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62

# **INVESTMENT POLICY, OBJECTIVES, AND GUIDELINES**

**STATE OF WISCONSIN INVESTMENT BOARD**

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Table of Contents (To be Modified)

INTRODUCTION .....	2
MISSION STATEMENTS .....	3
IMPLEMENTATION POLICIES .....	5
INVESTMENT GUIDELINES – INTRODUCTION .....	10
GENERAL COMPULSORY GUIDELINES.....	11
PORTFOLIO COMPULSORY GUIDELINES .....	13
ACTIVE U.S. EQUITY PORTFOLIO GUIDELINES .....	13
INTERNATIONAL EQUITIES PORTFOLIO GUIDELINES .....	14
U.S. FIXED INCOME PORTFOLIO GUIDELINES .....	14
GLOBAL BOND PORTFOLIO GUIDELINES.....	15
GENERAL GUIDELINES FOR NON-PUBLIC PORTFOLIOS .....	16
NATIONAL PRIVATE DEBT PORTFOLIO GUIDELINES .....	17
WISCONSIN PRIVATE DEBT PORTFOLIO GUIDELINES .....	17
PRIVATE EQUITY PORTFOLIO .....	19
REAL ESTATE PORTFOLIO .....	19
REAL ESTATE COMMERCIAL MORTGAGE PORTFOLIO .....	20
STATE INVESTMENT FUND .....	22
WISCONSIN CERTIFICATE OF DEPOSIT PROGRAM .....	25
LOCAL GOVERNMENT PROPERTY INSURANCE FUND.....	26
STATE HISTORICAL SOCIETY TRUST FUND .....	27
STATE LIFE INSURANCE FUND.....	28
PATIENTS COMPENSATION FUND .....	29
TUITION TRUST FUND – EDVEST WISCONSIN PROGRAM .....	31
APPENDIX 1: HISTORICAL STRATEGIC ASSET ALLOCATION TARGETS.....	32
APPENDIX 2: SPECIFIC INVESTMENT PERFORMANCE OBJECTIVES .....	34
APPENDIX 3: SOFT PARAMETERS – ASSET CLASS AND PORTFOLIO .....	36
APPENDIX 4: PORTFOLIO PERFORMANCE CALCULATIONS.....	40

## INTRODUCTION

The State of Wisconsin Investment Board ("SWIB") is an independent state agency responsible for the management and investment of all funds entrusted to it, including assets of the Wisconsin Retirement System (WRS), the State Investment Fund, and the assets of various other state agencies and programs. In its role as investment manager for these funds, SWIB is held by law to a high standard of fiduciary duty.

SWIB was created by the Wisconsin Legislature for the sole purpose of providing professional investment management of trusts and public funds under its control, in accordance with its standard of fiduciary responsibility. The Trustees of the Board have established the investment guidelines set forth herein, pursuant to a comprehensive and ongoing evaluation of the appropriate risk and return standards for each fund under management. These guidelines are intended to assist in development of a diversified portfolio of investments, tailored to accomplish the purpose of each fund within acceptable risk parameters. They represent a delegation of standing authority to investment managers within the organization, in an effort to promote efficient and cost effective operation of the funds.

These guidelines are not intended to represent an absolute limit on the type of investments which can be made by the Board or considered by staff. In many instances, investments which fall outside of the standing authority delegated to Investment Board staff, may well be appropriate for inclusion in one or more of the Board's portfolios. The Trustees of the Board explicitly reserve the right to authorize such other investments as they deem consistent with the Board's responsibilities as a fiduciary.

Accordingly, the Trustees of the Board hereby delegate to the Executive Director and professional investment staff of the Board, standing authority to make prudent investments within the following investment guidelines, pursuant to sections 15.02(4) and 25.16(1) of the Statutes and section IB 2.02 of the Wisconsin Administrative Code.

# MISSION STATEMENTS

## The Wisconsin Retirement System (WRS)

The assets of the WRS constitute a large majority of the total funds invested by SWIB. The retirement funds are managed in both domestic and foreign, and long-term and short-term investments, across a wide range of asset types and classes. The WRS assets are divided into two funds--A Fixed Retirement Investment Trust and a Variable Retirement Investment Trust. The Fixed Trust is a broadly diversified portfolio of bonds, stocks, mortgages, non-public securities, real estate and other holdings. The Variable Trust Fund is primarily invested in common stocks and other equity holdings.

### A. Fixed Retirement Investment Trust

The Fixed Trust Fund consists of the retirement contributions made by and on behalf of participants in the WRS. These participants include state, school, and local government employees. All participant contributions are invested through this Trust unless the participant has elected to contribute to the Variable Trust.

### B. Variable Retirement Investment Trust

The Variable Trust, like the Fixed Trust, is a pooled fund consisting of retirement contributions for the participants within the WRS. A qualified participant can elect to credit up to 50% of their total monthly retirement contribution to the Variable Trust, with the balance going to the Fixed Trust. The purpose of the Variable Trust is to permit participants to share in the expanding economy of the nation through the profits of business and industry. However, unlike the Fixed Trust, the Variable Trust does not enjoy diversification across a variety of different asset classes and could be subject to greater volatility of earnings.

### **The State Investment Fund**

The State Investment Fund (SIF) is a pool of the cash balances of various state agencies and departments, WRS fund cash balances pending longer term investment, and numerous other local governmental bodies which elect to participate in the SIF through the Local Government Investment Pool. The SIF functions as the state's cash management fund. By pooling idle cash balances of the WRS, all state funds and a large number of municipalities, the SIF provides all participants in the fund with strong rates of return and enhanced liquidity. The stated objectives of the SIF are to provide liquidity, safety of principal and reasonable rates of return. The SIF is invested primarily in obligations of the U.S. Government and its agencies, and high quality commercial bank and corporate debt obligations.

### **Other Funds**

SWIB also manages several other smaller funds established by state law. Separate objectives, policies, and guidelines apply to investment of the assets in each fund. They are managed in accordance with risk and investment parameters determined to be appropriate for achieving the purpose of each fund.

## **IMPLEMENTATION**

This document is intended to summarize the fundamental investment objectives, philosophies, and directives relative to the implementation and oversight of the investment of SWIB assets. Key areas are elaborated upon, and specific investment guidelines are articulated. The document is intended to provide an abridged outline of the common and critical components of successful administration of a large pool of public assets. Detailed supplemental policies and procedures for portfolios are maintained separately.

The following practices pertain primarily to the management of WRS assets. Other funds are managed by SWIB in similar but not identical fashion.

### **BROAD INVESTMENT OBJECTIVES**

SWIB's overall objectives in managing WRS assets are:

1. To ensure that sufficient funds are available to meet obligations;
2. To comply with all applicable fiduciary and legal standards; and
3. To create marginal value added to help reduce the cost of, or to improve, benefits.

### **KEY INVESTMENT PHILOSOPHIES**

1. Through quantitative asset/liability modeling and qualitative evaluation, an appropriate strategic asset allocation mix can be selected. Rebalancing back to strategic targets after allowing a predetermined amount of "drift" around targets effectively contains allocation risk and can add value by enforcing a "buy low, sell high" approach at the asset class level.
2. A well-diversified asset mix dominated by equities is a favorable position for meeting long-term objectives, recognizing that strategies will not always appear to add value over shorter time frames. It is essential to hold to the investment program during difficult times, and the diversified mixture will mitigate the impact of negative market environments.
3. A core of passive investments within major asset classes deemed to be relatively efficient provides risk control to enable fully active strategies, and facilitates timely fund rebalancing activities.
4. Over the long term, active management can add value beyond market-neutral benchmarks at the asset class, sector, and security levels by exploiting market inefficiencies and their resulting valuation opportunities. Relatively more or less can be managed actively within asset type based on an assessment of the level of market efficiency and opportunity.

5. Risk management and cost control are integral to the entire investment process. Risk is addressed from asset allocation through individual security selection and ex post measurement by a sound risk management structure. Costs are contained through lower-cost internal and passive management approaches, and external fee negotiations.
6. Fund and portfolio results are most appropriately measured against market indices, representing neutral, or passive market positions. Peer comparisons are fraught with difficulties due to differences in liability structure, investment style, risk preferences, and inconsistencies over time, and are used only as secondary comparisons. Results are evaluated on the basis of investment return as well as return for the level of risk taken on.

## RESPONSIBILITIES

SWIB's investment responsibilities break down into these key areas:

1. Asset Allocation
2. Asset Class Structure
3. Guideline Formulation and Benchmark Selection
4. Manager Selection and Portfolio Implementation
5. Monitoring/Maintenance
  - (a) Fund Rebalancing
  - (b) Risk Monitoring and Compliance
  - (c) Performance Evaluations

## ASSET ALLOCATION

SWIB undertakes an annual review of its strategic asset allocation plan to determine a suitable target allocation for each asset class included in the portfolio. The strategic nature of these reviews contemplates a long-term (5-7 years) time horizon over which potential results are evaluated. This exercise is not an attempt to predict short-term market movements, but an effort to understand the long-term impacts of poor, normal, and above average market results.

In addition to the potential future market impacts, SWIB also contemplates the impacts of benefit changes, the soundness of investment return and risk expectations, and the asset allocation policies of its peers.

Historical strategic asset allocation targets by calendar year are contained in *Appendix 1* for the Fixed and Variable Trust Funds.

The policy targets that have been adopted for the Fixed Trust Fund are currently:

U.S. Equities .....	39%
Fixed Income .....	34%
International Equities .....	18%
Real Estate .....	4%
Alternatives .....	5%

Based on the assumptions used in the review, this portfolio has a return expectation of approximately 8.8% (6.2% real return). However, in one out of three years, the return is expected to be higher than 21.3% or lower than -3.7%.

The policy targets that have been adopted for the Variable Trust Fund are currently:

U.S. Equities .....	80%
International Equities .....	20%

Based on the assumptions used in the review, this portfolio has a return expectation of approximately 9.0%. However, in one out of three years, the return is expected to be higher than 25.8% or lower than -7.8%.

### **ASSET CLASS STRUCTURE**

Major asset class portfolios will be structured in a manner that attempts to effectively cover the universe represented by the asset class benchmarks, and provide adequate flexibility to position the asset class as desired relative to benchmarks. Index funds and actively managed portfolios will be combined in a manner that attempts to accomplish desired performance objectives within acceptable risk parameters.

SWIB is subject to a Wisconsin statute that limits external management (not including index and other commingled funds) to 15% of its total assets. In structuring asset class portfolios in light of this limitation, external allocations will be rationed to investment advisors operating in less efficient markets and/or advisors who are able to provide strategic assistance to SWIB's internal managers.

### **ASSET ALLOCATION REBALANCING**

Fixed and Variable Fund asset allocations will be reviewed monthly for potential rebalancing. When feasible, index funds will be used to facilitate rebalancings to minimize time frame and costs. Derivative securities may be used to implement temporary adjustments. When active portfolios are used in a rebalance, portfolio managers will be consulted and included in the process.

When a major liquid asset class (*i.e.*, U.S. Equities, Fixed Income, International Equities) exceeds  $\pm 10\%$  of its target allocation, a rebalancing exercise will be initiated. When a rebalance is triggered, specific dollar amounts will be considered for movement based on the degree of the over/underweight, liquidity characteristics, and current market conditions.

## **RISK MONITORING AND COMPLIANCE**

It is recognized that risk issues permeate the entire investment process, and risk is considered throughout the investment process from asset allocation to performance evaluation. Ongoing monitoring will be accomplished through a “mosaic” approach, wherein multiple forms of analysis and reporting contribute to the total picture. Inspection of levels of diversification, nominal risk exposures, risk/return plots, Value at Risk, tracking error, and worst case scenario modeling form the core of the monitoring process. Quarterly comprehensive reports will be assembled and presented to SWIB’s Risk Committee and the Board of Trustees.

SWIB’S Compliance Officer will review portfolios and asset classes monthly for firm guideline as well as softer risk parameter conformance. Portfolios out of guideline compliance are brought into compliance immediately, or a plan for doing so is discussed and approved by the Risk and Investment Committee. Portfolios outside of softer risk parameters are discussed with the Committee, and justification for maintaining the exposure, if desired, is provided to the Committee. Decisions based on compliance issues are brought to the Board of Trustees for their information and vote if required.

## **PERFORMANCE EVALUATIONS**

SWIB will review monthly fund, portfolio, and benchmark returns. At least quarterly, reviews of performance and allocation/guideline compliance will be conducted.

Performance reviews will be conducted versus benchmarks and peers as outlined in *Appendices 2-3*. Quarterly results will be evaluated to review progress toward longer term objectives. Comprehensive performance evaluations will be conducted annually. It is understood that there are likely to be intermittent periods when portfolio performance deviates from market indexes. During such times, comparisons with specific peer groups will also be considered.

## **SPECIFIC INVESTMENT PERFORMANCE OBJECTIVES**

The following are goals SWIB will seek to meet in managing WRS assets. *Appendix 2* contains additional objectives at the asset class and portfolio levels.

### **A. Fixed Trust Fund**

1. A long-term annualized return in excess of 3.5% above wage inflation.
2. A return in excess of a hypothetical portfolio comprised of asset class benchmarks weighted by strategic target allocations (adjusted for 2% cash), over all cumulative time periods over three years in length:

39%	Russell 3000
18%	Morgan Stanley All Country World Index ex US
34%	Fixed Income Roll Up
4%	NCREIF (National Council of Real Estate Investment Fiduciaries)
5%	“15%”

3. A nominal return in excess of the Fund's actuarial earnings assumption (currently 8%) over a long-term period (5 to 10 year periods).
4. A return ranking of median or above median versus SWIB's peers (large public pension funds) over five-year periods, with a volatility of return ranking of median or below median.

**B. Variable Trust Fund**

1. A return in excess of a hypothetical portfolio comprised of asset class benchmarks weighted by strategic target allocations (adjusted for 2% cash), over all cumulative time periods over three years in length:  
  
80% Russell 3000  
20% Morgan Stanley All Country World Index ex US
2. A return ranking of median or above median versus SWIB's peers' (large public pension funds) equity portfolio returns over five-year periods, with a volatility of equity return ranking of median or below median.

## **INVESTMENT GUIDELINES - INTRODUCTION**

Each portfolio will be assigned “hard” (compulsory) guidelines and may be assigned “soft” (expected) parameters intended to trigger supervisory and Risk and Investment Committee attention. Compulsory guidelines refer to issues that require correction and/or the receipt of dispensation from the appropriate authority. Expected parameters refer to desired characteristics and/or risk exposures. Managers, however, are allowed to deviate from expected parameters in pursuit of excess return, subject to potential supervisory and/or Risk and Investment Committee inquiry and discussion. The compulsory guidelines are included in the body of this document. Expected parameters for each portfolio are detailed in *Appendix 3*.

## GENERAL COMPULSORY GUIDELINES

The following compulsory guidelines are applicable to all portfolios. Individual portfolio guidelines appear subsequently.

1. All investment decisions are subject to all applicable federal and state statutes and are to be held to the prudent expert fiduciary standard as set forth in the state statutes.
2. Each portfolio will maintain a prudent level of diversification within its area of specialization.
3. All securities trades are subject to a best execution standard that maximizes, to the extent practical within legal constraints, overall earnings.
4. Exposure limits are to be applied at the time of purchase. Unless otherwise indicated, "value" shall mean market value including uninvested cash.
5. Eligible securities must be issued by entities incorporated in or organized under the laws of any sovereign state or territory listed as "Free" or "Partly Free" in the most recent version of the Freedom House Index.
6. Funds or commingled investment pools authorized to invest more than 50% of their capital outside the U.S. shall be considered non-U.S. investments.
7. All holdings may be sold.
8. Credit quality rating requirements refer to an entire rating level, e.g., "A or better" includes "A-" and better ratings. Investment grade securities are those rated "BBB-" or better (or the equivalent rating agency rating).
9. SWIB may not initiate improvement or development of real property owned or controlled by SWIB without making provisions for compliance with applicable Federal, state and local codes and ordinances.
10. Developed and emerging market designations are those defined by the International Finance Corporation (IFC), though all countries included in a portfolio's benchmark shall be eligible for investment regardless of the IFC designation, provided other requirements of these guidelines are met. Investments where a reasonable level of return is guaranteed or otherwise ensured outside the emerging markets shall not be considered emerging market investments.
11. Any derivative issuer or counter-party used must be a recognized exchange or a bank or broker dealer with an actual credit rating of at least: (1) 'B/C' or better from Thomson Bankwatch (Keefe); (2) 'A1/P1' or better on short-term debt from S&P or Moody's; or (3) 'A' or better on long-term debt from S&P or Moody's.
12. Follow-on investments, and modifications to or waivers of investment terms, may be made on existing investments that were originally acquired with Investment Board or Board Committee approval outside the delegated authority of these Guidelines.

However, follow-on investments and modifications or waivers that would result in a “material change” to a Board or Board Committee-approved investment term may not be made without prior approval of the Board or appropriate Committee. Nevertheless, material changes need not be approved by the Board or Board Committee if, under the Investment Guidelines in effect at the time of the change, the original investment could have been made under authority delegated to the portfolio manager. Asset and property management or leasing activities done in the normal course of business for assets in which SWIB has an interest shall also not be considered changes to initially approved investment terms under this paragraph. Changes (other than property and asset management and leasing activities) made under this paragraph that do not require Board or Board Committee approval shall be reported to the Board or appropriate Committee at or before its next meeting. Changes made to investments originally reviewed by the Staff Risk and Investment Committee shall be reported to the Risk and Investment Committee at or before its next meeting. A “material change” shall be interpreted to include the following, whenever the additional investment or action involves the lesser of \$5 million or 20% of the amount originally approved for investment:

- a. Forgiveness of debt;
  - b. Extension of a maturity or payment date by more than two years, or an extension of 6 months if interest does not accrue on the full amount during the deferral;
  - c. Conversion of debt to equity;
  - d. Release of co-obligors or guarantors;
  - e. Reduction of an interest rate;
  - f. Release of collateral;
  - g. Subordination or other lowering of SWIB's position in the capital structure; or
  - h. Investment of additional SWIB monies in the entity.
13. The Executive Director or, in his or her absence, the Assistant Executive Director may suspend any of the guideline limits in an emergency after an attempt has been made to reach a majority of the Board. The members of the Board shall be notified by the end of the following business day of the reason for the suspension of the limits.
14. Dollar limitations for commitments to funds or other investments do not apply to incidental and customary contractual reinvestment, indemnity, reserve or similar obligations incorporated into the terms of an investment, provided such obligations are not expected to amount to more than 10% of the base commitment.

## **PORTFOLIO COMPULSORY GUIDELINES**

### **A. Active U.S. Equity Portfolio Guidelines**

The U.S. Equity Portfolios are invested in publicly traded equity securities, primarily using U.S. common stocks and convertible bonds, as well as partnership interests.

1. When aggregated with other SWIB portfolios, 20% represents the maximum allowable ownership of outstanding shares of any single class of equity securities of any one issuer.
2. When aggregated with other SWIB portfolios, no single issuer may represent more than 7% of the total market value of all SWIB U.S. equity portfolios.
3. Purchases of privately placed securities are permitted, provided that the issuer agrees to assist in a public sale upon reasonable request by SWIB.
4. When aggregated with other SWIB portfolios, issues subject to restricted trading shall not constitute more than 5% of the market value of all SWIB U.S. equity portfolios.
5. Up to 10% of each portfolio's market value may be invested in developed market ADRs (or similar securities) and Canadian securities.
6. Subject to review by the SWIB Risk and Investment Committee, the stock equivalent value of index futures, index options, and options on index futures may represent up to 20% of the aggregate value of all SWIB U.S. equity portfolios.
7. Put options may be purchased and call options may be sold only in connection with existing portfolio positions, *i.e.*, all such individual security options must be covered at all times.

## **B. International Equities Portfolio Guidelines**

The International Equities Portfolio invests in publicly traded equity securities, including ADR's and equivalent securities, primarily in non-U.S. developed markets.

1. U.S. equity investments shall not exceed 10% of a portfolio's value .
2. Investments in companies domiciled in emerging market countries shall not exceed 15% of a portfolio's market value.
3. Investments in a single company shall not exceed 10% of a portfolio's market value.
4. No more than 10% (when aggregated with other SWIB portfolios) of a class of equity securities of any one issuer may be purchased.
5. Currency exposure management is permitted (but not required) through the use of exchange-traded currency instruments, and through the use of spot and forward contracts in foreign currencies. Direct currency hedging is permitted to directly hedge currency exposure back to the U.S. dollar. Cross-currency exposure management to transfer out of an exposed currency and into a benchmark currency is permitted. Total effective currency exposure from held securities and currency management activities shall not exceed the aggregate value of security holdings. No derivatives-based currency management of U.S. or non-U.S. cash and cash equivalent positions is permitted. All other derivative investment strategies must be reviewed by the SWIB Risk and Investment Committee.

## **C. U.S. Fixed Income Portfolio Guidelines**

The U.S. Fixed Income Portfolios are invested in publicly traded, dollar denominated fixed income instruments, primarily of investment grade, including government, agency, corporate, and Yankee securities.

1. Each portfolio shall maintain an average quality rating of A or better, using the lower of split ratings.
2. Effective duration of each portfolio shall remain within 15% of the assigned benchmark's duration.
3. Non-Investment Grade securities shall not exceed 15% of each portfolio's market value.
4. With the exception of U.S. government and agency securities, issuer concentrations are restricted to 5% (investment grade) and 3% (non-investment grade) of the market value of each portfolio.
5. Issues trading under Rule 144A may not exceed 10% of a portfolio's market value

6. Financial futures, options, and swaps are permitted for the purposes of adjusting durations and to invest anticipated cash flows, subject to review by the SWIB Risk Committee and to the following guidelines:

(a) Derivatives shall not be used to establish a leveraged position.

(b) Eligible contracts are:

- (1) 3-Month U.S. Treasury Bills
- (2) 2-Year U.S. Treasury Notes
- (3) 5-Year U.S. Treasury Notes
- (4) 10- Year U.S. Treasury Notes
- (5) U.S. Treasury Bonds
- (6) Options on above contracts
- (7) OTC options

(c) Each contract must be specific to an explicitly documented transaction. Contracts must be closed when any hedged positions are closed.

#### **D. Global Bond Portfolio Guidelines**

The Global Bond Portfolio is invested in fixed income obligations of governments, government-related entities, and corporations around the world, primarily in developed markets, including the United States.

1. Overall portfolio quality must be maintained at an average rating of A or better, using the lower of split ratings.
2. Corporate securities may not exceed 20% of the portfolio's market value.
3. No single corporate issuer shall represent more than 5% of the portfolio's market value.
4. Emerging market debt shall not exceed 10% of the portfolio's market value.
5. Issues trading under Rule 144A shall not exceed 5% of a portfolio's market value
6. Non-Investment Grade securities shall not exceed 10% of the portfolio's market value.
7. Short-term investments must be issued by governmental entities described above or by banks rated at least A or equivalent.
8. Currency and interest rate exposure management is permitted but not required. Interest rate exposure management is permitted only through the use of exchange-traded interest rate instruments. Currency exposure management is permitted through the use of exchange-traded currency instruments, and through the use of spot and forward contracts in foreign currencies. Direct currency hedging is permitted to directly hedge currency exposure back to the U.S. dollar. Cross-currency exposure management to transfer out of

an exposed currency and into a benchmark currency is permitted. Total effective currency exposure from held securities and currency management activities shall not exceed the aggregate value of security holdings. No derivatives-based currency management of U.S. or non-U.S. cash and cash equivalent positions is permitted. All other derivative investment strategies must be reviewed by the SWIB Risk and Investment Committee.

#### **E. General Guidelines For Non-Public Portfolios**

The National Private Debt, Private Equity, Real Estate, Commercial Mortgage and Wisconsin Private Debt Portfolios shall be subject to the following general requirements:

1. Each portfolio manager shall provide the Board or appropriate Board committee with an update on potential investments under consideration, portfolio developments, investments on the watch list or in workout status, and portfolio strategy at least three times a year. All portfolio commitments to investments in non-public instruments (including those eligible to trade under Rule 144A) shall be reported to the Board at the next Board meeting.
2. Each portfolio manager shall be responsible for including in the above reports to the Board, disclosure of any referrals or significant contacts (other than status requests) by or on behalf of SWIB Trustees regarding consideration of the investment.
3. Each portfolio manager shall obtain confirmation in writing that documentation has been satisfactorily completed from legal counsel prior to closing of any investment in their portfolio that involves negotiated SWIB documentation.
4. Each portfolio manager shall submit to the staff Risk and Investment Committee a written summary of any proposed investment of \$10 million in an asset or instrument that does not have an investment grade or higher rating from a national rating agency or the NAIC, including such investments that are made in a series when they aggregate \$10 million within any 12 months, prior to commitment. The Committee may establish procedures for reviewing such investments. Its review shall include whether the investment falls within the portfolio's investment guidelines and is consistent with the portfolio's established strategy, as well as whether appropriate due diligence standards are being applied. No such investment may be closed without approval of the Risk and Investment Committee. Committee votes and meeting minutes shall be distributed to the Board. Despite review or discussion by the Risk Committee, the portfolio manager shall retain sole responsibility for each investment decision.
5. The Executive Director, Chief Legal Counsel, a Chief Investment Officer, or any managing director or portfolio manager of a non-public portfolio may convene a meeting of the staff Risk and Investment Committee to discuss an investment in the non-public portfolios at any time that one is needed outside of regularly scheduled meetings. The Risk and Investment Committee shall establish its own procedures for calling meetings, approving investments and taking action.

**F. National Private Debt Portfolio Guidelines**

The National Private Debt Portfolio is primarily invested in fixed income instruments that are generally issued in the Rule 144A market or negotiated directly by SWIB and/or a co-lender. Investments are intended to be intermediate to long term in maturity.

1. Investments may be made in fixed income instruments that carry an investment grade rating or are issued by, or credit supported or leased by a entity that has an investment grade rating from a national rating agency, the NAIC or SWIB's internal rating system, using the highest rating.
2. Investments may be made in below investment grade private fixed income instruments, provided that such investments do not in the aggregate constitute more than 10% of portfolio par value.
3. Investments that carry only an internal SWIB rating may not in the aggregate constitute more than 20% of portfolio par value.
4. Aggregate portfolio issuer limits as a percentage of portfolio par value shall be scaled by quality and a purchase may not cause the portfolio to exceed the following limits:

<b>Rating</b>	<b>Maximum Position</b>
US Gov't/Agency	No Limit
AA or higher	7.5%
A	5%
BBB or less	3.5%

5. Investments in instruments issued outside of the U.S. may be made in the developed markets, provided that the aggregate value of such investments does not constitute more than 15% of portfolio par value and they are denominated and paid in U.S. dollars.

**G. Wisconsin Private Debt Portfolio Guidelines**

The Wisconsin Private Debt Portfolio's objective is to invest funds of the Wisconsin Retirement System in business activities that contribute to Wisconsin's economy and also provide market-rate returns consistent with SWIB's fiduciary responsibilities. The investments will be focused on fixed-income instruments issued by corporations that are headquartered in Wisconsin or that intend to apply the proceeds to business operations in Wisconsin. Investments will be primarily private loans negotiated by SWIB directly or as part of an investor group that includes banks or other institutional investors, but may also be securities originated in the Rule 144(a) market or public fixed income markets. Investments may be made in fixed income instruments or instruments with both fixed income and equity features.

- 1) Investments may be made in below investment grade instruments provided that such investments do not in the aggregate constitute more than 25% portfolio par value. Any investment below investment grade requires approval from the Risk and Investment Committee.
- 2) Investments may carry a rating from a national rating agency, the NAIC or SWIB. If the investment carries only a SWIB rating, it shall be approved by the Risk and Investment Committee, regardless of size.
- 3) Aggregate portfolio issuer limits shall be scaled by quality and a purchase may not cause the portfolio's exposure to a borrower or issues to exceed the following limits (at par value):

<b>Rating</b>	<b>Maximum Position</b>
US Gov't/Agency	No Limit
AA or higher	\$100 MILLION
A	\$75 MILLION
BBB	\$50 MILLION
BB or less	\$25 MILLION

- 4) The portfolio shall maintain at minimum a weighted average rating of BBB, where AAA=4, AA=3, A=2, BBB=1, and BB or less =0.
- 5) Up to 15% of the portfolio may be invested in companies headquartered in Illinois, Iowa, Minnesota or Michigan.

## **H. Private Equity Portfolio**

The Private Equity Portfolio consists of private equity or equity-related investments made on a global basis in limited partnership or other fund vehicles and direct investments in operating or holding companies (through strategic partnerships, as co-investments alongside funds, or where SWIB serves as the lead investor).

1. Any other guidelines notwithstanding, all portfolio commitments that would exceed the lesser of \$100 million or 25% of an individual fund (excluding co-investments) must be approved by the Board of Trustees prior to commitment. SWIB may not own more than 50% of a company's outstanding equity without prior Board of Trustee approval.
2. Venture capital investments may not be made in emerging markets with prior approval of the Board of Trustees. SWIB may not be the lead investor in a direct venture capital investment without advance approval by the Board of Trustees, regardless of location. No more than 2% of the Fixed Trust Fund may be invested in venture capital.
3. Venture capital co-investments in the U.S. or developed international markets are made alongside a strategic partner that has written agreement to co-invest in a number of transactions with SWIB and be responsible for due diligence may be made without Board of Trustee approval. Venture capital co-investments alongside a fund through which SWIB is also an investor in the target company may only be made with prior Board of Trustee approval.
4. Where SWIB is the lead investor in a non-venture capital direct investment, advance approval by the Board of Trustees is required for any commitment involving more than 2% of the market value of the Private Equity Portfolio. In addition, direct investments where SWIB is the lead investor may not be made in companies outside the U.S. without approval of the Board of Trustees.
5. Commitments for non-venture capital co-investments alongside a strategic partner that has a written agreement to co-invest in a number of transactions with SWIB and be responsible for due diligence may be made without Board of Trustee approval, regardless of location. Non-venture capital co-investments alongside a fund through which SWIB is also an investor in the target company may only be made in the U.S. or developed international markets without prior Board of Trustee approval.
6. Aggregate commitments (both called and undrawn and including co-investments) to any fund manager or sponsor, or investments with any company or strategic partner, may not exceed 20% of the portfolio without Board of Trustees approval.

## **I. Real Estate Portfolio**

The Real Estate and Mortgage Portfolio contains investments in mortgages, commingled real estate investment pools, funds, various types of direct equity ownership in real estate assets, and debt instruments with a real estate equity participation component, either solely, or through REITs, public or private real estate company securities, limited partnerships, joint ventures, separate accounts or co-investment vehicles. The portfolio is intended to have relatively stable

and predictable returns over a longer, strategic time frame. Certain investments with relatively higher expected returns, and higher risk, may be used on a more tactical basis.

1. Each real estate investment must be processed and closed in accordance with any applicable provisions of the Real Estate Procedures Manual.
2. All portfolio commitments to an individual fund or commingled pool that would exceed the lesser of \$100 million or 25% of the fund or commingled pool (excluding co-investments) must be approved by the Board prior to commitment.
3. Aggregate commitments (both called and undrawn and including co-investments) to any commingled pool or fund manager or sponsor may not exceed 20% of the portfolio.
4. Aggregate direct public REIT and real estate company stock holdings (excluding underlying fund and commingled pool holdings) may not exceed 15% of the market value of the portfolio and portfolio investments in any one public REIT or company may not exceed 3% of the market value of the portfolio. SWIB's direct ownership position in any public REIT or company may not exceed 20% of outstanding voting equity.
5. No more than 33% of the portfolio may be invested outside the U.S. Commingled pools and funds that are authorized to invest more than 50% of their capital in emerging markets do not qualify for investment.
6. Other guideline limitations notwithstanding, staff may make modifications of mortgages or leases; enter into new leases; execute deeds and bills of sale; make expenditures for maintenance and improvements; grant easements; hire consultants, service providers, real estate advisors and property managers; and, in general, take all necessary action to manage, maintain and enhance investment value of the real estate and mortgage portfolio.
7. Prior to funding a direct investment where real property is a material component, the property shall be evaluated for the presence of environmental and code compliance issues. If environmental issues that require action by governmental authorities exist, then funding shall not occur until an adequate remediation program is in place. If code compliance issues exist, then an adequate plan to bring the property into compliance shall be in place.
8. Real estate advisers with delegated investment discretion shall be approved by the Board of Trustees.

#### **J. Real Estate Commercial Mortgage Portfolio**

This portfolio will invest in commercial real estate mortgage whole loans on a participation basis only. Investments will typically have a fixed interest rate, some amortization of principal and call protection.

1. SWIB may only invest in participations of whole mortgage loans sponsored by, and jointly invested in, firms previously approved by the Board or appropriate Board committee.
2. The Real Estate Division shall be responsible for review of the mortgage loan underwriting done by the lead investor. This underwriting includes the secured property, the borrower, and transaction terms. The Real Estate Division shall have complete staff discretion to concur with this underwriting.
3. The National Private Debt Portfolio shall be responsible for reviewing the risk adjusted return anticipated by the loan originator, relying on the risk assessment provided by the underwriter and reviewed by the Real Estate Division. The National Private Debt Portfolio shall have complete staff discretion to make the decision. Real Estate and National Private Debt will jointly collaborate on any loan modifications requested by the lead investor, as each individual case may warrant.

## STATE INVESTMENT FUND

**Description:** The State Investment Fund (SIF) is the investment vehicle for cash and short-term investments of various state and local government funds, including the Fixed Retirement Investment Trust and the Variable Retirement Investment Trust.

**Investment Objectives:** In order of importance:

1. Safety of principal
2. Liquidity
3. Competitive money market returns as defined by a benchmark of 70% 3-month T-Bills/30% One-Month CD yield.

**Investment Guidelines (exposure limits are to be applied at the time of purchase):**

### ASSET ALLOCATION (Percent of Portfolio at Par Value)

Treasuries, Agencies & Repurchase Agreements	50-100%
Commercial Paper and Notes	0-30%
CD's and BA's	0-30%
Asset Backed	0-30%
Mortgage Backed	0-30%
Canadian (fully hedged)	0-20%
Yankee/Euro (fully hedged)	0-10%

### MATURITY GUIDELINES (maximum)

The portfolio weighted average maturity will not exceed one year, consistent with portfolio purpose and objectives. Maturity of floating rate securities shall be based on interest rate reset dates except as specified below.

The following maturity limits shall apply to each instrument.

Repurchase Agreement Gov't/Agency Collateral	10 years
Treasuries and Agencies	5 years
Commercial Paper	270 days
Commercial Notes	3 years
Certificates of Deposit	3 years
Bankers Acceptances	1 year
Asset Backed - fixed rate	3 years or less average life

	- floating rate	4 years or less average life
Mortgage Backed	- fixed rate	3 years or less average life
	- floating rate	4 years or less average life
Canadian		2 years
Yankee/Euro		2 years
Reverse Repurchase Agreements		1 day

CREDIT QUALITY / ISSUER EXPOSURE

(Maximum Size at Par Value)

The maximum exposure for each issuer/guarantor shall be in the aggregate (unless specified as per issue) as follows.

Repurchase Agreements (Gov't/Agency Collateral)	No limit
U.S. Treasury Bills and U.S. Agency Discount Notes	No limit
U.S. Treasury Notes (per issue)	\$500 million
US. Agency Notes (per issue)	\$250 million
A1+, P1 Rated Commercial Paper and AAA Long Term Rating	\$100 million
A1+, P1 Rated Commercial Paper and AA Long Term Rating	\$75 million
A1+ or P1 or F1+ Rated Commercial Paper	\$ 50 million
A1 or P1 or F1+ Rated Commercial Paper	\$ 25 million
AAA Rated Corporate Note	\$100 million
AAA Asset Backed Rating (per issuer)	\$ 50 million
AAA Mortgage Backed Rating (per issuer)	\$ 50 million
AA Rated Corporate Note	\$ 25 million
AA Asset Backed Rating (per issuer)	\$ 15 million
AA Mortgage Backed Rating (per issuer)	\$ 15 million
A Bank Instrument Rating by Thompson BankWatch or 1 by Cates or AAA by S&P or Aaa by Moody's	\$100 million
A/B Bank Instrument Rating by Thompson BankWatch or 1.5 by Cates or AA+ by S&P or Aa1 by Moody's	\$ 50 million
B Bank Instrument Rating by Thompson BankWatch or 2 by Cates or AA by S&P or Aa by Moody's	\$ 25 million
Wisconsin Certificate of Deposit Program (unless a higher limit from another category applies)	\$ 10 million or 3% of assets, whichever is less
Canadian Government Bills and Notes	\$250 million
Reverse Repurchase Agreements	\$200 million

Make any other legal investment that is specifically approved by the Board.

## DERIVATIVES AUTHORITY

Subject to review and approval of the SWIB Risk and Investment Committee, each derivative transaction must be done within statutory and the following limitations as described below:

Derivative authority is limited to positions in finance futures, options and swaps and only if the purpose is to hedge existing positions, to adjust portfolio duration within statutory guidelines, or otherwise to reduce the interest rate risk to which SWIB is subjected in the normal course of business. Interest only and principal only securities, inverse floaters, and off balance sheet synthetic derivatives are not permitted.

1. Eligible contracts are: 1) U.S. Treasury Bill (IMM); 2) Certificate of Deposit (IMM); 3) Eurodollar Time Deposit (IMM); 4) Two Year Note Contract (CBT); 5) Five Year Note Contract (CBT).
2. Eligible options are those on the contracts listed above and over-the-counter options.
3. Swap counterparties must be rated "B" by Thompson BankWatch, "A-1"/"A" by S&P, or "P-1"/"a" by Moody's. Dealers must be recognized by and report to the Federal Reserve.
4. Futures, options or swaps must be identified with a specific asset or group of assets (the hedged position) at the time the contract is executed. In each case, the purpose of the transaction must be explicitly stated at the time of execution and a written record of purchases and sales of contract maintained.
5. When an underlying asset position (the hedged position) is closed, the corresponding asset swap, futures or options position forming the hedge must also be closed.

## WISCONSIN CD PROGRAM

Up to \$400 million may be invested in Wisconsin banks or thrifts subject to the following guidelines:

- (1) The bank/thrift qualifies for “pass-through” insurance by being classified as “well capitalized” by the FDIC or “adequately capitalized” with an FDIC waiver which states the institution qualifies for “pass-through” insurance.
- (2) The total dollar amount invested by SWIB in the CD’s of any individual bank/thrift shall not exceed the lesser of \$10,000,000 or three (3%) percent of reported assets of the individual bank/thrift, providing that the total dollar amount invested by SWIB in any individual holding company (when investing in the CD’s of the bank/thrifts of the holding company) shall not exceed \$30 million, unless the total dollar amount of CD investment in the program is less than \$400 million.
- (3) The maturity limit for the program shall be not greater than 3 years.
- (4) Make any other legal investment that is specifically approved by the Board.

## LOCAL GOVERNMENT PROPERTY INSURANCE FUND

**Description:** The Local Government Property Insurance Fund was created by ch. 605 of the Wisconsin Statutes and is administered by the State Office of the Commissioner of Insurance (OCI). It provides a vehicle through which any local governmental unit in Wisconsin may insure its property against damage or destruction. The OCI and its contract administrator regularly monitor fiscal activity in the Fund and are responsible for ensuring that an adequate liquidity reserve is maintained to pay claims. OCI funds targeted for near-term liquidity are invested in the State Investment Fund. The remaining assets are invested in a fixed income portfolio, laddered by maturity.

**Investment Objective:** The OCI is responsible for advising SWIB at least annually of projected cash flow needs of the Fund and the size of the liquidity reserve to be invested through the State Investment Fund. Funds not included in the liquidity reserve are invested by laddering assets into fixed income investments. The following Investment Guidelines, pertaining to the laddered fixed income portion, are intended to ensure safety of principal and maximization of return within liquidity needs established by the OCI.

### **Investment Guidelines (exposure limits are to be applied at the time of purchase):**

1. **Quality:** Issues rated "A-" or better, using the lower of split ratings.
2. **Sector:** U.S. Treasury and government agencies – no limit.  
Corporate – no limit.  
AAA rated Mortgage-backed, asset-backed securities – maximum 3% of the market value of the fund.
3. **Issuer:** 3% maximum per corporate issuer of the market value of the fund.
4. **Maturity limit:** 10 years.
5. Notwithstanding the above requirements, investments may be made in the Lehman Intermediate Government Index, the Lehman Intermediate Credit Index, the Lehman Long Government Index and the Lehman Long Credit Index.
6. Make any other legal investment that is specifically approved by the Board.

## STATE HISTORICAL SOCIETY TRUST FUND

**Description:** The State Historical Society Trust Fund supports current and anticipated initiatives and operations of the Society through the generation of current income as well as longer-term capital growth. The Society is responsible for administering the operations of the Fund, and the fund's securities are maintained by SWIB.

**Investment Objective:** To maintain a diversified portfolio of high quality publicly issued equities and fixed income obligations providing long-term growth in capital and income generation.

**Investment Guidelines (exposure limits are to be applied at the time of purchase):**

1. The bond portfolio shall maintain a minimum quality rating of "A-", using the lower of split ratings.
2. Non-Investment Grade securities shall not exceed 5% of the fund.
3. No single issuer shall constitute more than 5% of the fund, with the exception of the US Government and its agencies.
4. Equity issues with market capitalization  $\leq$  \$500 million shall not exceed 10% of the market value of the equity portfolio.
5. Notwithstanding the above requirements, investments may be made in the Russell 3000 Index, the Russell 2000 Index, the Russell 1000 Index, the Lehman Intermediate Government Index, the Lehman Intermediate Credit Index, the Lehman Long Government Index and the Lehman Long Credit Index.
6. Make any other legal investment that is specifically approved by the Board.

## STATE LIFE INSURANCE FUND

**Description:** The State Life Insurance Fund offers low cost life insurance protection to Wisconsin residents in amounts not exceeding \$10,000 per person. The State Office of the Commissioner of Insurance is responsible for administering the operations of the Life Insurance fund. The fund's securities are maintained by SWIB.

**Investment Objective:** To maintain a diversified portfolio of high quality publicly or privately issued fixed income obligations that will preserve principle, maximize income while minimizing costs to policyholders, and approximate the expected life of the Fund's insurance contracts. Surplus income from the Fund is used to minimize the cost of insurance to the Fund's policyholders.

**Investment Guidelines (exposure limits are to be applied at the time of purchase):**

1. The portfolio shall maintain a minimum quality rating of "A-", using the lower of split ratings.
2. Portfolio maturity, including cash, shall be a minimum of 10 years.
3. Non-Investment Grade securities shall not exceed 5% of the fund.
4. No single issuer shall constitute more than 5% of the fund, with the exception of the US Government and its agencies.
5. Notwithstanding the above requirements, investments may be made in the Lehman Intermediate Government Index, the Lehman Intermediate Credit Index, the Lehman Long Government Index and the Lehman Long Credit Index.
6. Make any other legal investment that is specifically approved by the Board.

## PATIENTS COMPENSATION FUND

### **Description:**

The Patients Compensation Fund (PCF) was created by Chapter 655 of the Wisconsin statutes in 1975 to provide excess medical malpractice coverage for Wisconsin health care providers and to compensate injured claimants. Health care providers obtain primary medical malpractice insurance from private insurance companies in an amount required by statute, and coverage for damages in excess of the primary insurance is provided by the PCF.

### **Investment Objectives:**

#### *Overall Portfolio:*

1. Produce sufficient returns to meet liability payments on behalf of PCF participants and claimants.
2. Preserve capital and produce current income.
3. Seek capital appreciation for surplus funds to minimize participant fees.
4. Over a complete market cycle, achieve an average annual rate of return meeting or exceeding the actuarial requirement of 7% and a total return of 8%.

*Cash Equivalents:* Sufficient cash balances, invested in the State Investment Fund, will be maintained to satisfy projected short term cash outflows as estimated by the PCF Board of Governors.

*Bond Portfolio:* Publicly-traded fixed income investments, managed by the State of Wisconsin Investment Board (SWIB), will employ an immunization strategy for liabilities beyond the projected short term cash outflows. Return enhancement will also be sought where possible.

*Equity Portfolio:* Equity funds, managed by SWIB, will employ an indexing strategy. Outside managers are expected to earn a return consistent with the appropriate market indices.

### **Investment Guidelines (exposure limits are to be applied at the time of purchase):**

1. A minimum of 30% of the bond portfolio must be invested in U.S. Treasury or Agency securities.
2. A minimum of 80% of the bond portfolio must be rated "A3/A-" or better, using the lower of split ratings.

3. The securities of any issuer shall not exceed 5% of the bond portfolio, with the exception of US Government and agency securities.
4. Cash equivalents may be held in the bond portfolio at the manager's discretion.
5. The average duration of the aggregate bond portfolio shall be less than 10 years.
6. Surplus funds, as determined by the Board of Governors, may be invested in funds indexed to the S&P 500 and/or the Russell 3000 and their related subset indices, the Lehman Intermediate Government Index, the Lehman Intermediate Credit Index, the Lehman Long Government Index, and the Lehman Long Credit Index.
7. Make any other legal investment that is specifically approved by the Board.

## TUITION TRUST FUND – EDVEST WISCONSIN PROGRAM

**Description:** Edvest Wisconsin is a State of Wisconsin prepaid college tuition program. SWIB's investment responsibility is to maintain sufficient cash balances to meet current liabilities and to horizon match the remaining assets in fixed income instruments to the estimated liabilities.

- Investment Objectives:**
1. To maintain current market values of the Trust Assets in excess of the present value of the estimated liabilities.
  2. To maintain cash balances and estimated annual income sufficient to meet current requirements.

**Investment Guidelines (exposure limits are to be applied at the time of purchase):**

1. All issues shall be rated "A-" or better, using the lower of split ratings.
2. Individual corporate bond sector weightings shall not exceed two times the relevant weighting in the Lehman Corporate Bond Index.
3. No issuer shall represent more than 5% of the fund, with the exception of the US Government and its agencies.
4. Make any other legal investment that is specifically approved by the Board.

## Appendix 1

### HISTORICAL STRATEGIC ASSET ALLOCATION TARGETS FIXED TRUST FUND

Beginning Calendar Year	Domestic Equities	International Equities	Fixed Income	International Fixed Income	Real Estate	Alternative	Cash
1982	30%	0%	60%	0%	10%	0%	0%
1983	30%	0%	60%	0%	10%	0%	0%
1984	30%	0%	60%	0%	10%	0%	0%
1985	30%	0%	60%	0%	10%	0%	0%
1986	30%	0%	60%	0%	10%	0%	0%
1987	40%	0%	40%	0%	20%	0%	0%
1988	50%	0%	40%	0%	10%	0%	0%
1989	50%	0%	40%	0%	10%	0%	0%
1990	50%	6%	32%	4%	10%	0%	0%
1991	50%	6%	32%	4%	10%	0%	0%
1992	47%	8%	30%	5%	10%	0%	0%
1993	45%	10%	30%	5%	10%	0%	0%
1994	40%	15%	28%	7%	10%	0%	0%
1995	40%	15%	28%	7%	5%	5%	0%
1996	40%	15%	28%	7%	7%	3%	0%
1997	40%	15%	30%	5%	7%	3%	0%
1998	40%	15%	30%	5%	5%	3%	2%
1999	42%	15%	35%	0%	5%	3%	0%
2000	39%	18%	34%	0%	4%	5%	0%
2001	39%	18%	34%	0%	4%	5%	0%
2002	39%	18%	34%	0%	4%	5%	0%

Notes: For calendar 1998, cash is explicitly targeted. For all other calendar years, cash is targeted at 0%, and a 2% cash allowance is provided for in the fund benchmark.

Prior to calendar 1999, domestic and international fixed income were targeted separately. Since calendar 1999, total fixed income is targeted as a single asset class.

Prior to calendar 2000, private equity was considered part of U.S. equities. Since calendar 2000, private equity is considered part of Alternative assets.

**VARIABLE TRUST FUND**

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<b>Beginning Calendar Year</b>	<b>Domestic Equities</b>	<b>International Equities</b>
2000	75%	25%
2001	80%	20%
2002	80%	20%

Notes:

Prior to calendar 2000, the relative domestic/international split from the Fixed Trust Fund was also adopted for the Variable Trust Fund.

A 2% cash allowance is provided for in the fund benchmark.

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## Appendix 2

### Specific Investment Performance Objectives

#### U.S. EQUITY

PORTFOLIO	BENCHMARK	UNIVERSE RANK OBJECTIVE
Total U.S. Equity	Russell 3000	Above Median
Large Cap	S&P 500	Above Median
Mid Cap	S&P Mid Cap	Above Median
Small Cap	Russell 2000	Above Median
Large Cap Diversified	S&P 500	Above Median
Healthcare Sector	Russell 3000 Healthcare Index	Above Median

#### INTERNATIONAL EQUITY

PORTFOLIO	BENCHMARK	UNIVERSE RANK OBJECTIVE
Total Portfolio	ACWI ex US	Above Median
Developed Markets Portfolios	MSCI World ex US	Above Median

#### FIXED INCOME

PORTFOLIO	BENCHMARK	UNIVERSE RANK OBJECTIVE
Total Fixed Income	"Roll Up"	Above Median
U.S. Public FI	Lehman Govt/Credit	Above Median
Intermediate Govt/Corp	Lehman Intermediate Govt/Corp	Above Median
Long Govt/Corp	Lehman Long Govt/Corp	Above Median

National Private Debt	Lehman Duration Adjusted Corporate + 10 Bps	N/A
Wisconsin Private Debt	Pending	N/A
CMBS	Lehman Duration Adjusted BAA	N/A
Global FI	Salomon World Govt Bond	Above Median
Emerging Debt	JP Morgan Emerging Markets Plus	Above Median

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### OTHER ASSET CLASSES

Real Estate Objective: A return in excess of NCREIF

Private Equity Objective: A net absolute return in excess of 15% per year.

### Appendix 3

#### SOFT PARAMETERS – ASSET CLASS AND PORTFOLIO

ASSET CLASS CHARACTERISTIC	ASSET CLASS	Discussion Trigger
Maximum Small Cap Exposure	U.S. Equities	2.5 x Benchmark
Maximum Volatility	U.S. Equities	120% of Benchmark Over 5 Years
Maximum Volatility	Int'l Equities	120% of Benchmark Over 5 Years
Duration	U.S. Fixed	± 15% of Benchmark
Maximum Volatility	U.S. Fixed	120% of Benchmark Over 5 Years
Duration	Global Fixed	± 15% of Benchmark
Maximum Volatility	Global Fixed	120% of Benchmark Over 5 Years

  

PORTFOLIO CHARACTERISTIC	PORTFOLIO	Discussion Trigger
<b>ACTIVE U.S. EQUITIES</b>		
Number of Holdings	Large	30-100
	Mid	30-250
	Small	30-500
	Large Cap Diversified	100-200
	Healthcare Sector	75-150
Maximum Position Size	Large	10%
	Mid	10%
	Small	10%
	Large Cap Diversified	10%
	Healthcare Sector	20%
Median Position Size	Large	2-3%
P/E Ratio	Large	50%-150% of Benchmark
	Mid	50%-150% of Benchmark
	Small	50%-150% of Benchmark
	Large Cap Diversified	50%-150% of Benchmark
	Healthcare Sector	50%-150% of Benchmark
Maximum Industry Sector Exposure	Large	Greater of 10% or 3 x Benchmark
	Mid	Greater of 10% or 3 x Benchmark

	Small	Greater of 10% or 3 x Benchmark
	Large Cap Diversified	Greater of 10% or 3 x Benchmark
Maximum Volatility	Large	133% of Benchmark Over 5 Years
	Mid	133% of Benchmark Over 5 Years
	Small	133% of Benchmark Over 5 Years
	Large Cap Diversified	133% of Benchmark Over 5 Years
	Healthcare Sector	133% of Benchmark Over 5 Years
Maximum Cash	Large	10%
	Mid	10%
	Small	10%
	Large Cap Diversified	10%
	Healthcare Sector	10%

PORTFOLIO CHARACTERISTIC	PORTFOLIO	Discussion Trigger
<b>INTERNATIONAL EQUITIES</b>		
Number of Holdings	Int'l Developed	30-100
Minimum Number of Countries	Int'l Developed	10
Maximum Country Exposure	Int'l Developed	Greater of 10% or 3 x Benchmark
Maximum Industry Sector Exposure	Int'l Developed	Greater of 10% or 3 x Benchmark
Maximum Volatility	Int'l Developed	133% of Benchmark Over 5 Years
Maximum Cash	Int'l Developed	10%
<b>U.S. FIXED INCOME</b>		
Number of Issuers	Intermediate	20-100
	Long	20-100
Maximum Industry Sector Exposure	Intermediate	Greater of 10% or 3 x Benchmark
	Long	Greater of 10% or 3 x Benchmark
Maximum Volatility	Intermediate	133% of Benchmark Over 5 Years
	Long	133% of Benchmark Over 5 Years
Maximum Cash	Intermediate	20%
	Long	20%
<b>GLOBAL FIXED INCOME</b>		
Duration	Global Fixed	± 15% of Benchmark
Minimum Number of Countries	Global Fixed	5
Maximum Exposure to Individual Sovereign Issuer	Global Fixed	40%
Maximum Volatility	Global Fixed	133% of Benchmark Over 5 Years
Maximum Cash	Global Fixed	20%
<b>PRIVATE PORTFOLIOS</b>		
Maximum Industry Exposure	National Private Debt	20%
Maximum Outside Developed Mkts	Private Equity	20%
Venture Capital	Private Equity	10-30%
Max VC Strategic Partnering	Private Equity	10% of VC
Buyouts	Private Equity	70-90%
Direct Investments	Private Equity	20-40% of Buyouts
Funds	Private Equity	60-80% of Buyouts
Maximum Industry Sector Exposure	Private Equity	Data Not Available

Maximum Non-U.S. Country Exposure	Private Equity	Data Not Available
Maximum Development Risk (Direct Holdings Only)	Real Estate	10%
Maximum Single Property Type Exposure - Quarterly	Real Estate	40%
Minimum Core Holdings	Real Estate	40%
Maximum Non-Core Holdings	Real Estate	60%
Maximum Core Portfolio Leverage	Real Estate	50%
Maximum Core Fund/Deal Leverage	Real Estate	75%

## Appendix 4

### PORTFOLIO PERFORMANCE CALCULATIONS

Portfolio returns are calculated in accordance with AIMR guidelines, using monthly valuations and day-weighted cash flows (income and funding flows). Exceptions to the standard monthly process are noted in the following sections.

#### New Portfolio Performance Inception

The portfolio performance inception date is the date by which initial funding has been placed into the portfolio and a core investment of assets can be accomplished, usually within three months of initial funding. Whenever possible, portfolio inception is aligned with the beginning of a calendar quarter to synchronize with manager universe performance comparisons.

For public market portfolios, the inception date is the beginning of the first full month of investment, and will be the first day of initial funding if funding has been placed on the first day of the first month. When initial funds are placed some time later during the first month, the inception date is the first day of the following month. Performance is measured from the beginning of the inception date on the basis of total portfolio rate of return, including cash.

For private market portfolios, the inception date is the beginning of the first full month following the investment of an initial core of assets, by the beginning of the third full month after the initial placement of funds. Performance is measured from the beginning of the inception date on the basis of security-only rate of return, excluding cash.

For all portfolios, issues relating to the ability to effectively deploy initial funds within a given time frame are addressed by the gradual placement of funds into the portfolio as necessary.

#### Transition Portfolio Performance

To the extent possible, when a portfolio mandate is significantly altered, resulting in a significant conversion of portfolio assets, manager returns will be held harmless to the required transition. During the period of transition, typically one month for public market portfolios, portfolio manager returns will be held neutral to the portfolio benchmark by assigning benchmark returns for the manager results.

When mandate modifications are more substantial, old portfolios will be replaced by new portfolios, and transition portfolios will be used in the conversion process as necessary.

#### Portfolio Allocations/Deallocations

During periods of significant fund flows into or out of portfolios, the monthly performance period is broken into individual daily periods, audited asset valuations are taken on the days of the significant flows, and the monthly return is the linked series of daily returns. AIMR standards require the breaking down of the performance period into multiple periods when total cash flows reach 10% of portfolio market value within a single period, or one month in SWIB's

case. SWIB has viewed the 10% threshold as conservative, and has applied the daily calculation to periods having considerably lower levels of flows, as low as 2 to 3% of market value.

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