UNIVERSITY OF MASSACHUSETTS
INVESTMENT POLICY AND GUIDELINES STATEMENT
OPERATING CASH PORTFOLIO

I. INTRODUCTION

The Investment Policy and Guidelines Statement (the “Policy”) of the University of Massachusetts sets forth procedures and guidelines to assist in the day-to-day investment of the Operating Cash Portfolio (the “Fund”) generally referred to as Daily Operating Cash.

In addition to Daily Operating Cash, the University has established reserves for future operations. In September of 2008 the University Board of Trustees voted (T08-031 as amended) the following:

“The University Treasurer, under the direction of the President, may transfer reserve funds of the University to the University of Massachusetts Foundation, Inc. for investment purposes. An agreement between the University Treasurer and the University of Massachusetts Foundation, Inc. shall be executed assuring that ownership, accounting and liquidity needs of the University are met. The University Treasurer has the authority to request the return of funds at any time in order to meet the operating needs of the university.”

The reserve funds of the University are invested in accordance with a Policy and Asset Allocation guidelines specifically designed for longer term assets. The relationship between the University and the Foundation has been codified via a Memorandum of Understanding. All proceeds from these investments are returned to the University for operating purposes. These assets are commonly referred to as the Funded Reserve.
II. ROLES AND RESPONSIBILITIES

The University Investment Committee

The Board of Trustees delegates responsibility for the oversight of the Operating Cash Portfolio to the University Investment Committee (the “Committee”). The Board of Trustees shall approve the Policy and provide overall direction in the execution and implementation of the Policy. The Committee shall review and approve or disapprove investment recommendations made by the University Treasurer, Staff and the Investment Consultant prior to their execution, including but not limited to the selection and termination of outside investment managers, investment consultants, and custodians. The Committee shall also review investment results in relationship to Policy and investment expectations to determine if future changes are needed to either the Policy or the implementation of the Policy.

The University Treasurer’s Office

Working under the direction and oversight of the Committee, the University Treasurer’s Office is responsible for the day-to-day oversight and administration of the Operating Cash Portfolio. Responsibilities include, but are not limited to, the implementation of the Policy’s asset allocation structure, management of the short-term liquidity reserve investments, accounting and recordkeeping, and oversight of outside investment managers, consultants, and custodians.

The University Treasurer and Staff shall also be responsible for communicating the decisions of the Committee to investment managers, custodian bank(s), consultant and other interested parties. The University Treasurer will provide oversight of the investment consultant and other investment service providers.

Investment Consultant

The Investment Consultant shall assist the Committee and Treasurer’s Office in developing and modifying Policy, including the development of an appropriate asset allocation strategy, recommendations on the appropriate mix of investment manager styles and strategies, and recommendations on the selection and retention of outside investment managers. The Consultant shall be responsible for performance measurement and providing timely reporting, written and/or oral, on investment strategies, instruments, managers and other related issues, as requested by the Committee or Treasurer’s Office Staff. The Consultant shall act as a fiduciary to the Fund.

Investment Managers

The duties and responsibilities of each of the outside investment managers retained by the Committee to manage portions of the Operating Cash Portfolio include:

- Invest the assets under its management in accordance with the Policy expressed herein.
• Managers are expected to meet or exceed their strategy-specific benchmarks, net of all fees and expenses, expressed herein over various and appropriately measured time periods.

• Exercise investment discretion within the guidelines and objectives stated herein. Such discretion includes decisions to buy, hold or sell securities in amounts and proportions reflective of the manager’s current investment strategy and compatible with the investment objectives.

• Comply with all provisions pertaining to the investment manager’s duties and responsibilities as a fiduciary. Operating Cash Portfolio assets should be invested with the care, skill, prudence and diligence under the circumstances then prevailing that a prudent professional investment manager, acting in a like capacity and familiar with such matters, would use in the investment of such assets.

• Disclose all conflicts and potential conflicts of interest

• Ensure that all portfolio transactions are made on a “best execution” basis.

• Exercise ownership rights, where applicable, through proxy solicitations, doing so strictly for the economic benefit of the Operating Cash Portfolio. Documentation regarding the disposition of proxy solicitations shall be provided by the investment managers upon request (if applicable).

• Meet with the Committee and University Treasurer as needed upon request of the Treasurer or Staff. Quarterly reports are to be submitted in writing within 45 days after the end of each quarter.

• Promptly informing the Treasurer regarding all significant matters pertaining to the investment of the Portfolio assets.

• Initiate written communication with the board when the manager believes that this Policy is inhibiting performance and/or should be altered for any valid reason. No action shall be taken by the investment manager until the Board of Trustees has approved changes to the Policy in writing. No deviation from the guidelines and objectives established in the Policy is permitted until communication has occurred between the investment manager, the Treasurer’s Office Staff and Committee.

• For separately managed accounts, managers are responsible for reconciling performance, holdings and security pricing data with the University’s custodian bank for separately managed accounts. If the University’s custodian bank shows a different price for a given security, the manager shall submit to the custodian bank’s price reconciliation process.
Custodian bank

In order to maximize investment return, no money should be allowed to remain idle. Dividends, interest, proceeds from sales, new contributions and all other monies are to be invested or reinvested promptly. The Custodian(s) will be responsible for performing the following functions:

- Accept daily instructions from designated Treasurer’s Office Staff;
- Advise designated investment staff daily of changes in cash equivalent balances;
- Notify investment managers of proxies, tenders, rights, fractional shares or other dispositions of holdings;
- Resolve any problems that Staff may have relating to the custodial account;
- Safe-keep securities; interest and dividend collections; Collection of proceeds from maturing securities;
- Collect proceeds from maturing securities;
- Daily cash sweep of idle principal and income cash balances;
- Process all investment manager transactions;
- Reconcile of fund holdings and pricing discrepancies with investment managers;
- Provide monthly statements by investment managers’ accounts and a consolidated statement of all assets;
- Provide a dedicated account representative and back up to assist in all needs relating to the custody and accountability of the Fund's assets;
- Manage the securities lending program, if applicable.

III. INVESTMENT OBJECTIVES

The primary objective of the Operating Cash Portfolio is the preservation of principal and the assurance of appropriate liquidity to meet the needs of the university. The secondary objective of the Portfolio is to maximize the current and expected yield on the Portfolio assets, so as to provide additional income for operating purposes. Therefore, the Portfolio assets are expected to be invested in a diversified manner that reflects the short-term nature and purpose of the University’s obligations.

The total Portfolio return should, over time, exceed the established Policy and Allocation Indices. Returns for investment managers shall exceed their respective benchmarks, as well as rank in the top half of the appropriate universe of managers adhering to the same investment strategy.

IV. INVESTMENT MANAGER GUIDELINES

Introduction

Full discretion, within the parameters of the guidelines described herein and the specific manager guidelines appended, is granted to the investment managers regarding the selection of securities, and the timing of transactions.
Compliance with the Policy must be monitored by the investment managers on a regular basis (monthly or more frequently when market conditions warrant) and based on then current market values. Securities that, at purchase, would move the portfolio out of compliance with these guidelines, based on the investment manager’s most recent valuation, may not be purchased.

In the event that a portfolio moves out of compliance with these guidelines (as identified in the investment manager’s regular review of the portfolio), through market conditions or other changes outside the control of the manager, the manager must notify the Treasurer’s Office Staff and the Investment Consultant immediately and either bring the portfolio composition back into compliance within 30 days or make a written request for a compliance waiver that includes a plan of action for the security.

**General guidelines**

For managers not participating in an Alternative Investments program, the following guidelines are to be adhered to, unless prior approval from the Committee has been granted:

- There shall be no use of options or commodities without the prior approval of the Committee;
- Uncovered options or futures contracts may not be purchased;
- Uncovered short positions may not be purchased;
- Short selling is not permitted; and
- There shall be no use of financial leverage.

For all investment managers across all asset classes, trades must be done on a “best-execution” basis.

**Guidelines for use of pooled funds**

Mutual funds and other types of commingled investment vehicles provide, under some circumstances, lower costs and better diversification than can be obtained with a separately managed fund pursuing the same investment objectives. However, commingled investment funds cannot customize investment policies and guidelines to the specific needs of individual clients. The Committee is willing to accept the policies of such funds in order to achieve the lower costs and diversification benefits of commingled funds. Therefore, commingled investment vehicles are exempt from the policies and restrictions specified herein if the Committee determines that:
The investment practices of the commingled fund are consistent with the spirit of this Policy, and are not significantly different in letter; and

The benefits of using a commingled vehicle rather than a separate account are material.

For all separately managed portfolios, individual manager guidelines will be put in place prior to account funding. Each individual set of manager guidelines shall become part of the Policy document and attached hereto.

V. ASSET ALLOCATION TARGETS & RANGES

There shall be a current asset allocation policy target, which represent the long-term objectives of the Operating Cash Portfolio (see Appendix A). The actual allocation of the Portfolio will deviate from the target due to cash flows and market performance.

It is expected that these targets will be reevaluated on at least an annual basis and revised by the Committee if significant changes occur with regard to the goals and objectives of the Operating Cash Portfolio, and the economic and/or capital market environments.

The Committee may change the policy targets upon their own initiative and/or at the recommendation of their consultant by making changes to the appended policy targets.

VI. PERFORMANCE BENCHMARKS

The following performance benchmarks for the Operating Cash Portfolio will be calculated by the Investment Consultant on a quarterly basis and reviewed by the Investment Consultant, Treasurer’s Office Staff and Committee on a regular basis:

**Total Fund Return:** The Total Fund Return shall represent a composite of the actual performance of all of the Operating Cash Portfolio holdings, including all externally managed assets, internally managed bond holdings, cash and cash equivalents. The Total Fund return shall meet or exceed the Allocation Index return and the Policy Index return, which are each described below.

**Allocation Index:** The Allocation Index return shall measure the success of the Fund’s *current* allocation. It shall be calculated by using index rates of return for each asset class invested in by the Portfolio multiplied by the actual percent allocated to each asset class. The difference between the allocation index return and the Total Fund return measures the effect of active management. If the Total Fund return is greater than the Allocation Index return, then active management has in aggregate added value. If the Total Fund return is less than the Allocation Index return, then active management has not added value.

**Policy Index:** The Policy Index return shall measure the success of the Portfolio’s *target* allocation. It shall be calculated by using index rates of return for each asset class invested in
by the Portfolio multiplied by the percent targeted to each asset class. The difference between the Allocation Index return and the Policy Index return measures the effects of deviating from the target allocation. If the Allocation Index return is greater than the Policy Index return, then deviating from the target allocation has added value. If the Allocation Index return is less than the Policy Index return, then active management has not added value.

**Manager Benchmarks:** The Investment Managers shall be compared to a combination of passively managed index returns matching the managers’ specific investment styles, as well as the median manager in their appropriate peer group universe, as described in Appendix A:

**VII. IMPLEMENTATION:**

All monies invested for the fund by its investment managers after the adoption of this Investment Policy shall conform to this policy.
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Asset allocation guidelines

In order to have a reasonable probability of achieving the target return at an acceptable risk level, the Committee has adopted the asset allocation policy outlined below. The actual asset allocation will be reviewed on a quarterly basis, if not more frequently, and will be at a minimum readjusted when an asset class weighting is outside its target range.

<table>
<thead>
<tr>
<th>Asset class</th>
<th>Style universe</th>
<th>Target allocation</th>
<th>Exposure % range</th>
<th>Target benchmark</th>
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<tr>
<td><strong>Fixed Income</strong></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Short Duration Fixed</td>
<td>Short Duration</td>
<td>62%</td>
<td>40-70%</td>
<td>Barclays Short Treasury</td>
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<tr>
<td>Income</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Intermediate Duration</td>
<td>Intermediate Duration</td>
<td>32%</td>
<td>15-40%</td>
<td>Barclays 1-3 Year Treasury</td>
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<tr>
<td>Fixed Income</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>High Yield Fixed</td>
<td>High Yield Bonds</td>
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<td>15-30%</td>
<td>Barclays Corporate High Yield</td>
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<tr>
<td>Income</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Global Fixed Income</td>
<td>Global Bonds</td>
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<td>3-9%</td>
<td>Barclays Global Aggregate</td>
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</tr>
<tr>
<td><strong>Cash</strong></td>
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<td>38%</td>
<td>20-50%</td>
<td>90-day T-bills</td>
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