-	-	-	-	-
Domestic Fixed Income	Bloomberg Barclays US Aggregate Float Adjusted Index	-	-	-	-	100%	-	-	-
	Bloomberg Barclays U.S. Treasury Inflation-Protected Securities (TIPS) 0-5 Year Index	-	-	-	-	-	-	-	100%
International Fixed Income	Bloomberg Barclays Global Agg ex-USD Float Adjusted RIC Capped Index (USD Hedged)	-	-	-	-	-	100%	-	-
Short Term Fixed Income	90% Ryan Labs 3 Year GIC Index / 10% Citigroup 3-Month U.S. Treasury Bill Index	-	-	-	-	-	-	100%	-