OPERS

Ohio Public Employees Retirement System

Liquidity Policy
March 2025

TABLE OF CONTENTS

Revision History

Liquidity Policy Established	**February 15, 2017**
Policy Revised	**March 21, 2018**
Policy Revised	**September 18, 2019**
Policy Revised	**March 17, 2021**
Policy Revised	**March 16, 2022**
Policy Revised	**March 15, 2023**
Policy Revised	**March 20, 2024**
Policy Revised	**March 19, 2025**

I. SCOPE

This Policy addresses liquidity management within the asset allocations of the Ohio Public Employees Retirement System ("OPERS") Defined Benefit ("DB Fund") Fund and Health Care 115 Trust Funds ("HC Fund").

II. PURPOSE

This Policy provides the broad strategic framework for managing the Funds' liquidity involving investment assets, investment-related liabilities and short-term obligations including benefit payments.

III. LEGAL AUTHORITY

The investment powers and fiduciary responsibilities of the OPERS Retirement Board ("Board") are established by Section 145.11 of the Ohio Revised Code ("ORC"). Section 145.11 states:

> The members of the public employees retirement board shall be the trustees of the funds created by section 145.23 of the Revised Code. The board shall have full power to invest the funds. The board and other fiduciaries shall discharge their duties with respect to the funds solely in the interest of the participants and beneficiaries; for the exclusive purpose of providing benefits to participants and their beneficiaries and defraying reasonable expenses of administering the public employees retirement system; with care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims; and by diversifying the investments of the system so as to minimize the risk of large losses, unless under the circumstances it is clearly prudent not to do so.

IV. PHILOSOPHY

In general, liquidity refers to the capacity to use and, if necessary, generate cash. Since most obligations are satisfied with cash, rather than other assets, this capacity is of paramount importance to the Funds.

The Board's asset allocation is the first expression of liquidity preference. Any limits that the Board places on risk (while seeking return) are a reflection of self-imposed constraints in the form of downside protection, liquidity considerations, leverage limits, and so forth.

For an asset or collection of assets, liquidity is a term used to characterize the capacity of the asset(s) to be efficiently converted into cash. "Efficiently" considers (1) the time involved in the conversion, (2) the price at which the conversion occurs and (3) the transaction costs. More liquid assets generally require less time to be converted into cash, can be converted into cash at or above "fair value", and involve low transaction costs. Conversely, less liquid assets generally require more time to be converted into cash, may require discounting below "fair value" to be converted and may involve high transactions costs.

Liquidity is prized by the markets and, therefore, comes at a cost. Generally, the more liquid an asset is, the lower the expected return from it. For example, physical cash itself provides no future expected return.

OPERS seeks to balance the need for liquidity with the goal of targeted returns so that there are always sufficient funds available. During periods of market dislocations in which asset liquidity becomes impaired, maintaining the long term asset allocation is a secondary priority relative to the immediate cash flow needs for benefit payments.

V. SOURCES OF LIQUIDITY RISK

Liquidity risk is the potential for loss resulting from the diminished capacity, or inability of the Fund to efficiently meet its benefit and investment-related payment obligations. Three broad areas of liquidity risk are considered below.

A. Benefit Payments

Many factors influence the liquidity risk associated with the Funds benefit obligations. These include the structural characteristics of the Plans, including benefits offerings, contribution rates, and member demographics. For example, all else equal, a mature pension plan with a lower ratio of active members to retirees may have lower cash inflows than a plan in which the relationship of active members to retirees is higher. OPERS is currently considered to be a mature plan in which cash outflows (benefit payments) exceed cash inflows (contributions) plus net investment cash income.

This Policy relates only to the ultimate, short-term cash flow requirements associated with the cash payment of the benefits and not to the Plans' structural benefit characteristics.

B. Assets

Asset liquidity is dependent upon several factors including:

- Market conditions (trading volumes, volatility, relative values of securities) at near normal levels;
- How quickly an asset can be bought and sold (this includes contractual provisions, such as gates, which may limit the ability to transact);
- Pricing efficiency;
- Transactions costs.

Generally speaking, and with consideration of the variables above, the level of liquidity of the Funds can be characterized, under normal market conditions, as follows:

Illiquid	⟷	**Liquid**
Private Equity Private Real Estate Private Credit	Emerging Markets Debt Securitized Debt* High Yield* Risk Parity	U.S. Equity* Non-U.S. Equity* Core Fixed* Investment Grade Credit* TIPS* U.S. Treasury* REITs* Opportunistic* Risk Mitigation Strategies* Commodities* Operating Cash Rebalancing* Tactical Asset Allocation* Transition* Liquidity Reserves*

** May include the ability to manage exposure and liquidity using derivatives*

C. Investment-Related Liabilities and Cash Needs

Investment-related liabilities are those obligations resulting from investment activity and include:

- Derivatives related obligations including margin collateralization and other payment obligations;
- Transactional obligations; and
- Other contractual obligations.

Potential cash needs include the following:

- Asset allocation and Fund-level rebalancing activities;
- Internally managed portfolio fundings and transitions;
- Externally managed public and private markets portfolio capital commitments and transitions.

These liabilities and cash needs may also be impacted by market conditions and contractual provisions.

VI. RISK MANAGEMENT

In order to protect the pension funding, the Board has sought a balance of risk and return in its asset allocation. As part of that balance, the Board has elected to make allocations to private equity, private real estate and other illiquid asset classes and asset structures in order to better achieve their discount rate goals. This balance of risk and return is addressed by this policy which seeks to specifically give a roadmap of how OPERS addresses this balance of needs, while recognizing that any allocation that seeks returns will appear sub-optimal in the midst of a crisis. Therefore, it is necessary to build the liquidity strategy in advance of the need for it. A number of approaches are used to measure and manage the Fund’s liquidity risks, including a combination of controls in policies, portfolio guidelines, account structures, procedures and operative legal and governing documents.

A. Assets

The liquidity characteristics of each Asset Class and sub-Asset Class are described in the preceding table, with additional detail provided below. Limitations on less liquid asset classes are driven by the top-down allocation and ranges which are included in the Investment Objectives and Asset Allocation Policies for the DB and HC Funds.

1. Operating cash

Operating cash accounts are used to make benefit payments.

2. Liquidity allocation

A dedicated allocation to U.S. Treasury securities is specified in the Investment Objectives and Asset Allocation Policies for the DB and HC Funds. This allocation, which is reviewed annually by the Investment Advisor, resides within the Fixed Income Asset Class and would be used as part of a Contingency Liquidity Plan to satisfy the Funds liquidity needs.

3. Liquidity Reserves and Rebalancing Portfolios

Numerous Liquidity Reserve portfolios are used at the Asset Class and sub-Asset Class level to manage liquidity and to facilitate both internally and externally managed portfolio fundings and transitions.

Fund-level rebalancing portfolios are used to manage the Funds liquidity and to manage the asset allocation.

Both liquidity reserve and rebalancing portfolios may utilize derivative instruments to take advantage of the following characteristics:

- Derivatives – particularly exchange traded (OPERS Category II) are often more liquid than the physical security, or underlying asset. That is, derivatives may be more readily transacted, at a comparable, or favorable cost, and at fair market prices, relative to physical securities.
- Relative to physical securities which may experience delayed availability when the securities are loaned, there is no impact on derivatives liquidity from securities lending.

4. Risk Mitigation Strategies

Long Duration U.S. Treasury portfolios are used at the Asset Class and sub-Asset Class level to manage liquidity and to facilitate both benefit payments and rebalancing.

Trend Following and Alternative Risk Premia portfolios may utilize derivative instruments to take advantage of market dislocations. It can be used at the Asset Class and sub-Asset Class liquidity and to facilitate both internally and externally managed portfolio rebalancing.

B. Liabilities

1. Securities Lending

OPERS conducts securities lending to enhance Fund returns by lending securities and re-investing the cash collateral with the expectation that the yield earned on the re-invested cash collateral exceeds the rebate fees paid. During the time that securities are on loan, they are unavailable for sale and therefore negatively impact liquidity of the Funds. In order to mitigate this reduced liquidity, the following approaches are utilized:

- A limit on the aggregate amount of securities lent relative to the total amount of securities which are eligible to be lent (public market separate account securities) is specified in the Securities Lending Policy.
- Individual portfolios may be restricted from securities lending.

2. Capital Commitments

Private equity, private credit and private real estate investments sometimes require the commitment of a capital pool which is then drawn, or funded, over time as needed (i.e., as investments are made). This unused (and unfunded) portion of capital, referred to as committed capital, represents a form of liability. At the time the manager calls for capital, the Funds must be prepared to provide cash to satisfy the call. The contingent liquidity requirements of private market capital commitments are closely monitored and managed accordingly.

3. Derivatives

Usage of derivatives results in additional liquidity needs as follows:

- Clearinghouse margining (collateralization) is required for Category II derivatives
- Collateralization with the counterparty to the derivative is required for Category III derivatives.
- Derivatives settlements may also result in liquidity needs.

C. Contingency Liquidity Plan

During a liquidity event, the CIO, working with the Board's Consultant and with subsequent notification to the Board, may utilize contingency liquidity actions to satisfy the Funds' liquidity needs.

In addition to assets held in the liquid reserves and rebalancing portfolios, liquid fixed income assets are held, in part, for liquidity management purposes and may be utilized to satisfy the Funds' liquidity needs. Specifically, Treasury securities are held in the following allocations and may be accessed as needed:

- U.S. Treasury (short and long duration portfolios)
- U.S. TIPS
- Core Fixed

Access may require a modification to approved Targets, Ranges and Benchmarks included in the Investment Objectives and Asset Allocation Policies for the DB and HC Funds Policies. For example, the benchmark of the Core Fixed allocation may be modified from the Bloomberg U.S. Aggregate to a customized Bloomberg U.S. Aggregate ex - U.S. Treasuries.

It may also become necessary to modify limitations in the Board's Derivatives Policy (or Leverage Policy) as the liquidity environment deteriorates since derivatives are, in general, a more liquid form of asset than underlying securities.

D. Contingency Funding

During a significant liquidity event, the CIO, working with the Executive Director, may utilize other contingency funding actions to satisfy the Funds' short-term liquidity needs. These may include use of a liquidity line of credit, repurchase agreements or cash collateral proceeds from securities lending to satisfy short term cash needs. The Board will receive a notification of actions taken with regards to contingency funding.

VII. ROLES AND RESPONSIBILITIES

A. OPERS Retirement Board

The Board is responsible for reviewing and approving this Policy and any changes to it. In addition, the Board is responsible for reviewing reports related to this Policy.

B. Investment Staff

The Board delegates authority to the Chief Investment Officer ("CIO") to implement this Policy. Staff is responsible for monitoring the Policy and recommending changes to the Board. Staff is also responsible for managing leverage within the framework of the Board-approved Policy and within the goals and objectives adopted by the Board in the Annual Investment Plan.

All members of Staff are accountable to the CIO. The CIO is responsible for all Staff actions relative to the management of OPERS' investments. In this regard, it is the responsibility of the CIO to satisfy himself/herself that all Policies and directives of the Board are implemented.

C. Investment Compliance

The Investment Compliance area of Investment Accounting, Operations and Compliance ("IC") is responsible for monitoring compliance with this Policy, including guidelines established pursuant to it. If IC determines that an exception to this Policy has occurred, IC shall notify Staff, the CIO, the Executive Director and the Board.

D. Investment Advisor

The role of the Investment Advisor is specified in the Fund Policies.

VIII. MONITORING AND REPORTING

On a quarterly basis, or more frequently if appropriate, Compliance Staff will provide a report to the Board on compliance, including exceptions, with this Policy.