# OHIO POLICE & FIRE PENSION FUND INVESTMENT POLICY and GUIDELINES

Approved March 1, 2023

### I. INTRODUCTION

The purpose of this Investment Policy and Guidelines (Policy or Statement) is to define the framework for investing the assets (Total Portfolio) of the Ohio Police & Fire Pension Fund (OP&F or Plan). This Statement is intended to provide general principles for establishing the goals of OP&F, the allocation of assets and the employment of outside asset management. The statutory investment authority of the Board of Trustees (or the Board) is set forth in Sections 742.11 to 742.113 and Sections 742.114, 742.116 of the Ohio Revised Code (ORC), as amended from time to time. The Board may delegate these duties to an Investment Committee.

The objectives of OP&F have been established in conjunction with a comprehensive review of the current and projected financial requirements. These objectives are:

- To have the ability to pay all benefit and expense obligations when due.
- To maintain the purchasing power of the current assets and all future contributions by maximizing the rate of return on OP&F's assets at a reasonable level of risk.
- To maintain 30-year funding and achieve full funding on an actuarial accrued liability basis.
- To control the costs of administering OP&F and managing the investments.

The investment objectives of the Total Portfolio are:

- Long-term returns on Plan investments, in addition to contributions received from members and employers, should satisfy any current funding obligations of the Plan when and as prescribed by law and, once the Plan is fully funded, should keep pace with the growth of Plan liabilities.
- The investment performance goal for the Total Portfolio is to meet or exceed the return of the Total Portfolio policy benchmark over a full market cycle, generally measured over three- to five-years, without taking on additional risk as measured by standard deviation of returns. The Total Portfolio policy benchmark is a weighted average, based on the allocation target defined in Section III below, of each asset class benchmark.

In order to achieve these objectives, the Board of Trustees will conduct itself in accordance with ORC Section 742.11, which provides "The Board and other Fiduciaries shall discharge their duties with respect to OP&F solely in the interest of the participants and beneficiaries." These duties shall also be carried out "with 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 like aims", as referenced in ORC Section 742.11. All aspects of this Statement should be interpreted in a manner consistent with OP&F's objectives. At least annually, the Board shall review and adopt policies, objectives or criteria for the operation of the investment program and make such changes as appropriate.

Investment policies and Investment Manager(s) guidelines referenced in this document are separate policies governing specific aspects of managing the Total Portfolio and are not reproduced in this Statement, but are incorporated by reference as governing documents of the Plan.

### IL DEFINITION OF RESPONSIBILITIES

# A. Board of Trustees/Investment Committee

The statutory investment authority of the Board with regard to the Plan is set forth in Chapter 742, as described above, provides that in its capacity as a fiduciary, the Board of Trustees/Investment Committee must discharge its duties in a prudent manner and for the exclusive benefit of the participants and beneficiaries of the Plan.

In discharging its duties, the responsibilities of the Board of Trustees/Investment Committee pursuant to this Policy include the following:

• Establish the strategic investment policy (Asset Allocation Policy) for OP&F in accordance with the above goals, and periodically review Asset Allocation Policy in light of any changes in actuarial variables and/or market conditions.

- Approve the investment structure for applicable asset classes identified in the Asset Allocation Policy.
- Select qualified Investment Consultant(s) and Investment Manager(s) to advise on and manage OP&F's assets recognizing the goals set forth in ORC Sections 742.11 and 742.116.
- Monitor and review the performance of selected Investment Manager(s) to determine achievement of goals and compliance with policy guidelines.
- Monitor the costs of the investment operations at least annually.
- Review, at least annually, the current investment policies of OP&F and make such changes as appropriate.
- Review applicable annual investment plan(s) prepared by the staff and/or Investment Consultant(s). As conditions warrant, revise the annual investment plan(s) as the year progresses.
- Monitor investment activity for compliance with Board policies and adherence by Investment Manager(s) to strategy and direction.
- Review the overall investment performance to determine whether it meets established benchmarks.
- Evaluate and assign all Investment Manager(s) to a rating category as outlined in OP&F's Investment Manager Monitoring and Evaluation Policy.
- Review suggested changes or additions to the functions and operations regarding the investment operations
  of similar institutional investors.
- Review the proposed investment department annual operating budget and report its recommendations to the Finance Committee.
- Fulfill any other responsibilities as provided in the ORC and Investment Committee Charter.

The Board of Trustees/Investment Committee may authorize others such as OP&F staff, and may utilize the services of external advisors, such as actuaries, auditors, consultants and legal counsel, to implement decisions made by the Board. The comments and recommendations of such parties will be considered by the Board in conjunction with Board discussion of the issues for the purpose of making informed and prudent decisions.

### B. Staff

Staff will be the primary liaison between the Board of Trustees/Investment Committee and the Investment Consultant(s), the Investment Manager(s), and the custodial bank(s). The Chief Investment Officer, Deputy Chief Investment Officer, Sr. Investment Officer or Sr. Investment Officer – Public Markets are authorized in between meetings of the Board to take such actions as necessary in the best interests of the Total Portfolio and the Plan in keeping with the policies, strictures and guidelines which apply to the Board of Trustees. Staff's transactional authority is limited to ten percent of the Total Portfolio. In doing so, the staff will:

- Manage OP&F assets under its care and/or control in accordance with this Policy's objectives and guidelines set forth herein.
- Implement Board decisions regarding asset allocation, investment structure, Investment Manager(s) selection, and portfolio rebalancing procedures.
- Coordinate the Investment Manager(s) selection, evaluation, and retention decisions for the Plan's
  investments, consistent with OP&F's Investment Manager Search Policy and OP&F's Investment Manager
  Monitoring and Evaluation Policy.
- Monitor both internally and externally managed assets to ensure compliance with guidelines set forth in this
  Policy
- Establish a process to promptly vote all proxies and related actions in a manner consistent with OP&F's
  long-term interests and objectives set forth herein and OP&F's Proxy Voting Policy. Maintain detailed
  records of said voting of proxies and related actions and comply with all regulatory objectives related
  thereto.
- Manage the overall liquidity in the Total Portfolio to ensure timely payment of member benefit payments
  and Plan expenses and the investment of contributions consistent with established asset allocation and
  portfolio rebalancing policies.
- Report to the Board at least quarterly regarding the status of the Total Portfolio and its performance for various time periods. Meet with the Board at least annually to report on Investment Manager(s) performance and compliance with goals and objectives.
- Acknowledge and agree in writing to their fiduciary responsibility to fully comply with this Policy set forth herein, and as modified in the future.

# C. Investment Consultant(s)

The Board of Trustees/Investment Committee may retain an investment consulting organization or organizations (the Investment Consultant(s)) to assist in the overall strategic investment direction of the Total Portfolio, or specific asset classes, and its implementation. Each such Investment Consultant, in recognition of its role as a fiduciary of the Plan, will assume specific duties. These duties shall generally include the following:

- Provide independent and unbiased information.
- Assist in the development of this Policy and other policies that govern the Plan investments.
- Assist in monitoring compliance with this Policy.
- Assist in the development and recommendation of strategic asset allocation targets, investment structure, and rebalancing procedures for the Total Portfolio or for a specified asset class.
- Assist in development of performance measurement standards.
- Assist in the Investment Manager(s) search and selection process consistent with OP&F's Investment Manager Search Policy.
- Monitor, evaluate and report to the Board on Total Portfolio and/or Asset Class and Investment Manager (s) performance on an ongoing basis.
- Conduct due diligence when an Investment Manager(s) fails to meet a standard.
- Establish a procedural due diligence search process.

### D. Investment Manager(s)

The Board of Trustees/Investment Committee may, from time to time, cause the Plan to retain one or more qualified investment managers ("Investment Manager(s)") to manage a portion of the Plan assets. When applicable, the Board of Trustees/Investment Committee shall approve each Investment Manager's guidelines, which may set forth the purpose, Investment Manager(s) philosophy and approach, authorized investments, prohibitions, typical portfolio characteristics, performance objectives and evaluation, and Investment Manager(s) communications. The Investment Manager(s) have certain responsibilities that include the following:

- Manage OP&F assets under its care, custody, where applicable, and/or control in accordance with this Policy's objectives and guidelines set forth herein and its governing agreement with OP&F.
- Exercise full investment discretion over the assets in their care within the guidelines set forth in this Policy and, where applicable, the specific guidelines established for the Investment Manager(s) in the governing agreements with OP&F.
- Constructing a portfolio of securities that reflects the execution of a specific investment strategy.
- Promptly inform the Board and staff in writing regarding all changes of a material nature pertaining to the firm's organization and professional staff.
- If directed, promptly vote all proxies and related actions in a manner consistent with OP&F's long-term interests and objectives set forth herein and OP&F's Proxy Voting Policy. Each Investment Manager designated to vote shall keep detailed records of said voting of proxies and related actions and will comply with all regulatory obligations related thereto.
- Provide reporting to the Board or staff or Investment Consultant(s) quarterly regarding the status of the
  portion of the Total Portfolio managed by the Investment Manager(s) and its performance for various time
  periods. Meet or participate via teleconference or webcast with the Board or staff or Investment
  Consultant(s) annually or as needed to report on their performance and compliance with goals and
  objectives.
- Acknowledge and agree in writing to their fiduciary responsibility to fully comply with this Policy set forth herein, and as modified in the future.

# E. Office of the Ohio Treasurer/Board of Deposit/Custodian(s)

Per Section 742.11 of the ORC, the Treasurer of the State of Ohio (the Treasurer of State) is designated as custodian of investment assets. As custodian, the Treasurer of State or its designee (as described below) will be responsible for holding and safekeeping Plan assets, settling purchases and sales of securities; and identifying and collecting income which becomes due and payable on assets held. The Treasurer of State may engage a qualified bank or trust company, as authorized agent of the Treasurer of State, to perform certain services on behalf of the Treasurer of State to fulfill its responsibilities as custodian, including sweeping any available uninvested cash into designated money market funds.

# III. ASSET ALLOCATION and REBALANCING

It is the responsibility of the Board to determine the allocation of assets among distinct public and private market asset classes. The allocation will be completed in a manner consistent with commonly recognized financial principles. Application of these principles is expected to lead to a portfolio with the highest level of return consistent with the risk tolerance of OP&F.

The procedure for determining the allocation will consider the relevant characteristics of the liabilities and potential assets of OP&F. The liability considerations shall include, but not be limited to, current and expected future values of the benefits, and future contributions. These factors are important for identifying the investment horizon of OP&F

and its cash flow requirements. The asset characteristics considered shall include, but not be limited to, current asset value, the potential return relative to the potential risk, and diversification characteristics. The objectives and constraints contained within this Policy are also considered. It should also be noted that a multi-dimensional view of risk is integrated into the process where organizational (i.e. behavioral and shortfall) and investment (drawdown, inflation, liquidity, and active) risks are taken into account for determining the appropriate Asset Allocation Policy.

The asset allocation must be consistent with the investment standards specified in ORC Section 742.11.

The risk/return characteristics of OP&F shall be reviewed on a periodic basis (no less than every five years) through a comprehensive asset liability valuation study. On an interim basis, an asset-only allocation study may be conducted. OP&F recognizes the importance in understanding the critical asset class return, risk and correlation assumptions (i.e. the capital market assumptions) used in either an asset liability valuation study or asset-only allocation study given these assumptions are a critical input within the Asset Allocation Policy decision. For the assumptions used to determine the current Asset Allocation Policy, please see Appendix 1 and 2. Furthermore, OP&F understands that the Asset Allocation Policy decision is the most important investment decision the Plan undertakes, driving approximately 90% of the Plan's variation in returns. The goal of each study shall be to formulate an Asset Allocation Policy that improves the probabilities of funding OP&F's benefits over the long-term, while maximizing the safety of promised benefits and minimizing the cost of funding these benefits through the most efficient combination of acceptable asset classes under the prudent person standard. Given that short-term volatility is also important, OP&F evaluates the impact of the Asset Allocation Policy decision on funded ratios, annual contribution requirements and other relevant metrics over both short- and long-term time periods.

Based on an asset liability valuation study or asset-only allocation study, which analyzed the expected returns, risk and correlations of various asset classes, projected liabilities (only in the case of an asset liability valuation study), liquidity, and the risks associated with alternative asset mix strategies, the Board has established the following Asset Allocation Policy. The asset classes are "bucketed" or grouped together into macro-asset class buckets (i.e. Growth, Defensive Growth, Defensive and Inflation-Oriented) based on their expected correlations to one another to create a better understanding of risk and diversification, and based on asset class exposures to the economic factors of growth and inflation.

	Long-Term Target Allocation -	
Asset Class	Notional Exposure	Range
Domestic Equity	18.6%	$\pm  5.6\%$
Non-U.S. Equity	12.4%	$\pm 3.7\%$
Private Markets	10.0%	± 3.0%
<b>Total Growth Assets</b>	41.0%	± 8.2%
High Yield	7.0%	<u>+</u> 2.1%
Private Credit	5.0%	<u>+</u> 1.5%
<b>Total Defensive Growth Assets</b>	12.0%	<u>+</u> 2.4%
Core Fixed Income	25.0%	± 5.0%
Cash	0.0%	+ 6.3%
<b>Total Defensive Assets</b>	25.0%	- 5.0% / + 11.3%
U.S. Inflation Linked Bonds	15.0%	<u>+</u> 3.0%
Real Estate	12.0%	$\pm 3.6\%$
Real Assets	8.0%	$\pm \ 2.4\%$
Midstream Energy Infrastructure	5.0%	$\pm~1.5\%$
Commodities	2.0%	+ 0.6%
Gold	5.0%	<u>+</u> 1.5%
<b>Total Inflation-Oriented Assets</b>	47.0%	<u>+</u> 9.4%
Total	125.0%	<u>+</u> 5.0%

The most recent study has shown that this is a favorable asset mix for meeting longer-term goals under multiple market conditions. In addition, this study incorporates the "risk parity" concept into OP&F's asset allocation with the goal of balancing economic factor risk exposures. The Total Portfolio has long-term target allocations that total 125% due to the application of leverage in core fixed income and U.S. inflation linked bonds and the implementation approach for gold.

The Asset Allocation Policy represents a long-term strategy and thus, the Total Portfolio should strategically meet its performance objectives in the long-term but not necessarily every year. Please see Appendix 3 for the expected returns, risk, contribution to asset volatility, and other relevant metrics for the current Asset Allocation Policy.

Short term market shifts may cause the asset mix to drift from the allocation targets. Should the actual percentage fall out of the indicated range for a particular asset class, the staff shall direct rebalancing transactions to reallocate assets from the over-allocated asset class to the under-allocated asset class. In determining where to reallocate assets within asset classes, where applicable, actual percentages are compared to target weightings for each individual mandate. These rebalancing transactions are accomplished through the coordination of staff with the written directive executed by one or more of the Executive Director, Chief Investment Officer, General Counsel, or Director, Financial Services. This rebalancing discipline is intended to encourage "buying low" and "selling high" and to keep the Total Portfolio invested at an appropriate overall risk level. Except when there is a perceived extraordinary downside risk in a particular asset class, movement outside the normal ranges should be avoided.

Investments in private markets, private credit, private real estate and private real assets are generally less liquid than investments in public markets securities and are typically implemented via periodic commitments to funds with limited partnership structures. As a result, actual allocations to these asset classes may deviate from their strategic targets for extended periods. Actual vs. target deviations for these asset classes shall not be considered in violation of the Asset Allocation Policy. Under/overweights to these asset classes shall be invested in public markets securities with the most similar risk/return characteristics as a short-term proxy for the private asset classes. Similarly, resulting deviations to those public market asset classes shall not be considered in violation of the Asset Allocation Policy. However, broad economic factor bucket ranges of Growth, Defensive Growth, Defensive, and Inflation-Oriented Assets shall remain within their targeted ranges.

To assist in rebalancing, OP&F has retained a derivative overlay Investment Manager(s) which provides several benefits including: (1) reduce OP&F's tracking error relative to target allocations; (2) improve Total Portfolio returns; (3) enhance liquidity, and (4) reduce the administrative burden associated with management of monthly cash flows.

The Board may adopt interim Asset Allocation Policy target allocations to reflect the transition from previous policy target allocations to new policy target allocations. The interim target allocations will reflect dollar cost averaging and/or opportunistic implementation to most prudently reach the new policy target allocations over time. Please see Appendix 4 for interim Asset Allocation Policy target allocations, if applicable.

### IV. INVESTMENT IMPLEMENTATION

The implementation of an investment portfolio designed to achieve the Total Portfolio objectives must be consistent with governing statutes as specified in Sections 742.11 to 742.113, 742.114, 742.116 and with the Ohio-Qualified Investment Manager Policy, the Ohio-Qualified Broker Policy, and OP&F's Broker Policy.

Where appropriate, OP&F will invest assets through the use of qualified Investment Manager(s). The allocations to these Investment Manager(s) will be made in accordance with the results of the asset liability valuation study or asset-only allocation study, investment structure analysis, and established procedures. For a complete description of the selection of Investment Manager(s), please see OP&F's Investment Manager Search Policy.

### V. ASSET CLASS OBJECTIVES, CHARACTERISTICS and INVESTMENT STRUCTURE

Investment structure targets will be established within applicable asset classes to address risk and return factors present in the respective asset class. For example, the domestic equity composite portfolio structural targets will be established to ensure style (growth vs. value) and market capitalization neutrality relative to the overall market, and to address active versus passive implementation decisions. External Investment Manager(s) will be hired to implement the structural targets in a diversified manner and will therefore have derived target weightings within the overall investment program. Where applicable, these are set forth below. Furthermore, please see Appendix 5 for alpha expectations for the applicable asset classes.

# A. Growth Assets

### 1. Domestic Equity

# Investment Objectives

Total return of the domestic equity composite portfolio should exceed the return of the FT Wilshire 5000 Total Market TR Index over a full market cycle on an annualized basis. Total return of each Investment Manager's portfolio should rank above the median when compared to their peer group, if applicable, over a full market cycle on

an annualized basis and should exceed their benchmark return as specified in each Investment Manager's guidelines or applicable documentation.

### Investment Characteristics

The main focus of investing will be on companies headquartered and/or domiciled in the United States. The domestic equity composite portfolio shall have similar portfolio characteristics as that of the FT Wilshire 5000 Total Market TR Index, and should not exhibit size (market capitalization) or style (value vs. growth) bias.

### Investment Structure

The structure of the domestic equity composite portfolio will be diversified among passive and active investment strategies as follows:

### i. Passive Large Capitalization Core Exposure

The passive large capitalization core component has a target allocation of 30% of the domestic equity composite portfolio. This passive portfolio is intended to provide broad market exposure for and diversification to OP&F's domestic equity composite portfolio through holdings in large- and mid- capitalization equities or futures.

# ii. Active Large Capitalization Portable Alpha Exposure

The active large capitalization portable alpha component has a target allocation of 60% of the domestic equity composite portfolio. The implementation of this portable alpha component will not be considered leverage in relation to the long-term target allocations for the Total Portfolio. The overall objective is to provide risk-adjusted returns greater than the return of the Standard & Poor's (S&P) 500 Index. S&P 500 market exposure, obtained through the use of derivatives and/or physicals, will be combined with strategies that represent diversified sources of alpha with a broad range of risk characteristics. For a complete description of the appropriate use of derivatives, please see OP&F's Derivatives Policy Statement.

# iii. Active Small Capitalization Core Exposure

The active small capitalization core component has a target allocation of 7.5% of the domestic equity composite portfolio.

# iv. Synthetic Small Capitalization Exposure

The synthetic small capitalization component has a target allocation of 2.5% of the domestic equity composite portfolio.

# 2. Non-U.S. Equity

### **Investment Objectives**

Total return of the Non-U.S. equity composite portfolio should exceed the return of the Morgan Stanley Capital International All Country World Index ex-U.S. Investible Market Index – Iran and Sudan Free (\$ Net) (MSCI ACWI ex-U.S. IMI I/S Free Index) over a full market cycle on an annualized basis. Total return of each Investment Manager's portfolio should rank above the median when compared to their peer group, if applicable, over a full market cycle on an annualized basis and should exceed their benchmark return as specified in each Investment Manager's guidelines or applicable documentation.

# **Investment Characteristics**

The main focus of investing will be on companies headquartered or domiciled in the MSCI ACWI ex-U.S. IMI countries, which includes both developed and emerging markets. The Non-U.S. Equity composite portfolio shall have similar portfolio characteristics as that of the MSCI ACWI ex-U.S. IMI I/S Free Index.

### Investment Structure

Non-U.S. equity assets will be managed on an active basis in order to exploit the perceived inefficiencies in the Non-U.S. equity markets. The structure of the Non-U.S. equity composite portfolio will be diversified among active ACWI ex-U.S. strategies and dedicated ACWI ex-U.S. small capitalization strategies as follows:

### i. Active ACWI ex-U.S. Large and Mid Capitalization Exposure

The Active ACWI ex-U.S. Large and Mid Capitalization component has a target allocation of 85% of the Non-U.S. equity composite portfolio.

# ii. Active ACWI ex-U.S. Small Capitalization Exposure

The dedicated Active ACWI ex-U.S. Small Capitalization component has a target allocation of 15% of the Non-U.S. equity composite portfolio.

### 3. Private Markets

### Investment Objectives

The performance objectives for the private markets composite portfolio and for individual investments are set forth in OP&F's Private Markets Investment Policy. Both the returns for the private markets composite portfolio and respective benchmark are lagged one quarter.

### Investment Characteristics

Investments will be diversified by certain criteria as set forth in OP&F's Private Markets Investment Policy.

### Investment Structure

The target allocation of Total Portfolio assets to private markets will be established by OP&F's long-term Asset Allocation Policy, including a range around the target allocation to allow flexibility as the underlying private markets investments are funded over time. In order to meet this allocation target, the Board of Trustees/Investment Committee approves a private markets investment plan setting forth the proposed investment activity for a specified period of time. The private markets investment plan shall be reviewed at least annually, and more frequently if necessary or appropriate, to reflect market conditions.

# B. Defensive Growth Assets

### 1. High Yield

### **Investment Objectives**

Total return of the high yield fixed income composite portfolio should exceed the return of the ICE BofA ML U.S. High Yield Master II Constrained Index over a full market cycle on an annualized basis. Total return of each Investment Manager's portfolio should rank above the median when compared to their peer group, if applicable, over a full market cycle on an annualized basis and should exceed their benchmark return as specified in each Investment Manager's guidelines or applicable documentation.

### Investment Characteristics

The main focus of investing will be on below investment grade fixed income securities, those securities rated below BBB- or equivalent. Positions may include publicly traded high yield bonds as well as public and private bank loans. The high yield fixed income composite portfolio shall have similar portfolio characteristics as that of the ICE BofA ML U.S. High Yield Master II Constrained Index. Each Investment Manager's portfolio shall have similar portfolio characteristics as that of their respective benchmark.

# Investment Structure

High yield fixed income assets will be managed solely on an active basis in order to exploit the perceived inefficiencies in the high yield fixed income markets and to minimize the probability of exposure to securities in default.

### 2. Private Credit

# Investment Objectives

The performance objectives for the private credit composite portfolio are set forth in OP&F's Private Credit Investment Policy. Both the returns for the private credit composite portfolio and respective benchmark are lagged one quarter.

### Investment Characteristics

Investments will be diversified by certain criteria as set forth in OP&F's Private Credit Investment Policy.

### Investment Structure

The target allocation of Total Portfolio assets to private credit will be established by OP&F's long-term Asset Allocation Policy, including a range around the target allocation to allow flexibility as the underlying private credit investments are funded over time. In order to meet this allocation target, the Board of Trustees/Investment Committee approves a private credit investment plan setting forth the proposed investment activity for a specified period of time. The private credit investment plan shall be reviewed at least annually, and more frequently if necessary or appropriate, to reflect market conditions.

# C. Defensive Assets

### 1. Core Fixed Income

# Investment Objectives

Total return of the core fixed income composite should exceed the applicable levered return of the Bloomberg U.S. Aggregate Index minus the cost of financing over a full market cycle on an annualized basis. Total return of each Investment Manager's portfolio should rank above the median when compared to their peer group, if applicable, over a full market cycle on an annualized basis and exceed their benchmark return as specified in each Investment Manager's guidelines or applicable documentation.

### Investment Characteristics

The main focus of investing will be a diversified mix of traditional fixed income securities. The core fixed income composite portfolio shall have similar portfolio characteristics as that of the Bloomberg U.S. Aggregate Index.

### Investment Structure

Given the core fixed income allocation target set forth in the Asset Allocation Policy above, the core fixed income composite portfolio will be levered approximately 2.0x. The structure of the core fixed income composite portfolio shall be diversified among active investment strategies and synthetic overlays as follows:

### i. Active Core Fixed Income Exposure

The active core fixed income component has a target allocation of 50% of the core fixed income composite portfolio on a notional basis. The overall objective is to provide risk-adjusted returns greater than the return of the Bloomberg U.S. Aggregate Index.

### ii. Synthetic Core Fixed Income Exposure

The synthetic core fixed income component has a target allocation of 50% of the core fixed income composite portfolio on a notional basis. The synthetic core fixed income component shall be implemented to provide either U.S. Treasury exposure or Bloomberg U.S. Aggregate exposure or some combination of both.

### 2. Cash

### Investment Objectives

Total return of the cash composite should exceed the return of the 90 Day U.S. Treasury Bill over a full market cycle on an annualized basis. Total return of each Investment Manager's portfolio should rank above the median when compared to their peer group, if applicable, over a full market cycle on an annualized basis and exceed their benchmark return as specified in each Investment Manager's guidelines or applicable documentation.

# Investment Characteristics

Cash is managed with a focus on capital preservation and providing a high degree of liquidity to meet ongoing cash flow needs of the Plan. For the uninvested cash that is swept at OP&F custodial banks, the designated money market funds are government money market funds that invest within the limitations or guidelines prescribed for the funds. For externally managed cash, the portfolios are expected to be invested consistent with the Investment Manager's guidelines.

### Investment Structure

For any available uninvested cash at OP&F's custodial banks, cash is swept into designated money market funds. For externally managed cash, the portfolios will be actively managed consistent with the individual Investment Manager's guidelines.

### D. Inflation-Oriented Assets

# 1. U.S. Inflation Linked Bonds (TIPS)

### Investment Objectives

Total return of the TIPS composite portfolio should exceed two times the Bloomberg U.S. Government Inflation-Linked Bond Index minus the cost of financing over a full market cycle on an annualized basis. Total return of each Investment Manager's portfolio should exceed their benchmark return as specified in each Investment Manager's guidelines or applicable documentation. In addition, there is a portable alpha component to the TIPS composite portfolio whereas the overall objective is to provide risk-adjusted returns greater than two times the return of the

Bloomberg U.S. Government Inflation-Linked Bond Index minus the cost of financing. The implementation of this portable alpha component will not be considered leverage in relation to the long-term target allocations for the Total Portfolio.

### Investment Characteristics

The main focus of investing will be on U.S. inflation-linked securities. The TIPS composite portfolio, as well as each Investment Manager's portfolio, shall have similar portfolio characteristics as that of the Bloomberg U.S. Government Inflation-Linked Bond Index.

### Investment Structure

The TIPS allocation will be managed on an active basis. Given the TIPS allocation target set forth in the Asset Allocation Policy above, the TIPS composite portfolio will be levered approximately 2.0x, excluding the portable alpha component. TIPS exposure, obtained through the use of derivatives and/or physical bonds, may be combined with a strategy that provides a diversified source of alpha with customized risk tolerances. Implementation of the TIPS composite portfolio will be consistent with OP&F's Derivatives Policy Statement, which provides a complete description of the appropriate use of derivatives in the Plan.

### 2. Real Estate

### **Investment Objectives**

The performance objectives for the real estate composite portfolio are set forth in OP&F's Real Estate Investment Policy. Both the returns for the real estate composite portfolio and respective benchmark(s) are lagged one quarter.

### Investment Characteristics

Investments will be diversified by certain criteria as set forth in OP&F's Real Estate Investment Policy.

### Investment Structure

The target allocation of Total Portfolio assets to real estate will be established by OP&F's long-term Asset Allocation Policy, including a range around the target allocation to allow flexibility as the underlying private real estate investments are funded over time. In order to meet this allocation target, the Board of Trustees/Investment Committee approves a real estate investment plan setting forth the proposed investment activity for a specified period of time. The real estate investment plan shall be reviewed at least annually, and more frequently if necessary or appropriate, to reflect market conditions.

## 3. Real Assets

### Investment Objectives

The performance objectives for the real assets composite portfolio are set forth in OP&F's Real Assets Investment Policy. Both the returns for the real assets composite portfolio and respective benchmark are lagged one quarter.

### Investment Characteristics

Real assets investments will be diversified by certain criteria as set forth in OP&F's Real Assets Investment Policy.

### Investment Structure

The target allocation of Total Portfolio assets to real assets will be established by OP&F's long-term Asset Allocation Policy, including a range around the target allocation to allow flexibility as the underlying real assets investments are funded over time. In order to meet this allocation target, the Board of Trustees/Investment Committee approves a real assets investment plan setting forth the proposed investment activity for a specified period of time. The real assets investment plan shall be reviewed at least annually, and more frequently if necessary or appropriate, to reflect market conditions.

### 4. Midstream Energy Infrastructure

# Investment Objectives

Total return of the midstream energy infrastructure composite portfolio should exceed the return of the Alerian Midstream Energy Index over a full market cycle on an annualized basis. Total return of each Investment Manager's portfolio should rank above the median when compared to their peer group, if applicable, over a full market cycle on an annualized basis and should exceed their benchmark return as specified in each Investment Manager's guidelines or applicable documentation.

# Investment Characteristics

The main focus of investing will be on publicly traded midstream energy infrastructure opportunities. Investments may consist of master limited partnerships (MLPs) and securities of energy related C-corporations. The midstream energy infrastructure composite portfolio as well as each Investment Manager's portfolio shall have similar portfolio characteristics as that of the Alerian Midstream Energy Index.

### Investment Structure

Midstream energy infrastructure assets will be managed solely on an active basis in order to exploit the perceived inefficiencies in the publicly traded midstream energy infrastructure markets.

### 5. Gold

### **Investment Objectives**

Total return of the gold composite portfolio should match the return of the S&P GSCI Gold Index Total Return minus the cost of financing over a full market cycle on an annualized basis.

### **Investment Characteristics**

The gold allocation will be implemented through the derivatives markets and will be unfunded with the exception of necessary cash collateral and where gold is used to address deviations in certain private market asset classes with similar risk/return characteristics. Gold has been identified as one of the asset classes to hold an underweight for the asset class of real assets. In these cases, the gold allocation will be fully funded with cash collateral so as not to increase the Total Portfolio leverage from this purpose.

### Investment Structure

The gold allocation will be managed on a passive basis. Given the gold allocation target set forth in the Asset Allocation Policy above, the gold composite portfolio should be considered as leverage, except where gold is used to address deviations in certain private market asset classes with similar risk/return characteristics. Implementation of the gold composite portfolio will be consistent with OP&F's Derivatives Policy Statement, which provides a complete description of the appropriate use of derivatives in the Plan.

### 6. Commodities

### Investment Objectives

Total return of the commodities composite portfolio should exceed the return of the Bloomberg Commodity Index over a full market cycle on an annualized basis. Total return of each Investment Manager's portfolio should rank above the median when compared to their peer group, if applicable, over a full market cycle on an annualized basis and should exceed their benchmark return as specified in each Investment Manager's guidelines or applicable documentation.

# **Investment Characteristics**

The commodities allocation will be implemented through the derivatives markets and/or with commodity-linked equities. For a complete description of the appropriate use of derivatives, please see OP&F's Derivatives Policy Statement.

### Investment Structure

The commodities allocation will be managed primarily on an active basis in order to exploit the perceived inefficiencies in the commodities markets; however, on an interim basis, a passive approach may be employed. Given the commodities allocation target set forth in the Asset Allocation Policy above, the commodities allocation will be fully funded with cash collateral and therefore the commodities composite portfolio will not be considered as leverage in relation to the long-term target allocations for the Total Portfolio.

### VI. PROXY VOTING

OP&F's Board of Trustees believes that common stock proxies are valuable and should be voted in the long-term interests and objectives of the Plan set forth herein and OP&F's Proxy Voting Policy and International Proxy Voting Policy. Common stock proxies may be executed by the Sr. Investment Officer – Public Markets or the Chief Investment Officer, or their designees. Staff or their designee that exercises a proxy vote shall keep detailed records of said voting of proxies and related actions and will comply with all regulatory obligations related thereto and the policies set forth in OP&F's Proxy Voting Policy and International Proxy Voting Policy. Staff shall provide a semi-annual summary report of proxy voting actions to the Board of Trustees/Investment Committee.

# VII. SECURITIES LENDING

The investment objective for the securities lending program is to generate incremental income within a high quality investment program that safeguards the return of principal, maintains adequate daily liquidity, ensures diversification and tightly controls exposure to fluctuating interest rates. The program may be operated by a bank trustee or a third party lending agent. Marking to market shall be performed daily by the agent(s) and a minimum average of at least 102 percent for domestic, and 105 percent for Non-U.S. collateral shall be diligently maintained. Securities lending reports shall be provided monthly by the agent(s) to staff. Staff will present a semi-annual summary report to Board of Trustees/Investment Committee.

### VIII. INVESTMENT MANAGER MONITORING and EVALUATION POLICY

The purpose of OP&F's Investment Manager Monitoring and Evaluation Policy is to establish the process and discipline for managing the Investment Manager(s) relationship. The policy states the process, responsibilities and important factors for consideration in the monitoring and evaluation process. For a complete description of the monitoring and evaluation process, please see OP&F's Investment Manager Monitoring and Evaluation Policy.

### IX. COMMUNICATIONS

Each Investment Manager will provide hard copy reports at least quarterly, including performance measurement, asset inventories, transaction summaries, market commentary or anything else deemed significant at the time of reporting. Each Investment Manager is expected to meet or participate via teleconference or webcast with OP&F's Board or staff or Investment Consultant(s) annually or as needed.

### X. INVESTMENT MANAGER SEARCH POLICY

When applicable, the selection of Investment Manager(s) will be conducted under a Request for Proposal (RFP) process and the search may be on a closed or open manager universe basis. For a complete description of the selection of Investment Manager(s), please see OP&F's Investment Manager Search Policy.

# XI. SECURITIES LITIGATION POLICY

The Securities Litigation Policy has been adopted to ensure that OP&F takes prudent, effective, appropriate, and efficient actions to protect and increase the value of OP&F investments and to ensure that OP&F receives all money or assets which are due it as a result of the resolution of class action suits in a cost effective manner consistent with the Board's fiduciary duties. For a complete description of the policy objectives, monitoring, reporting requirements, procedures, etc., please see OP&F's Securities Litigation Policy.

### XII. IRAN and SUDAN DIVESTMENT POLICY

As required by uncodified provisions of Chapter 742 of the ORC, OP&F has adopted an Iran and Sudan Divestment Policy, the purpose of which is to divest and restrict the purchase of stocks and bonds issued by a publicly traded company with scrutinized business operations in Iran and Sudan, subject to the fiduciary responsibilities of the Board of Trustees, as set forth in Chapter 742 of the ORC. For a complete description of the responsibilities, process, reporting requirements, etc., please see OP&F's Iran and Sudan Divestment Policy and Iran and Sudan Divestment Processes.

### XIII. DERIVATIVES POLICY STATEMENT

The Derivatives Policy Statement is intended to supplement this Statement and serves as the overall guideline on the use of derivatives within OP&F and its related investment manager guidelines. The Derivatives Policy Statement sets forth controls and risk management procedures for traditional investment strategies that may employ derivatives but are primarily invested in equity or fixed income securities, and separately for investment strategies which OP&F determines to be implemented primarily through the use of derivative securities.

### XIV. BROKER POLICY & OHIO-QUALIFIED BROKER POLICY

The Broker Policy sets forth the general and specific directions toward trading activities of all assets of OP&F. The Ohio-Qualified Broker Policy sets forth the specific criteria regarding OP&F's goal to increase the utilization of Ohio-qualified agents (brokers) for the execution of domestic equity and domestic fixed income trades.

# XV. OHIO-QUALIFIED INVESTMENT MANAGER POLICY

The Ohio-Qualified Investment Manager Policy sets forth the specific criteria regarding OP&F's goal to increase the utilization of Ohio-qualified investment managers.

# XVI. ACKNOWLEDGEMENT

The following individuals acknowledge and agree in writing to their fiduciary responsibility to fully comply with the Policy set forth herein, and as modified in the future.

Chief Investment Officer	Sr. Investment Officer
Deputy Chief Investment Officer	Investment Officer – Alternative Investments
Sr. Investment Officer – Public Markets	Investment Officer – Public Markets
Investment Specialist	

# Appendix 1

# Wilshire's June 30, 2022 Capital Market Assumptions

The following capital market assumptions were used to determine the current Asset Allocation Policy adopted in August 2022 via a comprehensive asset liability study.

Asset Classes	Expected Return 10 Years	Expected Return 20 Years	Expected Return 30 Years	Risk	Cash Yield	Factor Exposure Growth	Factor Exposure Inflation	Liquidity Market Level	Liquidity Stressed Metric
Domestic Equity	6.00%	6.50%	6.95%	17.00%	1.65%	8.00	-3.00	100	0
Non-U.S. Equity	7.25%	7.50%	7.70%	19.10%	3.10%	8.00	1.50	90	0
Private Markets	10.05%	10.20%	10.35%	28.00%	0.00%	13.50	-3.80	0	0
High Yield	6.25%	6.45%	6.65%	10.00%	9.10%	4.00	-1.00	80	0
Private Credit	8.25%	8.05%	7.85%	12.10%	11.80%	6.00	0.00	90	40
Core Fixed Income	4.05%	4.25%	4.45%	4.25%	4.55%	-0.85	-2.50	100	85
Cash	3.15%	3.20%	3.20%	0.75%	3.15%	0.00	0.00	100	100
U.S. TIPS	3.15%	3.60%	4.00%	6.00%	3.80%	-3.00	2.50	90	85
Real Estate	7.20%	7.55%	7.85%	15.65%	1.90%	3.50	1.00	0	0
Real Assets	7.05%	7.65%	8.30%	16.95%	1.85%	4.60	5.60	0	0
Midstream Energy Infrastructure	7.80%	8.05%	8.30%	19.00%	6.05%	5.00	5.80	90	0
Commodities	5.50%	5.55%	5.65%	16.00%	3.15%	0.00	12.00	90	50
Gold	5.50%	5.55%	5.65%	18.00%	0.00%	-5.00	7.00	90	45
Leverage	3.40%	3.45%	3.45%	0.75%	3.40%	0.00	0.00	N/A	N/A

	Domestic Equity	Non-U.S. Equity	Private Markets	High Yield	Private Credit	Core Fixed Income	Cash	U.S. TIPS	Real Estate	Real Assets	Midstream Energy Infrastructure	Commodities	Gold	Leverage
Domestic Equity	1.00													
Non-U.S. Equity	0.83	1.00												
Private Markets	0.74	0.67	1.00											
High Yield	0.54	0.45	0.34	1.00										
Private Credit	0.50	0.46	0.22	0.64	1.00									
Core Fixed Income	0.28	0.09	0.31	0.25	0.04	1.00								
Cash	-0.05	-0.08	0.00	-0.10	-0.13	0.19	1.00							
U.S. TIPS	-0.05	0.05	-0.03	0.05	-0.01	0.59	0.20	1.00						
Real Estate	0.53	0.47	0.51	0.57	0.56	0.19	-0.05	0.07	1.00					
Real Assets	0.59	0.71	0.55	0.53	0.52	0.11	-0.06	0.16	0.46	1.00				
Midstream Energy Infrastructure	0.40	0.39	0.44	0.50	0.45	0.13	0.00	0.20	0.45	0.56	1.00			
Commodities	0.25	0.38	0.27	0.29	0.30	-0.02	0.00	0.25	0.24	0.49	0.35	1.00		
Gold	-0.05	0.16	-0.02	0.05	0.00	0.21	-0.05	0.30	0.11	0.15	0.05	0.30	1.00	
Leverage	-0.05	-0.08	0.00	-0.10	-0.13	0.19	1.00	0.20	-0.05	-0.06	0.00	0.00	-0.05	1.00

- Wilshire's asset class return, risk and correlation assumptions are developed on multi-year forward looking expected rates of return and historical risk and correlation, adjusted to incorporate recent trends.
- Public market return expectations represent a passive investment in the asset class (beta). They do not reflect value added from active management (alpha).

# Appendix 2

A summary of the actuarial assumptions as of the latest actuarial valuation (except see note on investment rate of return) is shown below.

Actuarial Assumptions	
Valuation date	Jan. 1, 2021
Actuarial cost method	Entry age
Investment rate of return	7.50% (Board approved change from 8.00% in Feb.
	2022)
Projected salary increases	3.75% - 10.50%
Payroll increases	3.25%
Inflation assumptions	2.75%
Cost-of-living assumptions	2.20% simple
Amortization method	Level percent of payroll, open
Amortization period	30 years
Asset valuation method	4-year adjusted fair value with a corridor of 20% of the
	fair value.
Health Mortality	RP-2014 Total Employee and Healthy Annuitant
	Mortality Tables rolled back to 2006, adjusted and
	projected with the Buck Modified 2016 Improvement
	Scale. Rates for surviving beneficiaries are adjusted by
	120%.
Disability Mortality	RP-2014 Disability Mortality Tables rolled back to
	2006, adjusted and projected with the Buck Modified
	2016 Improvement Scale.

Appendix 3

Metric	Current Asset Allocation Policy
Returns & Risk (%)	
Expected Return – 10 Years	7.38
Expected Return – 20 Years	7.74
Expected Return – 30 Years	7.96
Standard Deviation of Return	11.75
Contribution to Asset Volatility (%)	
Growth	60.5
Defensive Growth	6.8
Defensive/Rate Sensitive	3.5
RA/Inflation Sensitive	29.2
AAL MVA Funded Ratio (%)	
Median (Expected) – 1 Year	71.13
Median (Expected) – 3 Years	71.36
Median (Expected) – 5 Years	72.25
Median (Expected) – 10 Years	74.65
AAL AVA Funded Ratio (%)	
Median (Expected) – 1 Year	73.36
Median (Expected) – 3 Years	74.23
Median (Expected) – 5 Years	72.53
Median (Expected) – 10 Years	74.54

<sup>•</sup> Figures were derived using the assumptions as of June 30, 2022, which are included in Appendix 1.

Appendix 4

		Long-				
Asset Class	1/1/2023	4/1/2023	7/1/2023	10/1/2023	1/1/2024	Term Target Allocation
Domestic Equity	21.50%	20.85%	20.70%	20.55%	20.40%	18.60%
Non-U.S. Equity	13.00%	13.00%	13.00%	13.00%	13.00%	12.40%
Private Markets	8.50%	8.50%	8.50%	8.50%	8.50%	10.00%
Total Growth Assets	43.00%	42.35%	42.20%	42.05%	41.90%	41.00%
High Yield	8.50%	8.50%	8.50%	8.00%	8.00%	7.00%
Private Credit	3.50%	3.50%	3.50%	4.00%	4.00%	5.00%
Total Defensive Growth Assets	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%
Core Fixed Income	23.50%	24.00%	24.00%	25.00%	25.00%	25.00%
Cash	1.50%	1.00%	1.00%	0.00%	0.00%	0.00%
Total Defensive Assets	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%
U.S. TIPS	16.50%	16.00%	16.00%	15.00%	15.00%	15.00%
Real Estate	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%
Real Assets	5.50%	5.75%	6.00%	6.25%	6.50%	8.00%
Midstream Energy Infrastructure	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Commodities	0.00%	1.00%	1.00%	2.00%	2.00%	2.00%
Gold	6.00%	5.90%	5.80%	5.70%	5.60%	5.00%
Total Inflation- Oriented Assets	45.00%	45.65%	45.80%	45.95%	46.10%	47.00%
Total Notional Exposure	125.00%	125.00%	125.00%	125.00%	125.00%	125.00%

# Appendix 5

Asset Class	Alpha Expectation
Domestic Equity	1.00%
Non-U.S. Equity	1.00%
Private Markets	1.00%
High Yield	0.50%
Private Credit	0.50%
Core Fixed Income	0.40%
U.S. TIPS	1.00%
Midstream Energy Infrastructure	1.00%
Real Estate	1.00%
Real Assets	0.00%
Commodities	0.75%
Gold	0.00%