UNIVERSITY OF WISCONSIN SYSTEM
TRUST FUNDS

INVESTMENT POLICY STATEMENT

Last Revised/Reaffirmed: December 10, 2015
Preface

Introduction and Background. The invested Trust Funds of the University of Wisconsin System (UW Trust Funds) currently consist predominately of bequests from individuals via wills or other trusts, as well as outright gifts from living donors, corporations (including matching gift programs), and external foundations and trusts. Such bequests and gifts come to the Board of Regents of the University of Wisconsin System (the Board) whenever the donor and documentation name the beneficiary as either the Board of Regents, directly, or any UW System institution, without specifically identifying a UW-related foundation. (UW-related foundations are independent entities with separate governing boards.) These gifts or donations originate as either, 1) “true endowments,” where the donor has restricted the use of “principal” and may or may not have imposed additional restrictions as to purpose (in accounting parlance, “restricted – nonexpendable” gifts), or 2) “quasi-endowments,” where the donor has placed no restriction on use of principal and may or may not have imposed restrictions as to purpose (in accounting parlance, either “restricted – expendable” or fully “unrestricted” gifts).

The Board is the principal and ultimate fiduciary of the UW Trust Funds. A fiduciary is defined as someone who oversees and/or manages the assets of, or for the benefit of, another person and who stands in a special relationship of trust, confidence, and/or legal responsibility. A summary of the primary fiduciary and management responsibilities of the Board is provided in Appendix 1. As noted there, the Board has delegated to its Business and Finance Committee (the Committee), many oversight and management functions. Specific roles and responsibilities of all relevant parties are discussed later.

Purposes. “The preparation and maintenance of the Investment Policy Statement (IPS) is one of the most critical functions of the investment steward. The IPS should be viewed as the business plan and the essential management tool for directing and communicating the activities of the [investment] portfolio. It is a formal, long-range, strategic plan that allows the steward to coordinate the management of the investment program in a logical and consistent framework. All material investment facts, assumptions, and opinions should be included.”1 Furthermore, the IPS should provide the guiding principles for all aspects of the management of entrusted assets, and the premises on which these principles rest.

Organization and Format. The IPS is organized into these five major sections:

- **Premises** – which discusses the underlying bases (primarily various objectives, assumptions, and beliefs) for the policies and their implementation
- **Investment Policies** – which describes specific policies adopted to attain identified objectives while conforming with the major premises
- **Implementation** – which describes by whom and how the policies are to be implemented
- **Evaluation** – which describes how success will be monitored and evaluated
- **Appendices** – which provide greater detail on various policy elements discussed at a broader level in the main body of the document

In general, the main body of the IPS is intended to provide higher level elements expected to change only infrequently. The appendices are intended to provide details or lower level elements, which may require more frequent revisions and refinements, due to changing economic and market conditions, the investment opportunity set, industry “best practices,” etc. Incorporating these items into appendices will allow for them to be more clearly and easily revised.

---

Review of the IPS. Given the centrality of the IPS itself in ensuring that the Board meets its fiduciary responsibilities and effectively oversees the management of the investment program, it is imperative that the Board review the IPS on an on-going basis. Although long-range and strategic in nature, the IPS should nevertheless be considered a living document; revisions and further refinements may be required as and when goals, constraints, or external market conditions change significantly.
UNIVERSITY OF WISCONSIN SYSTEM TRUST FUNDS
Investment Policy Statement

I. Premises

A. Investment Objectives, Constraints, and Competencies

Creation of Distinct Investment Funds. Recognizing that assets invested with UW Trust Funds may have distinctly different investment time horizons, three separate investment pools (or funds) have been created. To accommodate endowed assets (where the “principal” is to be preserved into perpetuity) and other long-term investments, the “Long Term Fund” has been created. To accommodate fully expendable assets that may have intermediate to short-term investment time horizons, the “Intermediate Term Fund” and “Income Fund” have been created (collectively, the Funds). Each of these Funds are accounted for on a unitized basis, similar to a mutual fund, where investors buy and sell Fund units representing proportional shares of the Funds’ underlying investments. The investment objectives and constraints for each of the Funds are inherently different and are therefore discussed separately below. There are, however, certain general constraints applicable to all Funds.

General Investment Constraints. Two potential investment constraints – tax considerations and external legal/regulatory requirements – are generally relevant to all UW Trust Fund assets. As a tax-exempt organization, the UW System’s investment returns are not subject to taxation; therefore, tax considerations become essentially irrelevant in the investment decision-making process. However, given the UW’s tax status, tax-exempt securities (e.g., municipal bonds) should generally be excluded from investment consideration. (It should be noted that under certain circumstances, a tax-exempt organization’s investments can generate Unrelated Business Taxable Income (UBTI). Therefore, for investment vehicles and strategies that could potentially generate UBTI, an expectation should be that they seek to minimize it.) The current external legal/regulatory framework, to which generally all assets are subject, is also described in Appendix 1.

Long Term Fund

Investment Return Objectives. Used primarily for investing endowed assets, the principal return objective of the Long Term Fund is to achieve, net of administrative and investment expenses, significant and attainable “real returns;” that is, nominal returns net of expenses, over and above the rate of inflation. By distributing a significant real return stream, disbursements for current expenditure will grow with the rate of inflation so as to maintain their purchasing power and support level into perpetuity. Other secondary investment return objectives for the Fund are to outperform various market and peer group benchmarks. (Details on these benchmarks are provided in later sections.)

Spending Policy. The “spending policy” for an endowment provides guidance and a methodology for determining what amounts are to be distributed for annual spending purposes. The policy should help ensure that the purchasing power of the corpus is maintained. The current spending policy for the Long Term Fund is provided in Appendix 2.

Usage, Constraints, and Other Considerations

Investment Time Horizon. With over 95 percent of the accounts in the Fund classified as endowments, the appropriate investment horizon is extremely long term. The Fund should therefore be managed as an “endowment fund,” where the purchasing power of the corpus is to be preserved into perpetuity.

Fund Size. At roughly $385 million as of June 30, 2015, the Fund is large enough to participate in virtually all asset classes. However, smaller percentage allocations to certain asset classes may
necessitate the use of commingled vehicles rather than separate accounts. Commingled vehicles preclude the application of individualized investment guidelines.

Dependence on and Variability of Distributions. Expenditures from UW Trust Funds do not represent a significant portion of overall UW campus budgets. However, specific departments and programs may rely heavily on Trust Fund resources. As such, extreme variability in the value of the annual distributions is not desirable. Therefore, risk objectives (i.e., volatility of returns) and the spending rate methodology should take this into account.

Liquidity Requirements and Cash Flow Analysis. Generally, the Fund has an obligation or liability to pay out the spending rate, plus expenses, offset by new contributions. To a limited extent, some “quasi-endowments” or “expendable” assets are invested in the Long Term Fund, which results in the occasional need to liquidate Fund principal as well. Over the most recently analyzed ten-year period, the Fund experienced quarterly cash flows ranging from plus 0.70 percent of assets to minus 1.32 percent, and the average net quarterly cash flow was minus 0.78 percent of assets. The limited and fairly predictable nature of quarterly withdrawal requirements coupled with the perpetual time horizon of the Fund suggests that meaningful allocations can be made to “illiquid” asset classes. Nevertheless, careful and on-going cash flow modeling for “illiquid” investments and asset classes should be conducted to help ensure that the Long Term Fund has the desired liquidity when needed, and that the Fund does not deviate substantially from its desired asset class, investment, and manager target allocations.

Investment Risk Objectives. A primary risk objective is to minimize the probability that the desired return objective is not achieved, particularly over the intermediate to long term. Another objective, as suggested above, is to limit extreme volatility of spending distribution levels in the shorter term, which by extension implies limiting extreme volatility of returns in the shorter term. To address both of these shorter and longer term concerns, the Fund should seek to minimize its expected volatility for any given targeted return level. However, it is also recognized that expected volatilities, as represented by standard deviations assuming “normal distributions,” do not provide a complete picture of portfolio risk. Therefore, another risk objective of the Fund is to maintain meaningful “hedges” against major economic events or traumas that can lead to “fat-tail” negative outcomes.

Intermediate Term Fund

Investment Return Objectives. The primary objective of the Intermediate Term Fund is to provide competitive investment returns consistent with very moderate levels of volatility (ideally, equal to or lower than that expected from an intermediate, investment-grade bond portfolio) and low probability of loss of “principal.” Furthermore, the Fund should seek to maximize its expected return for any given targeted level of volatility. Other investment objectives for the Fund are to outperform various market and peer group benchmarks. (Details on these benchmarks are provided in later sections).

Usage, Constraints, and Other Considerations.

Investment Horizon. Over 90 percent of the Fund is represented by “quasi-endowments,” where the expected investment horizon is approximately two to five years. Some ten percent of the Fund appears to represent unspent Income Fund balances that have been swept into the Intermediate Fund; these assets should be considered to have an even shorter investment horizon.

Fund Size. At approximately $85 million as of June 30, 2015, were the Fund considered on a “stand-alone” basis, it would likely not be large enough to participate in some “alternative” asset classes such as
Private Equity, where investment minimums may be quite high. However, since the Long Term Fund participates in these alternative asset classes, investment minimums would likely not be an issue.

**Dependence on and Variability of Distributions.** Historically, this Fund, invested entirely in U.S. Bonds, distributed all of its interest income to the Income Fund for spending purposes. However, since all of the assets of the Intermediate Term Fund are considered fully expendable (i.e., principal can be completely spent down too), the level and variability of such spending distributions are essentially irrelevant.

**Liquidity Requirements and Cash Flow Analysis.** The Intermediate Term Fund permits withdrawals and contributions on a quarterly basis; however, the quarterly cash flows are less certain since all assets are fully expendable. Over the most recently analyzed ten-year period, the Fund experienced quarterly cash flows ranging from plus 0.5 percent of assets to minus 7.6 percent, and the average net quarterly cash flow was minus 1.8 percent of assets. Given the quarterly cash flow uncertainty of this Fund, the fact that all assets are in theory immediately expendable and that the expected average investment horizon is only two to five years, “illiquid” asset classes do not make sense.

**Investment Risk Objectives.** The primary risk objectives for the Fund are to provide moderate levels of return volatility (ideally, equal to or lower than that expected from an intermediate, investment-grade bond portfolio) and low probability of loss of “principal.”

### Income Fund

**Investment Risk and Return Objectives.** The primary objective of the Income Fund is to provide competitive investment returns consistent with the need for preservation of “principal” and immediate liquidity. Expected risk and return for the Fund should also be similar to high-quality “money market” funds.

**Usage, Constraints, and Other Considerations.**

**Investment Horizon.** The Fund is used primarily for the following: 1) spending distributions from the Long Term Fund (these amounts become currently expendable income); 2) other monies which are needed for expenditure, generally within the next twelve to eighteen months; and 3) pending investment of new monies awaiting investment in longer-term Funds.

**Liquidity Requirements.** This Fund essentially permits withdrawals and contributions on a daily basis. Only short-term, highly liquid investments are appropriate here.

**State of Wisconsin Requirement.** By statute, this Fund must reside with the State as part of its agency-commingled State Investment Fund, and it is managed by the State of Wisconsin Investment Board. Other than performance reporting and certain benchmark comparisons discussed later, this document excludes any further discussion of the Income Fund, as it falls outside of the purview of the UW Board of Regents and UW Trust Funds staff.

**Internal Competencies.** The specific policies contained in the IPS should also take into account internal competencies and limitations, given the size, structure, and governance of the UW Trust Funds. These are broadly categorized and discussed below under “Strengths” and “Weaknesses.”

**Potential Strengths.**

**Asset Base.** The relatively modest size of assets under management should allow for participation in investment opportunities which have more limited capacity. Funds can be either too small or too large to
UNIVERSITY OF WISCONSIN SYSTEM TRUST FUNDS
Investment Policy Statement

effectively participate in some markets and opportunities. UW Trust Funds’ size may often fall in the “sweet spot” in this regard.

Committee and Board Composition. The relatively small size of the Committee may facilitate more effective and timely decision-making. Also, the Committee and Board are made up of State government-appointed members with diverse and varied personal and professional backgrounds, including UW students. This diversity of backgrounds and expertise may enhance deliberation and decision-making by providing for unique and fresh perspectives.

Reputation. Many investment management firms and service providers prefer to have prestigious institutional clients, and the UW System is so perceived. Also, the prestige of the UW should help to attract and retain talented investment staff.

Academic Expertise. Although infrequently tapped, the UW System includes academicians with expertise in relevant fields such as investments, economics, and accounting. (Applied graduate student investment programs are one example of such academic expertise.)

Potential Weaknesses.
Asset Base. The modest size of assets under management may limit, to some extent, the level of resources devoted to internal investment capabilities and staffing, as their costs are charged against invested assets.

Compensation of Investment Professionals. Compensation levels and types (e.g., base salary, performance-based incentives) may not be considered competitive enough to attract and retain talented investment staff.

Committee and Board Composition. The Committee is not purely an “Investment Committee,” and there is no requirement for its members to have any investment experience or expertise. In fact, for the most part, members have historically not had investment-related backgrounds. Also, Committee membership likely changes more frequently than is typical among investment committees of other endowments and foundations.

B. Core Investment Philosophy and Beliefs

Nature of Capital Markets, Investment Risks and Returns. When one seeks to truly “invest,” the objective is not just to get one’s money back (or even just enough to maintain the same purchasing power), but to actually make more money, to make a profit, to have increased the “real” value of your assets. To do this, one must be willing to accept some level of investment risk. Unfortunately, there are no “risk-free” assets capable of generating returns sufficient to support the desired spending levels of an endowment. In free and open capital markets, capital will flow to higher risk investment opportunities only if they are priced to provide the potential for higher returns. “Potential” for higher returns is emphasized here, because the higher returns are not a certainty; if they were certain, they would not be riskier. The expected average return may be higher, but the range of possible outcomes is much wider (including the possibility of complete loss) versus a “safer” investment. Some investment risks, however, can and should be mostly diversified away, as these risks are not on average compensated for. An example of such a risk is the “idiosyncratic” or “non-systematic” risk that comes from investing in a particular company, or even industry. These are risks peculiar to that company or industry. The power of diversification works to largely eliminate many of these risks. There are other types of risk that cannot be
diversified away; they are referred to as “systematic” or “market” risks. But fortunately, these risks are compensated for on average. Some examples of systematic or broad market risks are the following:

- Equity market
- Bond market (credit and/or interest rate risk)
- Inflation
- Deflation
- Economic trauma
- Geopolitical trauma
- Liquidity/Illiquidity
- National and global monetary and fiscal policies

It may be possible to hedge against some of these risks, but they cannot be completely eliminated simply through investment diversification. However, since these broad risk factors affect different markets and asset classes in different ways and to varying degrees, diversification among many different asset classes and markets can greatly reduce overall portfolio risk. It is important to keep in mind, though, that all investment returns derive from economic activity and productivity – from the creation (or destruction) of “real” wealth, real goods and services. Whether it is corporate profits or interest income, the corporations and borrowers are engaged in economic activity, which if successful, will allow them to repay their lenders or share the wealth with their owners. With this perspective in mind, it is clear that broad (increasingly, global) economic activity is the ultimate risk factor, and that each of the systematic risks listed above can significantly impact this economic activity. In summary, the principal premise put forward here is that investment risk is inherently neither good nor bad, but all aspects and sources of potential risk must be understood, monitored, managed, and, in the end, embraced in order to achieve attractive and commensurate returns.

**Market Efficiency.** As originally formulated, the concept of “market efficiency” referred to its “informational efficiency;” that is, whether market prices fully reflect all available information, and that assets are then appropriately priced relative to “fully-informed” perceptions of their risk. In such a world, all assets should provide similar perceived-risk-adjusted returns. However, the concept of an efficient market has also come to refer more nebulously to a market where assets are always priced at “fair value.” What is “fair value” though? It means that an asset is not “mispriced.” Mispriced relative to what? The only time it can be said with certainty that one asset is mispriced is if there is an identical asset that is selling for a different price (this is called an “arbitrage” opportunity and they, of course, will always be short-lived). The premise put forward here regarding market efficiency is that markets sometimes do a very poor job in even roughly pricing risk appropriately. In that sense, the general belief is that prices for individual assets, and even entire sectors and markets, do sometimes veer far from “fair” or “intrinsic value,” and that these mispricings can be exploited through active management. However, it is also important to state the additional premise that some markets are inherently less efficient in this sense. This can be because they simply receive less attention (e.g., stocks of small companies vs. stocks of large companies), or because there is much less public information available about them (e.g., commercial real estate or private equity).

**Alpha and Beta Concepts.** The concepts of “alpha” and “beta” in a portfolio management context have become a common part of investment vernacular. Although they are frequently overused or misused, institutional investors and fiduciaries should have a basic understanding of these concepts. As applied to a single security, the term “beta” is generally used to denote that component of expected return attributed to the security’s sensitivity to movements in the overall market. For example, if a security has an estimated (or historical) beta of 1.2, it would be expected to move on average, 20 percent more than the
UNIVERSITY OF WISCONSIN SYSTEM TRUST FUNDS  
Investment Policy Statement

market overall; that is, it would be 20 percent more volatile. The beta for the overall market in question is always set at 1.0, so the beta measures for individual securities are relative to the market. Beta is therefore to be viewed as a standardized measure of “systematic” risk which cannot be diversified away. The term “alpha” in a single security context is used to denote any expected excess return; that is, expected return over (or under) that predicted by the security’s beta. (In mathematical terms, the equation is denoted as follows: expected return = (market return x beta) + alpha.) This expected excess return would exist only if the security was “mispriced” or “inefficiently priced.” In an overall portfolio context, the term beta is generally used to denote the return achievable by simply investing passively in a particular market, such that only systematic risk is incurred. The term alpha here has come to simply denote excess return, if any, over and above that of the market in question. Positive (or negative) alpha can only be realized through active investment management, that is, consciously deviating from a given market benchmark.

Portable Alpha. An investment technique that has become increasingly in vogue is referred to as “portable alpha.” The idea behind it is that alpha and beta sources within a portfolio context can be “decoupled.” More typically, institutional portfolios have had to find alpha only from where they have placed their beta (market or asset class) allocations. For instance, if an investor wanted a beta exposure of say 50 percent in U.S. large-cap equities, any alpha (excess return) for that allocation would have to come from active management within that large-cap portfolio. Therefore, beta and alpha were inextricably tied together. An example of “portable alpha” would be as follows: the investor gets cheap beta exposure to U.S. large-cap equities through S&P 500 futures; actual dollars are used to fund a U.S. small-cap equity manager, where there is, in theory, greater alpha potential; and, finally, the small-cap beta exposure is hedged away by selling small-cap futures. The result is that the small-cap manager’s pure alpha, if any, has been “ported” onto the large-cap beta exposure. Whereas return expectations from an active large-cap portfolio might have been the S&P 500 return + 100 basis points, the portable alpha structure might be expected to produce S&P 500 + 300 basis points. The premise put forward here, is that portable alpha is a logical and potentially attractive active management strategy. However, if and when it is entertained, its complexities and risks must be fully understood and easily managed.

Active vs. Passive Management. Consistent with the premises on market efficiency, the belief put forward here is that active management may be desirable (as opposed to passive or indexed management), especially in less efficient markets. However, if active management is to be pursued by hiring external managers, one must be adept at selecting superior managers, because active management is a zero-sum game – one manager’s positive alpha is another manager’s negative alpha. One good indication of market efficiency, as well as a good indicator as to whether active management should be pursued, is the dispersion of returns among managers within an asset class. For example, the dispersion of returns between “top-quartile” and “bottom-quartile” private equity or real estate managers is huge, whereas the dispersion between the top and bottom investment-grade bond managers is negligible.

Hedge Funds. Hedge funds are largely unregulated vehicles that can represent “the ultimate” in active management, where there are few if any constraints imposed. For instance, they often use extensive leverage, sell short, use derivatives, and otherwise invest in anything, anywhere – the more exotic the better. Nevertheless, a premise is that a diversified portfolio of skilled hedge fund managers, operating within prudent constraints and with strong risk-control capabilities, can add a level of diversification and return potential from active management to an otherwise well-diversified portfolio. Due diligence standards, must, however be of the highest order given hedge fund managers’ greater flexibility.

Market Neutral and Absolute Return Funds. A type of hedge fund strategy that may be of particular interest is a so-called “market neutral” or “absolute return” strategy. Here, the intent is that its investment
returns will exhibit little or no correlation to the movements in the major capital markets. The returns in total, in theory, should come primarily from manager skill in identifying and exploiting mispricings and arbitrage opportunities; any beta exposures are in theory hedged away. If, again, skilled managers following such strategies can be sourced, these types of hedge funds would provide an excellent additional source of portfolio diversification.

Capitalization-Weighted Benchmarks. It is recognized that the market benchmarks that are most widely used are “capitalization-weighted.” Capitalization-weighted indexes are comprised of a particular market’s securities, weighted by their total capitalization value (e.g., total shares outstanding times current market price). Some academicians and practitioners have suggested that there are some fundamental flaws to cap-weighted benchmarks. First among those suggested, is that cap-weighting on average results in an over weighting of overvalued stocks, and “growth” stocks in general, and an underweighting of undervalued stocks, and “value” stocks in general. Schemes such as equal-weighting (which has its own drawbacks) or weightings based on some “fundamental” business measures (e.g., sales, market share, etc.) have been suggested as “better” or “more efficient” alternatives. However, capitalization-weighting remains a sound basis for benchmark construction, as such indexes do represent the “current market” for a particular asset class; any deviations from capitalization-weighted indexes (e.g., equal-weighted, or fundamentally-weighted) represent active investment management decisions to deviate from the current market portfolio.

Primacy of Asset Allocation. The single most significant decision in the investment process is that of asset allocation; that is, deciding how assets are to be allocated among the major investment categories (or asset classes). Studies indicate that well over 90 percent of a portfolio’s return can be explained simply by its asset allocation.

Mean-Variance Optimization and its Limitations. “Mean-variance optimization” programs are a very commonly used tool for conducting asset allocation analyses. They are designed to solve the following question given the inputs discussed above: Which portfolios will provide the highest expected average return for any expected level of volatility, or conversely, which portfolios will provide the lowest expected volatility at any expected level of return? Forward-looking capital market assumptions for various asset classes are essential in determining which portfolios will exhibit desirable risk/return profiles. These same assumptions are also the key inputs to "mean-variance optimization." They are: 1) expected returns, 2) standard deviations, and 3) correlations. Although there are very significant limitations to mean-variance optimization (e.g., “normal” distributions of investment returns are assumed when hard-to-model “non-normality” and “fat left tails” are more realistic; there is uncertainty associated with other assumptions and inputs; there is significant sensitivity to small changes in assumptions; covariances change over time and under more extreme conditions; it assumes that the simple "point-estimates" of assumptions are known with certainty and that the outcome is therefore known with certainty; outcomes, therefore, do not reflect the probabilities that significantly different outcomes may occur; etc.), the analysis is at least a useful and informative exercise. For instance, it prompts an investor to carefully review expected returns and volatilities of various asset classes, their implied risk premiums, and their relationship to each other and whether these make intuitive sense for capital markets. They also help encourage investors to "stretch" in terms of giving consideration to new or more non-traditional asset classes. Also, mean-variance optimization can lend some quantitative support to what intuitively seems to make good sense and indicate whether one is at least "heading in the right direction." On the other hand, it is important to note that unless some constraints are employed in the modeling (i.e., reasonable minimums and maximums by asset class), an optimizer will generate many, if not mostly, portfolios that are intuitively unacceptable (e.g., 50 percent or more to Real Assets or Private Equity). Therefore, some “reasonable” constraints should normally be devised.
SPECIFICATION AND PRIMARY ROLES OF ASSET CLASSES. Although there are certain standard broad classifications (e.g., equities and bonds), there remains some controversy over what constitutes a distinct asset class. However, the criteria given below provide a good starting point for asset class specification:

- **Assets within an asset class should be relatively homogenous.** Assets within an asset class should have similar attributes. [And they should be subject to the same principal risk factors.]
- **Asset classes should be mutually exclusive.** [That is, they should not overlap.]
- **Asset classes should be diversifying.** For risk-control purposes, an included asset class should not have extremely high expected correlations with other asset classes or with a linear combination of the other asset classes. Otherwise the included asset class will be effectively redundant in a portfolio because it will duplicate risk exposures already present. In general, a pair-wise correlation above 0.95 is undesirable.
- **The asset classes as a group should make up a preponderance of world investable wealth.**
- **The asset class should have the capacity to absorb a significant fraction of the investor’s portfolio without seriously affecting the portfolio’s liquidity.** Practically, most investors will want to be able to reset or rebalance to a strategic asset allocation without moving asset class prices or incurring high transaction costs.  

Asset classes should also be grouped into certain “super-categories” based on the primary roles those asset classes are expected to play within the overall portfolios. It is recognized that expected returns, volatilities, and pair-wise correlations are inherently imperfect representations of true underlying risks and returns. Therefore, optimal portfolios generated using only these inputs may lack some needed judgmental, qualitative assessment of broad risk factors, and risk control. This is where it may also be helpful to consider what levels of assets might be prudently devoted to each such “super-category.”

The following broad asset classes, grouped by “super-categories,” are consistent with the above criteria and are deemed appropriate for the UW Trust Funds:

**Growth and High-Yielding Assets.** (i.e., higher risk, “return drivers”)
- Global Developed Market Equities
- Emerging Market Equities
- Private Equity (e.g., venture capital, leveraged buyouts, other private capital)
- High Yield Debt/Credit (e.g., high yielding corporate debt or bank loans, emerging market debt)
- Directional Hedge Funds (e.g., long-biased equity or high yield/distressed debt strategies)

**Event-Risk and Deflation-Hedge Assets.** (i.e., lower risk, “catastrophe insurance”-like)
- High Quality Debt/Credit (pure U.S. Treasuries are perhaps ideal here)
- U.S. Cash
- Absolute Return/Non-Directional Hedge Funds (e.g., “market neutral” strategies)

**Real and Inflation-Hedge Assets.** (i.e., physical assets and inflation-protected financial assets)
- U.S. TIPS (Treasury Inflation Protection Securities)
- Real Assets (e.g., private/public commercial real estate, timber and farm land, commodities, infrastructure)

---

2 Sharpe, Chen, Pinto and McLeavy. “Asset Allocation.” *Portfolio Management.* CFA Institute, Ch.5.
UNIVERSITY OF WISCONSIN SYSTEM TRUST FUNDS
Investment Policy Statement

Market indexes selected to be broadly representative of each of these asset class (and in most cases to suggest appropriate passively managed alternatives), are provided in later sections or appendices.

**Meaningful Asset Class Allocations.** Another basic premise regarding asset classes and their inclusion in a portfolio is that the allocation must be significant enough to provide its desired attributes in a meaningful way. Allocations of less than 5 percent of portfolio assets to a particular asset class do not make sense.

**Tactical Asset Allocation.** “Tactical asset allocation” involves making tactical shifts away from long-term strategic asset allocations. The crux of this strategy involves the following: some form of current valuation of asset classes or markets as a whole, determination of the "fair" risk-adjusted valuation (whether an "equilibrium" or average historical value, etc.), determination of the current level of over- or under-valuation and what this implies for expected returns going forward. Based upon relative levels of over-/under-valuation and expected future returns (for some period) among the asset classes/markets available, under- and over-weightings versus some strategic norm or benchmark are implemented. This is no different than what an active long-only stock picker does, but he does it at the individual security level; the asset allocator does it at the asset class level. Risk-controlled active asset allocation strategies should provide opportunities to add alpha over and above what a static, strategic asset allocation can be expected to provide. Desirable managers for a global active asset allocation mandate should have all of the following characteristics: a strong, dedicated and utterly defensible conviction that it can be done successfully; a long and strong track record that supports this conviction; a sophisticated risk-control platform; strong global presence and expertise; and very bright people and leadership that reflect a strong cultural continuity. If such managers can be found, a global active asset allocation strategy should be considered for incorporation into the Long Term Fund's portfolio, in some manner and at some level. (Note, when this strategy is employed with a global focus, it if often referred to as “global tactical asset allocation,” or GTAA.)

**Various Investment Beliefs and Biases.** Generally, it is believed that successful investment programs and portfolios will reflect and incorporate the following long-term, strategic tenets and biases:

- **Value(ation) orientation** – that is, for a risky investment to be attractive, its price should reflect a significant “margin of safety” or discount versus some reasonable valuation of the asset.
- **Price paid is always a major determinant of realized investment returns.**
- **Mean reversion is powerful and inevitable** – that is, in virtually all things economic within competitive, capitalist systems (e.g., profit margins, economic growth rates, real interest rates, credit spreads, asset price, etc.), values at extremes will revert to long-term averages.
- **Particularly for equities, and contrary to theory,** higher risk stocks/companies underperform lower risk stocks/companies, where risk is viewed in terms of such things as beta, volatility, quality (e.g., in regards to profitability, leverage, etc.), and size; therefore, large or even mega-cap, high-quality stocks/companies should form the strategic core of equity portfolios.
- **One risk factor** that the market generally compensates for on average is “illiquidity;” therefore, all else being equal, portfolios should reflect a bias towards less liquid assets.

**Opportunistic Investment Category.** The concept behind an “Opportunistic” investment category is as follows. On occasion, unusual and exceptional investment opportunities may present themselves which could meaningfully improve the risk/return profile of the Funds. Such an investment opportunity will likely represent one of the following situations: 1) it does not quite fit into any currently acceptable asset class or strategy (at least as they are presently defined), or 2) investing in the opportunity would shift the Fund’s strategic asset allocations beyond what is normally acceptable. Also, such investments will normally not represent permanent positions; i.e., they will likely have either a term associated with them
UNIVERSITY OF WISCONSIN SYSTEM TRUST FUNDS
Investment Policy Statement

(e.g., a limited partnership vehicle) or they will eventually be divested or otherwise unwound. A limited place should be reserved for such unusual opportunities for the Long Term Fund.

Currency. Currency is not considered to be an asset class or an “investment” at all for that matter, as there are normally, and on average, no expected returns from holding or being exposed to, a foreign currency. Also, unhedged foreign-denominated assets generally provide somewhat higher levels of diversification (i.e., somewhat lower correlations) in a broad portfolio context. Therefore, for the most part, and unless significant skill in currency exposure management can be demonstrated, assets denominated in foreign currencies should not be hedged.

Commodities. Although “commodities” are included in the Real Assets category shown above, it is in many ways also questionable as to whether they constitute an asset class or an “investment” at all. Direct ownership of commodities (or commodity-linked derivatives) may provide an inflation hedge, in that their prices should in theory be highly correlated to general inflation levels, but aside from an inflation-like return, there is no other expected return and certainly no generation of income while the assets are held. Most commodities do have intrinsic value as production inputs to the process of generating real economic wealth (gold is one exception here, however, as it has essentially no intrinsic value), so demand for commodities should be fairly strongly correlated to levels of and growth in economic activity. Of course, “substitution” is always a risk that could diminish demand. The supply side of the price function is much less clear. For instance, non-renewable commodities will eventually grow more scarce, while new technologies and efficiencies will continue to enhance supplies (and lower production costs) of both renewable and non-renewable resources. Of course, diversification (from lower correlations to other investments) is often cited as a primary benefit from commodity ownership, but source and levels of return remain nebulous. The premise put forth here is that direct ownership of commodities themselves (even in derivative-linked forms) represents a dubious form of “investment.” Commodities may represent another option for simply “storing wealth” or as an inflation hedge, subject nonetheless to the risks and vagaries of their unique supply and demand functions. Making (or losing) money in commodities and commodity derivatives may therefore remain a playground better suited to speculators and natural hedgers (i.e., commercial producers and users).

Leverage. The use of borrowed funds, or explicit leverage, in investing is inherently neither good nor bad. It becomes good or bad depending on how it is used, how much is used, and what is being levered (e.g., what the nature of the collateral is). It is important to remember that many “traditional” types of investing involve substantial leverage; for example, stocks of companies that have significant debt, or stocks/interests in commercial real estate investment entities that have considerable debt. The intent in using debt is to lever up the returns going to the reduced level of equity being invested. Of course the leverage works both ways; if there are losses, they fall entirely onto the equity (assuming that losses are not severe enough to impair the repayment of the debt). The premise put forward here is that the use of leverage within the context of an investment strategy/portfolio itself, may be prudent and desirable depending on how it is used, how much is used, and what is being levered (e.g., what the nature of the collateral is).

Derivatives. A derivative is defined as an instrument that derives its value from some underlying asset, reference rate (such as an interest rate), or index. It is recognized that derivatives involve certain risks as do all investments, but that their risk ensues primarily from how they are used in the context of an overall portfolio. Derivatives can be used in ways that increase or decrease the risk/return profile of an investment portfolio. Therefore, as with leverage, derivatives are inherently neither good nor bad. The primary risk of derivative strategies comes from the potential to leverage a position or to invest/speculate without committing capital. For example, to the extent that the underlying collateral for a long
derivatives position is invested in other than essentially risk-free assets, the position is “leveraged” in that additional risk is introduced into the portfolio. The use of derivatives to create such economic leverage should generally be prohibited. The use of “over-the-counter” (OTC) derivatives also introduces counter-party credit risk; this results because there is no well-capitalized clearinghouse that insures the performance of both parties to a derivative contract as there is for exchange-traded derivatives. Overall, uses of derivatives, if employed, should be well-defined, clearly understood, and generally seek to reduce or provide for better management of portfolio risks and/or costs.

**Short Selling.** “Short selling” is the practice whereby a security is “borrowed” and sold at today’s price; the security is then repurchased by the short seller in the market at a later date to replace the security borrowed from the lender’s account. As opposed to owning the security (or being “long” the security) if its price is expected to rise, one might sell the security short (or be “short” the security) if its price is expected to fall. Short sales are conducted through a broker: not only are the proceeds from the short sale kept on account with the broker, the short seller must also post margin (essentially, collateral) to ensure that the trader can cover any losses sustained if the security price rises during the period of the short sale. Whereas the maximum loss for a long position is the amount invested, the maximum loss from a short position is in theory unlimited (if the price were to rise to infinity). Although short sellers face particular challenges, risk-controlled short selling within an overall portfolio context can be rewarding if the manager has real skill in identifying both under- and over-valued securities. In fact, numerous academic studies have shown that by being allowed to combine long and short positions, a skilled manager is better equipped to translate his insights into profitable portfolio positions. One example of long/short portfolio strategies is a “130/30” strategy, where the manager is permitted to go up to 130 percent long and 30 percent short, such that the net long exposure is 100 percent. Effectively, such a portfolio can be no more risky than a traditional 100 percent long portfolio and yet provide more opportunities for alpha.

**Securities Lending.** Securities lending is taking the other side of the short sale (securities borrowing) described above. Many, if not most, large institutional investors, usually through their custodian bank, actively lend securities they own. The objective is to earn a modest level of incremental income from the program in one of the following ways: 1) if the borrower posts other securities as collateral, the lender simply receives a fee, usually quoted in basis points per annum of the original market value of the loaned security, or 2) if cash is posted as collateral, the revenue generated from lending is derived from the difference or “spread” between interest rates that are paid (the “rebate rate”) and received (the “reinvestment rate”) by the lender. It is recognized that the primary risk in securities lending is not that the borrower will default, due to required collateralization and margin maintenance, but that in the case of cash collateralization, the expected interest spread is not earned. If a securities lending program is to be approved, the risks must be fully understood and commensurate with expected incremental returns.

**Strategic Partnering.** Given certain internal constraints and competencies, “partnering” with fewer excellent managers capable of providing wide-ranging research and consultative feedback is desirable. Therefore, a focus in investment manager selection should be to employ at least some managers that can become such “strategic partners.”

**Flexible Yet Disciplined.** The overall management process for the UW Trust Funds’ investment program should be flexible enough to allow for capturing investment opportunities as they occur, yet maintain reasonable parameters to ensure prudence and care in execution.

**Keep It Simple.** The central premise here is that overall simplicity in an investment program is generally a virtue. Complex new investment schemes (e.g., “portable alpha,” “risk parity,” complex “overlay strategies,” etc.) should be treated with great skepticism. Generally, the simple basics of sound investing
practices (as discussed throughout this section) are sufficient to garner long-term investment success. Complex schemes and strategies should only be entertained if they are fully understood in terms of risks (often new and complex), expected rewards, and their impact on and interaction with the overall investment portfolio under not only “normal” but extreme market and economic conditions as well.

C. Other Premises

Corporate Activism and Social Responsibility. As an owner of stocks of public corporations, ownership rights should generally be exercised in a manner consistent with maximizing the value of the ownership interests. The voting of proxies, and the introduction of proxy proposals, is one important ownership right. Furthermore, while acknowledging that the primary fiduciary responsibility of the UW Trust Funds is to maximize financial gain on its investments, considerations of the “social responsibility” of the entities in which it may invest can still be entertained. The current policies related to proxy voting and “social responsibility” are summarized in Appendix 3.

Large Unendowed Bequests/Gifts. Large gifts where the donor does not restrict principal should become Board-designated endowments so as to provide for more perpetual support to the UW, unless compelling arguments for complete expenditure can be made. The current policy details are provided in Appendix 4.

Investing with a Wisconsin Focus. The Board’s primary fiduciary responsibility for UW Trust Funds is to maximize financial return, given an appropriate level of risk. The Trust Funds generally are not managed internally but are managed by external investment firms. These investment managers, for both public and private investments, have the ability to invest in Wisconsin-based companies and start-ups to the extent they deem them to be desirable and appropriate investments. Furthermore, the sources of Trust Funds’ assets are generally bequests and donations to benefit programs and activities as specified by the donors. Investing these funds with a Wisconsin focus would not provide any “additional” benefits for these programs and activities. In this case, the fiduciary responsibility is clearly to choose among the best investment options available without any bias as to where they are located. (An example of potentially achieving “additional” benefits through a Wisconsin focus might be the investment of State pension assets, which could result in greater State tax revenue and better funding of the pension plan.)
UNIVERSITY OF WISCONSIN SYSTEM TRUST FUNDS
Investment Policy Statement

II. Investment Policies

A. Asset Allocations, Policy Portfolios, and Benchmarks

**Strategic Asset Allocations.**  
**Purpose.** As noted earlier, determining and implementing the overall strategic asset allocations for the Funds is the first and most important step in implementing the investment program. The strategic, or policy, asset allocations should represent the long-term "equilibrium" or "normal" asset class positions for the portfolios, positions that under normal conditions are expected to best meet the Funds’ objectives for both investment returns and risk.

**Frequency of Asset Allocation Reviews.** Given their focus on long-term capital market assumptions, in-depth asset allocation reviews need not be conducted on a set schedule. However, it is anticipated that in-depth reviews will be made at least once every three years. Also, the spending policy for the Long Term Fund should generally be reviewed in conjunction with an asset allocation review.

**Sources of Data and Assumptions.** Trust Funds will rely heavily on input from its “strategic investment partners” for the capital market assumptions required in an asset allocation analysis. Such assumptions are intended to be conscious of not only long-term historical relationships and averages, but also projected long-term capital market conditions based upon current economic and financial environments. Asset class return expectations should also be “internally consistent” and reflect a “build-up” of the following components: inflation + the risk-free real rate of return + various risk-premiums depending on the riskiness of the asset class in question. Furthermore, in the case of equities, return expectations are also viewed as being comprised of the following “building blocks:” earnings per share growth (which for equities overall should equal nominal GDP growth) + dividend yield + return impact from change in the price-to-earnings (P/E) ratio.

**Reliance on Models and Judgment.** Strategic asset allocation reviews will rely heavily on the use of “mean-variance optimization” models (discussed more in the *Premises* section). Other statistical tools may also be utilized, such as “Monte Carlo Simulations,” to help predict probabilities of various outcomes. However, as these models and programs have significant limitations (also discussed earlier), results should be tempered with substantial amounts of judgment. Such judgmental factors are to be fully discussed as part of any reviews and recommendations of strategic asset allocations.

**Departures from Strategic Asset Allocation Targets.**  
**Setting Asset Allocation “Ranges.”** Strategic asset allocation analyses are generally intended to produce a desirable portfolio with precise percentage targets for each asset class. A common and acceptable practice is, however, to adopt permissible allocation ranges about these precise targets. This allows for some “tactical flexibility” for controlled deviations and limits, to some extent, the need for constant rebalancing. Asset allocation ranges are to be incorporated into approved asset allocations plans.

**Global Tactical Asset Allocation.** As discussed earlier in the *Premises* section, a core investment belief is that entire markets or asset classes can become significantly under- or over-valued, and that such inefficiencies can be exploited by capable and disciplined managers. Allocations to GTAA managers or strategies, if any, are to be fully described and incorporated into approved asset allocations plans. It is expected that any GTAA component will take one of two forms: 1) a dedicated portion of Fund assets will be allocated to a manager(s), or 2) an overlay strategy for the entire Fund will be employed. Furthermore, the GTAA program, if any, is to be designed so that overall Fund deviations from strategic asset allocation targets will normally be within permissible ranges. As with any active asset management
strategically, GTAA is to be pursued in a risk-controlled fashion and only to the extent that truly skilled and capable managers can be sourced.

Opportunist Investment Category. Also as discussed earlier in the Premises section, another core belief is that unusual investment opportunities may present themselves from time to time which would either 1) not quite fit into any currently acceptable asset class or strategy, or 2) shift the Fund’s strategic asset allocations beyond what is normally acceptable. To the extent that such “opportunistic investing” is permitted, it is to be incorporated into approved asset allocations plans. Absent any unusual opportunities or strategies, the allocation to Opportunistic investments will be zero. When an opportunistic investment is to be made, it is generally to be funded either by a roughly proportional reduction in all other asset classes, or the asset class most resembling the opportunistic investment is to be used as the primary funding source.

Current Asset Allocation Targets by Fund.
Long Term Fund. The current strategic asset allocation or “policy portfolio” for the Long Term Fund, without the incorporation of Global Tactical Asset Allocation or Opportunistic categories, is provided in Appendix 5. Therefore, this appendix provides the long-term strategic allocation, absent any allowance for significant tactical shifts or “opportunistic” investments. To the extent that GTAA and/or Opportunistic categories are to be incorporated, the combined target asset/category allocations are provided in Appendix 6. Asset class benchmarks are also provided in each Appendix.

Intermediate Term Fund. The current strategic asset allocation or “policy portfolio” for the Intermediate Term Fund is provided in Appendix 7. Asset class benchmarks are also shown.

B. Other Investment and Risk Management Policies

Rebalancing. Rebalancing to target asset allocations, or to within permissible ranges, is a key risk management practice, given again the primacy of asset allocation to achieving and maintaining the desired risk/return profile. Furthermore, to the extent that multiple managers, investment styles (e.g., growth vs. value, large- vs. small-cap, etc.), or “sub-asset classes” are employed within a particular broad asset class category, rebalancing should generally take place at these levels as well. Details of the current rebalancing policies are provided in Appendix 8.

Sector, Security, Individual Investment Concentration. Generally, limits on various investment concentration levels are not to be set at the broad policy level. However, it is expected that virtually all investment managers, strategies, and vehicles selected will employ diversification sufficient to eliminate a majority of “non-systematic” or idiosyncratic risks. Concentration levels will also be monitored closely, and in the case of “separate accounts,” individualized investment guidelines will address this as well as other aspects of risk management.

Individualized Investment Guidelines. In the case of “separately-managed accounts,” individualized investment guidelines are to be developed. These guidelines will vary depending on the asset class, style, and strategies involved, as well as the perceived capabilities of the investment manager in question. When commingled funds of any kind are contemplated, the funds’ documented investment guidelines, and expected investment practices, are to be carefully reviewed to determine their acceptability.

Regarding Specific Investment Strategies and Vehicles. Certain guidelines, restrictions, and expectations are expected to be broadly applicable to most, if not all, investment managers and portfolios. These are discussed below.
**UNIVERSITY OF WISCONSIN SYSTEM TRUST FUNDS**

**Investment Policy Statement**

**Leverage.** Generally, portfolios devoted to “traditional asset classes” (e.g., equities and fixed income) using “long-only” strategies are to be prohibited from using economic leverage. Notwithstanding this general prohibition, leverage may be used in Private Equity; Real Estate, and other similar Real Assets; Absolute Return, and other Hedge Fund strategies; and in the conduct of a “Securities Lending Program” (if such a program exists, it is to be fully described in an Appendix to the IPS). In these cases, leverage levels, limits, and practices are to be carefully reviewed as part of the initial and on-going due diligence process when investing in commingled vehicles. For separately-managed accounts, individualized investment guidelines are to address leverage.

**Derivatives.** The use of derivatives to create economic leverage is to be prohibited in traditional asset class portfolios. Furthermore, for any given portfolio, derivatives are generally to be limited to those whose value is directly linked to investments which would otherwise be permissible for that portfolio. Generally, derivatives are expected to be used primarily to reduce portfolio risks, provide needed liquidity, or to affect transactions more cost-effectively. For commingled vehicles; policies, practices, and limits on the use of derivatives are to be carefully reviewed as part of the initial and on-going due diligence process. For separately-managed accounts, individualized investment guidelines are to address the use of derivatives.

**Short Selling.** For commingled vehicles; policies, practices, and limits on short selling, if permitted at all, are to be carefully reviewed as part of the initial and on-going due diligence process. For separately-managed accounts, individualized investment guidelines are to address the practice of short selling, if permitted at all.

**Foreign Currency Exposure.** In general, the expectation will be that portfolios with assets denominated in foreign currencies will not hedge the foreign currency exposure either back into U.S. dollars or into another currency. To the extent that managers have demonstrated consistent skill in actively managing currency exposures, such activities may be considered. For commingled vehicles; policies, practices, and limits on currency exposure management are to be carefully reviewed as part of the initial and on-going due diligence process. For separately-managed accounts, individualized investment guidelines are to address currency exposure management.

**Trading.** Investment managers will be expected to execute all transactions at the lowest possible cost, which includes explicit commissions, bid/ask spread, and estimated market impact; in aggregate, this is referred to as obtaining “best execution.” The use of “soft dollar” arrangements, where higher commissions are paid to a broker in exchange for research or other services, is generally to be prohibited or strongly discouraged, as such research or services may not in fact directly benefit the portfolio in question.

**Manager Concentration.** Recognizing that one element of risk is “manager risk,” the risk that any particular investment manager may experience serious investment-related or organizational problems, manager-level concentration will be thoughtfully considered. Generally, acceptable manager concentration levels will depend greatly upon the asset class and investment strategy involved, as well as the expected level of “tracking error.”

**Risk Metrics and Budgeting.** The broad framework for risk management consists of the following key elements: the strategic asset allocation, other investment polices and individualized investment manager guidelines, and the benchmarks used for measuring performance objectives. However, certain risk metrics and budgeting practices are also to be employed to more quantitatively measure and control
UNIVERSITY OF WISCONSIN SYSTEM TRUST FUNDS
Investment Policy Statement

portfolio risk at the Fund level, particularly when active investment management is employed. These are discussed below.

**Total Risk.** The basis for the “risk budget” at the total portfolio level is the risk (volatility) of the Fund’s “policy portfolio” benchmark (these are given in Appendices 5 and 7). Thus the risk budget begins with the risk of the benchmark index, which assumes passive (or, in most cases, indexed) management within each asset class and no deviations (intentional or otherwise) from benchmark asset class weights. The “total risk” at the Fund level is to be defined as the annualized standard deviation of its monthly returns.

**Budget.** Total risk for the Long Term Fund is to be maintained at a level equal to the square root of the sum of the squares of the actual “benchmark risk” (described above) and the “active risk” budget (described below). As this precision is not practically achievable, the total risk of the Fund is generally expected to be managed within a 20 percent range of the total risk of the policy portfolio benchmark. For example, if the policy portfolio’s total risk is 10 percent, the allowable range is 8 percent to 12 percent.

**Active Risk.** Active risk ensues from any deviations away from the Fund-level policy benchmarks or from the compositions of the benchmarks for each asset class. The budget for active risk is to be consistent with the tolerance for active risk and the expectations for excess returns from active management. The active risk at the Fund level is to be defined and measured as the “tracking error,” which is the annualized standard deviation of the difference between monthly Fund returns and monthly policy portfolio benchmark returns.

**Budget.** The active risk, or tracking error, budget for the Long Term Fund is to be 5 percent annual standard deviation, and is expected to be generally managed within a range of 4 percent to 6 percent.

(Note: The risk metrics and budgeting processes described above may not be employed until the Funds have achieved actual asset allocations close to their target strategic allocations or “policy portfolio” weightings.)
III. Implementation

A. Roles and Responsibilities

Board of Regents. The full Board retains these specific responsibilities:
- Approve the Investment Policy Statement, which includes these key elements:
  - Asset allocations for each Fund
  - Spending policy for the Long Term Fund
  - Proxy voting and “social responsibility” policies
- Annually elect all UW Trust Funds-related officers (i.e., the Trust Officer and any Assistant Trust Officers, which includes the Director of the Office of Trust Funds)

Business and Finance Committee. The Board delegates all other management and administration responsibilities for the UW Trust Funds to its Business and Finance Committee. The Committee, in turn, is authorized, with the approval of the Board, to delegate such powers and responsibilities regarding the management and administration to the Trust Officer or other administrative officers or employees of the UW System as the Committee deems appropriate. The Committee retains these specific roles and responsibilities:
- Recommend to the full Board an Investment Policy Statement, which includes these key elements:
  - Asset allocations for each Fund
  - Spending policy for the Long Term Fund
  - Proxy voting and “social responsibility” policies
- Recommend to the full Board the UW Trust Funds-related officers (i.e., the Trust Officer and any Assistant Trust Officers, which includes the Director of the Office of Trust Funds)
- Otherwise oversee and monitor all other aspects of the management and administration of UW Trust Funds which have been delegated to others

Office of Finance.

Vice President for Finance/Trust Officer. Primary responsibilities of the Vice President for Finance are the following:
- In general, oversee the management and administration of the Office of Trust Funds
- Perform other duties as required by law or assigned by the Board or Committee

Office of Trust Funds.

Director/Assistant Trust Officer. Primary responsibilities of the Director of the Office of Trust Funds are the following:
- In general, implement, conduct, oversee, and monitor all other aspects of the management and administration of the UW Trust Funds, including all specific policies and practices contained herein or otherwise approved by the Committee and Board
- So as to be particularly clear regarding this important function, the Director is responsible for hiring (and terminating) external investment managers (subject to the selection process discussed later), provided, however, that he/she provides to the Committee a due diligence memo regarding each prospective hire (or termination) at least 15 business days in advance of the manager’s initial funding (or termination); should any Committee member voice opposition within that timeframe, the decision will be delayed pending further due diligence
- Submit periodic reports to the Committee (reporting/communication standards are discussed later)
- Manage and monitor all external and internal expenses and fees
- Manage and maintain all UW Trust Funds records
- Work with donors, estates, and trusts in taking in and properly establishing new Trust Funds accounts
UNIVERSITY OF WISCONSIN SYSTEM TRUST FUNDS
Investment Policy Statement

Other Investment Staff. Conduct all investment management-related and administrative functions as assigned by the Director of the Office of Trust Funds.

Accounting, Recordkeeping, and Administrative Staff. Primary responsibilities are the following:
- In general, maintain all accounting and recordkeeping systems related to the various unitized investment pools, or Funds, and for all accounts participating in those pools
- Assist benefiting campuses and departments in their utilization of Trust Funds accounts

General Counsel’s Office. Primary responsibilities are the following:
- Help ensure compliance with all applicable laws and regulations
- Provide assistance on any legal matters pertaining to bequests and other trust-related gifts
- Provide assistance on matters pertaining to investment-related contracts and agreements (external counsel may be hired under some circumstances)

Office of Procurement. Primary responsibilities are the following:
- Assist in the procurement of investment-related and other product/service providers, particularly where an RFP and competitive-bid process is warranted

Investment Managers. Primary responsibilities are the following:
- Manage the portfolio or commingled vehicle in conformance with their individualized investment guidelines or the guidelines of the commingled vehicle
- Provide the following information, at a minimum, to the Office of Trust Funds on a monthly basis (or quarterly for some asset classes): 1) portfolio holdings and valuations, 2) transaction summary, and 3) investment returns for the most recent period and since inception
- For separately-managed accounts, work with the custodian to reconcile any discrepancies regarding portfolio market valuations or calculated investment returns
- For commingled vehicles, provide safekeeping for underlying assets and interests
- Notify the Office of Trust Funds immediately upon any of the following events: any violation of established investment guidelines; a material change in the organization or the management of the portfolio; in the manager’s judgment, the consequences of financial/economic developments may have a material adverse impact on the portfolio; the firm becomes subject to legal or regulatory enforcement actions or other investment-related litigation
- Ensure the availability of a senior-level officer(s) for annual due diligence meetings
- Ensure the availability of senior-level officers and/or investment professionals for due diligence meetings at the offices of the manager upon request

Custodian. Primary responsibilities are the following:
- Provide safekeeping for all UW Trust Funds assets, held in separately-managed accounts
- Provide monthly portfolio holdings, valuation, and transaction reports in a timely fashion
- Provide performance reporting and other analytics as requested and available under the custodial contract, or otherwise contracted for
- Notify the Office of Trust Funds immediately when there is a material change in the organization or its processes and procedures, or when there are any concerns regarding portfolio transactions or valuations
- File on behalf of UW Trust Funds, participation in class action lawsuits pertaining to Fund investments
B. Investment Manager Selection, Retention, and Termination

Selection Process. Under all circumstances, the Office of Trust Funds is to conduct a thorough and documented due diligence process in the selection of investment managers or specific investment vehicles. In addition, in those cases where there are multiple providers of a desired investment product or service, UW and State procurement policies and practices are to be followed. This will typically involve a Request for Proposal (RFP) process and public notification of the impending vendor search. Also in these cases, an “Evaluation Team” or “Selection Committee” will be involved in the selection process. Such team or committee will include at least two members with financial or investment expertise who are external to the Office of Trust Funds.

It is recognized, however, that for certain investment opportunities, a competitive search process is not appropriate or even possible. Examples might include opportunities in various alternative asset classes, such as Private Equity, Real Estate, Timber, or Opportunistic investments. In many of these cases, the investment structure is a limited partnership with one-time opening and closing dates.

Major Selection and Retention Criteria. Provided below are areas which should be of particular focus in the investment manager selection process. It should be noted that these same areas should be the focus of on-going evaluations.

- Level of integrity and honesty
- Cogency of investment thesis and implementation processes
- Ownership structure and diffusion of ownership and profit interests
- Firm culture and history
- Cogency of strategic direction for the firm
- Evidence and significance of competitive advantages
- Importance of the product to the manager’s business
- Assets in the desired product/strategy, especially relative to the opportunity set
- Willingness to close products/strategies to maintain performance levels
- Alignment of interests (e.g., do managers co-invest significantly?)
- Risk control and management capabilities
- Sources of investment research and ideas (internal/proprietary vs. external)
- “Strategic partnering” potential
- Institutional focus
- Investment fees
- Long-term, risk-adjusted investment performance

Investment Vehicle Structures. There is to be no particular preference for the structure of an investment vehicle. Examples of different structures include separately-managed accounts, institutional mutual or other such commingled funds, limited partnerships, and limited liability companies. When there are opportunities to choose among different structures for a desired investment product, all aspects of their differences should be weighed in the decision-making process. Important differences might involve the following: investment minimums, fees and other costs, fee structure, liquidity, and legal/contractual provisions and protections.

Contracts. For separately-managed investment accounts, contracts or “investment management agreements” (IMAs) will generally be put into place. Individualized investment guidelines will also generally be made part of such IMAs. Such contracts or IMAs will be open-ended, with no set termination date; however, UW will retain the right to terminate for any reason with a 30-day advance
notice to the manager. (It is important to note that for separate accounts, the assets reside with the UW Trust Funds’ custodian and are so-titled.) For vehicles such as limited partnerships, the contractual agreements are to be carefully reviewed by Counsel to ensure their appropriateness. Where possible, “side-letter” agreements, which provide further protections or clarifications, should be contemplated.

**Termination Criteria.** Essentially, termination is to be considered when a manager no longer adequately meets an established standard(s) under the selection and retention criteria. Additionally, any change in firm ownership, or in regard to key investment personnel, should be grounds for immediate reevaluation.

**C. Codes of Ethics and Avoiding Conflicts of Interest**

**UW System Code of Ethics.** Pursuant to this Code, it is expected that no UW officials will make, participate in making, or influence a decision in which the official has a financial interest. Also, no member of the UW System staff may solicit or accept from any person or organization anything of value pursuant to an express or implied understanding that his or her conduct of University business would be influenced thereby.

**CFA Code of Ethics.** The Office of Trust Funds also adopts the Chartered Financial Analyst (CFA) Institute Code of Ethics and Standards of Professional Conduct for its internal investment staff. These are found at the following Web address: [http://www.cfainstitute.org/ethics/codes/ethics/pages/index.aspx](http://www.cfainstitute.org/ethics/codes/ethics/pages/index.aspx) and are incorporated by reference. Furthermore, external investment managers and professionals will be expected to either adopt the CFA Code or have similar codes of conduct in place.
IV. Evaluation

A. Monitoring and Measuring Success

Performance Expectations and Benchmarks.

*Asset Class Level.* Performance benchmarks for individual asset classes can be found in the Appendices which also provide Fund asset allocations (Appendices 5, 6 and 7).

*Investment Manager Level.* Each individual investment manager will be assigned an appropriate performance benchmark, which in many cases will be the same benchmark used for the entire asset class. In some cases, benchmarks which reflect a more appropriate sub-set of the broader asset class may be assigned. Performance comparisons relative to these benchmarks will be made not only on an absolute basis, but also on a risk-adjusted basis. Therefore, not only will investment returns be compared to benchmarks, but so too will various measures of portfolio risk (e.g., beta, duration, standard deviation of returns, Sharpe ratios, tracking error, information ratio, etc.). Finally, each investment manager will be compared to the median of an appropriate peer group, where available.

*Fund Level.*

*Long Term Fund.* Comparative benchmarks for the Long Term Fund as a whole are to be the following:

- “U.S.-centric 70/30” Benchmark – defined as 55 percent S&P 500, 15 percent MSCI EAFE, and 30 percent Barclay’s Aggregate Bond Indexes, which is to represent a more traditional portfolio
- “Global 70/30” Benchmark – defined as 70 percent MSCI ACWI and 30 percent Barclay’s Global Aggregate Bond Indexes, which is to represent a more globally-diversified traditional portfolio
- Spending Rate + CPI (and/or HEPI) + Expenses – which is to represent the “hurdle” rate for sustaining the endowment’s purchasing power
- NACUBO-Commonfund Study (and/or other Peer) Median(s) – which is to reflect the average performance of similar-sized university endowments
- “Policy portfolio” benchmark – as provided in Appendix 5, which is to represent a purely passive approach at both asset-class and Fund levels (note: this benchmark will not be employed until the Fund has achieved actual asset allocations close to its “policy portfolio” weightings)
- Risk-adjusted performance – both the volatility (standard deviation of returns) and Sharpe ratio (return per unit of volatility) of the Fund will also be compared to those of the above benchmarks where possible

Opportunistic Investment Category. There is no appropriate market or peer benchmarks for this investment category. However, the expectation for the category as a whole and over time, is that its inclusion will have enhanced the risk/return profile of the Fund (i.e., it will have provided for better risk-adjusted returns). Such evaluations should be periodically made to help determine whether the “opportunistic program” is adding value.

*Intermediate Term Fund.*

- Barclay’s Intermediate Aggregate Bond Index – which is to represent a more traditional intermediate “expendables” fund
- “Policy portfolio” benchmark – as provided in Appendix 7, which is to represent a purely passive approach at both asset-class and Fund levels (note: this benchmark will not be employed until the Fund has achieved actual asset allocations close to its “policy portfolio” weightings)
- Risk-adjusted performance – both the volatility (standard deviation of returns) and Sharpe ratio (return per unit of volatility) of the Fund will also be compared to those of the above benchmarks where possible
UNIVERSITY OF WISCONSIN SYSTEM TRUST FUNDS
Investment Policy Statement

On-Going Investment Manager Due Diligence. Due diligence does not end upon hiring an investment manager but is to continue throughout the life of the relationship. At a minimum, this on-going process is expected to include the following elements:

- Annual in-depth meetings with key investment and/or firm-level representatives
- In-depth meetings at managers’ offices once every two to three years
- Attendance at client conferences and educational forums when available
- Open telephonic or electronic communication with key personnel as needed

Monitoring and Managing Expenses. As mentioned earlier in the Implementation section, it is the responsibility of the Office of Trust Funds to monitor and manage both external and internal expenses related to the administration and management of the Trust Funds. External fees for investment management and other products and services are to be reasonable and competitive with similar products or services available. Expenses relating to internal investment, administrative, and accounting activities are to be managed to reasonable and acceptable levels, as these expenses too are charged against the investment Funds.

B. Reporting and Communication Standards

Reporting Expectations. The following reports are to incorporate the performance evaluation and benchmarking information discussed previously. These reports are to be provided to the Board and the Committee on a routine basis:

- Quarterly Investment Reviews – which are to include detailed market commentaries, investment performance data, and fund-level activities and transactions
- Annual Report – which is to provide annual data on sources and uses of the Funds, annual financial statements for the Trust Funds as a whole (consistent with the UW System’s audited financial statements), and information on the external and internal expenses of the Office of Trust Funds
- Annual Endowment Peer Benchmarking Report – which is to provide investment performance data and other points of comparison for peer institutions
- Annual Investment Manager Due Diligence Reports – which are to be brief reports summarizing the most recent annual due diligence meetings, and are to highlight any areas of concern
- Proxy Voting Reports – which, upon request by the Board, are to provide the Committee with voting records and results for proxy proposals voted internally.

These reports, with the exception of the manager due diligence reports, are also to be made publicly available via the Trust Funds’ web site.

Other Communication Expectations. It is expected that if there is any significant adverse development in the management of the Funds during any interim periods, the Director of the Office of Trust Funds will immediately communicate such information to the Trust Officer/Vice President for Finance, who may then direct that it be communicated to the Committee Chair.
UNIVERSITY OF WISCONSIN SYSTEM TRUST FUNDS
Investment Policy Statement

Appendix 1

PRIMARY FIDUCIARY AND MANAGEMENT RESPONSIBILITIES OF THE BOARD

Wisconsin Statutes, Board policies and the terms of the gifts, grants, and bequests themselves provide the basic framework within which UW Trust Funds are managed and its fiduciary responsibilities are established. This appendix outlines the principal provisions in these areas.

Statutory Provisions.
Section 36.29, Wisconsin Statutes. Section 36.29, Wis. Stats., authorizes the Board to accept gifts, grants and bequests for the benefit or advantage of the UW System, and to administer the funds comprised of such donations. This statute also establishes several restrictions and requirements with respect to these funds:
(1) Gifts, grants and bequests must be executed and enforced according to the provisions of the legal instrument establishing the donation, including all provisions and directions in such an instrument for the accumulation of the income of any fund or rents and profits of any real estate without being subject to the limitations and restrictions provided by law in other cases, except that no such income accumulation can be allowed to produce a fund more than 20 times as great as that originally given;
(2) No investment of the funds of such gifts, grants, or bequests shall knowingly be made in any company, corporation, subsidiary, or affiliate that practices or condones through its actions discrimination on the basis of race, religion, color, creed, or sex;
(3) The board may not invest more than 85% of trust funds in common stocks;
(4) Any grant, contract, gift, endowment, trust or segregated funds bequeathed or assigned to an institution or its component parts for any purpose whatsoever shall not be commingled or reassigned.

UPMIFA, s. 112.11, Wisconsin Statutes. The Uniform Prudent Management of Institutional Funds Act ("UPMIFA"), codified in s. 112.11, Wis. Stats., applies to institutional funds, defined as funds held by an institution exclusively for charitable purposes, including governmental organizations and universities, organized and operated exclusively for educational, religious, charitable or other eleemosynary purposes. UPMIFA describes the standard of conduct in managing and investing an institutional fund; the appropriation for expenditure of endowment funds, providing various rules of construction here; the delegation of management and investment functions; the release or modification of restrictions on management, investment, or purpose; and states that the statute applies to institutional funds existing on or after August 4, 2009, governing only decisions and actions taken on or after that date.

In general, UPMIFA grants broad authority to the institution to invest and reinvest institutional funds, unless otherwise limited by the applicable gift instrument or law. The institution may delegate its investment authority to its committees, its officers, or employees, or to other outside investment managers or advisors. The institution may also appropriate for expenditure a portion of the appreciated assets of an endowment fund, and make other expenditures as permitted by law, relevant gift instruments or the institutional charter. With respect to managing and investing, delegating management and investment functions, and making appropriations of appreciated assets, UPMIFA establishes the standard of fiduciary conduct that the institution must follow, requiring that the institution "act in good faith, with the care that an ordinarily prudent person in a like position would exercise under similar circumstances.” Section 112.11(3), (4), (5), Wis. Stats.
UPMIFA further permits the release or modification of any restrictions on the use or investment of funds, if the donor gives written consent. The institution also may apply to a state circuit court for modification of a restriction regarding the management or investment of an institutional fund, “if the restriction has become impracticable or wasteful, if it impairs the management or investment of the fund, or if, because of circumstances not anticipated by the donor, a modification of a restriction will further the purposes of the fund. . . . To the extent practicable, any modification must be made in accordance with the donor’s probable intention.” Under similar circumstances, the institution may also apply to a circuit court to modify the purpose of the fund or a restriction on the use of the fund, “in a manner consistent with the charitable purposes expressed in the gift instrument.” Lastly, release or modification for reasons described above regarding the purpose, management or investment of an institutional fund of less than $75,000 and more than 20 years old is permitted upon 60 days’ notification to the attorney general. Section 112.11(6), Wis. Stats.

Board Bylaws and Policies. 

Bylaws and Regent Policy Document 31-2. The Board has, through its Bylaws, delegated authority to the Business, Finance, and Audit Committee to "have charge of consideration of all matters related to . . . trust funds, . . . " (Chapter III, Section 3, Regent Bylaws.) In addition, the Committee has been delegated the authority to hire investment counsel, subject to Board approval, and to give discretionary authority to investment counsel in the purchase and sale of securities, "within guidelines determined by the Committee." The Board's Trust Officer (the Vice President for Business and Finance) has the duty to "receive, manage, and maintain records of all trust funds" to perform other duties required by law or assigned by the Board or Business, Finance, and Audit Committee (Chapter II, Section 8, Regent Bylaws).

Complementing these provisions in the Bylaws, Regent Policy Document (RPD) 31-2 expressly empowers the Committee to manage the Trust Funds, providing, in relevant part:

The management and administration of University Trust Funds, . . . is delegated to the [Business, Finance, and Audit] Committee; the said Committee is authorized and empowered to do all things necessary within the limitations imposed by law or by the terms of the specific gifts and bequests accepted by the Board of Regents to administer the funds so received and under the control of the Regents in an efficient and prudent manner; the Business and Finance Committee is authorized, with the approval of the Board, to delegate such powers and responsibilities regarding the management and administration of University Trust Funds to the Trust Officer or other administrative officers or employees of the University as the Committee may in its judgment deem appropriate; the Committee is authorized to employ investment counsel; and the Trust Officer of the Regents is directed to keep a separate record of the actions taken by the Business and Finance Committee on all matters relating to University Trust Funds and to distribute memoranda of such actions as soon as practicable to all members of the Board of Regents for their confidential information.

Compliance with Donor Terms. It is incumbent upon the Board to ensure that gifts and bequests be “executed and enforced according to the provisions of the instrument making the same,” s. 36.29, Wis. Stats. However, donor-imposed terms and conditions can sometimes impose practical problems; contravene current University policies; or, in some cases, no longer be legal. As the vast majority of bequests coming to the Board of Regents are unsolicited gifts from deceased donors who have not worked with the University in crafting their gift instrument, the opportunity to prevent such problematic donor terms is limited. When such issues arise, whether in working with a living donor before the gift is made or “after the fact,” the Trust Funds Office consults with the Office of General Counsel to determine appropriate actions consistent with Regent policy and applicable law.
The “spending policy” for an endowment specifies the methodology for determining what amounts are to be distributed for annual spending purposes. The policy should help ensure that the purchasing power of the endowment’s corpus is maintained.

**Current Policy. (Effective July 1, 2005.)** A “rate” of distribution (percent of assets) that reflects an achievable and sustainable level of real investment returns is to be determined. Real investment returns are those achieved over and above the relevant rate of inflation. The most relevant rate of inflation for University-related costs is the Higher Education Price Index (HEPI). HEPI is expected to roughly equal the Consumer Price Index (CPI) plus one percent over time. The spending rate should also be applied in a manner that helps smooth the volatility of the dollar level of annual distributions that may otherwise result from Fund market value fluctuations.

The spending rate is to be four percent (4%) per annum. This percentage is to be applied to a trailing three-year moving average of Fund market valuations (12 quarterly valuations) to determine the dollar value of the annual distribution. Investment income from the Fund plus proceeds from security sales as needed may be used to provide the required distribution. Realized annual investment returns above (below) the spending rate, will increase (decrease) the market value of the Fund’s corpus.
UNIVERSITY OF WISCONSIN SYSTEM TRUST FUNDS
Investment Policy Statement

Appendix 3

SUMMARY OF POLICIES ON PROXY VOTING
AND “SOCIAL RESPONSIBILITY”

It should be noted that this appendix provides concise summaries of the various relevant Regent Policy documents; that is, the policies are not quoted in their entirety here.

Regent Policy 31-10: Proxy Voting

Shareholder proxies dealing with “routine” corporate governance and management issues or other issues of a predominately financial or shareholder value/rights nature are generally to be voted by the investment managers, in accordance with each manager's proxy voting guidelines.

These issues generally include such items as the following:
- Election of directors
- Election of auditors
- Elimination of preemptive rights
- Amendments to corporate charter or by-laws which might materially affect shareholder rights
- Management recommendations regarding adding or amending indemnification provisions in charters or by-laws
- Authorization to issue common stock under option and incentive plans under most circumstances
- Issuance of additional shares of stock for other corporate purposes under most circumstances
- Acquisitions and mergers
- Changes to the Board of Directors; proposals relating to cumulative voting, annual election of directors, and staggered boards
- Outside director compensation (cash plus stock plans)

Shareholder proxies dealing with some aspect of “social responsibility” are generally to be voted (or directed to be voted) internally by the UW System Trust or Assistant Trust Officer(s) in accordance with various general guidelines approved by Board from time to time. The current guidelines group social responsibility-related proxies into the following major categories:
- Disclosures overall
- Labor and human rights
- Health and safety
- Environmental practices and animal welfare
- Climate change
- Sustainability
- Diversity and non-discrimination
- Political expenditures
- Cyber security

Regent Policy 31-13: Social Responsibility Investment Considerations

- The primary fiduciary responsibility is to maximize financial return, given an appropriate level of risk.
UNIVERSITY OF WISCONSIN SYSTEM TRUST FUNDS
Investment Policy Statement

• The Board acknowledges the importance of public concerns about corporate policies/practices that are discriminatory or cause substantial social injury.
• To enhance Board awareness of social concerns, a proxy review will be conducted, so as to highlight relevant shareholder proposals involving some aspect of social responsibility, such proxy proposals to be voted in accordance with Regent Policy 31-10: Proxy Voting.
• To solicit input from students, faculty, alumni and citizens on matters related to social concerns, the Business and Finance Committee of the Board of Regents may schedule a public forum at the request of parties interested in presenting such concerns to the Board of Regents.
• Given the Board’s, state and federal commitments to environmental protection, it is expected that the companies or other entities in which it invests will evidence similar commitment in their activities.
• Consistent with Wis. Stats. 36.29(1), investments made in any company employing persons in nations which by their laws discriminate on the basis of race, religion, color, creed or sex shall be divested in as prudent but rapid manner as possible.
• For donors who place a high priority on socially responsible investing, use of special investment vehicles will be explored.

Regent Policy 31-16: Sudan Divestment

• The Board wishes to join in concert with other institutional investors, states and other municipalities, and the U.S. government in restricting and discouraging business activity that provides support to the current government of Sudan, or otherwise abets acts of genocide or “ethnic cleansing” occurring in that country.
• Assets held in separately managed accounts shall not be invested in companies (“targeted companies”) which either directly or through an affiliated instrumentality meet the following criteria:
  ▪ Provide revenues to the Sudanese government through business with the government, government-owned companies, or government-controlled consortiums.
  ▪ Offer little substantive benefit to those outside of the Sudanese government.
  ▪ Have either demonstrated complicity in the Darfur genocide or have not taken any substantial action to halt the genocide.
  ▪ Provide military equipment, arms, or defense supplies to any domestic party in Sudan, including the Sudanese government and rebels.
• Non-investment in such companies will require divestment of current holdings and the screening out of such companies’ securities so as to prevent future investment in them.
• Investment is permissible in companies which, either directly or through an affiliated instrumentality, provide services clearly dedicated to social development for the whole country.
• Where invested assets are held in commingled or mutual fund accounts, letters are to be submitted to the contracted investment management firms requesting that the manager consider either adopting a similar Sudan-free investment policy for the existing fund, or consider creating a comparable separate commingled fund devoid of companies targeted as a result of this resolution. In the event that the manager introduces a comparable separate Sudan-free fund, the Board shall direct that all assets in the existing fund be transferred into the newly available, Sudan-free fund.
Regent Policy 31-15: Policy on Large Unendowed Bequests/Gifts

All new bequests/gifts of $250,000 or more where the donor is silent as to the expenditure of principal, shall be identified as designated endowments, with only the income from the trust available for expenditure in accordance with the terms of the trust agreement. However, where the donor explicitly states that the principal of the gift be made available for expenditure, this policy will not apply. If an institution wants an exception to this proposed rule, the request for exception, with appropriate justification, should be contained in the institution's recommendation for acceptance and be incorporated in the Regent resolution. If at a later date, the institution wishes to seek an exception to the Regent imposed restriction, it should submit a request to the Office of the Vice President for Finance for consideration at the next meeting of the Business and Finance Committee.”
### STRATEGIC ASSET ALLOCATIONS FOR THE LONG TERM FUND

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Target Strategic Allocations</th>
<th>Min./Max. Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Growth and High-Yielding Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global Developed Market Equities</td>
<td>27.5%</td>
<td>20% - 50%</td>
</tr>
<tr>
<td>Emerging Market Equities</td>
<td>7.5%</td>
<td>0% - 20%</td>
</tr>
<tr>
<td>Private Equity</td>
<td>10%</td>
<td>5% - 15%</td>
</tr>
<tr>
<td>High Yield Debt/Credit</td>
<td>10%</td>
<td>0% - 20%</td>
</tr>
<tr>
<td>Directional Hedge Fund Strategies</td>
<td>0%</td>
<td>0% - 15%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>55%</td>
<td>25% - 80%</td>
</tr>
<tr>
<td><strong>Event Risk- and Deflation-Hedge Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Quality Debt/Credit</td>
<td>15%</td>
<td>10% - 50%</td>
</tr>
<tr>
<td>U.S. Cash</td>
<td>0%</td>
<td>0% - 15%</td>
</tr>
<tr>
<td>Absolute Return Strategies</td>
<td>10%</td>
<td>0% - 20%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>25%</td>
<td>10% - 50%</td>
</tr>
<tr>
<td><strong>Real and Inflation-Hedge Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. TIPS</td>
<td>5%</td>
<td>5% - 15%</td>
</tr>
<tr>
<td>Real Assets</td>
<td>15%</td>
<td>5% - 25%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>20%</td>
<td>10% - 35%</td>
</tr>
<tr>
<td><strong>Opportunistic</strong></td>
<td>0%</td>
<td>0% - 20%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

**Indexes Broadly Representative of Each Asset Class/Strategy**

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Index(es)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Developed Market Equities</td>
<td>MSCI World Index</td>
</tr>
<tr>
<td>Emerging Market Equities</td>
<td>S&amp;P/IFC Investable Composite Index</td>
</tr>
<tr>
<td>Private Equity</td>
<td>Venture Economics Benchmarks/Public Equities + 300 bps</td>
</tr>
<tr>
<td>High Yield Debt/Credit</td>
<td>Bank of America High Yield BB/B Index</td>
</tr>
<tr>
<td>Directional Hedge Fund Strategies</td>
<td>HFRI Fund of Funds: Strategic Index</td>
</tr>
<tr>
<td>High Quality Debt/Credit</td>
<td>Citigroup 1-10 Year U.S. Treasury Index/Barclay’s Global Aggregate Bond Index</td>
</tr>
<tr>
<td>U.S. Cash</td>
<td>1-Month Treasury Bill</td>
</tr>
<tr>
<td>Absolute Return Strategies</td>
<td>HFRI Fund of Funds: Conservative Index</td>
</tr>
<tr>
<td>U.S. TIPS</td>
<td>Citigroup Inflation Linked Securities Index</td>
</tr>
<tr>
<td>Real Assets</td>
<td>Composite of various indexes (e.g., NCREIF Property, NCREIF Timber Indexes, DJ-AIG Commodities Index (of spot prices)/CPI + 300 bps</td>
</tr>
</tbody>
</table>

Note: The “policy portfolio” benchmark for the Long Term Fund is comprised of the above indexes, weighted so as to match the “target strategic allocations.”
Asset Allocations

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Target Allocations</th>
<th>Min./Max. Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GLOBAL TACTICAL ASSET ALLOCATION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global Tactical Asset Allocation</td>
<td>25%</td>
<td>20% - 30%</td>
</tr>
<tr>
<td>Growth and High-Yielding Assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global Developed Market Equities</td>
<td>18%</td>
<td>15% - 35%</td>
</tr>
<tr>
<td>Emerging Market Equities</td>
<td>5%</td>
<td>0% - 10%</td>
</tr>
<tr>
<td>Private Equity</td>
<td>10%</td>
<td>5% - 15%</td>
</tr>
<tr>
<td>High Yield Debt/Credit</td>
<td>7%</td>
<td>0% - 15%</td>
</tr>
<tr>
<td>Directional Hedge Fund Strategies</td>
<td>0%</td>
<td>0% - 15%</td>
</tr>
<tr>
<td></td>
<td><strong>40%</strong></td>
<td><strong>20% - 60%</strong></td>
</tr>
<tr>
<td>Event Risk- and Deflation-Hedge Assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Quality Debt/Credit</td>
<td>10%</td>
<td>5% - 35%</td>
</tr>
<tr>
<td>U.S. Cash</td>
<td>0%</td>
<td>0% - 10%</td>
</tr>
<tr>
<td>Absolute Return Strategies</td>
<td>7%</td>
<td>0% - 15%</td>
</tr>
<tr>
<td></td>
<td><strong>17%</strong></td>
<td><strong>5% - 35%</strong></td>
</tr>
<tr>
<td>Real and Inflation-Hedge Assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. TIPS</td>
<td>3%</td>
<td>0% - 10%</td>
</tr>
<tr>
<td>Real Assets</td>
<td>15%</td>
<td>5% - 25%</td>
</tr>
<tr>
<td></td>
<td><strong>18%</strong></td>
<td><strong>5% - 25%</strong></td>
</tr>
<tr>
<td>Opportunistic</td>
<td>0%</td>
<td>0% - 20%</td>
</tr>
<tr>
<td></td>
<td><strong>100%</strong></td>
<td></td>
</tr>
</tbody>
</table>

Additional Representative Indexes/Benchmarks

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Index(es)/Benchmark(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Tactical Asset Allocation</td>
<td>60% MSCI World Index, 20% Citigroup 3-Month T-Bill, 20% Barclay’s U.S. Aggregate Bond Index/70% MSCI ACWI Index, 30% Barclay’s Global Aggregate Bond Index</td>
</tr>
<tr>
<td>Opportunistic</td>
<td>There is no appropriate market index for this strategy; however, performance expectations are discussed in the body of the IPS.</td>
</tr>
</tbody>
</table>

Note: Given a dedicated allocation to GTAA, the strategic asset allocation targets shown in the prior appendix are applicable only to that portion of the Fund not dedicated to GTAA. Therefore, incorporating the GTAA component as a targeted allocation for the entire Fund requires that the dedicated Fund allocations to individual asset classes be adjusted proportionally downward. However, the desired allocations for those asset classes not represented at all in the portion of the Fund given over to GTAA are not adjusted but remain at their strategic allocation levels for the entire portfolio. Asset classes not currently represented in the GTAA component are Private Equity and Real Assets (this is due largely to their illiquidity and/or unusual ownership structure).
### STRATEGIC ASSET ALLOCATIONS FOR THE INTERMEDIATE TERM FUND

**Asset Allocations**

<table>
<thead>
<tr>
<th>INTERMEDIATE TERM FUND</th>
<th>Target Strategic Allocations (Policy Portfolio)</th>
<th>Min./Max. Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Growth and High-Yielding Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global Developed Market Equities</td>
<td>15%</td>
<td>5% - 20%</td>
</tr>
<tr>
<td>Emerging Market Equities</td>
<td>0%</td>
<td>0% - 5%</td>
</tr>
<tr>
<td>High Yield Debt/Credit</td>
<td>5%</td>
<td>0% - 10%</td>
</tr>
<tr>
<td></td>
<td>20%</td>
<td>5% - 25%</td>
</tr>
<tr>
<td><strong>Event Risk- and Deflation-Hedge Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Quality Debt/Credit</td>
<td>50%</td>
<td>40% - 75%</td>
</tr>
<tr>
<td>U.S. Cash</td>
<td>5%</td>
<td>0% - 15%</td>
</tr>
<tr>
<td>Absolute Return Strategies</td>
<td>10%</td>
<td>5% - 15%</td>
</tr>
<tr>
<td></td>
<td>65%</td>
<td>45% - 80%</td>
</tr>
<tr>
<td><strong>Real and Inflation-Hedge Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. TIPS</td>
<td>15%</td>
<td>5% - 30%</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

**Indexes Broadly Representative of Each Asset Class/Strategy**

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Developed Market Equities</td>
<td>MSCI World Index</td>
</tr>
<tr>
<td>Emerging Market Equities</td>
<td>S&amp;P/IFC Investable Composite Index</td>
</tr>
<tr>
<td>High Yield Debt/Credit</td>
<td>Bank of America High Yield BB/B Index</td>
</tr>
<tr>
<td>High Quality Debt/Credit</td>
<td>Citigroup 1-10 Year U.S. Treasury Index/Barclay’s U.S. Aggregate Bond Index</td>
</tr>
<tr>
<td>U.S. Cash</td>
<td>1-Month Treasury Bill</td>
</tr>
<tr>
<td>Absolute Return Strategies</td>
<td>HFRI Fund of Funds: Conservative Index</td>
</tr>
<tr>
<td>U.S. TIPS</td>
<td>Barclay’s 0-5 Year TIPS Index</td>
</tr>
</tbody>
</table>

Note: The “policy portfolio” benchmark for the Intermediate Term Fund is comprised of the above indexes, weighted so as to match the “target strategic allocations.”
General Policy and Practices. To maintain desired risk tolerance profiles, portfolio rebalancing to at least within allowable asset class exposures will be conducted no less frequently than quarterly. The purpose of rebalancing is to control risk and maintain the policy asset allocations within the ranges approved by the Committee and the Board. Minimizing transaction costs will be the focus when implementing rebalancing activities, and new cash flow will be utilized to the extent possible. Also, to the extent that multiple managers, strategies, styles, or “sub asset classes” are employed within a broad asset class, rebalancing to their target allocations should also take place. Rebalancing activities, or lack thereof, are to be regularly reported to the Committee.

Use of Derivatives. In unusual circumstances, derivatives may be used to affect certain rebalancings, when doing so by buying and selling actual portfolio holdings is deemed impractical, too costly, and/or too time-consuming. However, it is anticipated that such derivative positions would not be long-term in nature but would be unwound upon being able to transact in the underlying physical securities.

Illiquid Asset Classes. It is recognized that withdrawing from or adding to certain illiquid asset classes (e.g., Private Equity, Private Real Estate, Timber, etc.) for regular portfolio rebalancing purposes is generally not possible or practical. Therefore, these asset classes will generally be excluded from the regular rebalancing activities. However, on a longer-term basis, efforts will be made to maintain these asset classes at their targeted, or range-bound, levels.

Tactical Considerations. Maintaining or developing asset allocations within the permissible ranges will be at the discretion of the Director of the Office of Trust Funds. Generally, such decisions will be based on perceived relative valuations of asset classes and are expected to be consistent with the views of the Global Tactical Asset Allocation manager(s) and other “strategic partners.”

“Ramping Up” and “Ramping Down” Asset Allocations. It is also recognized that as the Funds need to either add new asset classes or exit existing asset classes as a result of changes to the strategic asset allocation, taking considerable time to accomplish these changes may be required or warranted. This could be due either to the nature of the asset class (e.g., Private Equity) and/or concern about then-current valuation levels. In these cases, the Director of the Trust Funds Office has discretion as to the timing of these shifts and how assets are to be deployed in the interim. This may result in cases where actual asset allocations are not within their permissible ranges; however, such deviations are to be temporary in nature.