



## Performance Measures for Investment Portfolio Objectives Resource

### Background.

The purpose of this Resource is to help governments develop appropriate performance measures for their investment portfolio, as recommended in GFOA's Best Practice, *Performance Measures for Investment Portfolio Objectives*.

Specifically, the information here relates to the investment of operating funds, rather than pension, special, or reserve funds. Additionally, the Best Practice and Resource do not incorporate measures for investment accounting and GASB purposes.

Governments should review their own investment policy to determine specific metrics related to each key tenet of public investing – safety of public funds, liquidity and availability of funds, and after these are ensured, the return of the portfolio. Governments using external advisers to manage their portfolios should also ensure their advisers uphold these measures.

By adhering to safety, liquidity, and return measures, governments can demonstrate internally, to elected officials, and to the public that they are managing investments in a manner that ensures they meet their foremost responsibility to preserve public funds.

Below is discussion of each performance measure category. Additionally, a template to help governments with the assessment process, is part of this suite of documents.

### Getting started.

#### *Process*

Key steps to measure investment portfolio performance include, but are not limited to:

- Determining staff responsible for designing, tracking and analyzing performance measures
  - Incorporating public investing education into investment programs
- Measuring and reporting on each key investment objective – safety, liquidity, and return
  - Determining performance measures
  - Comparing actual results to performance measures at least quarterly
  - Analyzing and communicating explanations for significant variances
- Ensuring compliance with the entity's investment policy
- Confirming internal (e.g., staff and elected officials) and external team members understand the reasoning behind the investment policy and portfolio management procedures
- When applicable, verifying that investment adviser data reflects their measuring of

- the portfolio's true performance, rather than advisers' reported performance
- Identifying other measures relevant to your government

Each section below provides suggestions that may be used to build out the measures matrix. Governments should be able to explain why the measure is in place (e.g., reference in investment policy, state laws, etc.), and indicate whether the performance measure was achieved over an established period of time.

## Safety

*Governments should determine performance measures for the safety of funds that best align with the entity's legal parameters, investment policy objectives, and risk tolerance. The results of these policy-driven measures should include regular reporting of targets and actual results.*

- Performance measures related to the safety of funds are typically determined by state and local laws, codes, and policies. These frequently include, but may not be limited to:
  - Permissible investment types (typically dictated by state and local law, code, and policy)
  - Permissible credit rating criteria of investments
  - Permissible concentration of investments are used (typically dictated by state and local law, code, and policy)
  - Permissible maximum maturities (typically dictated by state and local law, code, and policy)
    - Governments should not exceed their maximum portfolio weighted-average-maturities (WAM)
  - Performing and maintaining credit analyses of investments and potential investments
  - Assessing and following entities' policy and/or code-based risk tolerances
  - Bank deposit balances are FDIC insured and collateralization of bank deposit balances are in place and maintained
    - Governments should know their state and local collateralization policies, and whether that collateralization portfolio is accessible and complies with the mandated types of investments
  - Diversification strategies to avoid concentration risk
    - Entities should be able to demonstrate the diversity within their portfolio, by maturity and type of investment, as well as other factors to avoid concentration or market risk
  - Ongoing, comprehensive portfolio monitoring
  - Performing due diligence during the selection of external partners (GFOA BP)
- Monitoring external professionals
  - Investment Advisers – some governments utilize investment advisers for a variety of portfolio management services. Monitoring measures include, but may not be limited to:
    - Confirming firms and individuals assigned to accounts are registered at the federal, and where needed, state levels. (brokercheck.com)
    - Obtaining written confirmation that advisers know and will abide by entities' investment policies
    - Confirming advisers are adhering to their discretionary or non-

- discretionary authority as permitted by entities
  - Ensuring advisers are engaging with entities and basing investment decisions on entities' cash flows and liquidity needs
  - Verifying that advisers are performing duties outlined in the scope of services/contract. As noted above, advisers' scope of services should include reporting on all three public investing measures – safety, liquidity, and return
- Dealers – typically governments work with dealers when purchasing and selling investments inhouse. Monitoring measures include, but may not be limited to:
  - Ensuring entities receive multiple bids or offers for possible investments
  - Confirming firms and individuals assigned to accounts are registered at the federal, and where needed, state levels
  - Ensuring dealers provide essential trade records
  - Determining if entities are designated as a “Sophisticated Municipal Market Participant” by the dealer firm, per the government’s decision
- Public investing professional education
  - Staff responsible for various elements of the investment portfolio should obtain continued public investing education
- Identifying other measures relevant to your government

### Liquidity

*Governments should determine which liquidity performance measures best align with the entity's legal parameters and investment policy objectives that ensures adequate cash flow for anticipated and unanticipated expenditures. The results of these policy-driven measures should include regular reporting of targets and actual results.*

Performance measures related to liquidity include, but are not limited to:

- Preparing and regularly updating cash flow forecasts to estimate the timing of inflows and outflows for at least the period of the investment horizon (e.g., 5 years)
  - Governments should regularly prepare cash flows, and adhere to this policy and schedule
  - Cash flow considerations should inform decisions determining appropriate investment types and maturities
- Maintaining minimum liquidity balance (e.g., three months of operating expenses or a target dollar amount after an adjustment for risk mitigation)
  - Governments should determine what their minimum liquidity balance should be, how it is derived, and know why that measure was chosen
- Meeting cash flow responsibilities
  - Investment maturities match cash flow needs
    - Governments should know when funds are needed, and invest at an appropriate time horizon
  - No sales of investments were made before maturity to meet cash flow requirements
    - A key liquidity measure is if an investment is sold before maturity in order

- to meet the entity's cash/payables needs
- Identifying other measures relevant to your government

### *Earned Income and Return*

*Governments are expected to earn reasonable income from their investments, as long as safety and liquidity tenets are met. It is important for governments to convey internally, to elected officials, and to the public, that a "great return" on funds is not the purpose of public investing. Some of the terms associated with yield and return to review –*

### Measuring Income, Earnings, and Yield/Return

While all three terms reference similar concepts—how much income the portfolio earns over a set amount of time—governments should decide which measure(s) best illustrate, return, the last of the three public investing tenets.

Governments should calculate the income/earnings generated from investments over an established time period. Additionally, entities may wish to measure their portfolio's yield to maturity and/or rate of return.

Income/earnings = amount of funds earned over an established period of time.

Return = calculation of return earned during a past period = income collected +/- amortization of discounts/premiums minus realized/unrealized losses then divided by average portfolio balance

Yield = Book yield (or yield to maturity) is a calculation of anticipated future return using the weighted average yield to maturity of the portfolio.

### Benchmarking/Reference Rate

Governments typically compare their return against a benchmark or a rate/index. A benchmark is only useful when it is comprised of investments very similar to the government's portfolio. Since many governments have a variety of investments that comprise their portfolios, it is difficult to find a benchmark that is truly comparative to their portfolio. Governments should review whether or not their benchmark truly represents the composition of their investment portfolio.

Another approach governments use for comparison purposes is a reference rate that correlates to an index or product that is typically used in public investing (e.g., state LGIP, Treasury Index, US Government Bond Index). This gives users an idea of portfolio performance relative to market indicators appropriate for public funds, not other types of corporate or individual portfolios.

Regardless of what is chosen, governments should be able to explain why a particular benchmark or reference rate is used.

Measures to evaluate portfolio performance per Income/Earnings and Yield/Return include, but are not limited to:

- Measuring investment income over a determined time period
- Determining if and why other measures are being performed (e.g., return, yield)
- Defining and justifying benchmark or reference rates used for comparing portfolio return/yield
- Performing simple variance analyses between established measure(s) and benchmark/reference rates
  - Governments should be able to explain why variances may occur whether due to market events or internal matters
- Reviewing benchmark and reference rate selections at least annually
- Identifying other measures relevant to your government

### When Using Total Return as a Measure

Governments that use investment advisers and have actively managed accounts (vs buy and hold) typically receive a measure of total return for their portfolio performance. Effectively, total return measures the return of the investment portfolio from a start date with the assumption that the entire portfolio is sold at a later date. Total return involves a complex calculation that includes the timing of all cash inflows and outflows, beginning and ending balances, realized and unrealized gains and losses, and they are typically used by investment advisers. When using this calculation, governments should understand what total return does and does not measure. Additionally, governments should not use total return as the sole measure of portfolio performance.