

## Investment Performance Benchmarking and Evaluation

### EXECUTIVE SUMMARY

Oregon State University's investment program has grown in scale and sophistication since 2014, when independent governing boards were established and public universities in Oregon were empowered to manage their own investments. Distinct long term, bond repayment, and cash management portfolios have been added that require more robust oversight. While current reporting evaluates individual managers, OSU's investment policy lacks portfolio level benchmarks necessary to assess whether collective investment decisions are meeting institutional objectives within appropriate risk parameters. Establishing a comprehensive benchmarking framework that includes policy, market based, and institutional objective measures, will strengthen governance by clarifying how and why portfolios perform, supporting sound decision making across time horizons, and enabling consistent evaluation of active and passive strategies. Next steps include finalizing benchmark selection criteria, defining performance evaluation standards, preparing draft benchmarks for each investment pool, and proposing Investment Policy amendments to formalize these practices and enhance long term accountability.

### BACKGROUND

A disciplined performance evaluation program supports sound governance by linking investment outcomes to defined objectives, improving transparency, and strengthening accountability. Using a combination of benchmarks and risk metrics helps stakeholders evaluate performance appropriately across time horizons and strategy types. Continuous monitoring and refinement are essential to improving outcomes over time. These materials were informed by professional guidance from CFA Institute Guidance Statement on Benchmarks for Firms, MSCI Benchmarking Best Practices, Meketa Total Fund Benchmarking and Cambridge Associates Policy Benchmarking and reviewed with OSU's investment advisors.

Oregon State University's investment program has evolved significantly since becoming independent in 2014. Key milestones include:

- **2015 - Endowment Management Agreement**  
Most OSU-directed endowment assets began being managed by the OSU Foundation.
- **2021 - Bond Repayment Investment Portfolio**  
OSU launched an investment portfolio to repay the principal of university revenue bonds over time. The objective is capital appreciation with a strategic allocation of 80% public equities and 20% fixed income.
- **2021 - Long-Term Equity Portfolio**  
OSU established a long-term equity portfolio funded with operating assets intended for investment horizons exceeding 10 years. The objective is capital appreciation with 100% allocated to public equities.
- **Active Cash Management Strategy**  
OSU developed an active cash management approach designed to enhance investment income while maintaining liquidity for working capital needs, using short- and intermediate-term fixed income investments.

OSU's quarterly investment reports compare individual investment managers to their primary benchmarks, but they do not provide a comparable performance evaluation at the total portfolio

level. Given the increased scale and sophistication of OSU's investment program and governance, establishing portfolio-level benchmarks is both practical and necessary to enable comprehensive evaluation of collective investment strategies and strengthen oversight.

## **BENCHMARKING FRAMEWORK**

Evaluating portfolio performance requires more than measuring returns. A robust benchmarking framework uses multiple reference points to explain not only *how* the portfolio performed but also *why*. This approach provides deeper insight into the effectiveness of investment strategies and supports better-informed decision making.

### **Why Multiple Benchmarks Matter**

No single benchmark can answer all questions across all time horizons. A combination of benchmarks helps investors evaluate results comprehensively and reduces the risk of drawing misleading conclusions from short-term performance.

### **Core Components of Performance Evaluation**

Performance evaluation is typically organized into three connected elements:

- **Performance Measurement** - Calculates the returns earned by the portfolio and compares those returns to the appropriate benchmarks.
- **Performance Attribution** - Identifies the factors driving performance relative to benchmarks (e.g. asset allocation choices, security selection, and interaction effects).
- **Performance Appraisal** – Assesses the sustainability and quality of returns over time, including the consistency of outcomes and performance versus peers or markets when relevant.

### **Time Horizon Considerations**

Benchmarks and evaluation periods should align with both short-term and long-term objectives. Overemphasizing quarterly outcomes can create conflicts when strategies are designed for multi-year horizons. Aligning the evaluation horizon with investment goal supports fair, meaningful assessments and discourages short-term decision-making that may undermine long-term results.

### **Purpose of Benchmarking**

Benchmarking serves as a feedback tool that highlights strengths and weaknesses in the investment program. It informs governance, supports accountability, and helps fiduciaries assess whether strategies are achieving intended outcomes within acceptable risk parameters.

### **Total Portfolio Benchmarking**

Benchmarking at the total portfolio (or pool) level provides fiduciaries with a comprehensive view of how institutional investment pools perform relative to defined objectives. This approach complements manager-level comparisons by measuring the collective impact of asset allocation, manager structure, and portfolio construction decisions.

### **Why it Matters**

Total portfolio benchmarking helps answer several critical oversight questions:

- Is the portfolio meeting its long-term financial objectives?
- How does performance compare to market standards and policy expectations?
- Are risk exposures aligned with institutional goals and constraints?

## Common Benchmark Categories

Total portfolio benchmarks generally fall into three categories:

- **Pool-Level Benchmarks** – Compare performance against a reference portfolio or asset mix.
- **Peer Group Benchmarks** – Compare results to similar institutions (primarily used for private markets; excluded here given the current focus).
- **Institutional Financial Objectives** – Compare returns to targets such as spending rates, inflation-plus targets, or other institutional goals.

## Benchmarking Methods

Institutions often use multiple benchmark types to evaluate performance across objectives and time horizons. Common methods include the following:

- 1) **Simple Benchmarks** – Simple benchmarks are based on straightforward market references (e.g., a single index or fixed mix like a 60/40 stock/bond blend). They are easy to understand and useful for setting broad expectations, but they can oversimplify diversified portfolios and may not reflect actual asset allocation or risk posture.
- 2) **Static Policy Benchmarks** – Static policy benchmarks reflect the institution’s asset allocation policy combining passive indices weighted to policy targets. They are transparent and measurable, strengthen governance accountability, and provide a clear standard for evaluation. However, they may ignore evolving strategy and market changes and can create tracking differences if the portfolio intentionally deviates from policy targets.
- 3) **Dynamic Policy Benchmarks** – Dynamic policy benchmarks adjust for changing market conditions and risk factors and may incorporate risk-adjusted measures such as volatility or Sharpe ratios. They can better reflect active strategy implementation but are more complex to design, maintain, and explain, and frequent updates may reduce comparability over time.
- 4) **Institutional Financial Objectives Benchmarks** – Institutional financial objective benchmarks measure success against mission-critical targets such as “CPI + spending rate” or other long-term objectives. They are well suited for endowments and liability-driven portfolios but can be disconnected from short-term performance and may not fully illuminate underlying risk exposures.

Benchmarking Method	Benefits	Drawbacks
Simple Benchmarks	<ul style="list-style-type: none"> <li>- Easy to understand and implement.</li> <li>- Provides a quick reference point for performance.</li> <li>- Useful for long-term return expectations.</li> </ul>	<ul style="list-style-type: none"> <li>- Oversimplifies complex portfolios.</li> <li>- Does not reflect actual asset allocation or risk profile.</li> <li>- Limited relevance for diversified or dynamic strategies.</li> </ul>
Static Policy Benchmarks	<ul style="list-style-type: none"> <li>- Aligns with institution's asset allocation policy.</li> <li>- Transparent and measurable.</li> <li>- Facilitates accountability and governance.</li> </ul>	<ul style="list-style-type: none"> <li>- Ignores market changes and evolving strategies.</li> <li>- May lead to tracking error if portfolio deviates from policy targets.</li> </ul>
Dynamic Policy Benchmarks	<ul style="list-style-type: none"> <li>- Adapts to changing market conditions and risk factors.</li> <li>- Incorporates volatility and risk-adjusted measures (e.g., Sharpe ratio).</li> <li>- More realistic for active strategies.</li> </ul>	<ul style="list-style-type: none"> <li>- Complex to design and maintain.</li> <li>- Requires frequent updates and monitoring.</li> <li>- May reduce comparability over time.</li> </ul>
Institutional Financial Objectives Benchmarks	<ul style="list-style-type: none"> <li>- Directly tied to long-term goals</li> <li>- Measures success in achieving mission-critical objectives.</li> <li>- Useful for endowments and liability-driven portfolios.</li> </ul>	<ul style="list-style-type: none"> <li>- Disconnect from short-term market performance.</li> <li>- Not indicative of relative performance vs. peers or markets.</li> <li>- Can mask underlying risk exposures.</li> </ul>

**Key Considerations for Benchmark Selection**

When selecting and maintaining benchmarks, fiduciaries should prioritize:

- **Alignment with Strategy:** Benchmarks should match portfolio objectives and mandates.
- **Measurability:** Benchmarks should be clearly defined, investable, and based on obtainable market data.
- **Risk Profile Matching:** Benchmarks should reflect the portfolio's expected risk characteristics.
- **Liquidity Considerations:** Benchmark composition should align with liquidity needs and constraints.
- **Costs:** Custom benchmarks may involve subscription fees or licensing fees.
- **Governance and Oversight:** Benchmarks should be reviewed and approved through a formal process with documented change management.
- **Regular Review:** Benchmarks should be reassessed during policy and asset allocation reviews.

**Limitations and Common Pitfalls**

Benchmarks are inherently backward-looking and cannot predict future returns. No single benchmark can perfectly represent a diversified portfolio. Overreliance on short-term benchmark comparisons can encourage reactive decisions that conflict with long-term strategy.

**BENCHMARK EXAMPLES**

The examples below illustrate how benchmark choice should reflect portfolio purpose and structure.

PORTFOLIO TYPE	OBJECTIVE	BENCHMARK	BENCHMARK TYPE	RATIONALE
<b>Growth Portfolio</b>	Long-term growth with moderate risk	S&P 500 (60%), MSCI ACWI ex U.S. (20%), Bloomberg U.S. Aggregate Bond Index (20%)	Static Policy Benchmark	Reflects target asset allocation for diversified equities and bonds.
<b>Endowment Portfolio</b>	Preserve purchasing power and meet spending needs	CPI + 4%	Institutional Financial Objective	Ensures returns exceed inflation and support annual spending requirements.
<b>Unspent Bond Proceeds</b>	Match cash flow needs with project expenditures	U.S. Government /Credit 1-3 Year Bond Index	Simple Benchmark	Aligns with short-term liability structure and minimizes interest rate risk.

**Asset-Based Benchmark Example**

For a growth portfolio targeting 60% U.S. large-cap equities, 20% developed international equities, and 20% U.S. bonds, an appropriate static policy benchmark might be:

- 60% S&P 500
- 20% to MSCI ACWI ex. U.S.
- 20% Bloomberg U.S. Aggregate Bond Index

**Institutional Objective Benchmark Example**

For an endowment portfolio intended to meet a 4% spending requirement while maintaining purchasing power, a long-term institutional benchmark of **CPI +4%** can serve as a clear objective measure. A secondary market-based benchmark may also be useful for shorter-term context.

**Liability-Based Benchmark Example**

Liability-based benchmarks are designed around expected cash flow needs. For OSU’s Unspent Bond Proceeds portfolio— where assets are expected to fund project costs over a defined period- benchmarks should align with the timing of expenditures and emphasize capital preservation and liquidity. A reasonable benchmark for a three-year expenditure horizon may be the **U.S. Government/Credit 1-3 Year Bond Index**, or the **91-day Treasury Bill** if expenditures are front-loaded and liquidity is paramount.

## PERFORMANCE EVALUATION

Measuring investment performance supports evaluation of strategy effectiveness, comparison to benchmarks, and informed decisions regarding portfolio adjustments. Performance outcomes are influenced by market conditions, economic trends, investment strategy design, portfolio management execution, and investor behavior. Monitoring performance relative to relevant benchmarks helps identify improvement opportunities and strengthens decision-making.

### Active Strategies

Active managers seek to outperform passive (index) strategies. Their evaluation should include both absolute and risk-adjusted measures. Common metrics include:

- **Standard deviation** and **Sharpe ratio** to assess risk-adjusted outcomes
- **Tracking error** to quantify how closely performance follows the benchmark
- **Attribution analysis** to isolate the effects of asset allocation and security selection

### Passive Strategies

Passive managers seek to replicate the performance of a stated index with minimal trading. Evaluation typically focuses on:

- **Tracking relative performance** versus the index
- **Tracking error**, which should be low in a well-implemented passive strategy
- **Fees and implementation efficiency**, given the simplified construction and limited turnover

### Watch Status

A watch list establishes criteria and an escalation process for monitoring managers whose ability to meet objectives may be at risk. Triggers may include sustained underperformance, changes in process or style, key personnel departures, fee changes, or other issues affecting expected outcomes. Watch status provides a structured period of heightened oversight, which may include additional reviews and meetings with stakeholders to understand causes and remediation steps.

## NEXT STEPS

OSU staff will continue to work toward implementation of portfolio-level benchmarking, integrate benchmarks into governance and reporting, and explore the university's risk tolerance in discussion with the Finance and Administration Committee. Benchmark and performance criteria will be included in amendments to the OSU Investment Policy, which will be presented to the Finance and Administration Committee for its consideration and recommendation to the full board.