The University of North Carolina
Retirement Programs
Investment Policy Statement

April 11, 2006
Amended April 27, 2009
Amended April 10, 2014
January 26, 2015
INVESTMENT POLICY STATEMENT CONTENTS

I. THE PLAN AND ITS GOALS

Definition of Key Terms:
“Board”
“Employer”
“Plan”
“Staff”
“Trustee”
“Funding Vehicles”
“Investment Options”
“Investment Advisory Committee”

Responsibility and Authority
Purpose of This Investment Policy Statement
Legal and Regulatory Environment

II. CONTEXT OF INVESTMENT POLICY STATEMENT

Investment Objective
Risk Tolerances

III. INVESTMENT ALTERNATIVES

Investment Options
Principal Protection
Bond
Core Equity
Style Based Equity
International/Global Equity
Aggressive Equity
Life Cycle Investment Options
Summary of Investment Options
Performance Objectives and Selection Criteria

IV. OPERATIONAL GUIDELINES

Frequency of Measurement
Investment Performance
Review of Investment Options
Review of Plan Fees and Participant Activity
Fund Termination
Investment Options
INVESTMENT POLICY STATEMENT CONTENTS (Continued)

V. POLICY MODIFICATION AND REVISION

VI. POLICY ADOPTION

APPENDIX A THROUGH APPENDIX E
INVESTMENT POLICY STATEMENT
The University of North Carolina Retirement Plan Programs

I. THE PLAN AND ITS GOALS

The North Carolina General Assembly established the Optional Retirement Program of The University of North Carolina ("Plan") in 1971 as provided under N.C.G.S. 135-5.1. The Plan is a defined contribution plan and is qualified under Section 401(a) and 403(a) of the Internal Revenue Code. General oversight of the Plan is the responsibility of The University of North Carolina Board of Governors ("Board"). Pursuant to N.C.G.S. 116-11(13), the Board has delegated to the President of The University of North Carolina, in Policy 200.6, Sec. A.1.d., the "[a]uthority to approve all actions relating to the administration of the Optional Retirement Program." This authority includes approving amendments to this Investment Policy Statement. The purpose of this Plan is to:

- Provide all eligible employees an alternative choice to the North Carolina Teachers’ and State Employees’ Retirement System
- Provide portability of accumulated contribution balances
- Provide flexibility by offering participants a choice of investment and distribution options
- Provide retirement income along with Social Security benefits

The University also maintains several other Retirement Plan Programs (Programs) which include

- The University of North Carolina Qualified Governmental Excess Benefit Arrangement,
- The University of North Carolina Section 403(b) Plan,
- The University of North Carolina Code Section 457(b) Plan,

These Programs, while supplemental to the Optional Retirement Program, are also covered by this Investment Policy Statement.

The Plan's goals are to:

- Provide an attractive benefit that will help the University recruit, retain and develop the best intellectual capital in a competitive national market
- Provide access to diversified and distinct investment alternatives that are sufficient in number in order to foster investment diversity
- Provide flexibility for participants to direct their employer and employee contributions
- Provide flexibility for participants to change their investment elections on a regular basis
- Provide adequate income at retirement

**Definition of Key Terms**

(a) "Board" means the Board of Governors of The University of North Carolina.

(b) "Employer" means The University of North Carolina or any of its constituent institutions or affiliates.

(c) "Funding Vehicles" means the annuity contracts or custodial accounts that satisfy the requirements of Sections 404(a)(2) and 401(f)(2), respectively, of the Internal Revenue Code issued for funding accrued benefits under this Plan.

(d) "UNC System Benefits Committee" serves as advisers to the Staff.

(e) "Investment Options" means mutual funds, fixed accounts, or other Funding Vehicles.

(f) "Plans" mean the Optional Retirement Program of The University of North Carolina, and other UNC Retirement Plan Programs:
   - The University of North Carolina Qualified Governmental Excess Benefit Arrangement,
   - The University of North Carolina Section 403(b) Plan,
   - The University of North Carolina Code Section 457(b) Plan

Each Plan maintains account balances of participants in which contributions are accumulated, investment earnings and losses are credited and debited, and from which certain operating expenses of the Plan may be paid.

(g) "President" means the President of The University of North Carolina.

(h) "Staff" means those persons employed by UNC General Administration who serve as advisers to the Board and the President with respect to the Plan.

(i) "Trustee" means the person(s) or entity named in any separate trust agreement forming a part of this Plan, and any successors.

**Responsibility and Authority**

The Board has retained oversight responsibility for the Plan as follows:

(a) The Board shall review and approve any subsequent revisions to the Plan’s Plan Document.
The Board has delegated responsibilities for the Plan to the President as follows:

(a) The President shall review and approve any subsequent revisions to the Plan’s Investment Policy Statement (“Policy”);

(b) The President shall designate the mutual fund companies, insurance companies, or other financial organizations from which Investment Options are to be selected;

(c) The President shall designate the Trustee, if applicable, for any separate trust agreement to hold in trust any of the assets of the Plan;

(d) The President shall designate the Investment Options for use under the Plan;

(e) The President or his/her designee shall approve the form and contents of any annuity contracts, custodial account contracts, mutual fund contracts, or separate trust agreements;

(f) The President shall review, at least annually, the performance and investment management expenses of the Investment Options in the Plan; and

(g) The President or his/her designee shall ensure participants have access to a description of the Investment Options available under the plan including investment objectives, expenses, risk and return characteristics.

The Staff is responsible for day-to-day operations of the Plan in accordance with Plan documents, the policies and decisions of the Board and the President, and applicable law. The Staff will provide input to the Board and the President to facilitate their decision making responsibilities.

**Purpose of This Investment Policy Statement**

The purpose of this Policy is to provide guidance concerning selecting and monitoring the Investment Options offered to participants in the Plan.

The Plan’s investment program is defined in the various sections of this Policy by:

- Stating in a written document the President’s expectations, objectives, and guidelines for the investment of the Plan’s assets.

- Setting investment guidelines for the President to utilize in the selection of Investment Options that will provide participants with adequate investment choices to meet their objectives and manage the level of overall risk for their accounts.

- Establishing formalized criteria to monitor, evaluate, and compare the performance results achieved by the individual funds on a regular basis, and their adherence to the guidelines set forth by the President in this Policy.
• Developing guidelines to ensure compliance with any applicable fiduciary requirements. The President also intends the program to comply with all applicable laws and regulations.

In addition, this Policy is intended:

(a) To Address Fiduciary Obligations

It is important to act with skill, care, prudence, and diligence in all matters relating to the Plan and to perform duties with respect to the Plan in the interests of the participants and their beneficiaries and in accordance with the governing Plan document.

(b) To Record Policy

The President will review on an annual basis investment performance and investment management expenses. The formation of judgments and the actions to be taken on those judgments will be aimed at matching the needs of the participants with Investment Options available to the participants. The President views this program as an ongoing, long-term activity that should not be influenced by cyclical fluctuations in the investment market.

(c) To Promote Understanding Among Various Functional Roles

This policy is also intended to serve as a reference tool, and a communications link between the President and

- new members of the Board, when Board membership changes;
- employer management;
- its other professional advisors and service providers;
- its investment managers.

Legal and Regulatory Environment

The Plan is subject to federal and state tax law and supporting regulations. The assets of the Plan shall be invested and managed in accordance with the following legal principles.

1. All transactions undertaken on behalf of the Plan shall be solely in the interest of participants and their designated beneficiaries; and

2. Investments shall be managed with the care, skill, prudence, and diligence under the circumstances 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 with like aims.

Investment Options, collectively, shall be diversified so as to allow the participant(s) to minimize the risk of large losses, unless under some unforeseen extraordinary circumstances it would clearly not be prudent for the President to do so.
II. CONTEXT OF INVESTMENT POLICY STATEMENT

Investment Objective

The investment objective of the Plan is to provide participants with an opportunity to create portfolios with varied aggregate risk and return characteristics. This is best accomplished by offering participants a broad range of investment alternatives.

Each Investment Option will have sufficiently different risk and return characteristics so that, taken together, they enable a participant to arrange a portfolio with aggregate risk and return characteristics according to his/her desires.

In addition, the Plan may offer a series of life cycle funds for those participants who desire for an investment professional to make their asset allocation decision. The life cycle series should offer participants a choice of target asset allocations.

Risk Tolerances

This Policy recognizes the difficulty of each participant achieving his/her investment objectives in light of the uncertainties and complexities of contemporary investment markets. This Policy also recognizes that participants should and will seek to assume different individual levels of risk exposure in order to achieve their various investment objectives and risk tolerance.

Plan participants may wish to tolerate some interim fluctuations in market value and rates of return in order to achieve their investment objectives. However, it is the President's goal to offer investment vehicles whose performance patterns adhere to their stated investment objectives and style. Therefore, when evaluating investment funds, the President or his/her designee will separately consider each investment's risk and return characteristics compared to the relevant benchmark in order to effectively discharge his/her responsibilities under the Plan in the best overall interests of Plan participants and their beneficiaries.
III. INVESTMENT ALTERNATIVES

Investment Options

Based on participants’ varying risk tolerances, the following types of Investment Options should be made available for Plan participants. Participants may individually diversify among these funds in order to achieve their own optimum level of risk and return.

Fixed Accounts may be subject to the terms and conditions of an annuity contract issued by an insurance company. Investment in such annuities is secured by the general assets of the issuing insurance company and the participant investing in these accounts assumes the associated credit risk.

The issuers of fixed annuities to be offered as Fixed Account investment options must maintain the following minimum financial strength ratings from at least two rating agencies:

- A from A.M. Best;
- A from Standard & Poor’s;
- A2 from Moody’s;
- A from Fitch.

The financial stability and financial strength ratings of the issuer are among a number of factors to be considered; some other factors are the terms and expenses related to the annuity contract, crediting rate history, rate reset method.

See Appendix A for a summary of benchmarks and peer groups for each asset class. Refer to the individual fund Prospectuses for detailed descriptions of the options. A description of the asset classes represented in the plan follows:

<table>
<thead>
<tr>
<th>General Asset Class Category Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Protection (Money market, Fixed Accounts or Stable Value)</td>
</tr>
<tr>
<td>• Seek the highest level of stable income consistent with the safety of principal afforded by the portfolio’s investments.</td>
</tr>
<tr>
<td>• The portfolio may hold U.S. Government and Agency securities and other money market securities issued by corporations.</td>
</tr>
<tr>
<td>• The portfolio may hold book value investments, including traditional account Guaranteed Investment Contracts (GICs) and synthetic GICs.</td>
</tr>
<tr>
<td>Bond</td>
</tr>
<tr>
<td>• Provide current income with the ability for security price appreciation.</td>
</tr>
<tr>
<td>• The portfolio will be limited primarily to fixed income securities rated either BBB or better by S&amp;P or Baa or better by Moody’s. The average quality rating will be A or better by Standard and Poor’s or Moody’s.</td>
</tr>
</tbody>
</table>

*Asset Class Category Descriptions Continued on the Next Page*
## Asset Class Alternatives (continued...)

<table>
<thead>
<tr>
<th>General Asset Class Category Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Core Equity</strong></td>
</tr>
<tr>
<td>- Provide broad equity market exposure with the opportunity of capital appreciation and income through dividends.</td>
</tr>
<tr>
<td>- This option may be actively or passively managed to a particular broad market index such as the Standard &amp; Poor’s 500 Index.</td>
</tr>
<tr>
<td>- This fund will invest primarily in large cap stocks.</td>
</tr>
<tr>
<td><strong>Style Based Equity</strong></td>
</tr>
<tr>
<td>- Primary focus is to provide capital appreciation.</td>
</tr>
<tr>
<td>- Managers are seeking advantages in the market place through their particular strategy. Funds offered in this category will have a style specific orientation such as value or growth.</td>
</tr>
<tr>
<td>- This type of fund will invest primarily in mid to large capitalization stocks of U.S. domiciled corporations.</td>
</tr>
<tr>
<td><strong>International/Global Equity</strong></td>
</tr>
<tr>
<td>- This option will provide investors with exposure to a broad range of stocks largely based outside of the U.S.</td>
</tr>
<tr>
<td>- Currency hedging may also be employed by the manager with the primary objective to protect currency translation exposure or create an initial position in a country.</td>
</tr>
<tr>
<td>- International funds will invest primarily in non-U.S. markets. Global funds will invest in foreign and domestic markets.</td>
</tr>
<tr>
<td><strong>Aggressive Equity</strong></td>
</tr>
<tr>
<td>- Broad category that encompasses funds with investments specifically in small or mid capitalization stocks.</td>
</tr>
<tr>
<td>- Managers seek to outperform the appropriate benchmark during a market cycle and are willing to take risks to achieve this objective.</td>
</tr>
<tr>
<td>- Managers may seek advantages in the market place through their particular strategy. Funds offered in this category may have a style specific orientation such as value or growth.</td>
</tr>
<tr>
<td>- This option has the opportunity to dramatically under perform or out perform the broad market during different market periods.</td>
</tr>
</tbody>
</table>
Target Date Investment Options

The Plan’s investment choices also include a series of “target date” Investment Options. These funds provide pre-set asset allocations based upon individual risk tolerance or anticipated retirement date, for those participants who do not feel comfortable making their own allocation decisions. These target date funds offered by each carrier shall be designated as the default fund in a situation where a participant does not make a fund selection.

Summary of Investment Options

The Plan’s investment choices are designed to:

- Provide an opportunity for a participant to exercise control over assets in his/her individual account.

- Provide a participant or beneficiary an opportunity to choose, from a broad range of investment alternatives, the manner in which the assets in his/her account are invested.

Performance Objectives and Selection Criteria

It is in the best interest of the Plan’s participants and beneficiaries that performance objectives be established for each Investment Option.

The performance objectives and criteria items will include but are not limited to the following:

- Manager’s adherence to his/her stated investment objectives and style

- Performance Numbers
  - Long-term focus
  - Above median results relative to peer group and above market benchmark over cumulative (3 and 5 year periods) and rolling 3-year periods
  - Net of fees basis

- Value Added and Risk Statistics, including:
  - Sharpe Ratio
  - Alpha
  - Beta
  - Standard Deviation
  - Downside Risk

- Qualitative Factors such as:
  - Assets under management
  - Manager tenure
  - Organizational structure and stability

- Expenses of funding vehicles relative to comparable portfolio
IV. OPERATIONAL

Frequency of Measurement

The President or his/her designee shall measure and review compliance with this policy at least annually.

Investment Performance

The President or his/her designee will review investment performance to determine if the Investment Options offered under the Plan continue to provide the participants with a broad range of choices with competitive returns relative to appropriate benchmarks and peer groups as defined in Appendix A.

It is not expected that this Policy will change frequently, although the President will review this Policy periodically. In particular, short-term changes as defined by industry standards in the financial markets should not require adjustments to this Policy.

Review of Investment Options

The President or his/her designee will:

• Review each Investment Option’s adherence to this Policy for that offering.
• Compare each Investment Option’s return with appropriate indices or benchmarks and peer groups as defined in Appendix A.
• Identify any material changes in the Investment Option’s organization, investment philosophy, and/or personnel.

Review of Plan Fees and Participant Activity

The President or his/her designee will:

• Review total Plan fees, including those of any third party administrator, the directed Trustee and Investment Option fees.
• Review aggregate participant balances and elections.

Fund Termination

Investment Options will be reviewed for possible replacement at least annually. The President should have little or no tolerance for an inconsistent investment approach. Therefore, the President or his/her designee will monitor Investment Options offered under the Plan on several key indicators for possible inconsistency, as set out below.
Fixed annuities may be immediately closed to new contributions if the financial strength ratings of the issuer fall below the minimum ratings or there are reasons to believe that the issuer will be unable to maintain the minimum ratings. Contributions will be redirected for investment in the money market investment option. Fixed annuities may also be replaced due to reasons that are applicable to all other investment options.

Reasons for replacement may include, but are not limited to the following:

- Significant under performance relative to the fund’s benchmark and peer group.
- Acceptance of significantly more risk than the fund’s benchmark index.
- Change or loss of key personnel, such as a fund manager and those servicing the account.
- Significant change, increase, or loss of assets under management.
- Evidence that actual portfolio characteristics do not follow published investing style.
- Performance patterns not logically explainable in terms of the published style, or performance out-of-step with a manager’s style peer group, particularly (but not exclusively) if resulting in under performance or excessive volatility.
- The identification by the President or his/her designee of more suitable funds.

None of these indicators shall be taken to be conclusive evidence of inconsistency. Such a finding will be based upon the facts and circumstances of each situation.

**Investment Options**

The President or his/her designee may use whatever resources are deemed appropriate to secure and evaluate qualified Investment Options during the selection process, including but not limited to search firms, consultants and the UNC System Benefits Committee. The President may expand or contract the number of investment fund choices in the asset categories as deemed appropriate to meet the objective of providing a broad array of investment choices, which offer competitive returns at competitive and reasonable expense levels. The number of investment funds selected will be considered in the context of selecting a manageable number of Investment Options that provide comprehensive coverage along the risk/return spectrum. Manager skill and cost to the Plan (and participants) will be considered in establishing an efficient roster of core options to implement the Policy.
V. POLICY MODIFICATION AND REVISION

The President or his/her designee will consider at least annually whether any elements of this Policy need revision and make recommendations to the President. Key occurrences, which could result in a Policy modification, include, but are not limited to:

(a) impractical time horizons;
(b) changes in the operating environment or objectives and priorities;
(c) issues found to be important, but not covered by the Policy; and
(d) long-term changes in market trends, economic conditions, or investment opportunities that are materially different from those used to set the Policy.

The President views this Policy, on the one hand, as the basic tool for the execution of the investing program, and on the other hand as a dynamic document which is responsive to any needs for fundamental or minor change. The President does not believe it is desirable or productive to react to short-term situations but rather takes a long-term view of offering this Plan and the Investment Options to participants.
VI. POLICY ADOPTION

The President of The University of North Carolina hereby adopts this Amended Investment Policy Statement effective on the 26th day of January, 2015.

[Signature]
President, The University of North Carolina

1/28/2015
Date Signed
### Appendix A - Asset Class Overview

<table>
<thead>
<tr>
<th>Broad Asset Class</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fixed Income</strong></td>
<td>These investments generally invest the bulk of their assets in the fixed income, or “bond” markets. Investments in this category vary both in terms of the duration of their primary holdings (short term, intermediate term or long term) and in the quality of the issuers of their holdings (government to corporate issuers of varying quality).</td>
</tr>
<tr>
<td><strong>Asset Allocation</strong></td>
<td>These investments, like balanced funds, attempt to provide participants with broadly diversified collections of stocks, bonds and money market securities. Each manager specifies either a strategy (e.g. “aggressive”, “moderate” or “conservative”) or a target date (e.g. 2030, 2040, 2050, etc.) that drives the proportionate, or strategic, allocation it follows. Each manager will have its own restrictions, disclosed in its prospectus, which will govern the ranges it may allocate to any given investment or asset class.</td>
</tr>
<tr>
<td><strong>Domestic Equity</strong></td>
<td>These investments generally invest the bulk of their assets in ownership (“equity”) securities, or stocks of companies whose headquarters and/or primary business is in the United States. Investments in this category vary both in their objectives (e.g. current income versus long term capital appreciation) and in the types of equity securities they specialize in. Some investments in this category focus on small capitalization or medium capitalization companies versus large capitalization companies. Some funds tend to look for companies whose earnings, or perceived value, are growing at faster rates than other companies (e.g. “growth”) while others focus their investments on companies who for various reasons may be selling for less than the manager believes is its real worth (e.g. “value”). Historically, investments focused on smaller and medium capitalization securities have thrived at different times and in different proportions to investments focused on large capitalization securities. Growth investments have also tended to excel at different times and in different proportion to value investments.</td>
</tr>
<tr>
<td><strong>International Equity</strong></td>
<td>These investments generally invest the bulk of their assets in ownership (“equity”) securities, or stocks of companies whose headquarters and/or primary business is outside of the United States. Investments in this category also include regionally focused managers that specialize in a particular part of the world, global managers that can invest in both U.S. and international markets, and emerging market managers that concentrate their investments in markets that are less mature than the world’s developed markets and so may provide opportunities for rapid growth. It is also generally true that higher growth opportunities are tempered significantly by higher risk for loss of capital, at least over shorter terms. Historically international markets have moved in very different cycles than their domestic counterparts.</td>
</tr>
<tr>
<td><strong>Specialty</strong></td>
<td>These investments generally invest the bulk of their assets in ownership (“equity”) securities, or stocks of companies in a particular market segment. Historically investments focused on specialty securities have offered a significantly high risk for loss of capital, at least over shorter terms.</td>
</tr>
<tr>
<td>Broad Asset Class</td>
<td>Asset Class or Strategy</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>Fixed Income</td>
<td>Fixed Income</td>
</tr>
<tr>
<td>Asset Allocation</td>
<td>Allocation</td>
</tr>
<tr>
<td>Asset Allocation</td>
<td>Target Date Funds</td>
</tr>
<tr>
<td>Domestic Equity</td>
<td>Large Cap U.S. Equity</td>
</tr>
<tr>
<td>Domestic Equity</td>
<td>Mid Cap U.S. Equity</td>
</tr>
<tr>
<td>International Equity</td>
<td>International Equity</td>
</tr>
<tr>
<td>Specialty</td>
<td>Specialty</td>
</tr>
</tbody>
</table>

*At the discretion of the Investment Consultant/Advisor, Morningstar categories used for scoring purposes may be supplemented by non-mutual fund investments (e.g. collective trusts), and/or contain options that are not currently categorized by Morningstar as such (e.g., scoring an option that Morningstar categorizes as "mid cap blend" as a "mid cap value" option in order to match the utilization of the fund by the Plan)."
Appendix B – Investment Evaluation/Scoring System

The actively managed investment options will be evaluated relative to their peers using a comprehensive scoring system proprietary to the Investment Consultant/Advisor. The scoring system is designed to serve as a guide and an aid to the Committee when evaluating investment options, providing a baseline for measurement and discussion. The scoring system is not intended to trigger an automatic and mandated fiduciary outcome or decision for a given score. It is intended to serve as a tool to support sound fiduciary decisions that are in the sole interest of participants and beneficiaries.

Thus, the comments that follow should be considered in the context that the Scoring System is one tool for the Committee’s use, not a system that supplants the fiduciary’s role in prudently evaluating investment options. In order to remain in good standing under the scoring system, each plan investment option should accumulate point totals within the acceptable ranges described below. The scoring system measures eight (8) quantitative areas and two (2) qualitative ones, as outlined in the tables below. Quantitative scores for investment options that are mutual funds are calculated at the strategy level using the lowest-cost share class available.

<table>
<thead>
<tr>
<th>Quantitative Scoring Areas</th>
<th>Weight</th>
<th>Min Score</th>
<th>Max Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Adjusted Perf (3 Yr)</td>
<td>10%</td>
<td>4 Pt</td>
<td>10 Pt</td>
<td>Risk-Adjusted Performance measures the level of return that an investment option would generate given a level of risk equivalent to the benchmark index.</td>
</tr>
<tr>
<td>Risk Adjusted Perf (5 Yr)</td>
<td>10%</td>
<td>1 Pt</td>
<td>10 Pt</td>
<td></td>
</tr>
<tr>
<td>Perf vs. Peer Group (3 Yr)</td>
<td>10%</td>
<td>4 Pt</td>
<td>10 Pt</td>
<td>Performance vs. Relevant Peer Group measures the percentile rank of an investment option’s returns relative to other available options in that category.</td>
</tr>
<tr>
<td>Perf vs. Peer Group (5 Yr)</td>
<td>10%</td>
<td>1 Pt</td>
<td>10 Pt</td>
<td></td>
</tr>
<tr>
<td>Style Attribution (3 Year)</td>
<td>7%</td>
<td>3 Pt</td>
<td>7 Pt</td>
<td>Style Attribution indicates the level of style purity of an investment option relative to the benchmark index.</td>
</tr>
<tr>
<td>Style Attribution (5 Year)</td>
<td>8%</td>
<td>1 Pt</td>
<td>8 Pt</td>
<td></td>
</tr>
<tr>
<td>Confidence (3 Year)</td>
<td>7%</td>
<td>3 Pt</td>
<td>7 Pt</td>
<td>Confidence indicates the consistent relative value add of the manager as compared to other available options in that category.</td>
</tr>
<tr>
<td>Confidence (5 Year)</td>
<td>8%</td>
<td>1 Pt</td>
<td>8 Pt</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Qualitative Scoring Areas</th>
<th>Weight</th>
<th>Min Score</th>
<th>Max Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Team</td>
<td>25%</td>
<td>1 Pt</td>
<td>25 Pt</td>
<td>Management Team measures the consistency and quality of an investment option’s management group.</td>
</tr>
<tr>
<td>Investment Family Items</td>
<td>5%</td>
<td>1 Pt</td>
<td>5 Pt</td>
<td>Investment Family Items measures the stewardship of the investment option’s parent company.</td>
</tr>
</tbody>
</table>

| Total                               | 100%   | 20 Pts    | 100 Pts   | Overall Investment Score |

15
**Point System:**

Points are awarded in each of the categories of the scoring system according to the following methodologies. In the categories of Risk Adjusted Performance, Performance vs. Relevant Peer Group, and Confidence, points are awarded according to where an investment option ranks on a percentile basis relative to the rest of the peer universe. The table below illustrates this methodology:

<table>
<thead>
<tr>
<th>% Rank</th>
<th>Top 25%</th>
<th>26-50%</th>
<th>51-75%</th>
<th>76-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Year Risk-Adjusted</td>
<td>10</td>
<td>9</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>5 Year Risk-Adjusted</td>
<td>10</td>
<td>8</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>3 Year Peer-Relative</td>
<td>10</td>
<td>9</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>5 Year Peer-Relative</td>
<td>10</td>
<td>8</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>3 Year Confidence</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>5 Year Confidence</td>
<td>8</td>
<td>6</td>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>

In the category of Style Attribution, points are awarded based on an investment option's level of style consistency relative to the applicable benchmark. Points are assigned using absolute breakpoints and are not peer-relative. These breakpoints are determined by the Investment Consultant/Advisor and are subject to change based on market conditions.

Points in the qualitative areas of Management Team and Investment Family Items are awarded on the basis of merit, and focus primarily on management team stability, consistency of investment philosophy, firm stewardship, and corporate governance.

If at any time the Committee concludes that an investment option is not meeting the desired objectives or guidelines, the investment option will be considered for termination. In order to remain in good standing an option should total greater than 80 points under the Scoring System. Options that total between 70 and 79 points will be marked for closer ongoing review by the Committee. Options that score below 70 points will be considered for termination.

<table>
<thead>
<tr>
<th>Scoring System</th>
<th>Min Score</th>
<th>Max Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good Standing</td>
<td>80 Pts</td>
<td>100 Pts</td>
</tr>
<tr>
<td>Marked for Review</td>
<td>70 Pts</td>
<td>79 Pts</td>
</tr>
<tr>
<td>Considered for Termination</td>
<td>20 Pts</td>
<td>69 Pts</td>
</tr>
</tbody>
</table>
For asset classes where the Investment Consultant/Advisor believes a peer-relative score is not meaningful, either due to the size or makeup of the asset class, the Investment Consultant/Advisor may score funds using an alternative quantitative and qualitative framework. The rating methodology evaluates both quantitative and qualitative factors, and culminates each quarter in one of the following ratings:

<table>
<thead>
<tr>
<th>Score</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green</td>
<td>Good Standing</td>
</tr>
<tr>
<td>Yellow</td>
<td>Marked for Review</td>
</tr>
<tr>
<td>Red</td>
<td>Considered for Termination</td>
</tr>
</tbody>
</table>

An example where this alternative methodology would apply is Multisector Bond investment options.

The passively managed investment options will be evaluated relative to an applicable benchmark, using a comprehensive scoring system proprietary to the Investment Consultant/Advisor. The rating methodology evaluates both quantitative and qualitative factors for passively managed investment options, and culminates each quarter in one of the following ratings:

<table>
<thead>
<tr>
<th>Score</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green</td>
<td>Good Standing</td>
</tr>
<tr>
<td>Yellow</td>
<td>Marked for Review</td>
</tr>
<tr>
<td>Red</td>
<td>Considered for Termination</td>
</tr>
</tbody>
</table>

Depending on the type of passively managed option being evaluated, multiple criteria, both quantitative and qualitative, may be used in establishing a rating. Such criteria may include, but are not limited to:

Quantitative
- Tracking error
- Fees
- Peer relative performance

Qualitative
- Fair value pricing methodology
- Securities lending practices
- Replication and management strategy
- Management firm experience and stability

When a passively managed option is scored below green, the Investment Consultant/Advisor will clearly articulate to the Committee, at an appropriate time, the reasons for the scoring.
Appendix C – Capital Preservation

Asset Class Overview

<table>
<thead>
<tr>
<th>Broad Asset Class</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Preservation</td>
<td>These options may represent a) Money Market options, b) Stable Value options, or c) Insurance Company Guaranteed options.</td>
</tr>
<tr>
<td></td>
<td><strong>Money Market</strong></td>
</tr>
<tr>
<td></td>
<td>Money Market options (Treasury / Government / Prime) are investment options whose primary objective is safety of principal. Money Markets invest in high quality, short-term securities (full principal and interest within 397 days) in an attempt to mitigate interest rate and credit risk. Money Market options are often structured to maintain a $1.00/share Net Asset Value (NAV).</td>
</tr>
<tr>
<td></td>
<td><strong>Stable Value</strong></td>
</tr>
<tr>
<td></td>
<td>A Stable Value fund is a type of separately managed account or commingled trust investing in high quality, short to intermediate-term fixed income securities presenting minimal interest rate and credit risk. Unique accounting features allow for loss amortization over a period of time, allowing management to invest in longer-term fixed income assets while mitigating risk. Stable Value funds are generally structured to maintain a $1.00/share NAV.</td>
</tr>
<tr>
<td></td>
<td><strong>Insurance Company Guaranteed Options</strong></td>
</tr>
<tr>
<td></td>
<td>An Insurance Company Guaranteed Option’s primary objective is to provide stable returns while featuring a full principal and interest guarantee. This category represents a type of insurance separate trust, insurance separate account or insurance general account product investing in high quality, intermediate-term securities while offering investors a “guaranteed” rate of return based on the insurance provider’s claims paying ability. Returns are based on a crediting rate formula which resets periodically with limited transparency.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Broad Asset Class</th>
<th>Asset Class or Strategy</th>
<th>Benchmark Index</th>
<th>Peer Morningstar Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Preservation</td>
<td>Money Market</td>
<td>90 Day U.S. Treasury Bill</td>
<td>N/A</td>
</tr>
<tr>
<td>Capital Preservation</td>
<td>Stable Value</td>
<td>Hueler Analytics Stable Value Index</td>
<td>N/A</td>
</tr>
<tr>
<td>Capital Preservation</td>
<td>Guaranteed Funds</td>
<td>90 Day U.S. Treasury Bill</td>
<td>N/A</td>
</tr>
</tbody>
</table>
**Investment Evaluation/Scoring System**

The Capital Preservation options will be evaluated using a comprehensive scoring methodology proprietary to the Investment Consultant/Advisor. The scoring methodology evaluates both quantitative and qualitative factors for the Capital Preservation options, and culminates each quarter in one of the following ratings:

<table>
<thead>
<tr>
<th>Score</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green</td>
<td>Good Standing</td>
</tr>
<tr>
<td>Yellow</td>
<td>Marked for Review</td>
</tr>
<tr>
<td>Red</td>
<td>Considered for</td>
</tr>
<tr>
<td></td>
<td>Termination</td>
</tr>
</tbody>
</table>

Depending on the type of Capital Preservation option being evaluated, multiple criteria, both quantitative and qualitative, may be used in establishing a rating. Such criteria may include, but are not limited to:

**Quantitative**
- Crediting Rate/Yield
- Market to Book Ratio
- Average Credit Quality of Portfolio
- Wrap provider/insurer diversification
- Average duration of securities in the portfolio
- Sector allocations

**Qualitative**
- Management team composition and tenure
- Management firm experience and stability

When a Capital Preservation option is scored below green, the Investment Consultant will clearly articulate to the Committee, at an appropriate time, the reasons for the scoring.

**Appendix D - Target Date Scoring**

The scoring for target date investments, most commonly in mutual fund or collective investment trust form, differs from the Consultant/Advisor’s scoring of core asset classes. While the principles behind target date evaluation mirror those of the scoring system for traditional options, target date investments are much more complex due to the shifting nature of portfolios through time, and therefore require a more complex scoring framework. Each target date manager will receive an overall numerical score as well as a corresponding recommendation for that score. Our qualitative assessment will determine an investment to be ‘In Good Standing,’ ‘Marked for Review’ or ‘Considered for Termination.’ The Consultant/Advisor believes that both qualitative and quantitative variables are essential to evaluate target date investments, consistent with its traditional asset class scoring system.
The below section discusses the major target date assessment categories and describes the methodology for each.

**Performance (20 Points Total)**

Performance is broken into two categories: risk-adjusted and peer-relative. Both categories are evaluated on a three and five-year basis. Morningstar divides target date investments by vintage year into three institutional categories: Conservative, Moderate and Aggressive.

These categories define peer groups by vintage year, taking into account variations across glidepaths and comparing each vintage year with a relevant peer group. Morningstar re-evaluates the Conservative, Moderate and Aggressive categories on a periodic basis to account for investment changes, and categories will be adjusted to be consistent with Morningstar's methodology. The Consultant/Advisor has determined that Morningstar's methodology is appropriate, and will continue to monitor its methodology to ensure that it remains appropriate.

Each target date investment option’s vintage year is compared against its designated Morningstar Institutional peer group. Each vintage year’s peer-relative score is then aggregated to arrive at a total score, and each target date family’s relative score is ranked based on percentiles. This process is followed for three year peer-relative performance, five year peer-relative performance, three year risk-adjusted performance, and five year risk-adjusted performance, providing four separate performance measures. Points are allocated based on the following system:

<table>
<thead>
<tr>
<th>% Rank</th>
<th>Top 10%</th>
<th>11-20</th>
<th>21-30</th>
<th>31-40</th>
<th>41-50</th>
<th>51-60</th>
<th>61-70</th>
<th>71-80</th>
<th>81-90</th>
<th>91-100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Once points are allocated between the four groups, scores are aggregated to arrive at a total performance score, and then adjusted to achieve an equitable result based upon sample size, based upon the recognition that not all of the target date investment options that exist in the Morningstar categories are covered. These adjustments are detailed below:

**Overall Performance Adjustments**

<table>
<thead>
<tr>
<th>Raw Score (out of 20)</th>
<th>19-20</th>
<th>18</th>
<th>17</th>
<th>16</th>
<th>15</th>
<th>14</th>
<th>13 and below</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted Score</td>
<td>20</td>
<td>19</td>
<td>18</td>
<td>17</td>
<td>16</td>
<td>15</td>
<td>13</td>
</tr>
</tbody>
</table>

This process yields a total performance score by target date family, using the lowest cost share class available to represent each vintage year.
Glidepath Risk: Weightings of Equities and "Other" Asset Classes (10 points)

Target date investment options have varied assumptions across considerations such as savings rates, retirement date, longevity and other factors surrounding retirement. While each family's assumptions may be justified, evaluating central tendencies through "the wisdom of the crowd" is a worthwhile way to measure two key risks inherent in target date investment options: shortfall risk (not having enough money to retire), and market risk (having too much exposure to risky asset classes subject to greater loss potential). In essence, evaluating dispersion from the mean is a way to evaluate how much market or shortfall risk a target date investment option takes relative to all other options. This dispersion is measured based on the following methodology:

<table>
<thead>
<tr>
<th>% Rank</th>
<th>Top 20%</th>
<th>21-39%</th>
<th>40-60%</th>
<th>61-79%</th>
<th>80-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points</td>
<td>6</td>
<td>8</td>
<td>10</td>
<td>8</td>
<td>6</td>
</tr>
</tbody>
</table>

An adjustment for the smaller sample size (as noted above) is made by normalizing the scores based on the maximum score obtained in the coverage universe, to yield a true peer comparison. This is important given how small the differentials can be across peers.

Glidepath Risk: Regression to Global Equity Index (10 Points)

Target date investment options have demonstrated periods of equity-like risk, despite broad diversification claims. Understanding beta, or the slope of the line of best fit in an ordinary least squares regression, helps analyze co-movement between variables. In this case, an assessment is made to determine how a target date investment option's returns move relative to a broad index of global equities, represented by 75% S&P 500 and 25% MSCI All-Country World Index ex-USA indices. Both three- and five-year betas are determined and averaged, and points are allocated based upon the following system:

<table>
<thead>
<tr>
<th>3 and 5 Year Beta</th>
<th>Beta &gt; .89</th>
<th>.70 &lt; Beta &lt; .89</th>
<th>Beta &lt; .70</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points</td>
<td>6</td>
<td>8</td>
<td>10</td>
</tr>
</tbody>
</table>

As seen above, this system rewards target date investment options with lower betas based on the view that investors can replicate equity beta elsewhere in their retirement plan or broad portfolio. Target date options should add value without relying on market beta.
An adjustment for the smaller sample size (as noted above) is made by normalizing the scores based on the maximum score obtained in the coverage universe to yield a true peer comparison. This is important given how small differentials can be across peers.

**Portfolio Construction (15 Points)**

Establishing solid portfolio management discipline and practices are important in improving the odds of target date investment success. This is a qualitative assessment, and points are allocated based on variables such as:

- Asset class granularity
- Tactical flexibility
- Asset allocation methodology
- Rebalancing methodology
- Investor assumptions used

These variables are determined based on conversations with managers, reviewing prospectuses/marketing materials and other supporting documentation regarding target date investment methodology.

An adjustment for the smaller sample size (as noted above) is made by normalizing the scores based on the maximum score obtained in the coverage universe to yield a true peer comparison. This is important given how small differentials can be across peers.

**Underlying Investment Vehicles (15 Points)**

Implementation is also critical to target date success. This category is evaluated through qualitative means, such as:

- Quality of underlying managers
- Manager due diligence and security selection process
- Use and appropriateness of active and passive management if applicable
- Transparency
- Security overlap potential

An adjustment for the smaller sample size (as noted above) is made by normalizing the scores based on the maximum score obtained in the coverage universe to yield a true peer comparison. This is important given how small differentials can be across peers.

**Target Date Investment Management (25 Points) and Firm (5 Points)**

This measure is consistent with the traditional scoring system for other investment options.
Points in the qualitative areas of Target Date Investment Management and Firm are awarded on the basis of merit, and focus primarily on management team stability, consistency of investment philosophy, firm stewardship, and corporate governance.

Appendix E – Default Investment Option

Default Investment Options are specific investments vehicles that are used when a plan participant or beneficiary fails to make affirmative investment elections. The Committee has decided to appoint a default option for use in situations where a participant may fail to provide investment direction. After reviewing the demographics of the Plan, the Committee has decided to use a suite of target date funds to function as the Plan’s Default Investment Option.