BWC Board of Directors

Investment Committee

Wednesday, December 17, 2008, 12:00 p.m.
William Green Building
30 West Spring Street, 2nd Floor (Mezzanine)
Columbus, Ohio 43215

Members Present:	Robert Smith, Chair Alison Falls Larry Price David Caldwell James Harris William Lhota
Other Members Present:	James Hummel Thomas Pitts James Matesich Kenneth Haffey

CALL TO ORDER
Mr. Smith called the meeting to order at 12:00 pm.

ROLL CALL
Roll call was taken. All committee members were present.

Upon request by Mr. Smith, Bruce Dunn, Chief Investment Officer, discussed the current status of the Bureau investment portfolio. Bond yields have declined significantly to date during December 2008. There has been an estimated six percent increase in total portfolio value of the Bureau since the end of November 2008. There has been an estimated four percent decrease in the total rate of return of the portfolio year to date. Mr. Price thanked the Bureau staff for their hard work on investments.

APPROVE MINUTES OF THE NOVEMBER 20 MEETING
Upon motion of Mr. Caldwell, seconded by Mr. Price, the minutes of the Investment Committee Education Session and the Investment Committee Meeting of November 20, 2008 were approved, 6-0.

NEW BUSINESS /ACTION ITEMS:

INVESTMENT POLICY STATEMENT REVIEW

Mr. Dunn led a discussion of portfolio rebalancing issues. Market liquidity has increased, and the Bureau could execute a good portfolio rebalance. The Bureau currently has 13.7% of the portfolio invested in equity. Excluding any potential material cross trading opportunities, Mr. Dunn estimated it would take a two week period for an effective execution of a likely portfolio rebalance. There is growing demand for long duration bonds by institutional investors, and there are possible cross trading opportunities. It is possible to execute the rebalance in January 2009. There would be an estimated $800 million rebalance necessary based on the current asset allocation weightings of the affected portfolios at market value. Discussion was made by Ms. Falls and Mr. Smith concerning phasing in a rebalance for equities over a period of months rather than the proposed two week period.

There is an internal rebalancing committee. Mr. Dunn is to develop a proposal for early January 2009 on a rebalancing recommendation. Marsha Ryan, Bureau Administrator inquired as to whether or not the rebalancing policy should specify a range to fall within for rebalancing.

Discussion was made by Mercer Consulting, with regard to portfolio rebalancing. A memorandum prepared by Mercer, dated December 14, 2008, is incorporated into the minutes. According to Mercer none of their clients have followed through with rebalancing during this current calendar quarter. Some of their clients have temporarily expanded ranges for rebalance, but have not amended investment policies. Discussion was made of revising section IV.B of the Investment Policy, concerning portfolio rebalancing. Mercer Consulting presented on the portfolio rebalancing issue. A memorandum prepared by Mercer, dated December 8, 2008, is incorporated into the minutes. More specifically, detailed discussion was made of events that may trigger the need to rebalance. Mr. Smith requested that the internal rebalancing committee review recommendations of Mercer. Mr. Price expressed concern over the final decision making process of rebalancing. Mr. Dunn indicated that it is in the best interests of the Bureau that such rebalancing transactions not be publicized at the time they are being executed as such knowledge may impact activity on the market to the detriment of the Bureau. Mr. Dunn shall fully report rebalancing transactions once fully executed. Mr. Pitts questioned why time requirements were as long as they are for rebalancing. The Bureau was in compliance with its rebalancing policy as of September 30, 2008. Rebalance is anticipated for January 2009, and there has been no triggering event that would have required rebalancing any sooner. Ms. Falls requested the Bureau develop a plan for compliance if suspension of rebalancing is triggered, and promptly present such a plan to the Board. Mr. Price agreed with this. Mr. Price raised the issue of flexibility in a recommendation for a rebalancing policy. Flexibility involves where to rebalance at within a range.

Motion was made by Mr. Price, seconded by Ms. Falls, as follows: that the Investment Committee of the Workers' Compensation Board of Directors recommend to the Board that it replace current section IV.B of the Statement of Investment Policy and Guidelines regarding a rebalancing policy with language that is set forth in the Mercer memorandum dated December 8, 2008. The exact language of the new section IV.B adopted as a result of this motion will be incorporated in the minutes of this meeting of the committee. Roll call was taken and the motion passed 6-0.

Discussion was made with regard to section IV.C.iii of the investment policy. Mr. Dunn discussed equity portfolio diversification, and to allow for passive managers to exceed the current five percent portfolio ownership limit at market value per equity holding in domestic equity, with active managers remaining at the current five percent domestic equity ownership limit per holding. Motion was made by Ms. Falls, seconded by Mr. Harris, as follows: that the Investment Committee of the Workers' Compensation Board of Directors recommend to the Board that it amend current section IV.C.iii of the Statement of Investment Policy and Guidelines regarding equity portfolio diversification, for the reasons set forth in the memorandum of the Chief Investment Officer dated December 8, 2008. The exact changes adopted as a result of this motion appears in the Mercer Memorandum of December 7, 2008 and will be incorporated in the minutes of this meeting of the committee. Roll call was taken and the motion passed 6-0.

DISCUSSION ITEMS

MONTHLY AND FISCAL YEAR TO DATE PORTFOLIO COMPARISONS
Mr. Dunn led the discussion of comparisons. Highlights of Mr. Dunn's report, incorporated into the minutes, included comparisons of November 2008 and October 2008, as well as November of 2008 and June of 2008.

MERCER PROGRESS REPORT ON ASSET LIABILITY MODELING
Presentation was made by Louis Finney, Guy Cooper, and Neil Cornell of Mercer Consulting. A report dated December 17, 2008 prepared by Mercer is incorporated into the minutes. Efficient frontiers of asset liability modeling were analyzed by Mercer, the results of which were presented to the Board. Analysis included statistical analysis, delivered via power point presentation, incorporated into the minutes. John Pedrick, Chief Actuarial Officer, participated in discussion of reserve discounting and duration of liabilities. Discussion was made of interest rate risk exposure, funding ratios, and modeling of such variables. Proposed alternatives with regard to asset mixes were thoroughly discussed. Evaluation of efficient mixes of asset allocation was focused upon. Mr. Smith raised discussion of current practice with regard to this issue. Dr. Finney set forth combinations of several approaches in the power point presentation, with a discussion of the impact of different methods and allocations. It was noted that high yield bonds and alternative investments may be attractive additional investment options in the

long run. The next step of the analysis will include taking the current allocation and evaluate at thirty percent, forty percent and fifty percent equity allocations. Further stochastic testing will be involved. Mr. Smith emphasized consideration of multiple scenarios.

ANNUAL CUSTODIAL REVIEW

Presentation was made by Lee Damsel, Director of Investments, and Mr. Dunn. A power point presentation was provided on the annual BWC custodial services review, and is incorporated into the minutes. The custodial team was acknowledged by Ms. Damsel, including representatives of the Ohio Treasurer of State who serves as the statutory custodian for the Bureau. Cindy Beck, Director of Securities Trust for the Treasurer of State, and JPMorgan representative Richard Hartzell were recognized by Ms. Damsel. JPMorgan serves as the sub-custodian for the Bureau and is assigned by the Ohio Treasurer of State. The BWC custodial team has focused on many assigned duties as listed in the presentation report throughout the entire year. The master record keeper of the Bureau's investment assets is BNY Mellon.

CIO REPORT NOVEMBER 2008

COMMITTEE CALENDAR

The above two reports were distributed but not discussed in the meeting.

Motion was made by Mr. Smith, seconded by Mr. Harris, to adjourn the meeting at 2:05 pm. Roll call was taken and the motion passed 6-0.

Prepared by: Thomas Woodruff, Interim Director Self Insured Department
December 23, 2008

Ohio Bureau of Workers' Compensation
Invested Assets Market Value Comparison
TOTAL FUNDS

Asset Sector	Market Value Dec 31, 2008	% Assets	Market Value Nov 30, 2008	% Assets	Increase(Decrease) Prior Month-End	% Change	Market Value June 30, 2008	% Assets	Increase (Decrease) Prior Fiscal Year-End	% Change
Bonds	14,516,504,293	85.0%	13,262,197,996	83.3%	1,254,306,297	9.5%	$13,917,829,156	79.8%	598,675,137	4.3%
Equity	2,272,151,241	13.3%	2,248,166,406	14.1%	23,984,835	1.1%	3,185,174,964	18.3%	(913,023,723)	-28.7%
Net Cash - OIM	35,945,398	0.2%	26,292,705	0.2%	9,652,693	36.7%	31,217,754	0.2%	4,727,644	15.1%
Net Cash - Operating	154,500,486	0.9%	295,029,224	1.9%	(140,528,738)	-47.6%	202,328,872	1.2%	(47,828,386)	-23.6%
Net Cash - MIF, PWRF, SIEGF	95,662,009	0.6%	97,201,165	0.6%	(1,539,156)	-1.6%	95,980,364	0.6%	(318,355)	-0.3%
Total Net Cash	286,107,893	1.7%	418,523,094	2.6%	(132,415,201)	-31.6%	329,526,990	1.9%	(43,419,097)	-13.2%
Total Invested Assets	$17,074,763,427	100%	$15,928,887,496	100%	$1,145,875,931	7.2%	$17,432,531,110	100%	($357,767,684)	-2.1%

OIM: Outside Investment Managers
MIF: Marine Industry Fund; **PWRE**: Public Work-Relief Employees' Fund; **SIEGF**: Self-Insured Employers' Guaranty Fund

Market Value of Bonds and Stocks includes accrued investment income.

Net Cash includes the impact of net trade receivables/payables, accrued money market earnings, and accrued investment manager fees.

December/November 2008 Comparisons

- Net investment income in December 2008 was $1,335 million representing a monthly net portfolio return of 8.4% (unaudited).
- Bond market value increase of $1,254.3 mm comprised of $23.9 mm in interest income and $1,283.4 mm in net realized/unrealized gains ($14.5 mm net realized loss), offset by $8.0 mm in OIM net bond sales (increasing net cash balances accordingly) and by $45.0 mm in OIM redemptions, representing a monthly net return of 9.8% (unaudited).
- Equity market value increase of $24.0 mm comprised largely of $6.2 mm of dividend income and $18.7 mm in net realized/unrealized gains ($9.5 mm net realized loss) and offset by $1.6mm in OIM net stock sales (increasing net cash balances accordingly), representing a monthly net return of 1.0% (unaudited).
- Net cash balances decreased $132.4 mm in December 2008 largely due to decreased operating cash balances ($140.5 mm) and increased OIM cash balances ($9.7 mm). JPMorgan US Govt. money market fund had 30-day average yield of 1.18% for December 2008 (1.57% for Nov. 08) and 7-day average yield of 1.04% on 12/31/08 (1.47% on 11/30/08).

December 2008/June 2008 FYTD Comparisons

- Net investment income FYTD of a negative $149 million comprised of $421 mm of investment income, $568 mm of net realized/unrealized losses ($145 million net realized loss) and $2 mm in fees, representing a FYTD net portfolio return of -0.7% (unaudited).
- Bond market value increase of $599 mm FYTD comprised of $378 mm in interest income, $370 mm of net realized/unrealized gains ($78 mm net realized loss), offset by $143 mm in OIM redemptions and by $6mm in higher OIM cash balances, representing a FYTD net return of 5.4% (unaudited).
- Equity market value decrease of $913 mm FYTD comprised largely of $36 mm in dividend income, $938 mm in realized/unrealized losses ($67mm net realized loss) and $12 mm in OIM redemptions, reduced by $1 mm in lower OIM cash balances, representing a FYTD net return of -28.3% (unaudited).

BWC Invested Assets
Estimated and Unaudited
As of January 22, 2009

Jan09 MV Decrease Bonds………….. $ -445 million (-3.1% return)
Jan09 MV Decrease Equities……….. $ -223 million (-8.6% return)

Jan09 MV Decrease Bonds+Equities $ -668 million ($-614 mm SIF only)
(-3.9% portfolio return including Cash)

BWC Net Assets 6/30/08……………..$2,503 million
BWC Net Assets 9/30/08……………..$1,580 million (-$923 mm FYTD)
BWC Net Assets 10/31/08……………..$ 225 million (-$2,278 mm FYTD)
BWC Net Assets 11/30/08……………..$ 945 million (-$1,558 mm FYTD)
BWC Net Assets 12/31/08……………..$2,312 million (-$191 mm FYTD)

BWC Asset Allocation MV 1/22/09

Bonds*…………	$13,366 million	82.0%
Equities*………….	2,789 million	17.1%
Cash…………….…...	145 million	0.9%
TOTAL………...	$16,300 million	100.0%

* includes nominal cash held by outside managers

Portfolio Return 2008 thru Sept08……..-5.7% (-$1.04 billion net inv. income)
Portfolio Return Oct08……….. ……....-8.7% (-$1.47 billion net inv. income)
Portfolio Return Nov08……………….+4.8% (+$0.73 billion net inv. income)
Portfolio Return Dec08………………. +8.4% (+$1.33 billion net inv. income)
Portfolio Return Calendar 2008 ……… -2.3% (-$0.44 billion net inv. income)
(returns above not additive)
Portfolio Return Jan09 MTD ……..….. - 3.9%

Prepared by: Bruce Dunn, CFA
BWC Chief Investment Officer

INVESTMENT DIVISION

TO: Marsha Ryan, Administrator
BWC Investment Committee
BWC Board of Directors

FROM: Bruce Dunn, CFA, Chief Investment Officer

DATE: January 16, 2009

SUBJECT: CIO Report December, 2008

Fiscal Year 2009 Goals

The Investment Division has five major goals for the new fiscal year 2009. These goals and brief comments on action plans for each goal follows:

1. Provide support and execute new BWC Investment Policy resulting from Asset-Liability study

2. Achieve full staffing of BWC Investment Division with continued training of developing staff

3. Continued establishment and execution of investment controls and compliance procedures

4. Complete implementation and utilization of resources provided by new investment accounting and performance system

5. Sell remaining miscellaneous investment assets

Strategic Goal One – PORTFOLIO TRANSITION

BWC investment consultant Mercer will be formulating an asset-liability study and related investment strategy recommendations to be presented to the BWC Investment Committee. The BWC Investment Division will provide whatever support is needed by Mercer in terms of background and information necessary for Mercer to complete its asset-liability study of the Bureau and its investment strategy recommendations. Once a new investment strategy is approved by the BWC Investment Committee and Board of Directors, the Investment Division will assist Mercer and the Investment Committee in developing a new or revised Investment Policy Statement reflecting the newly approved investment strategy.

The Investment Division in consultation with Mercer will employ a thorough and complete RFP process for each new outside investment manager search required to execute the new investment strategy. Given the assumption that multiple RFP processes will be necessary to execute the new investment strategy, a prioritization of the timing of RFP issuances will occur with the approval of the Investment Committee. Each RFP process is expected to result in investment manager recommendations to be presented for approval by the respective RFP evaluation committee to the Investment Committee and Board of Directors.

After each new investment manager for each identified investment asset class mandate is selected and approved, the Investment Division will coordinate the transfer of appropriate invested assets from the legacy investment manager to the new investment manager. It is expected that the Bureau will engage with its approved transition managers for the execution of each of its asset manager transfer strategies. The Investment Division will oversee the timing and execution of each targeted transition with the goal of achieving such asset transition with efficiency and at a low economic cost.

<u>Strategic Goal Two – INVESTMENT STAFF</u>

The Investment Division began fiscal year 2009 commencing July 1, 2008 with a staff of ten individuals consisting of the CIO, Director of Investments, Investment Administration Manager, one Senior Investment Manager, one Investment Manager, three Assistant Investment Managers and two administrative assistants. The one current remaining vacancy within the Investment Division is for a second Senior Investment Manager. Second stage interviews were concluded in October, 2008 for this important position. A finalist candidate was offered the position of Senior Investment Manager and has accepted such offer. The Senior Investment Manager candidate is scheduled to join the Investment Division staff in February 2009 and has satisfied the requisite background checks.

There will be a proper emphasis on the training of staff investment professionals to become more effective managers. Continuous investment education and an appropriate emphasis on CFA (Chartered Financial Analyst) related programs and study will be encouraged and supported. The number of investment professionals on staff who have achieved the CFA accreditation now totals six and will total seven with the addition of the chosen second Senior Investment Manager in February, 2009. The cross-training of many duties assigned to respective staff members will occur to broaden skill sets and ensure necessary backup support. Each investment professional on staff is expected to serve the needs of the Bureau and its customers with the highest of integrity, ethics and competence.

Strategic Goal Three – INTERNAL INVESTMENT PROCEDURES

The Investment Division will continue to establish and improve upon internal investment procedures and controls. All such procedures will be written and mapped through the use of the Webmethods schematic process. The BWC Internal Audit Division will be engaged as appropriate in guiding and assisting the Investment Division in the creation and refinement of such internal control procedures.

The Investment Division has focused on the management oversight of the passive style investment managers, performance reporting and other investment activities to support the BWC Investment Policy. Internal procedures will be developed for the monitoring of active style investment managers in advance of the anticipated selection and engagement of any such managers as an outcome of any new investment strategy approved. Among new policies and procedures being addressed are brokerage activity, proxy actions, corporate actions, legal class actions and asset allocation rebalancing.

Strategic Goal Four – INVESTMENT ACCOUNTING SYSTEM RESOURCES UTILIZATION

A new investment accounting and reporting system offered by BNY Mellon was selected by the Bureau in 2007 via the RFP process. The Investment Division is focusing on the goal of utilizing this improved investment accounting system for the daily monitoring of investment managers in satisfaction of compliance with the BWC Investment Policy. The investment staff has now either learned or is well into the process of learning how to utilize many of the compliance and performance measurement tools and resources offered by this accounting system through both formal training sessions and self education. The BWC Internal Audit Division validated in October, 2008 that the compliance measurement tools of this investment accounting system have been implemented and are being utilized by the Investment Division.

Strategic Goal Five – MISCELLANEOUS INVESTMENT ASSET SALES

It is a strategy and goal of the Investment Division to sell or liquidate during fiscal year 2009 most or all remaining miscellaneous investment assets of value owned by the Bureau. Miscellaneous assets are defined to include private equity, coins, stock distributions received from formerly owned private equity partnerships, and illiquid securities inherited and retained from previously terminated outside investment managers. The aggregate carrying value of these miscellaneous assets targeted for disposal was approximately $10 million on December 31, 2008.

At the end of fiscal year 2008 ending June 30, 2008, a total of 66 private equity partnerships had been sold by BWC since June, 2007 for total proceeds received of $399.0 million. All such proceeds received from private equity sales were reinvested in the passive indexed Large Cap S&P 500 Equity portfolio currently managed by Northern Trust. The last remaining private equity fund investment targeted for sale was sold in October, 2008 for proceeds of $0.9 million. There currently remains one private equity partnership that is being liquidated via its own portfolio asset sales and resulting cash distributions to its investors during fiscal year 2009. A significant cash distribution of $1.02 million was in fact received by BWC in September, 2008 from this fund being liquidated, reducing its carrying value to $0.2 million. A final summary report of the private equity sale process and results was presented at the Investment Committee meeting on November 20, 2008.

A substantial distribution of cash totaling approximately $12.1 million was received by the Bureau in July, 2008 from the coin fund liquidation firm contracted by the State of Ohio to oversee the liquidation of remaining coin fund related assets associated with Tom Noe. As a result of this significant coin fund distribution, the Bureau has now received a total of approximately $53.5 million, net of coin-related expenses paid directly by the Bureau. All remaining unencumbered coin and collectible assets not reserved for litigation claims have now been liquidated with the recent completion of several small auctions and a direct sale transaction with a dealer. There are believed to be sufficient funds retained in a capital coin fund bank account, managed by the coin fund liquidation firm, to pay future projected professional fees and litigation settlements.

Compliance

The investment portfolios in the aggregate were in compliance with the BWC Investment Policy at the end of December, 2008, with the exception of certain asset class allocation market value percentages at the end of the fourth quarter, 2008. The asset allocation class market values of both Equities and the Long Duration Fixed Income portion of the fixed income portfolios for each of the State Insurance Fund (SIF), Disabled Workers' Relief Fund (DWRF) and Coal Workers' Pneumoconiosis Fund (CWRF) were outside of their stated target ranges of the BWC Investment Policy at the end of the fourth quarter of 2008. Please see the next section on Portfolio Rebalancing.

Portfolio Rebalancing

At the end of the fourth quarter of 2008 ended 12/31/08, the investment portfolios for each of the State Insurance Fund (SIF), Disabled Workers' Relief Fund (DWRF) and Coal Workers' Pneumoconiosis Fund (CWPF) were outside of the asset allocation policy range of the Investment Policy Statement (IPS) for both Total Equity and Long Duration Fixed Income (LDFI) assets. These asset ownership ranges expressed as strategic target weights of the total portfolio at market value are 17-23% for Equities and in effect 55-63% for LDFI for each of these three portfolios. The actual portfolio allocation weightings at market value for these three trust funds were as follows on 12/31/08:

	SIF	DWRF	CWPF	Policy Range	Target
LDFI	65.2%	66.2%	64.9%	55-63%	59%
TIPS	20.5%	20.4%	20.0%	17-23%	20%
Equity	13.4%	12.9%	13.8%	17-23%	20%
Cash	0.9%	0.5%	1.3%	0-6%	1%

The significant ownership underweight for Equities and overweight for LDFI at the end of 4Q08 was the result of the BWC composite S&P 500 public equity portfolios returning a negative 21.9% and the composite LDFI portfolios returning a positive 13.5% for 4Q08.

Given these ownership weightings, a portfolio rebalancing event was triggered at the end of 4Q08 for each of these three trust funds per the new Rebalancing Policy (Section IV.B) of the IPS that was approved by the Board of Directors on 12/18/08. As a result of this portfolio rebalancing, the BWC Chief Investment Officer (CIO) called a meeting of the BWC Portfolio Rebalancing Committee ("Committee") for 1/06/09 to present a portfolio rebalancing action plan and to revise the BWC staff Investment Asset Allocation Rebalancing Policy to achieve an operational policy consistent with the new IPS Rebalancing Policy. A copy of this amended BWC staff Rebalancing Policy reviewed and approved by the Committee at its 1/06/09 meeting is provided at the end of this CIO Report.
The CIO presented a portfolio rebalancing action plan to the Senior Officer Review Team (BWC Administrator, Chief Operating Officer and Chief Fiscal & Planning Officer) at this 1/06/09 meeting. In recent discussions the CIO had with the BWC LDFI portfolio managers at both State Street and Barclays, the CIO

reported to the Committee that liquidity in the credit portion of the LDFI portfolios of the Bureau had improved significantly in the past month such that the rebalancing strategy recommended for LDFI securities sales could be executed in two or at most three days with good demand now present in the marketplace for many credit bonds owned by BWC. The CIO pointed out to the Committee that the credit portion of the LDFI portfolios reflect approximately 50% of total portfolio value with the remaining 50% comprised of very liquid U.S. Treasury and Agency bonds.

The CIO presented worksheets to the Committee that reflected the estimated portfolio asset allocations for each of these trust fund portfolios as of 12/31/08 and 1/05/09. The 1/05/09 close of business portfolio asset allocations were provided to the Committee because the LDFI portfolio market values declined 3.0% and the Equity portfolio market values increased 2.7% between 12/31/08 and 1/05/09. These asset allocations for 1/05/09 were as follows:

	SIF	DWRF	CWPF	Policy Range	Target
LDFI	64.5%	65.5%	64.2%	55-63%	59%
TIPS	20.5%	20.4%	20.1%	17-23%	20%
Equity	14.1%	13.5%	14.4%	17-23%	20%
Cash	0.9%	0.6%	1.3%	0-6%	1%

Since the Equities ownership was the most out of balance asset class to its Policy ownership range, the CIO focused his rebalancing recommendation on determining the approximate amount of funds that would be needed to redeem from LDFI and reinvest in Equities to achieve an asset allocation of approximately 18.5% for Equities. The target ownership of 18.5% for Equities is consistent with the intent of the IPS Rebalancing Policy adopted last month in being halfway between the limit violated (17%) and the targeted asset percentage (20%). The CIO provided in his worksheets to the Committee both the respective proposed transfer amounts from LDFI to Equities necessary to achieve the objective of an approximate 18.5% ownership allocation to Equities and to get LDFI near 61.0% (halfway between target 59% and upper range 63%) ownership allocation. These transfer amounts based on the 12/31/08 and 1/05/09 asset allocations were as follows:

($millions)	12/31/08	1/05/09	Difference
SIF	$800	$675	$125
DWRF	60	55	5
CWPF	11	9	2
Total	871	739	132

The CIO indicated to the Committee that he favored and recommended that the transfer amounts from LDFI to Equities reflective of the 1/05/09 portfolio asset allocations be considered for approval by the Senior Officer Review Team because it involved lesser amounts which would reduce transaction costs in executing such rebalance transfer. The worksheets provided by the CIO also reflected monthly projected net operating cash balance changes obtained from the Financial Reporting Department. The CIO also indicated to the Senior Officer Review Team that U.S. Treasury yields, especially long maturity 20 and 30 year issues representing a material portion of the BWC LDFI portfolios, have declined significantly in price over the past three trading days (30 yr UST declining over 8% in price) due to a not unexpected reversal in the flight to safety trades occurring in the fourth quarter of 2008. The CIO and BWC Director of Investments both expressed a concern that long-term maturity Treasuries may continue to decline in price in 2009 as investors seek alternative higher yielding bonds. The CIO stated that there is a strong consensus among respected market strategists that Treasury bonds are currently overvalued. The CIO and Director of Investments also mentioned to the Committee that the estimated net unrealized capital gain of the State Street managed SIF LDFI portfolio was reduced from $400 million on 12/31/08 to $140 million at close of 1/05/09. Both investment officers wanted to implement the sale of LDFI bonds promptly to ensure net capital gains would be realized, with the understanding that sale proceeds would be reinvested in Equities upon final settlement date of the bond trades. The Senior Officer Review Team approved the CIO recommendation to implement the sale of the respective recommended amounts of LDFI securities based on the 1/05/09 portfolio allocations from the respective State Street managed LDFI portfolios and also approved the reinvestment of such LDFI sale proceeds into the S&P 500 index portfolios managed by Northern Trust at the agreed amounts.

With this approved rebalancing strategy, the CIO authorized State Street to promptly sell LDFI bonds owned in the three respective trust portfolios. State Street completed the LDFI targeted bond sales over two trading days on January 8-9, 2009. The following is a summary of the results of the LDFI bond sales for each of the trust funds.

($millions)	**SIF**	**DWRF**	**CWPF**	**Totals**
Sale Proceeds (Jan8-9)	$703.8	$57.7	$10.6	$772.2
Net Realized Gain	27.1	3.1	0.4	30.6
Amount Redeemed (Jan13)	675.0	55.0	9.0	739.0

The Investment Division is very satisfied with the overall trading results of this sale program, especially with regards to the corporate bond sales. The targeted amount of sale proceeds approved for redemption by the Senior Officer Review Team for each trust fund were reinvested in the respective S&P 500 index funds on January 13, the common settlement date for all of the bond sales. As a matter of information, the S&P 500 index declined in value 6.3% during the four trading days between January 6-12, 2009 which is the period after approval of the rebalancing strategy but prior to the rebalancing into Equities. All proceeds were reinvested in Equities in one day very efficiently by Northern Trust as manager at a commission cost estimated at one-half cent per share for each of the three trust funds.

The purpose of a rebalancing policy is to take decisive action and a disciplined approach to quickly regain and restore the desired portfolio asset allocation. The amended current Rebalancing Policy of the BWC Portfolio Rebalancing Committee states that any portfolio rebalancing action is expected to occur during the first month of the new calendar quarter. A multiple staged approach to rebalancing to a defined target asset allocation over a more extended period of time is more difficult to implement, incurs higher overall transaction costs especially for smaller accounts such as DWRF and CWPF, and is prone to rethinking and self-doubt. It is the professional opinion of the CIO that a required rebalancing action consistent with the new existing IPS rebalancing policy should be executed and completed as soon as possible shortly after the end of each calendar quarter over a condensed time frame if market liquidity is satisfactory. As mentioned herein, market liquidity was more than satisfactory for the rebalancing action taken earlier this month as described herein.

Investment Manager Cash Redemptions

The Investment Division and Fiscal and Planning Division developed a specific internal cash management strategy and redemption plan in November, 2008 for the purpose of assuring that sufficient cash balances would be available into January, 2009. The period of December and most of January is historically a cyclical period of significantly declining cash balances for the State Insurance Fund whereby operating expenses significantly exceed premium revenue. Such trend typically reverses itself by the end of January and into February of each year as premium collections accelerate. In recent years, redemptions averaging around $150 million were required in December from one or more outside investment managers of SIF in order to have sufficient cash balances available to fund all obligations through January.

Given the stressful state of the U.S. financial markets since September 2008 until recently and the consequent reduced liquidity of non-government bonds, a portfolio cash redemption strategy was formulated to address the remainder of 2008 that precludes the need to have outside managers sell securities, likely at net losses. This strategy involves redeeming cash interest payments for the remainder of 2008 received from bonds owned in the two Long Duration Fixed Income (LDFI) portfolios managed by State Street and Barclays. All cash interest payments received on bonds owned by BWC are normally reinvested in additional bonds by all outside fixed income managers of the Bureau. As a result of the initial execution of this portfolio cash redemption strategy, a total of $90 million in cash was redeemed from the two SIF LDFI portfolios at the end of November for SIF an an additional $45 million was redeemed at the end of December, 2008. An additional $12.5 million was also redeemed in November for SIF from the passive equity indexed manager (Northern Trust). The equity portfolio cash redemption was as a result of a specific corporate action involving Anheuser Busch common stock being retired in a corporate buyout acquisition. In addition to these SIF cash redemption activities totalling $147.5 million, DWRF and CWPF similarly redeemed cash of $6.5 million and $1.3 million, respectively, from interest payments received from the LDFI portfolios as well for only the month of November.

As a result of this cash redemption strategy, cash was redeemed by the Bureau from its outside managers totalling $155.3 million for the months of November and December, 2008 without incurring any realized losses from sales of portfolio securities.

The Portfolio Rebalancing Committee of the Bureau agreed in principle at its January 6, 2009 meeting to redeem cash interest payments received from the LDFI portfolios of SIF, DWRF and CWPF portfolios managed by State Street and the SIF LDFI portfolio managed by Barclays for operational liquidity purposes, with any excess cash not needed for operations to be reinvested in the S&P 500 index portfolios managed by Northern Trust. Cash interest payments received from the LDFI portfolios of SIF are estimated to be around $145 million over the first three months of 2009.

Transition Management Services RFP

BWC currently has optional use contracts outstanding with two transition managers, State Street and Barclays. These two current transition manager optional use contracts with State Street and Barclays expire on October 31, 2009 with up to a six-month extension for any specific asset transition activity occurring at each expiration date.

Because these contract expirations in October, 2009 will likely occur when one or more investment manager RFP blackout periods and/or portfolio transitions may also be occurring, the Investment Division intends to issue an RFP and complete a new search for transition managers in advance of the need for specific identified transition manager services. Transition manager services and requisite trading activities will be coordinated with the implementation of the new BWC asset allocation investment strategy approved by the Board of Directors that emerges from the Mercer asset-liability modelling recommendations. Such transition manager services are expected to be engaged by the Bureau under the supervision of the Investment Division. These transition managers will be charged with effectively executing the sale, purchase and transfer of appropriate invested assets from legacy investment managers to new approved investment managers.

It is anticipated that the new RFP for transition manager services will be issued in February, 2009. The current tentative Transition Manager RFP timeline targets May, 2009 for the final selection of finalists by the Evaluation Committee consisting of the BWC investment staff and Guy Cooper of Mercer. The Transition Manager RFP blackout period will be communicated to the BWC Board of Directors at the appropriate time.

Quarterly Investment Manager Meetings Summary (Third Quarter 2008)

Northern Trust (Passive Large Cap U.S. Equity)

The BWC investment staff met with the portfolio manager and a relationship manager on November 13, 2008 at the Investment Division offices. The total returns of the State Insurance Fund and Coal Workers Fund were -8.33% for 3Q08 versus -8.37% for the benchmark S&P 500 index while 3Q08 total return of the Disabled Workers Fund was -8.31%, as represented by Northern Trust. This quarterly outperformance to the benchmark index was mostly attributable to cash reinvestment drag during a period of significant negative returns.

PM Brent Reeder indicated more trading for the three funds is being executed in last 15 minutes before closing bell to reduce tracking error because of heightened volatility occurring in the last minutes of daily trading in recent months. PM believes AIG will stay in the S&P 500 index since the federal government is strongly supporting AIG. Although some significantly reduced market cap names have been removed from benchmark index in 3Q08, there were nevertheless 17 names below a $1 billion market cap at time of meeting according to PM. PM indicated S&P 500 index generally adds names that are at least $4 billion in market cap. PM mentioned that he has seen some client portfolio rebalancing recently but surprisingly not as much as expected. He also has not seen many redemptions on indexed equity side from clients. Counterparty risk of brokers utilized by Northern Trust across all trading is being scrutinized more closely. There was a good discussion with the Northern Trust relationship manager at the meeting regarding the securities lending side and the recent actions imposed by Northern Trust to prevent large pullouts of cash that would damage remaining participants. For securities lending clients who attempt to withdraw all funds, a pro-rata share of collateral pool securities rather than cash is given to such clients.

Barclays Global Investors (Passive Long Duration Fixed Income)

The BWC investment staff met with a senior BGI fixed income strategist and the primary BWC relationship manager on November 13, 2008 at the Investment Division offices. Performance for 3Q08 for the State Insurance Fund LDFI portfolio managed by BGI had a total return of -3.33% as reported by BGI compared to the -3.40% benchmark index return. A primary reason for the outperformance was a slightly higher weighting in Treasuries and a slightly lower weighting in corporate credit issues when compared to the benchmark index composition for the quarter when Treasuries significantly outperformed corporate bonds.

BGI strategist indicated there is still a huge overhang of securitized issues to be sold by holders, with TARP strategy for supporting this market unclear yet. Credit default swap spreads are much tighter than corporate bond cash market yield spreads recently. BGI strategist indicated bid/ask spreads on better name long credits are approximately 2%. Broker-dealer trading desks still not supporting credit markets and are only acting as agent on a "best efforts" basis. BGI indicated this poor pricing of credit bonds is deterring transitions and portfolio rebalancing actions for clients. Relationship Manager indicated BGI expects to be profitable for 2008. BGI is attracting more assets and new clients with BGI active fixed income management team outperforming competitors, partly due to having sold all subprime exposure last year. BGI securities lending operations are having record year with high income being earned. Cash collateral pool management strategy being employed in securities lending by BGI has involved shortening duration and being defensive. Capital support agreements by Barclays Bank has been a good stabilizer in preventing clients from jumping out of securities lending, according to Relationship Manager.

State Street Global Advisors (Passive Long Duration Fixed Income; Passive TIPS)

The BWC Chief Investment Officer and Director of Investments visited the offices of State Street Global Advisors (SSGA) in Boston on November 14, 2008 for the purposes of conducting an on-site quarterly investment manager meeting as well as to meet with additional high-level investment professionals on requested focus topics, including the new CEO Scott Powers and the CIO Global Fixed Income Head Mark Marinella who is the immediate supervisor of LDFI PM John Kirby. The remaining Bureau investment staff participated in the quarterly meeting portion of the visit via conference call.

State Insurance Fund total return for the LDFI portfolio in 3Q08 was -3.36% as reported by SSGA versus the -3.40% for benchmark index with cash drag and overweight in government bonds accounting for excess performance to the benchmark over this period. Total 3Q08 return of Disabled Workers and Coal Workers LDFI portfolios reported by SSGA was -3.45% and -3.49%, respectively. LDFI PM Kirby indicated he likes how the three BWC trust fund portfolios are positioned now. Approximately 2/3 of the over 1,100 issues in the benchmark index are presently owned in the SIF LDFI portfolio and approximately ½ of benchmark issues are owned in each of the two ancillary fund LDFI portfolios. PM is reluctant to accumulate additional names where transaction costs and bid/ask spreads wide. PM indicated, however, bids on credit bonds are improving and broker-dealers are beginning to position issues again, although bids for $20 million or more of credit bonds still very scarce. Over past six months, PM has not bought the 10-year plus 1-2 month maturity issue that stays in benchmark index for only several months due to current higher transaction costs. PM seeing more Liability Driven Investors (LDI) opportunistically buying long duration credit with wide option adjusted spreads. Some new issues are getting upsized more recently and PM is getting allocated back to less than amount of bonds desired. PM confirmed that BWC would reduce transaction costs by redeeming cash accumulated from interest received in all three managed accounts at end of November as planned when PM performs month-end portfolio rebalancing as opposed to redeeming needed funds sometime within a month.

The U.S. TIPS market was under some pressure in 3Q08 with negative 3.54% return of benchmark index (BWC fund performance matched benchmark) but October was worst month ever for TIPS according to PM Jay Mauro with a negative 8.69% return. The recent poor performance reflects a deflation theme and hedge fund selling, especially at front end of curve with no dealer support to buy. PM Mauro indicated there has been significant interest by buyers when real long duration TIPS yields are above 3%, especially from pension funds with COLA clauses. The repurchase agreement (repo) market is still broken and TIPS has lost its repo bid, according to SSGA head bond trader Jim Kramer, but this is creating wonderful buying opportunity for the buy and hold investor. Mr. Kramer indicated TIPS exposure will offset some portfolio volatility especially in times of higher inflation. Inflation breakevens to nominal Treasuries have declined to negative yields recently which imply deflation expectations over next several years. PM Mauro indicated that 5-year new issue auctioned TIPS may be replaced with 30-year TIPS due to big demand for 30 years by LDI buyers. State Street expects supply of TIPS to be maintained by new Obama administration – Larry Summers was a big supporter of TIPS issuance when he was Treasury Secretary under President Clinton.

In addition to the meetings held with the LDFI and TIPS portfolio managers, the BWC CIO and DOI met in Boston with a number of high-level SSGA executives, including new CEO Scott Powers and the CIO Global Fixed Income Head Mark Marinella who is the direct supervisor of PM John Kirby. CEO Powers state that the "beta" or index management business is the anchor of SSGA's business model. The decision was made by Mr. Powers to exit the active fundamental equity management business as a result. Mr. Powers stressed a renewed emphasis on top-tier client servicing and advocacy. The strategic decisions made by Mr. Powers to date regarding business emphasis and management team leadership positions has been well received throughout the organization. Mr. Powers indicated State Street was not seeking nor in need of any TARP funds but nevertheless received $2 billion recently because State Street is one of the largest custodians and services the important pension fund market. Global Fixed Income CIO Mark Marinella provided his thoughts on the state of the fixed income markets. He indicated it took years to build up the excesses in the fixed income market and it will take time to return to markets that will be anything close to normal. Mr. Marinella believes investment grade corporates currently represent the best value in the fixed income markets followed by "AAA" quality ABS-CMBS and then MBS sectors. Mr. Marinella indicated the biggest challenge is actually finding good quality corporate bonds because there are not a lot of sellers at these cheap levels. He indicated credit spread curve is less steep for long maturities than for intermediate term maturities. Mr. Marinella believes the TIPS market will be a long-term winner but may stay cheap with low breakeven spreads over next several months in part due to likely future negative monthly inflation adjustment factors posted. PM Kirby was promoted by Mr. Marinella to co-head of global beta fixed income team earlier this year.

Ohio BWC Processes and Procedures
Investment Asset Allocation Rebalancing Policy
BWC Portfolio Rebalancing Committee

Adopted: January 6, 2009
Amends Adoption of: February 25, 2008

<u>Objective</u>

It is the intent of any portfolio rebalancing strategy to be meaningful such that the execution of such rebalancing strategy will result in the affected asset classes being significantly nearer target asset allocation as defined in the Investment Policy Statement (IPS). This rebalancing strategy is intended to benefit future portfolio performance while minimizing portfolio turnover and transaction costs.

Processes and Procedures

The following are actions required to implement and execute an asset allocation rebalancing of the investment portfolio of any respective trust fund of BWC:

- Investment Division will monitor the unaudited asset allocation of each trust fund on a monthly basis for compliance with the IPS.

- BWC Administrator, Chief Operating Officer and Chief Fiscal & Planning Officer ("Senior Officer Review Team") will be notified by the Chief Investment Officer (or Director of Investments if designated by the CIO) when it is determined the asset allocation for an identified general asset class (Total Fixed Income; Total Equity) or a specific asset class (i.e. TIPS, Long Duration Fixed Income) is outside of the policy range limits, as defined in the IPS, at the end of the calendar month.

- Any portfolio rebalancing action is expected to occur during the first month after the end of each calendar quarter.

- Investment Division will contact the appropriate outside investment managers and the BWC investment consultant to discuss market conditions and potential rebalancing actions.

- Investment Division will calculate a specific rebalancing dollar reallocation that will factor in appropriate future trust fund cash flows and the desired asset allocations upon rebalancing.

- Chief Investment Officer will present a rebalancing recommendation to the Senior Officer Review Team for approval before any such asset rebalancing can be implemented and executed.

- Chief Investment Officer will provide a written summary of the completed rebalancing activity executed for any respective trust fund portfolio to the BWC Investment Committee at its next scheduled meeting.

Prepared by BWC Investment Division

MERCER

MARSH MERCER KROLL
GUY CARPENTER OLIVER WYMAN

Consulting. Outsourcing. Investments.

Draft Report – Numbers are illustrative only.

January 22, 2009

Summary of Results – Projection Model

Investment Committee Meeting
Ohio Bureau of Workers' Compensation

Guy Cooper
Neil Cornell
Louis Finney
Kristin Finney-Cooke
Rich Nuzum

Summary

Overview of ALM Computations

- We start with assumptions about how the investment markets are going to behave in the future.
- These assumptions are shown in detail in the appendix of the report.
- A principal assumption is that stocks are going to earn a compound return of 8.4% in the next 30 years while bonds will earn 4.8% - 5.4% (depending on the type of bond).
- Detail: All assets behave in the future according to a probability distribution not just a single number. Stocks, for example, will earn 8.4% compounded on average but will vary around this average in any particular time period. The amount of variation around the average is given by the standard deviation of stock returns, also a part of the assumption set.

Overview of ALM Computations

- We also stipulate several asset mixes we want to study. In this report, we examine what happens over the next 20 years if the Bureau adopted any of five asset mixes:
  - The current asset mix of 80% bonds and 20% stocks
  - A mix of 100% bonds and no stocks
  - 70% bonds and 30% stocks
  - 60% bonds and 40% stocks
  - 50% bonds and 50% stocks
- Detail (Equity Portfolio): In each of the last three asset mixes, we assume 2 1/2% of the assets are invested in Real Estate and 2 ½% is invested in Private Equity. This 5% allocation to Alternatives is part of the equity allocation.
- Detail (Fixed Income Portfolio): In each of the last three asset mixes, we assume 5% of the assets are invested in High Yield Bonds. This 5% allocation is part of the fixed income allocation.
- In both cases we view these diversifying allocations as aspects of a second stage and we expect additional discussion on these pieces.

Overview of ALM Computations

- In addition to assumptions about asset returns and possible asset mixes, we need information about the Bureau's expected future liabilities.
- Oliver Wyman produces estimates of expected future liabilities for the next 30 years and we use these.
- We will discount these liability projections using a constant 4% discount rate.
- We will also study two other discount rate methods as a double check on the 4% constant method – to see if any of the conclusions differ significantly.

Overview of ALM Computations

- The basic idea of these projections is as follows:
- Assuming we invest 80% in bonds and 20% in stocks, the Bureau's current strategy, we compute what the assets will earn in 2009, assuming stocks and bonds behave in 2009 in accordance with our assumptions about their average return and their likely variation of return.
- We then compute the Net Asset and the Funding Ratio at the end of 2009.
- We do this for every year thereafter 2010 – 2028.
- We do this 1000 times, as if the 20 year time period 2008-2028 happened in a 1000 different ways.
- We make these calculations for all five of the asset mixes.

Overview of ALM Computations

- The richness of this methodology is that by examining 1000 different futures, we can make statements about what is most likely to happen, what least likely, and etc.
- This is called stochastic forecasting, where many possible futures are projected. The more common alternative is called deterministic forecasting, where just a single most likely or average future is projected.
- What makes this possible is the assumption that future asset markets behave according to a probability distribution not just a single number.

Summary of Results
Static Discount Rate

Summary of Key Statistics - Net Asset and Funding Ratio
4% Discount Rate for Liabilities

		80% Bonds	100% Bonds	70% Bonds	60% Bonds	50% Bonds
Expected	Net Asset - 2013 [1]	10	(50)	1,131	1,456	1,775
	Net Asset - 2018 [1]	(280)	(777)	1,919	2,661	3,334
Expected	Funding Ratio - 2011	97%	96%	101%	103%	104%
	Funding Ratio - 2013	100%	100%	109%	113%	115%
	Funding Ratio - 2018	97%	92%	120%	128%	134%
	Funding Ratio - 2028	104%	80%	184%	214%	250%
Downside Risk						
5% probability	Funding Ratio - 2011	77% or less	82%	82%	81%	79%
	Funding Ratio - 2013	75%	82%	83%	82%	81%
	Funding Ratio - 2018	63%	69%	77%	76%	73%
	Funding Ratio - 2028	41%	40%	81%	77%	72%
Upside Potential						
25% probability	Funding Ratio - 2011	106% or more	101%	110%	113%	116%
	Funding Ratio - 2013	113%	107%	122%	128%	134%
	Funding Ratio - 2018	114%	104%	139%	155%	169%
	Funding Ratio - 2028	144%	104%	245%	302%	366%

[1] In Millions

Summary of Results

4% Static Rate and Smoothed

Summary of Key Statistics - Net Asset and Funding Ratio
4% Discount Rate for Liabilities

		80% Bonds	100% Bonds	70% Bonds	60% Bonds	50% Bonds
Expected	Net Asset - 2013 [1]	10	(50)	1,131	1,456	1,775
	Net Asset - 2018 [1]	(280)	(777)	1,919	2,661	3,334
Expected	Funding Ratio - 2011	97%	96%	101%	103%	104%
	Funding Ratio - 2013	100%	100%	109%	113%	115%
	Funding Ratio - 2018	97%	92%	120%	128%	134%
	Funding Ratio - 2028	104%	80%	184%	214%	250%
Downside Risk						
5% probability	Funding Ratio - 2011	77% or less	82%	82%	81%	79%
	Funding Ratio - 2013	75%	82%	83%	82%	81%
	Funding Ratio - 2018	63%	69%	77%	76%	73%
	Funding Ratio - 2028	41%	40%	81%	77%	72%
Upside Potential						
25% probability	Funding Ratio - 2011	106% or more	101%	110%	113%	116%
	Funding Ratio - 2013	113%	107%	122%	128%	134%
	Funding Ratio - 2018	114%	104%	139%	155%	169%
	Funding Ratio - 2028	144%	104%	245%	302%	366%

[1] In Millions

Summary of Key Statistics - Net Asset and Funding Ratio
'Smoothed' Discount Rate for Liabilities

		80% Bonds	100% Bonds	70% Bonds	60% Bonds	50% Bonds
Expected	Net Asset - 2013 [1]	41	(676)	751	1,134	1,469
	Net Asset - 2018 [1]	381	(1,185)	1,755	2,570	3,388
Expected	Funding Ratio - 2011	94%	91%	97%	98%	100%
	Funding Ratio - 2013	100%	94%	106%	110%	113%
	Funding Ratio - 2018	104%	87%	119%	128%	138%
	Funding Ratio - 2028	114%	54%	170%	210%	250%
Downside Risk						
5% probability	Funding Ratio - 2011	76% or less	77%	77%	77%	76%
	Funding Ratio - 2013	77%	76%	80%	79%	78%
	Funding Ratio - 2018	70%	65%	76%	76%	76%
	Funding Ratio - 2028	45%	22%	67%	67%	64%
Upside Potential						
25% probability	Funding Ratio - 2011	102% or more	97%	105%	109%	112%
	Funding Ratio - 2013	112%	102%	119%	126%	133%
	Funding Ratio - 2018	119%	98%	140%	156%	175%
	Funding Ratio - 2028	156%	72%	233%	296%	368%

[1] In Millions

Appendix

Funding Ratio
Definitions

Based on June 30, 2008 Actuarial Audit, Mercer calculated the funding ratio for the SIF to be 102%, based on the following information:

SIF (break out by Employer Type)	5% Discounted Unpaid Losses
Private (PA)	11,918
Taxing Districts (PEC)	2,205
State Agencies (PES)	715
Self Insured	184
Health Partnership Program (HPP)	679
Total SIF	15,701
SIF Assets (Based on Asset Reporting Fund Composites)	15,944
Funding Ratio	1.02

Staff recently shared a variation on the Funding Ratio based on:

“Funded Liability” defined as: Reserves for funded unpaid claims and funded claim expenses (HPP on PA/PEC), excluding any risk margin

“Funded Assets” defined as: Cash, investments, and current receivables less deposits and current payables

$$\text{June 30, 2008 Funding Ratio} = \frac{\text{Funded Assets}}{\text{Funded Liabilities}} = \frac{\$17.001\text{B}}{\$14.761\text{B}} = 1.15$$

Setting the Discount Rate
Different Methodologies Reviewed

Usually Discount Rates follow yields that are experienced in the fixed income market place. We utilized three different discount rates methodologies in the analysis:

- Static
  – Discount Rate remains at a set level and never varies.
  – e.g. 4%
- Smoothed
  – Discount Rate changes, but only after the fixed income benchmarks demonstrate significant changes from previous yield levels within the set time frame.
  – Small changes in yield levels are ignored, but when multiple years of continual small changes amount to a large difference of where the discount rate is at versus the current yield levels, a change in the discount rate occurs toward the current level.
- And Dynamic
  – Rate fluctuates in one to one changes as fixed income market benchmarks change.
  – Often referred to “Mark to Market”.

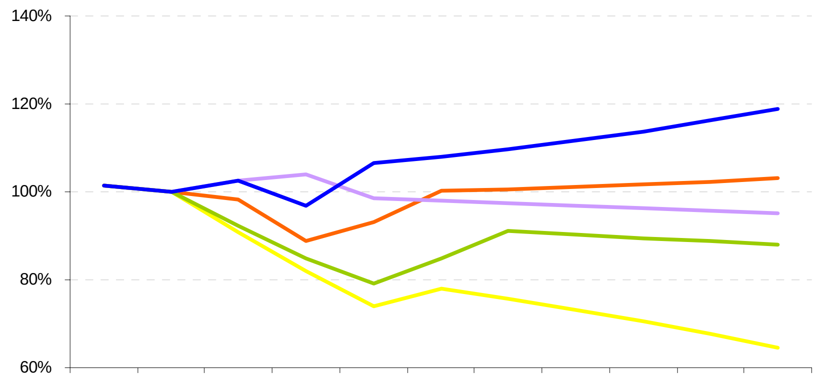
Setting the Discount Rate
Illustrations

Fixed Income Benchmark	Initial Start Date 6/30/2008	Projection Year Date June 30, 2009	2010	2011	2012
10 - Year Treasury	3.98%	2.60%	3.50%	5.42%	4.40%
Discount Rate Methodology					
Static	DR used in 6/30/2008 Report: 5.0%	4.00%	4.00%	4.00%	4.00%
Smoothed		4.25%	4.25%	5.00%	5.00%
Dynamic		2.60%	3.50%	5.42%	4.40%

For the Smoothed Methodology: when the “10-Year Treasury + 75 basis points benchmark” deviates from last years discount rate by more than 75 basis point, the discount rate is moved up (or down) by 75 basis points.

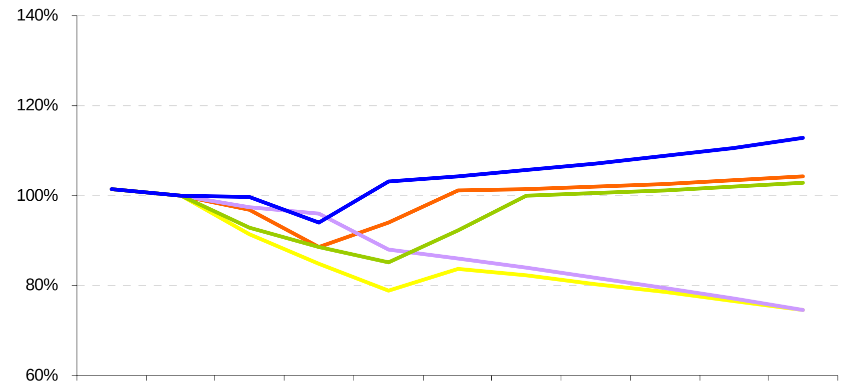
Funding Ratio - Comparison of Long Bonds vs Short Bonds
Smoothed Discount Rate/Current Portfolio

Current Portfolio with 59%
Long Gov't/Credit Bonds



		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Deterministic Scenarios												
Base Case		102%	100%	98%	89%	93%	100%	101%	101%	102%	102%	103%
Stagflation		102%	100%	91%	82%	74%	78%	76%	73%	71%	68%	65%
Prolonged Recession		102%	100%	103%	104%	99%	98%	97%	97%	96%	96%	95%
Inflationary Growth		102%	100%	92%	85%	79%	85%	91%	90%	90%	89%	88%
Ideal Growth		102%	100%	102%	97%	107%	108%	110%	112%	114%	116%	119%

Current Portfolio with 59%
Aggregate Bonds



		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Deterministic Scenarios												
Base Case		102%	100%	97%	89%	94%	101%	101%	102%	103%	103%	104%
Stagflation		102%	100%	91%	85%	79%	84%	82%	80%	79%	77%	74%
Prolonged Recession		102%	100%	97%	96%	88%	86%	84%	82%	80%	77%	74%
Inflationary Growth		102%	100%	93%	89%	85%	92%	100%	101%	101%	102%	103%
Ideal Growth		102%	100%	100%	94%	103%	104%	106%	107%	109%	111%	113%

Funding Ratio is impacted most adversely by the Stagflation scenario. High medical inflation increases liabilities rapidly, eroding the funding ratio quickly.

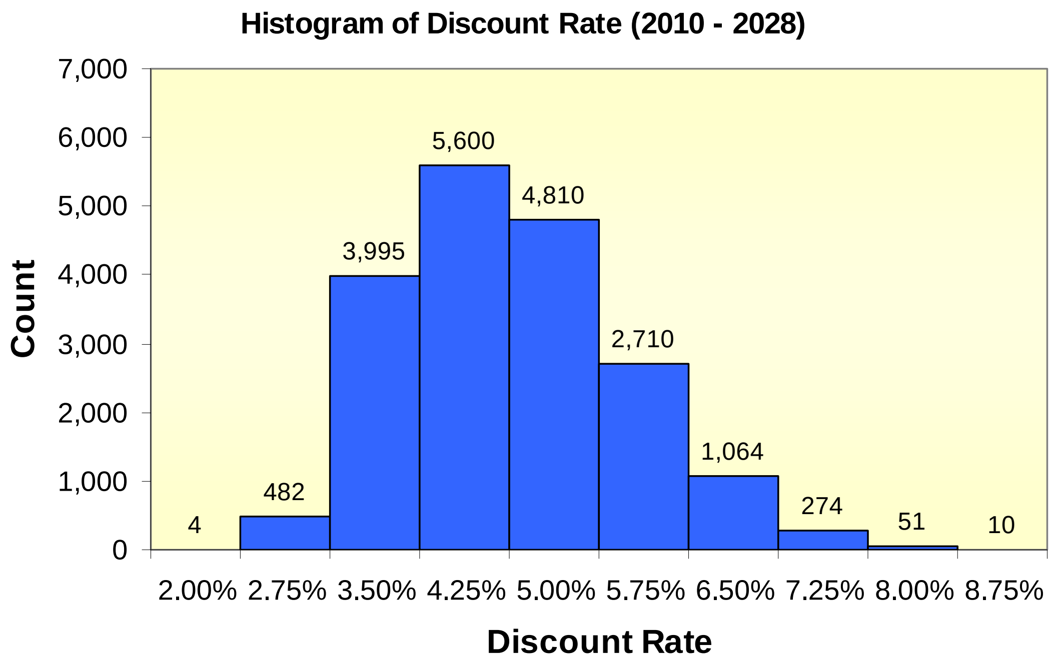
Longer Bonds provide greater protection under Recession scenario.

Smoothing the Discount Rate
Analysis of the Methodology

Percentage of Time the Discount Rate does not fluctuate from Year to year

June 30	to June 30	Percent
2010	2011	72.40%
2011	2012	70.20%
2012	2013	62.00%
2013	2014	60.10%
2014	2015	59.20%
2015	2016	59.10%
2016	2017	57.40%
2017	2018	63.10%
2018	2019	60.00%
2019	2020	62.30%
2020	2021	60.20%
2021	2022	58.50%
2022	2023	60.50%
2023	2024	58.50%
2024	2025	59.70%
2025	2026	59.20%
2026	2027	59.40%
2027	2028	59.20%

Frequency of Discount Rate Outcomes for projection years 2010 through 2038



Discount Rate	Count
2.00%	4
2.75%	482
3.50%	3995
4.25%	5600
5.00%	4810
5.75%	2710
6.50%	1064
7.25%	274
8.00%	51
8.75%	10

Key Finding:

About 60% of the time, discount rate is not changing from year to year

About 80% of the outcomes are at 5.0% or less

Alternative Asset Mixes

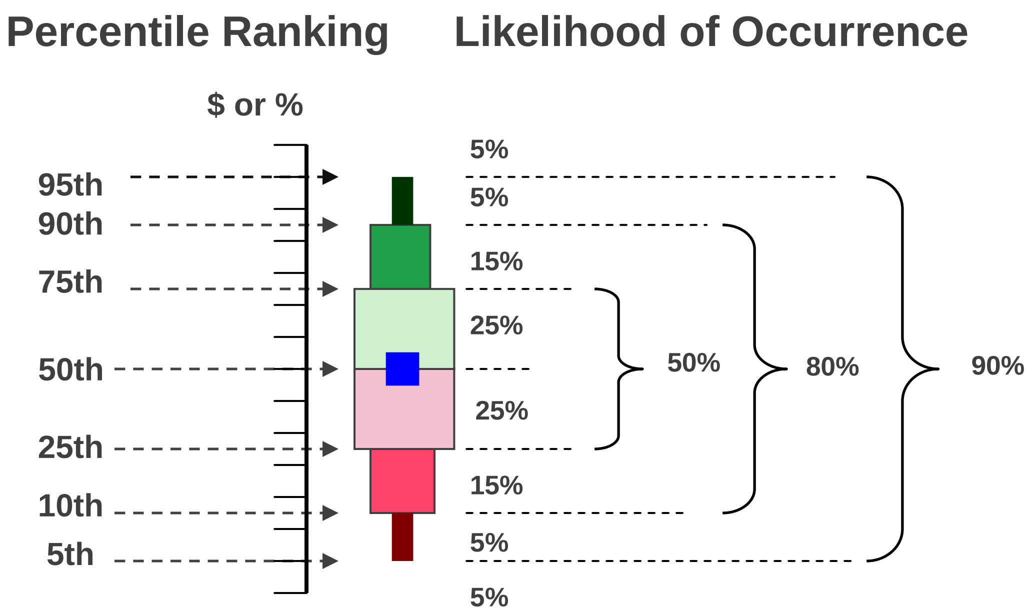
	Static Discount Rate					Smoothed Discount Rate				
	Implemented Policy Mix 1	All Bond Portfolio Mix 2	30% Equity 70% Bond Mix 3	40% Equity 60% Bond Mix 4	50% Equity 50% Bond Mix 5	Implemented Policy Mix 6	All Bond Portfolio Mix 7	30% Equity 70% Bond Mix 8	40% Equity 60% Bond Mix 9	50% Equity 50% Bond Mix 10
Equity : Fixed income : Alternatives	20:80:0	0:100:0	25:70:5	35:60:5	45:50:5	20:80:0	0:100:0	25:70:5	35:60:5	45:50:5
Public Equity: (US Equity : Non-US Equity)	100:0	0:0	50:50	50:50	50:50	100:0	0:0	50:50	50:50	50:50
ALLOCATION BY ASSET CLASS										
US Equity -- All Cap	20%		12.5%	17.5%	22.5%	20%		12.5%	17.5%	22.5%
Non-US Equities - World ex-U.S.			12.5%	17.5%	22.5%			12.5%	17.5%	22.5%
Total Allocation to Public Equity	**20%**	**0%**	**25%**	**35%**	**45%**	**20%**	**0%**	**25%**	**35%**	**45%**
US Fixed Income -- Cash (Dur 0.2)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
US Fixed Income -- Intermediate (Dur 3.8)										
US Fixed Income -- Aggregate (Dur 4.5)		66%	42%	36%	29%		20%	13%	11%	9%
US Fixed Income -- Inflation Indexed Bond	20%	33%	22%	18%	15%	20%	20%	13%	11%	9%
US Fixed Income -- Long Gov/Credt (Dur 11)	59%					59%	59%	38%	32%	26%
US Fixed Income -- High Yield			5%	5%	5%			5%	5%	5%
Total Allocation to Fixed Income	**80%**	**100%**	**70%**	**60%**	**50%**	**80%**	**100%**	**70%**	**60%**	**50%**
Private Equity - Total			2.5%	2.5%	2.5%			2.5%	2.5%	2.5%
Real Estate - Private			2.5%	2.5%	2.5%			2.5%	2.5%	2.5%
Infrastructure										
Total Allocation to Alternative Investments	**0%**	**0%**	**5%**	**5%**	**5%**	**0%**	**0%**	**5%**	**5%**	**5%**
STATISTICS										
Long-Term Expected Passive Annual Return	6.22%	5.18%	6.63%	7.02%	7.37%	6.22%	5.36%	6.78%	7.14%	7.48%
Standard Deviation of Returns	8.77%	4.68%	6.47%	7.69%	9.04%	8.77%	8.12%	8.11%	8.84%	9.81%
Net Asset - 2018 Most Likely (50th %-ile)	($280)	($777)	$1,919	$2,661	$3,334	$381	($1,185)	$1,755	$2,570	$3,388
Net Asset - 2018 Upside Potential (95th %-ile)	$3,495	$1,631	$6,592	$9,038	$11,874	$3,794	$927	$6,064	$8,719	$11,715
Net Asset - 2018 Downside Risk (5th %-ile)	($4,454)	($3,865)	($2,548)	($2,682)	($2,911)	($3,201)	($4,031)	($2,403)	($2,393)	($2,529)
Funding Ratio - 2011 (50th %-ile)	97%	96%	101%	103%	104%	94%	91%	97%	98%	100%
Funding Ratio - 2013 (50th %-ile)	100%	100%	109%	113%	115%	100%	94%	106%	110%	113%
Funding Ratio - 2018 (50th %-ile)	97%	92%	120%	128%	134%	104%	87%	119%	128%	138%
Funding Ratio - 2028 (50th %-ile)	104%	80%	184%	214%	250%	114%	54%	170%	210%	250%
Funding Ratio - 2011 Downside Risk (5th %-ile)	77%	82%	82%	81%	79%	76%	77%	77%	77%	76%
Funding Ratio - 2013 Downside Risk (5th %-ile)	75%	82%	83%	82%	81%	77%	76%	80%	79%	78%
Funding Ratio - 2018 Downside Risk (5th %-ile)	63%	69%	77%	76%	73%	70%	65%	76%	76%	76%
Funding Ratio - 2028 Downside Risk (5th %-ile)	41%	40%	81%	77%	72%	45%	22%	67%	67%	64%
Equity Beta (Total Portfolio	0.20	0.07	0.37	0.46	0.56	0.20	0.02	0.34	0.44	0.54
Duration (Total Portfolio)	7.0	3.8	2.6	2.3	1.9	7.0	7.9	5.3	4.5	3.7
Duration (Fixed Income)	7.0	3.8	2.6	2.3	1.9	7.0	7.9	5.3	4.5	3.7
Duration (Equity)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquidity (Total Portfolio	9.45	9.44	8.74	8.68	8.63	9.45	9.51	8.78	8.72	8.66

Note: In projection model, alternative allocations start at 6/30/09

Stochastic Analysis – Interpreting Results

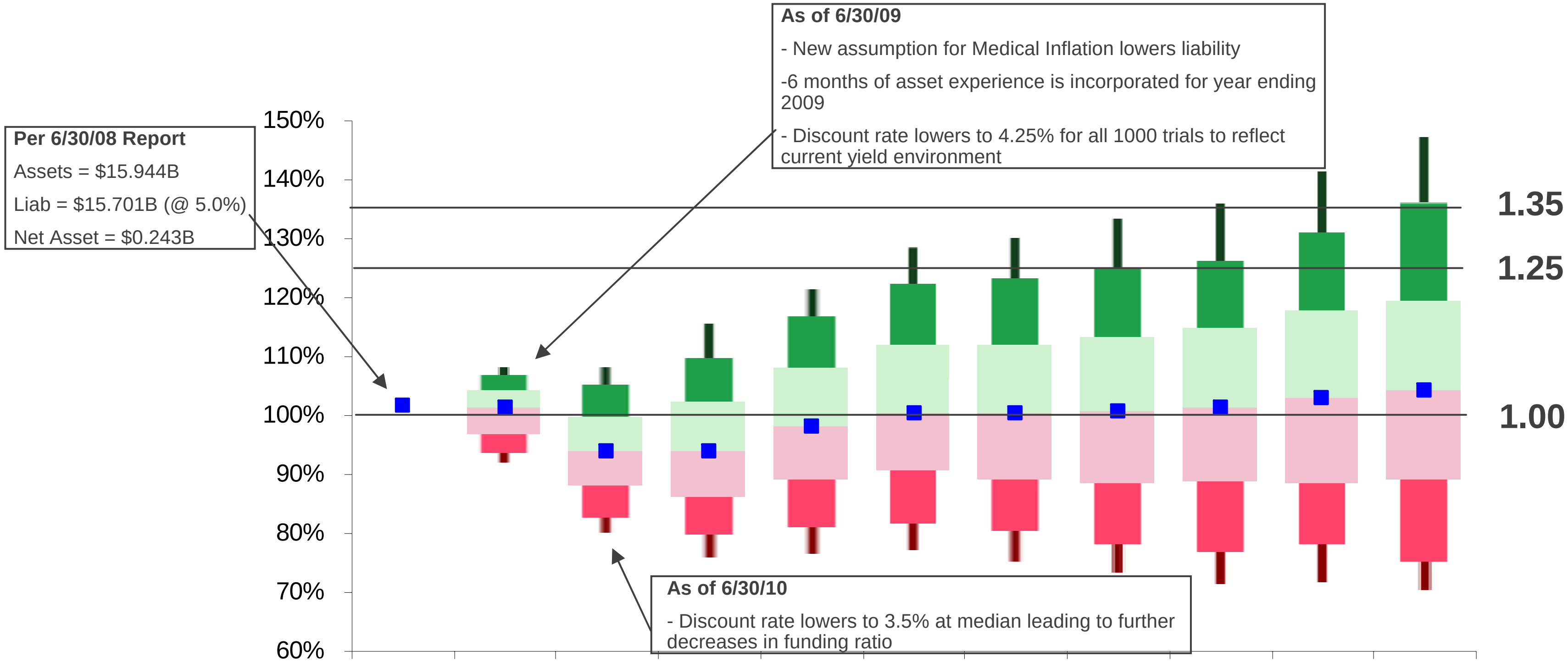
Measures of risk will be developed as a distribution of possible results based on Monte Carlo simulation. This technique generates 1000 economic trials with each trial producing projected results for each year over the selected planning horizon. Resulting distributions of outcomes are displayed graphically throughout this report as shown here.

Darkening shades of green indicate progressively more favorable outcomes for the sponsor. Red is used in the same way to show progressively unfavorable results. The graphics will be supplemented with numerical tables.



		Metric
95th		$ or %
90th		$ or %
75th		$ or %
50th		$ or %
25th		$ or %
10th		$ or %
5th		$ or %

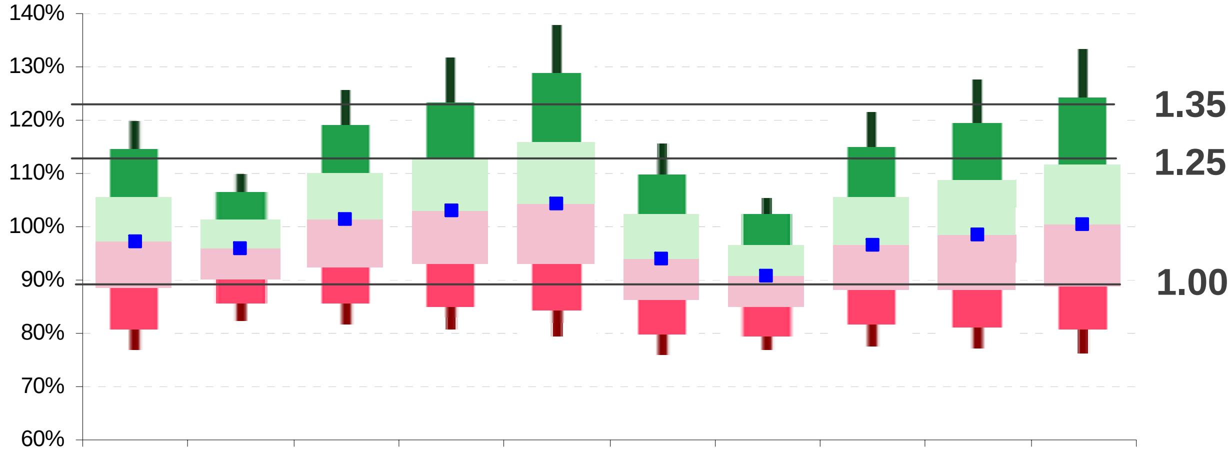
10 Year Projection of Funding Ratio
Implemented Asset Mix (Current)/Smoothed Discount Rate



		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
95th		102%	108%	108%	115%	121%	129%	130%	133%	136%	141%	147%
90th		102%	107%	105%	110%	117%	122%	123%	125%	126%	131%	136%
75th		102%	104%	100%	102%	108%	112%	112%	113%	115%	118%	119%
50th		102%	101%	94%	94%	98%	100%	100%	101%	101%	103%	104%
25th		102%	97%	88%	86%	89%	91%	89%	89%	89%	88%	89%
10th		102%	94%	83%	80%	81%	82%	80%	78%	77%	78%	75%
5th		102%	92%	80%	76%	76%	77%	75%	73%	71%	72%	70%

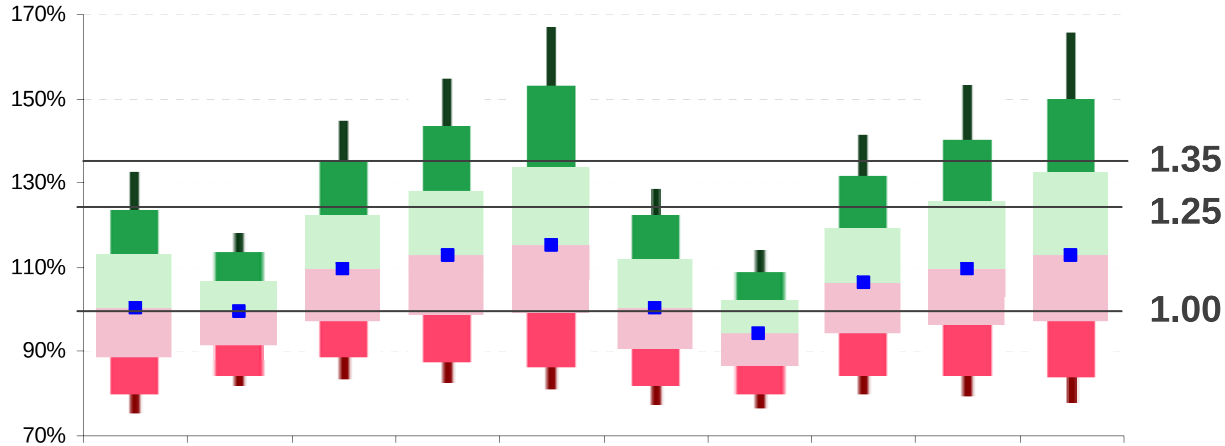
Comparison of Portfolios

Funding Ratio – 3 Years Out



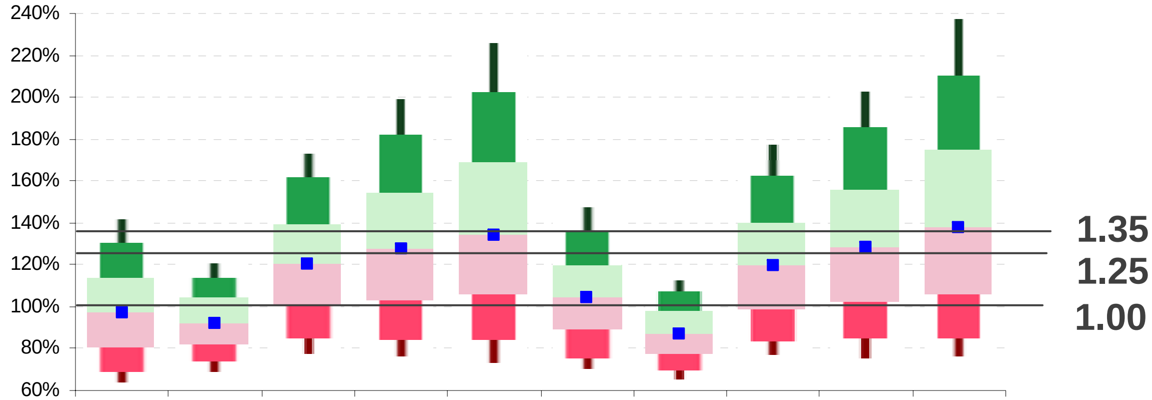
	Mix 1	Mix 2	Mix 3	Mix 4	Mix 5	Mix 6	Mix 7	Mix 8	Mix 9	Mix 10
	Discount Rate = Static					Discount Rate = Smoothed				
	20/80 dur 7	0/100 dur 4	30/70 dur 3	40/60 dur 2	50/50 dur 2	20/80 dur 7	0/100 dur 8	30/70 dur 5	40/60 dur 5	50/50 dur 4
95th	120%	110%	126%	131%	138%	115%	105%	121%	127%	133%
90th	114%	106%	119%	123%	129%	110%	102%	115%	119%	124%
75th	106%	101%	110%	113%	116%	102%	97%	105%	109%	112%
50th	97%	96%	101%	103%	104%	94%	91%	97%	98%	100%
25th	88%	90%	92%	93%	93%	86%	85%	88%	88%	89%
10th	81%	85%	86%	85%	84%	80%	79%	82%	81%	81%
5th	77%	82%	82%	81%	79%	76%	77%	77%	77%	76%
75th - 25th	17%	11%	17%	20%	23%	16%	12%	17%	21%	23%
95th - 5th	43%	27%	44%	51%	58%	40%	28%	44%	50%	57%
50th - 25th	9%	6%	9%	10%	11%	8%	6%	9%	10%	12%
50th - 5th	21%	13%	20%	22%	25%	18%	14%	19%	21%	24%

Comparison of Portfolios
Funding Ratio – 5 Years Out



	Mix 1	Mix 2	Mix 3	Mix 4	Mix 5	Mix 6	Mix 7	Mix 8	Mix 9	Mix 10
	Discount Rate = Static					Discount Rate = Smoothed				
	20/80 dur 7	0/100 dur 4	30/70 dur 3	40/60 dur 2	50/50 dur 2	20/80 dur 7	0/100 dur 8	30/70 dur 5	40/60 dur 5	50/50 dur 4
95th	132%	118%	145%	155%	167%	129%	114%	141%	153%	166%
90th	124%	114%	135%	144%	153%	122%	109%	132%	140%	150%
75th	113%	107%	122%	128%	134%	112%	102%	119%	126%	133%
50th	100%	100%	109%	113%	115%	100%	94%	106%	110%	113%
25th	89%	91%	97%	98%	99%	91%	87%	94%	96%	97%
10th	80%	84%	88%	87%	86%	82%	80%	84%	84%	84%
5th	75%	82%	83%	82%	81%	77%	76%	80%	79%	78%
75th - 25th	25%	16%	25%	30%	35%	21%	16%	25%	30%	36%
95th - 5th	57%	36%	61%	72%	86%	51%	37%	62%	74%	88%
50th - 25th	12%	8%	12%	14%	16%	10%	8%	12%	14%	16%
50th - 5th	25%	18%	26%	30%	34%	23%	18%	27%	30%	35%

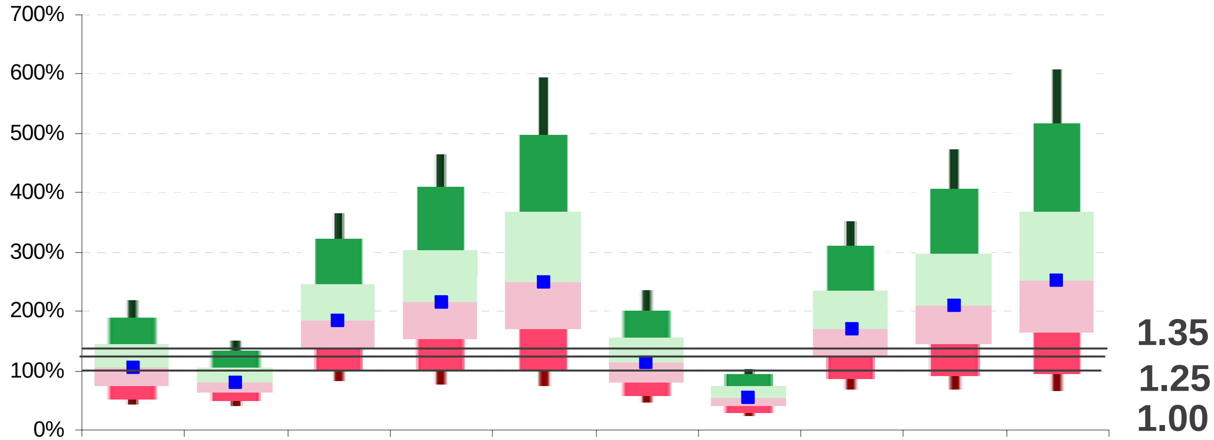
Comparison of Portfolios
Funding Ratio – 10 Years Out



		Mix 1	Mix 2	Mix 3	Mix 4	Mix 5	Mix 6	Mix 7	Mix 8	Mix 9	Mix 10
		Discount Rate = Static					Discount Rate = Smoothed				
		20/80 dur 7	0/100 dur 4	30/70 dur 3	40/60 dur 2	50/50 dur 2	20/80 dur 7	0/100 dur 8	30/70 dur 5	40/60 dur 5	50/50 dur 4
95th		142%	120%	173%	199%	225%	147%	112%	177%	202%	237%
90th		130%	113%	161%	182%	202%	136%	107%	162%	186%	210%
75th		114%	104%	139%	155%	169%	119%	98%	140%	156%	175%
50th		97%	92%	120%	128%	134%	104%	87%	119%	128%	138%
25th		81%	82%	100%	103%	106%	89%	77%	99%	102%	106%
10th		69%	74%	85%	84%	84%	75%	69%	83%	85%	85%
5th		63%	69%	77%	76%	73%	70%	65%	76%	76%	76%
75th - 25th		33%	22%	39%	52%	63%	30%	20%	41%	54%	69%
95th - 5th		78%	52%	95%	122%	152%	77%	47%	100%	127%	161%
50th - 25th		16%	10%	20%	25%	29%	15%	10%	20%	26%	32%
50th - 5th		34%	23%	43%	52%	61%	34%	22%	43%	53%	62%

Comparison of Portfolios

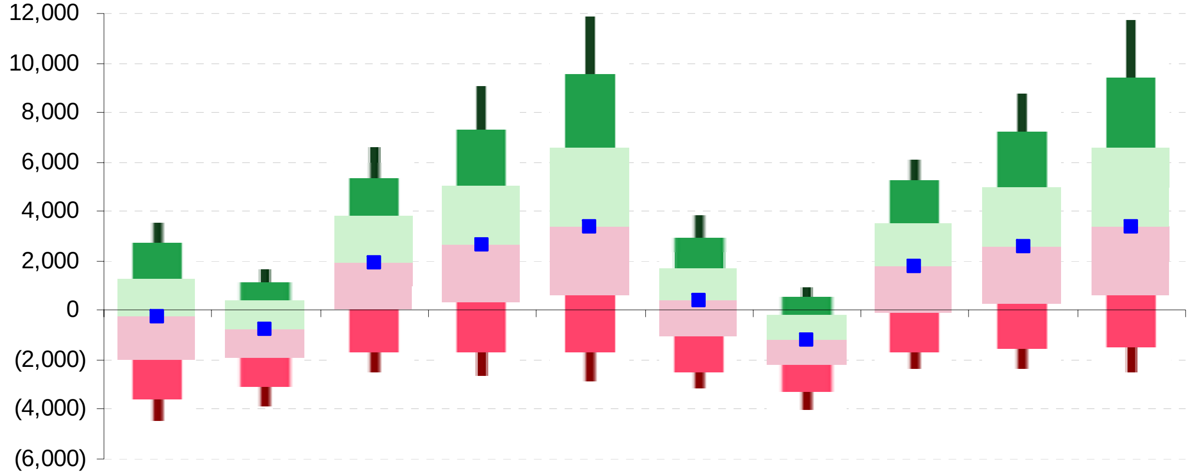
Funding Ratio – 20 Years Out



		Mix 1	Mix 2	Mix 3	Mix 4	Mix 5	Mix 6	Mix 7	Mix 8	Mix 9	Mix 10
		Discount Rate = Static					Discount Rate = Smoothed				
		20/80 dur 7	0/100 dur 4	30/70 dur 3	40/60 dur 2	50/50 dur 2	20/80 dur 7	0/100 dur 8	30/70 dur 5	40/60 dur 5	50/50 dur 4
95th		218%	151%	364%	462%	593%	233%	103%	349%	470%	607%
90th		188%	132%	320%	410%	497%	201%	92%	312%	405%	516%
75th		144%	104%	245%	302%	366%	156%	72%	233%	296%	368%
50th		104%	80%	184%	214%	250%	114%	54%	170%	210%	250%
25th		73%	62%	137%	153%	170%	80%	39%	123%	145%	164%
10th		52%	49%	100%	101%	103%	57%	29%	83%	90%	93%
5th		41%	40%	81%	77%	72%	45%	22%	67%	67%	64%
75th - 25th		71%	43%	108%	149%	196%	76%	33%	110%	151%	205%
95th - 5th		177%	110%	283%	385%	521%	188%	80%	282%	403%	543%
50th - 25th		30%	19%	46%	61%	80%	34%	15%	47%	65%	86%
50th - 5th		62%	40%	102%	137%	178%	69%	32%	103%	143%	186%

Comparison of Portfolios

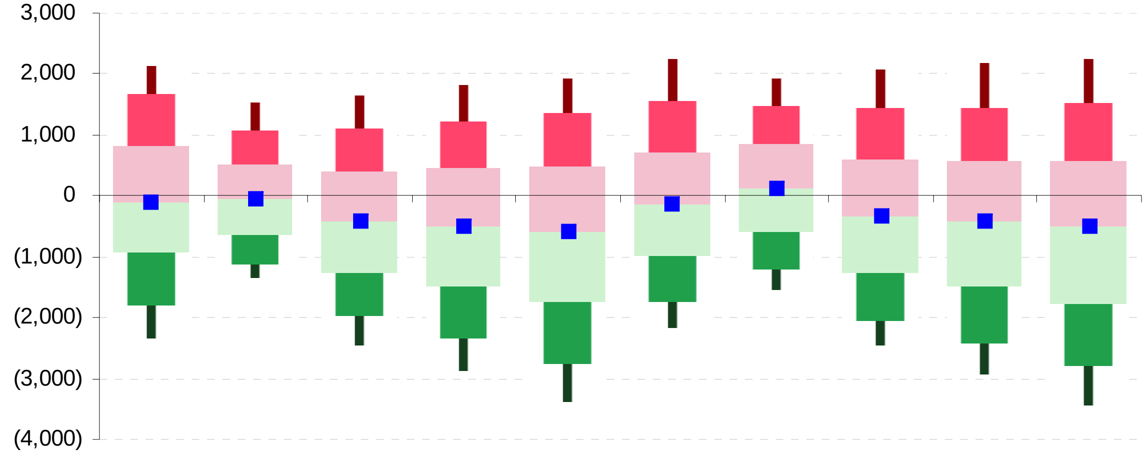
Net Asset – 10 Years Out



	Mix 1	Mix 2	Mix 3	Mix 4	Mix 5	Mix 6	Mix 7	Mix 8	Mix 9	Mix 10
	Discount Rate = Static					Discount Rate = Smoothed				
	20/80 dur 7	0/100 dur 4	30/70 dur 3	40/60 dur 2	50/50 dur 2	20/80 dur 7	0/100 dur 8	30/70 dur 5	40/60 dur 5	50/50 dur 4
95th	3,495	1,631	6,592	9,038	11,874	3,794	927	6,064	8,719	11,715
90th	2,723	1,082	5,357	7,309	9,554	2,963	541	5,236	7,239	9,409
75th	1,247	355	3,774	5,027	6,579	1,659	(200)	3,505	4,939	6,523
50th	(280)	(777)	1,919	2,661	3,334	381	(1,185)	1,755	2,570	3,388
25th	(1,983)	(1,952)	39	285	575	(1,058)	(2,261)	(108)	212	573
10th	(3,570)	(3,095)	(1,712)	(1,747)	(1,730)	(2,537)	(3,339)	(1,685)	(1,546)	(1,487)
5th	(4,454)	(3,865)	(2,548)	(2,682)	(2,911)	(3,201)	(4,031)	(2,403)	(2,393)	(2,529)
75th - 25th	3,230	2,307	3,735	4,742	6,004	2,717	2,061	3,613	4,727	5,950
95th - 5th	7,950	5,496	9,140	11,719	14,785	6,994	4,958	8,467	11,111	14,244
50th - 25th	1,704	1,175	1,880	2,376	2,759	1,439	1,077	1,863	2,357	2,815
50th - 5th	4,175	3,088	4,466	5,342	6,245	3,581	2,846	4,159	4,962	5,917

Comparison of Portfolios

Year to Year Change in Net Asset – 2009 to 2010



		Mix 1	Mix 2	Mix 3	Mix 4	Mix 5	Mix 6	Mix 7	Mix 8	Mix 9	Mix 10
		Discount Rate = Static					Discount Rate = Smoothed				
		20/80 dur 7	0/100 dur 4	30/70 dur 3	40/60 dur 2	50/50 dur 2	20/80 dur 7	0/100 dur 8	30/70 dur 5	40/60 dur 5	50/50 dur 4
5th		2,132	1,523	1,646	1,805	1,928	2,240	1,939	2,075	2,188	2,247
10th		1,674	1,073	1,118	1,227	1,354	1,559	1,463	1,458	1,458	1,519
25th		832	506	416	461	500	725	847	604	567	581
50th		(95)	(38)	(425)	(505)	(586)	(125)	119	(320)	(406)	(506)
75th		(937)	(642)	(1,261)	(1,483)	(1,747)	(976)	(586)	(1,272)	(1,499)	(1,769)
90th		(1,800)	(1,120)	(1,964)	(2,347)	(2,752)	(1,730)	(1,217)	(2,059)	(2,418)	(2,779)
95th		(2,332)	(1,334)	(2,437)	(2,885)	(3,374)	(2,159)	(1,533)	(2,452)	(2,917)	(3,437)
25th - 75th		1,769	1,148	1,677	1,944	2,247	1,701	1,433	1,876	2,066	2,350
5th - 95th		4,464	2,857	4,083	4,690	5,302	4,399	3,472	4,527	5,105	5,684
25th - 50th		927	544	841	966	1,086	850	728	924	973	1,087
5th - 50th		2,227	1,561	2,071	2,310	2,514	2,365	1,820	2,395	2,594	2,753

Observations

- In general, equities are favorable in improving funded status
  - Partly as result of low interest rates—current conditions unfavorable for Treasuries in long run
  - However, dispersion of results do increase with equities
- Under Implemented allocation (20/80), SIF expected to reach full funding around 2013 under Smoothed Discount rate and in 2012 under market-to-market accounting
  - Again partly due to expected rise in interest rates increasing the discount rate
- Short run downside risks are similar: 76-80% Funded Ratio in both smoothed and market-to-market discount rate setting (2011 results). Over long run, differences start to appear (10% percentile results for distribution of 2028 Funded Ratio range from 29% to 81%
- Over short run, mark-to-market produces slightly wider outcomes. Over long run, market-to-market produces narrower outcomes.
- 100% bonds does not make up for short-falls. In short run, they are hurt by rising interest rates, but even in long run, we see gradual decline in funded status with 100% bonds.
  - 100% bonds unable to absorb spikes in medical inflation?

Summary of Results
Dynamic Discount Rate

Summary of Key Statistics - Net Asset and Funding Ratio
Dynamic Discount Rate for Liabilities

		80% Bonds	100% Bonds	70% Bonds	60% Bonds	50% Bonds
Expected	Net Asset - 2013	343	(437)	664	1,071	1,492
	Net Asset - 2018	427	(1,164)	1,165	2,000	2,848
Expected	Funding Ratio - 2011	94%	91%	96%	98%	99%
	Funding Ratio - 2013	103%	96%	106%	109%	113%
	Funding Ratio - 2018	105%	87%	113%	123%	133%
	Funding Ratio - 2028	114%	55%	147%	188%	230%
5% probability	Funding Ratio - 2011	76% or less	78%	75%	74%	74%
	Funding Ratio - 2013	80%	80%	78%	78%	78%
	Funding Ratio - 2018	71%	66%	70%	71%	71%
	Funding Ratio - 2028	45%	23%	45%	46%	46%
25% probability	Funding Ratio - 2011	102% or more	96%	104%	108%	111%
	Funding Ratio - 2013	114%	104%	118%	126%	133%
	Funding Ratio - 2018	121%	97%	133%	150%	169%
	Funding Ratio - 2028	155%	722%	2204%	273%	345%

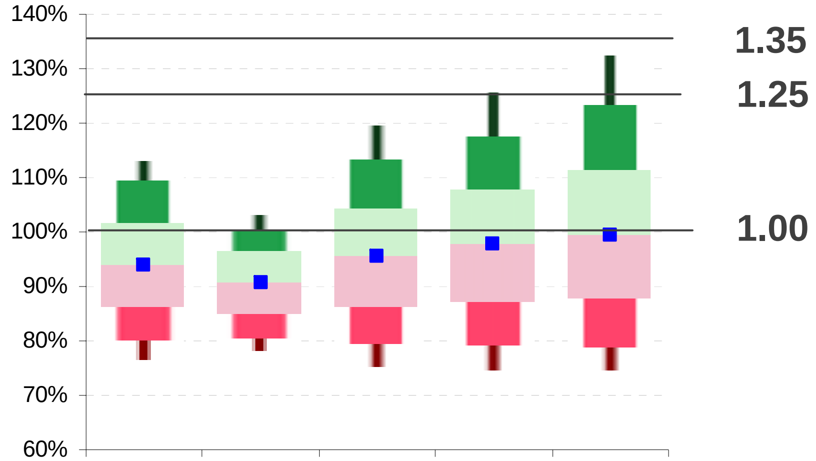
Alternative Asset Mixes

With Dynamic Discount Rate

	Dynamic Discount Rate				
	Implemented Policy Mix 1	All Bond Portfolio Mix 2	30% Equity 70% Bond Mix 3	40% Equity 60% Bond Mix 4	50% Equity 50% Bond Mix 5
Equity : Fixed income : Alternatives	20:80:0	0:100:0	25:70:5	35:60:5	45:50:5
Public Equity: (US Equity : Non-US Equity)	100:0	0:0	50:50	50:50	50:50
ALLOCATION BY ASSET CLASS					
US Equity -- All Cap	20%		12.5%	17.5%	22.5%
Non-US Equities - World ex-U.S.			12.5%	17.5%	22.5%
Total Allocation to Public Equity	**20%**	**0%**	**25%**	**35%**	**45%**
US Fixed Income -- Cash (Dur 0.2)	1%	1%	1%	1%	1%
US Fixed Income -- Intermediate (Dur 3.8)					
US Fixed Income -- Aggregate (Dur 4.5)		20%			
US Fixed Income -- Inflation Indexed Bond	20%	20%			
US Fixed Income -- Long Gov/Credt (Dur 11)	59%	59%	64%	54%	44%
US Fixed Income -- High Yield			5%	5%	5%
Total Allocation to Fixed Income	**80%**	**100%**	**70%**	**60%**	**50%**
Private Equity - Total			2.5%	2.5%	2.5%
Real Estate - Private			2.5%	2.5%	2.5%
Infrastructure					
Total Allocation to Alternative Investments	**0%**	**0%**	**5%**	**5%**	**5%**
STATISTICS					
Long-Term Expected Passive Annual Return	6.22%	5.36%	6.85%	7.22%	7.55%
Standard Deviation of Returns	8.77%	8.12%	9.59%	9.91%	10.55%
Net Asset - 2018 Most Likely (50th %-ile)	$427	($1,164)	$1,165	$2,000	$2,848
Net Asset - 2018 Upside Potential (95th %-ile)	$3,715	$934	$5,503	$8,014	$11,165
Net Asset - 2018 Downside Risk (5th %-ile)	($3,052)	($4,057)	($3,048)	($2,894)	($2,855)
Funding Ratio - 2011 (50th %-ile)	94%	91%	96%	98%	99%
Funding Ratio - 2013 (50th %-ile)	103%	96%	106%	109%	113%
Funding Ratio - 2018 (50th %-ile)	105%	87%	113%	123%	133%
Funding Ratio - 2028 (50th %-ile)	114%	55%	147%	188%	230%
Funding Ratio - 2011 Downside Risk (5th %-ile)	76%	78%	75%	74%	74%
Funding Ratio - 2013 Downside Risk (5th %-ile)	80%	80%	78%	78%	78%
Funding Ratio - 2018 Downside Risk (5th %-ile)	71%	66%	70%	71%	71%
Funding Ratio - 2028 Downside Risk (5th %-ile)	45%	23%	45%	46%	46%
Equity Beta	0.20	0.02	0.33	0.43	0.53
Duration (Total Portfolio)	7.0	7.9	7.3	6.2	5.1
Duration (Fixed Income)	7.0	7.9	7.3	6.2	5.1
Duration (Equity)	0.0	0.0	0.0	0.0	0.0
Liquidity	9.45	9.51	8.78	8.72	8.66

Note: In projection model, alternative allocations start at 6/30/09

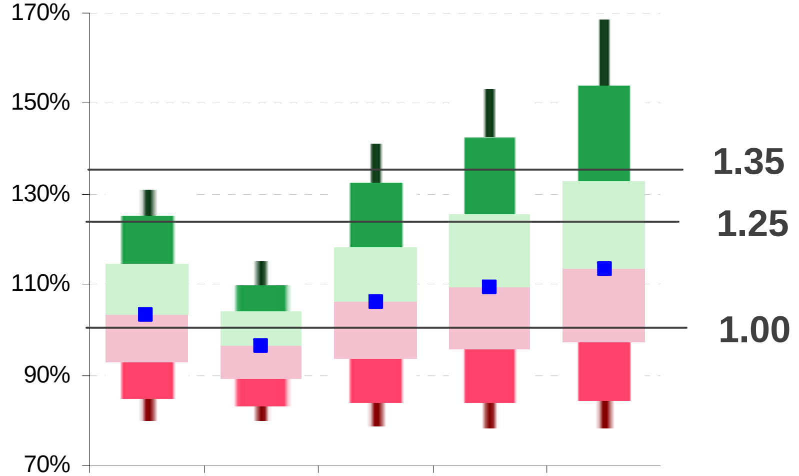
Comparison of Portfolios
Funding Ratio – 3 Years Out



		Mix 11	Mix 2	Mix 3	Mix 4	Mix 5
		Discount Rate = Mark-to-Market				
		20/80 dur 7	0/100 dur 8	30/70 dur 7	40/60 dur 6	50/50 dur 5
95th		113%	103%	119%	125%	132%
90th		109%	100%	113%	117%	123%
75th		102%	96%	104%	108%	111%
50th		94%	91%	96%	98%	99%
25th		86%	85%	86%	87%	88%
10th		80%	80%	79%	79%	79%
5th		76%	78%	75%	74%	74%
75th - 25th		16%	12%	18%	21%	23%
95th - 5th		36%	25%	44%	51%	58%
50th - 25th		8%	6%	9%	11%	12%
50th - 5th		18%	13%	20%	23%	25%

Comparison of Portfolios

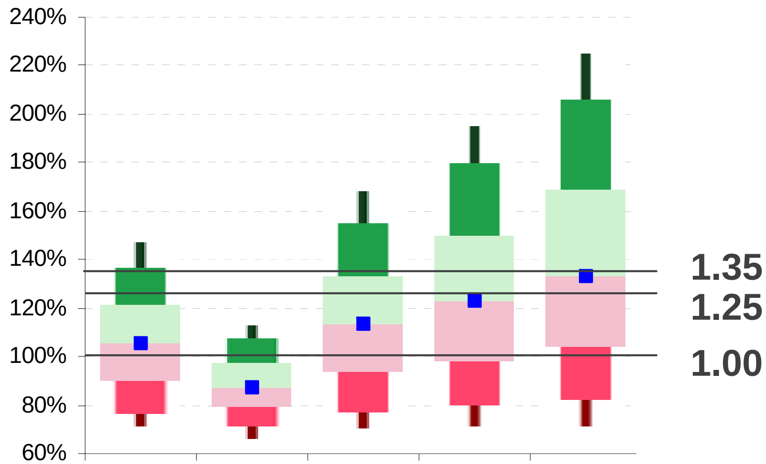
Funding Ratio – 5 Years Out



		Mix 11	Mix 12	Mix 13	Mix 14	Mix 15
		Discount Rate = Mark-to-Market				
		20/80 dur 7	0/100 dur 8	30/70 dur 7	40/60 dur 6	50/50 dur 5
95th		131%	115%	141%	153%	168%
90th		125%	110%	133%	143%	154%
75th		114%	104%	118%	126%	133%
50th		103%	96%	106%	109%	113%
25th		93%	89%	93%	95%	97%
10th		85%	83%	84%	84%	84%
5th		80%	80%	78%	78%	78%
75th - 25th		22%	15%	25%	30%	36%
95th - 5th		51%	35%	62%	75%	90%
50th - 25th		10%	7%	12%	14%	16%
50th - 5th		23%	16%	27%	31%	35%

Comparison of Portfolios

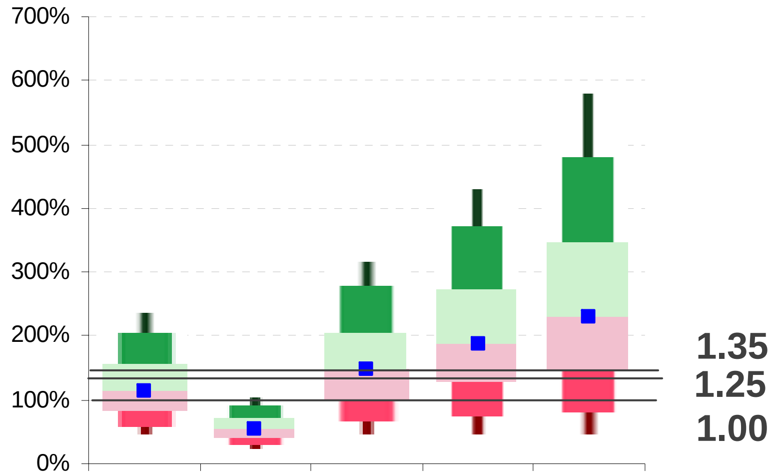
Funding Ratio – 10 Years Out



		Mix 11	Mix 12	Mix 13	Mix 14	Mix 15
		Discount Rate = Mark-to-Market				
		20/80 dur 7	0/100 dur 8	30/70 dur 7	40/60 dur 6	50/50 dur 5
95th		147%	113%	168%	195%	225%
90th		136%	107%	155%	180%	206%
75th		121%	97%	133%	150%	169%
50th		105%	87%	113%	123%	133%
25th		90%	79%	93%	98%	104%
10th		76%	71%	77%	80%	82%
5th		71%	66%	70%	71%	71%
75th - 25th		31%	18%	39%	52%	65%
95th - 5th		76%	47%	98%	124%	154%
50th - 25th		15%	8%	20%	25%	30%
50th - 5th		34%	21%	43%	52%	62%

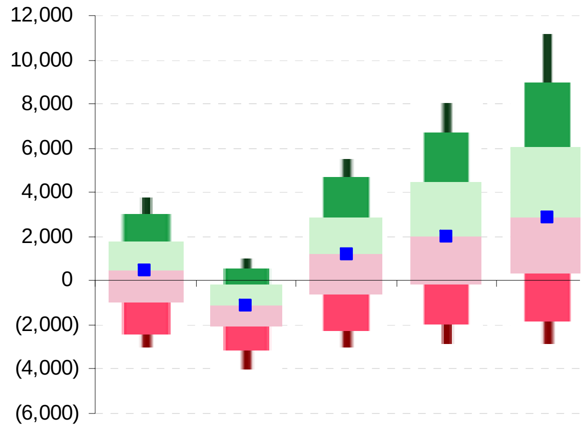
Comparison of Portfolios

Funding Ratio – 20 Years Out



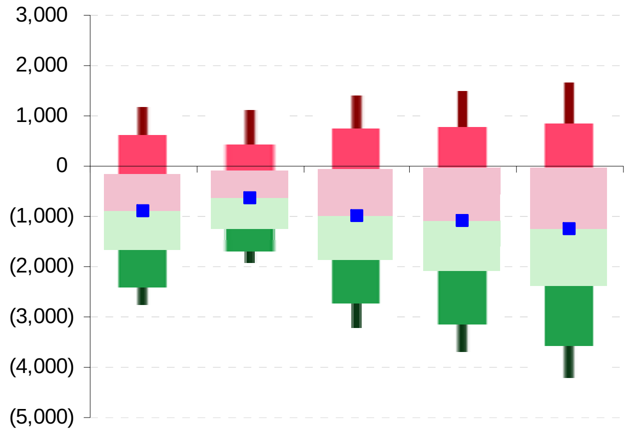
		Mix 11	Mix 12	Mix 13	Mix 14	Mix 15
		Discount Rate = Mark-to-Market				
		20/80 dur 7	0/100 dur 8	30/70 dur 7	40/60 dur 6	50/50 dur 5
95th		236%	102%	316%	428%	578%
90th		205%	91%	276%	372%	479%
75th		155%	72%	204%	273%	345%
50th		114%	55%	147%	188%	230%
25th		81%	40%	100%	128%	146%
10th		58%	29%	65%	74%	81%
5th		45%	23%	45%	46%	46%
75th - 25th		74%	32%	104%	145%	200%
95th - 5th		191%	79%	270%	382%	532%
50th - 25th		32%	15%	47%	60%	84%
50th - 5th		69%	32%	102%	142%	183%

Comparison of Portfolios
Net Asset – 10 Years Out



		Mix 11	Mix 12	Mix 13	Mix 14	Mix 15
		Discount Rate = Mark-to-Market				
		20/80 dur 7	0/100 dur 8	30/70 dur 7	40/60 dur 6	50/50 dur 5
95th		3,715	934	5,503	8,014	11,165
90th		2,996	561	4,648	6,671	8,949
75th		1,785	(217)	2,843	4,416	6,059
50th		427	(1,164)	1,165	2,000	2,848
25th		(999)	(2,044)	(617)	(202)	311
10th		(2,411)	(3,202)	(2,317)	(2,011)	(1,853)
5th		(3,052)	(4,057)	(3,048)	(2,894)	(2,855)
75th - 25th		2,784	1,827	3,460	4,618	5,747
95th - 5th		6,768	4,990	8,550	10,908	14,020
50th - 25th		1,426	880	1,782	2,202	2,536
50th - 5th		3,480	2,892	4,213	4,894	5,703

Comparison of Portfolios
Year to Year Change in Net Asset – 2009 to 2010



		Mix 11	Mix 12	Mix 13	Mix 14	Mix 15
		Discount Rate = Mark-to-Market				
		20/80 dur 7	0/100 dur 8	30/70 dur 7	40/60 dur 6	50/50 dur 5
5th		1,177	1,103	1,381	1,489	1,634
10th		625	409	745	779	853
25th		(169)	(89)	(68)	(37)	(44)
50th		(890)	(646)	(994)	(1,108)	(1,262)
75th		(1,679)	(1,273)	(1,881)	(2,109)	(2,373)
90th		(2,406)	(1,695)	(2,736)	(3,147)	(3,585)
95th		(2,759)	(1,921)	(3,218)	(3,697)	(4,211)
25th - 75th		1,510	1,184	1,813	2,072	2,329
5th - 95th		3,936	3,024	4,599	5,186	5,845
25th - 50th		721	557	926	1,071	1,218
5th - 50th		2,067	1,749	2,375	2,597	2,896

Summary of Results
Comparison of Discount Rate Methodologies

Summary of Key Statistics - Net Asset and Funding Ratio
4% Discount Rate for Liabilities

		80% Bonds	100% Bonds	70% Bonds	60% Bonds	50% Bonds
Expected	Net Asset - 2013 [1]	10	(50)	1,131	1,456	1,775
	Net Asset - 2018 [1]	(280)	(777)	1,919	2,661	3,334
Expected	Funding Ratio - 2011	97%	96%	101%	103%	104%
	Funding Ratio - 2013	100%	100%	109%	113%	115%
	Funding Ratio - 2018	97%	92%	120%	128%	134%
	Funding Ratio - 2028	104%	80%	184%	214%	250%
Downside Risk						
5% probability	Funding Ratio - 2011	77% or less	82%	82%	81%	79%
	Funding Ratio - 2013	75%	82%	83%	82%	81%
	Funding Ratio - 2018	63%	69%	77%	76%	73%
	Funding Ratio - 2028	41%	40%	81%	77%	72%
Upside Potential						
25% probability	Funding Ratio - 2011	106% or more	101%	110%	113%	116%
	Funding Ratio - 2013	113%	107%	122%	128%	134%
	Funding Ratio - 2018	114%	104%	139%	155%	169%
	Funding Ratio - 2028	144%	104%	245%	302%	366%

[1] In Millions

Summary of Key Statistics - Net Asset and Funding Ratio
'Smoothed' Discount Rate for Liabilities

		80% Bonds	100% Bonds	70% Bonds	60% Bonds	50% Bonds
Expected	Net Asset - 2013 [1]	41	(676)	751	1,134	1,469
	Net Asset - 2018 [1]	381	(1,185)	1,755	2,570	3,388
Expected	Funding Ratio - 2011	94%	91%	97%	98%	100%
	Funding Ratio - 2013	100%	94%	106%	110%	113%
	Funding Ratio - 2018	104%	87%	119%	128%	138%
	Funding Ratio - 2028	114%	54%	170%	210%	250%
Downside Risk						
5% probability	Funding Ratio - 2011	76% or less	77%	77%	77%	76%
	Funding Ratio - 2013	77%	76%	80%	79%	78%
	Funding Ratio - 2018	70%	65%	76%	76%	76%
	Funding Ratio - 2028	45%	22%	67%	67%	64%
Upside Potential						
25% probability	Funding Ratio - 2011	102% or more	97%	105%	109%	112%
	Funding Ratio - 2013	112%	102%	119%	126%	133%
	Funding Ratio - 2018	119%	98%	140%	156%	175%
	Funding Ratio - 2028	156%	72%	233%	296%	368%

[1] In Millions

Summary of Key Statistics - Net Asset and Funding Ratio
Dynamic Discount Rate for Liabilities

		80% Bonds	100% Bonds	70% Bonds	60% Bonds	50% Bonds
Expected	Net Asset - 2013 [1]	343	(437)	664	1,071	1,492
	Net Asset - 2018 [1]	427	(1,164)	1,165	2,000	2,848
Expected	Funding Ratio - 2011	94%	91%	96%	98%	99%
	Funding Ratio - 2013	103%	96%	106%	109%	113%
	Funding Ratio - 2018	105%	87%	113%	123%	133%
	Funding Ratio - 2028	114%	55%	147%	188%	230%
Downside Risk						
5% probability	Funding Ratio - 2011	76% or less	78%	75%	74%	74%
	Funding Ratio - 2013	80%	80%	78%	78%	78%
	Funding Ratio - 2018	71%	66%	70%	71%	71%
	Funding Ratio - 2028	45%	23%	45%	46%	46%
Upside Potential						
25% probability	Funding Ratio - 2011	102% or more	96%	104%	108%	111%
	Funding Ratio - 2013	114%	104%	118%	126%	133%
	Funding Ratio - 2018	121%	97%	133%	150%	169%
	Funding Ratio - 2028	155%	72%	204%	273%	345%

[1] In Millions

Mean-Variance Assumptions

	Geometric Return	Arithmetic Return	Standard Deviation	Beta	Duration	Liquidity
Domestic Equity	8.4%	9.9%	18.6%	1.00	0.0	9.0
International Equity	8.4%	9.9%	18.4%	1.00	0.0	8.8
Intermediate Bonds	4.8%	4.9%	4.5%	0.00	3.6	9.4
Mkt Bonds (Lehman Agg)	5.3%	5.4%	5.5%	0.10	4.8	9.3
Long Govt/Credit (11 yrs)	5.4%	6.0%	11.0%	0.00	14.0	9.5
TIPS	5.0%	5.1%	4.5%	0.00	2.4	9.7
Cash	3.5%	3.5%	1.3%	0.00	0.1	10.0
Real Estate [1]	7.3%	8.2%	13.7%	0.75	0.0	4.5
Private Equity	9.6%	13.0%	28.4%	1.35	0.0	0.0
Infrastructure	8.2%	10.0%	20.2%	1.10	0.0	0.0
High Yield	7.5%	8.0%	10.0%	0.50	4.4	7.5
Inflation	2.8%	2.8%	1.3%	--	--	--

	Dom Eq	Intl Eq	Inmd FI	Mkt FI	Long FI	TIPS	Cash	Real Estate	Private Eq	Infrastr	High Yield
Domestic Equity	1.00										
International Equity	0.70	1.00									
Intermediate Bonds	0.20	0.10	1.00								
Mkt Bonds (Lehman Agg)	0.20	0.10	0.95	1.00							
Long Duration (14 yrs)	0.20	0.10	0.90	0.95	1.00						
TIPS	0.15	0.10	0.60	0.60	0.60	1.00					
Cash	0	0.0	0.25	0.10	0.10	0.30	1.00				
Real Estate [1]	0.60	0.40	0.20	0.30	0.20	0.30	0.10	1.00			
Private Equity	0.70	0.30	0.10	0.20	0.20	0.15	0	0.50	1.00		
Infrastructure	0.60	0.28	0.18	0.23	0.20	0.20	0	0.75	0.5	1.00	
High Yield	0.60	0.15	0.45	0.50	0.45	0.50	0.10	0.35	0.40	0.38	1.00

[1] Combination of REITS and private real estate.

The Projection Model
General Information

Plans Considered in Analysis

- Ohio Bureau of Workers' Compensation – State Insurance Fund (SIF)

Plan Provisions

- As disclosed in the "Actuarial Audit of the Workers' Compensation State Insurance Fund and Related Funds Administered by the Ohio Bureau of Workers' Compensation as of June 30, 2008"

Projection Period

- 20 years from June 30, 2008

Fiscal Year

- July 1 – June 30

Data "as of" Date

- June 30, 2008

The Projection Model
General Information

Assets

- Assets for the SIF are currently invested based on the following asset allocation targets:
  - US Large Cap Eq 20%
  - TIPS 20%
  - Long Gov/Cred 59%
  - Cash 1% (to meet liquidity needs)

  - SIF Market Value of Assets (MVA) as of June 30, 2008 was $15,944B
  - Alternative Asset Allocations are assumed to start June 30, 2009

The Projection Model
Assumptions and Methods

Economic Assumptions - for Valuation Projections

- Medical Inflation:
  - Valuation Assumption: 9%
  - Projection Baseline: Starts at 6%, trends up to 9% in 1% increments per year

- Actuarial Valuation Discount Rate: 5.0% (as of June 30, 2008)
  - For projection purposes two different methodologies were analyzed
    - Dynamic Mark to Market based on 10-year Treasury yields
    - 10-year Treasury plus 75 basis points, year to year changes occur if the Treasury plus 75 is 75 basis points different from last year's discount rate.

The Projection Model
Assumptions and Methods

Liability Projection

- SIF liability as of June 30, 2008: $15,701B at 5.0% discount rate
- Assumed “closed book” for liabilities as of June 30, 2008
- Actuarial Asset Valuation Method – Market Value

Description of the Economic Environments
Base Case

		June 2009	June 2010	June 2011	June 2012	June 2013	June 2014	June 2015	June 2016	June 2017	June 2018	Cumulative Returns 3yrs	Cumulative Returns 5yrs	Cumulative Returns 10yrs
Inflation	Growth	1.2%	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%	2.80%	2.80%
Economic Growth	Growth	-2.0%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.10%	3.10%
3-Month Treasury	Yield	0.11%	1.31%	2.50%	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	3.70%	2.5%	2.98%	3.34%
2-yr Treasury	Yield	0.76%	1.94%	3.12%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	4.30%	3.1%	3.59%	3.94%
5-yr Treasury	Yield	1.55%	2.60%	3.65%	4.70%	4.70%	4.70%	4.70%	4.70%	4.70%	4.70%	3.6%	4.07%	4.38%
10yr Treasury	Yield	2.25%	3.18%	4.12%	5.05%	5.05%	5.05%	5.05%	5.05%	5.05%	5.05%	4.1%	4.49%	4.77%
30yr Treasury	Yield	2.69%	3.53%	4.36%	5.20%	5.20%	5.20%	5.20%	5.20%	5.20%	5.20%	4.4%	4.70%	4.95%
Real 10yr TIPS	Yield	2.14%	2.16%	2.18%	2.20%	2.20%	2.20%	2.20%	2.20%	2.20%	2.20%	2.2%	2.19%	2.19%
Domestic Equities	Return	-28.4%	12.4%	12.2%	12.1%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	12.2%	10.65%	9.49%
International Equities	Return	-43.8%	10.5%	10.4%	10.3%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	10.4%	9.63%	9.05%
Mkt Bonds	Return	5.9%	0.0%	0.8%	1.6%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	0.8%	2.65%	4.05%
Long Bonds	Return	10.1%	-2.2%	-1.3%	-0.4%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	-1.3%	1.37%	3.43%
Cash	Return	1.1%	0.7%	1.9%	3.1%	3.7%	3.7%	3.7%	3.7%	3.7%	3.7%	1.9%	2.64%	3.18%
TIPS	Return	-4.8%	4.8%	4.8%	4.9%	5.1%	5.1%	5.1%	5.1%	5.1%	5.1%	4.8%	4.94%	5.01%
Real Estate	Return	-20.1%	9.3%	9.4%	9.5%	7.4%	7.4%	7.4%	7.4%	7.4%	7.4%	9.4%	8.57%	7.98%
Private Eq	Return	-21.2%	14.7%	14.6%	14.4%	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	14.6%	12.61%	11.16%
High Yields	Return	-22.3%	4.3%	4.8%	5.3%	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%	4.8%	5.30%	5.70%
Med Inflation	Return	4.38%	7.00%	8.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%			

Description of the Economic Environments

Stagflation

		June 2009	June 2010	June 2011	June 2012	June 2013	June 2014	June 2015	June 2016	June 2017	June 2018	Cumulative Returns 3yrs	Cumulative Returns 5yrs	Cumulative Returns 10yrs
Inflation	Growth	1.2%	3.5%	4.3%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	4.3%	4.56%	4.78%
Economic Growth	Growth	-2.0%	0.0%	0.5%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	0.5%	0.70%	0.85%
3-Month Treasury	Yield	0.11%	2.07%	4.04%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	4.0%	4.81%	5.40%
2-yr Treasury	Yield	0.76%	2.61%	4.45%	6.30%	6.30%	6.30%	6.30%	6.30%	6.30%	6.30%	4.4%	5.18%	5.74%
5-yr Treasury	Yield	1.55%	3.20%	4.85%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	4.8%	5.50%	6.00%
10yr Treasury	Yield	2.25%	3.73%	5.22%	6.70%	6.70%	6.70%	6.70%	6.70%	6.70%	6.70%	5.2%	5.80%	6.25%
30yr Treasury	Yield	2.69%	4.06%	5.43%	6.80%	6.80%	6.80%	6.80%	6.80%	6.80%	6.80%	5.4%	5.97%	6.39%
Real 10yr TIPS	Yield	2.14%	1.93%	1.71%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.7%	1.63%	1.56%
Domestic Equities	Return	-28.4%	-5.9%	-6.4%	-7.3%	8.2%	8.2%	8.2%	8.2%	8.2%	8.2%	-6.5%	-0.90%	3.53%
International Equities	Return	-43.8%	1.3%	1.1%	0.7%	8.4%	8.4%	8.4%	8.4%	8.4%	8.4%	1.0%	3.92%	6.12%
Mkt Bonds	Return	5.9%	-4.2%	-2.4%	-0.7%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	-2.4%	1.43%	4.43%
Long Bonds	Return	10.1%	-9.2%	-6.9%	-4.7%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	-6.9%	-1.41%	2.95%
Cash	Return	1.1%	1.1%	3.1%	5.1%	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%	3.1%	4.27%	5.18%
TIPS	Return	-4.8%	7.8%	8.4%	8.9%	6.6%	6.6%	6.6%	6.6%	6.6%	6.6%	8.4%	7.64%	7.11%
Real Estate	Return	-20.1%	-4.9%	-4.9%	-5.2%	7.8%	7.8%	7.8%	7.8%	7.8%	7.8%	-5.0%	-0.07%	3.79%
Private Eq	Return	-21.2%	-8.2%	-8.7%	-9.9%	9.4%	9.4%	9.4%	9.4%	9.4%	9.4%	-8.9%	-2.01%	3.54%
High Yields	Return	-22.3%	-7.3%	-6.3%	-5.8%	7.6%	7.6%	7.6%	7.6%	7.6%	7.6%	-6.5%	-1.06%	3.20%
Med Inflation	Return	4.38%	7.73%	9.47%	11.20%	11.20%	11.20%	11.20%	11.20%	11.20%	11.20%			

Description of the Economic Environments
Prolonged Recession

		June 2009	June 2010	June 2011	June 2012	June 2013	June 2014	June 2015	June 2016	June 2017	June 2018	Cumulative Returns 3yrs	Cumulative Returns 5yrs	Cumulative Returns 10yrs
Inflation	Growth	1.2%	2.4%	1.9%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.9%	1.76%	1.63%
Economic Growth	Growth	-2.0%	-0.7%	-0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.3%	-0.20%	-0.10%
3-Month Treasury	Yield	0.11%	0.91%	0.96%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.0%	0.97%	0.99%
2-yr Treasury	Yield	0.76%	1.64%	1.44%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.4%	1.37%	1.31%
5-yr Treasury	Yield	1.55%	2.54%	2.14%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	2.1%	1.99%	1.87%
10yr Treasury	Yield	2.25%	3.39%	2.94%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.9%	2.77%	2.63%
30yr Treasury	Yield	2.69%	3.86%	3.43%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.4%	3.26%	3.13%
Real 10yr TIPS	Yield	2.14%	1.84%	1.55%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.5%	1.43%	1.34%
Domestic Equities	Return	-28.4%	-7.5%	-9.1%	-11.0%	3.8%	3.8%	3.8%	3.8%	3.8%	3.8%	-9.2%	-4.21%	-0.28%
International Equities	Return	-43.8%	0.5%	-0.2%	-1.2%	6.2%	6.2%	6.2%	6.2%	6.2%	6.2%	-0.3%	2.25%	4.21%
Mkt Bonds	Return	5.9%	7.2%	6.8%	6.3%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	6.8%	4.98%	3.67%
Long Bonds	Return	10.1%	11.0%	10.7%	10.5%	3.2%	3.2%	3.2%	3.2%	3.2%	3.2%	10.7%	7.65%	5.39%
Cash	Return	1.1%	0.9%	0.9%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	0.9%	0.96%	0.98%
TIPS	Return	-4.8%	7.4%	6.7%	5.9%	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%	6.7%	5.09%	3.92%
Real Estate	Return	-20.1%	-4.7%	-6.0%	-7.5%	3.2%	3.2%	3.2%	3.2%	3.2%	3.2%	-6.1%	-2.48%	0.32%
Private Eq	Return	-21.2%	-10.2%	-12.1%	-14.6%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	-12.3%	-6.13%	-1.21%
High Yields	Return	-22.3%	-0.1%	-1.2%	-2.5%	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%	-1.3%	0.09%	1.12%
Med Inflation	Return	4.38%	6.57%	7.13%	7.70%	7.70%	7.70%	7.70%	7.70%	7.70%	7.70%			

Description of the Economic Environments

Inflationary Growth

		June 2009	June 2010	June 2011	June 2012	June 2013	June 2014	June 2015	June 2016	June 2017	June 2018	Cumulative Returns 3yrs	Cumulative Returns 5yrs	Cumulative Returns 10yrs
Inflation	Growth	1.2%	3.5%	4.3%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	4.3%	4.56%	4.78%
Economic Growth	Growth	-2.0%	3.3%	3.6%	3.8%	3.8%	3.8%	3.8%	3.8%	3.8%	3.8%	3.6%	3.66%	3.73%
3-Month Treasury	Yield	0.11%	2.41%	4.70%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	4.7%	5.61%	6.30%
2-yr Treasury	Yield	0.76%	2.94%	5.12%	7.30%	7.30%	7.30%	7.30%	7.30%	7.30%	7.30%	5.1%	5.98%	6.64%
5-yr Treasury	Yield	1.55%	3.50%	5.45%	7.40%	7.40%	7.40%	7.40%	7.40%	7.40%	7.40%	5.4%	6.22%	6.81%
10yr Treasury	Yield	2.25%	4.00%	5.75%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	5.7%	6.44%	6.97%
30yr Treasury	Yield	2.69%	4.34%	6.00%	7.65%	7.65%	7.65%	7.65%	7.65%	7.65%	7.65%	6.0%	6.65%	7.15%
Real 10yr TIPS	Yield	2.14%	2.13%	2.11%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.1%	2.11%	2.10%
Domestic Equities	Return	-28.4%	5.4%	6.2%	7.1%	11.6%	11.6%	11.6%	11.6%	11.6%	11.6%	6.2%	8.36%	9.97%
International Equities	Return	-43.8%	7.0%	7.4%	7.9%	10.1%	10.1%	10.1%	10.1%	10.1%	10.1%	7.4%	8.49%	9.29%
Mkt Bonds	Return	5.9%	-4.4%	-2.6%	-0.8%	8.1%	8.1%	8.1%	8.1%	8.1%	8.1%	-2.6%	1.54%	4.79%
Long Bonds	Return	10.1%	-10.3%	-7.6%	-5.2%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	-7.7%	-1.72%	3.02%
Cash	Return	1.1%	1.3%	3.6%	5.9%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	3.6%	4.98%	6.05%
TIPS	Return	-4.8%	5.9%	6.6%	7.4%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%	6.6%	6.86%	7.04%
Real Estate	Return	-20.1%	3.4%	4.5%	5.6%	10.6%	10.6%	10.6%	10.6%	10.6%	10.6%	4.5%	6.90%	8.72%
Private Eq	Return	-21.2%	5.9%	7.0%	8.1%	13.7%	13.7%	13.7%	13.7%	13.7%	13.7%	7.0%	9.64%	11.65%
High Yields	Return	-22.3%	-1.8%	-0.1%	1.6%	10.1%	10.1%	10.1%	10.1%	10.1%	10.1%	-0.1%	3.85%	6.93%
Med Inflation	Return	4.38%	7.73%	9.47%	11.20%	11.20%	11.20%	11.20%	11.20%	11.20%	11.20%			

Description of the Economic Environments
Ideal Growth

		June 2009	June 2010	June 2011	June 2012	June 2013	June 2014	June 2015	June 2016	June 2017	June 2018	Cumulative Returns 3yrs	Cumulative Returns 5yrs	Cumulative Returns 10yrs
Inflation	Growth	1.2%	2.5%	2.1%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	2.1%	2.00%	1.90%
Economic Growth	Growth	-2.0%	3.4%	3.7%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	3.7%	3.82%	3.91%
3-Month Treasury	Yield	0.11%	0.97%	1.84%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	1.8%	2.18%	2.44%
2-yr Treasury	Yield	0.76%	1.59%	2.42%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	2.4%	2.75%	3.00%
5-yr Treasury	Yield	1.55%	2.20%	2.85%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	2.8%	3.11%	3.30%
10yr Treasury	Yield	2.25%	2.75%	3.25%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.2%	3.45%	3.60%
30yr Treasury	Yield	2.69%	3.13%	3.56%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	3.6%	3.74%	3.87%
Real 10yr TIPS	Yield	2.14%	2.44%	1.42%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	1.4%	1.01%	0.70%
Domestic Equities	Return	-28.4%	16.6%	16.2%	15.9%	8.9%	8.9%	8.9%	8.9%	8.9%	8.9%	16.2%	13.24%	11.05%
International Equities	Return	-43.8%	12.6%	12.4%	12.3%	8.7%	8.7%	8.7%	8.7%	8.7%	8.7%	12.4%	10.93%	9.84%
Mkt Bonds	Return	5.9%	3.3%	3.4%	3.6%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%	3.4%	3.79%	4.05%
Long Bonds	Return	10.1%	3.2%	3.4%	3.5%	4.2%	4.2%	4.2%	4.2%	4.2%	4.2%	3.4%	3.71%	3.97%
Cash	Return	1.1%	0.5%	1.4%	2.3%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	1.4%	1.93%	2.32%
TIPS	Return	-4.8%	5.9%	5.4%	5.0%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%	5.4%	4.69%	4.14%
Real Estate	Return	-20.1%	12.8%	12.6%	12.4%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	12.6%	10.53%	9.01%
Private Eq	Return	-21.2%	19.9%	19.5%	19.1%	10.3%	10.3%	10.3%	10.3%	10.3%	10.3%	19.5%	15.74%	12.99%
High Yields	Return	-22.3%	9.2%	9.1%	8.8%	5.8%	5.8%	5.8%	5.8%	5.8%	5.8%	9.0%	7.71%	6.74%
Med Inflation	Return	4.38%	6.67%	7.33%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%			

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Services provided by Mercer Investment Consulting, Inc.

12-Month Investment Committee Calendar

Date	January 2009	Notes
1/22/2009	1. Investment Consultant Asset/Liability Report and recommendation, initial review	
Date	**February 2009**	
2/19/2009	1. Investment Consultant Asset/Liability Report and recommendation, second review	
	2. Investment Consultant Performance Report 4Q08	
Date	**March 2009**	
3/19/2009	1. Investment Consultant Asset/Liability Report and recommendation, third review, possible vote	
	2. Investment Consultant contract renewal, possible vote	
Date	**April 2009**	
4/29/2009	1. Investment Consultant Asset/Liability Report and recommendation, possible vote if not voted on at 3/19/09 meeting.	
Date	**May 2009**	
5/28/2009	1. Transition Manager RFP finalists recommendation, vote	
	2. Investment consultant Performance Report 1Q09	
Date	**June 2009**	
6/18/2009		
Date	**July 2009**	
7/30/2009	1. BWC Investment Division Goals FY2010	
Date	**August 2009**	
8/27/2009	1. Investment Consultant Performance Report 2Q09	
Date	**September 2009**	
9/24/2009		
Date	**October 2009**	
10/29/2009	1. Investment Class Performance/Value Annual Report [ORC 4121.12(F)(12), possible vote	
	2. Custodian Annual Review	
Date	**November**	
11/19/2009	1. Investment Consultant Performance Report 3Q09	
Date	**December 2009**	
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The Ohio Bureau of Workers' Compensation

Statement of Investment Policy and Guidelines

Adopted by the BWC Board of Directors: December 18, 2008

Amends Adoption of: November 21, 2008

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The Ohio Bureau of Workers' Compensation
Statement of Investment Policy and Guidelines

I. INVESTMENT OBJECTIVES

The primary investment objective is to manage the reserve to preserve the ability of Funds to pay all disability benefits and expense obligations when due. Meeting this objective necessitates prudent risk-taking with the Funds' investments. An additional objective is to earn sufficient returns to grow the surplus over time and to keep premium payments as reasonable and predictable as possible for the benefit of the injured workers and employers of Ohio.

II. BACKGROUND

A. Purpose

This document establishes the investment policy (the "Investment Policy") for the Ohio Bureau of Workers' Compensation ("OBWC") State Insurance Fund and Ancillary Funds ("the Funds"). The Workers' Compensation Board of Directors ("Board") adopts this policy in order to assist the Administrator, the Chief Financial Officer, the Chief Investment Officer and the OBWC staff in meeting investment objectives and monitoring the performance of the investment of the surplus and reserves of the Funds as required by Ohio Revised Code Section 4121.12(F).

> *The Board is required to establish objectives, policies, and criteria for the administration of the investment program that include asset allocation targets and ranges, risk factors, asset class benchmarks, time horizons, total return objectives, and performance evaluation guidelines, and monitor the administrator's progress in implementing the objectives, policies, and criteria on a quarterly basis. (O.R.C. 4121.12(F))*

B. Fiduciary Standard

Under Ohio Revised Code Section (O.R.C.) 4123.44, the voting members of the Board, the Administrator of OBWC, and the Chief Investment Officer of the OBWC are trustees of the state insurance fund and fiduciaries of the Funds, which are held for the benefit of the injured workers and employers of Ohio.

> *All fiduciaries shall discharge their duties with respect to the Funds with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims, and by diversifying the investments of the assets of the funds so as to minimize the risk of large losses, unless under the circumstances it is clearly prudent not to do so. (*O.R.C. 4123.44*)*

All investment activities undertaken by, or on behalf of, the OBWC, including any investment activities performed by outside Investment Managers and General Partners, will strictly adhere to the terms of this Investment Policy, the restrictions of the O.R.C. 4123.44 and any other applicable statutory or administrative rules. A copy of the O.R.C. 4123.44, as amended, is attached to this Investment Policy and all aspects of this Investment Policy shall be construed and interpreted in a manner consistent with O.R.C. 4123.44.

III. ROLES AND RESPONSIBILITIES

A. Board Responsibilities

The Board is the primary body charged with overseeing investment activities relating to the Funds. Its oversight functions include the duties specified below:

i. Approve the strategic asset allocation and investment policy for the Funds and periodically review such policy in light of any changes in actuarial variables, market conditions, or other evolving facts or situations relevant to the appropriate character of that policy.

ii. Permit the Administrator to invest in an investment class only after the Board, by majority vote, opens the class in question.

iii. Close any class of investments when it deems prudent.

iv. Monitor and review the investment performance of the Funds on a quarterly (February, May, August and November) basis to determine achievement of goals and compliance with this Investment Policy.

v. Advise and consent to the Administrator's hiring of the CIO.

vi. Advise and consent to the OBWC's employment of an internal auditor, who shall report directly to the Board on investment matters.

vii. Approve the selection and termination of all Investment Consultants.

viii. Approve the criteria and procedures for the selection of the Investment Managers and General Partners.

ix. Approve the final selection and funding and termination of all Investment Managers and General Partners.

x. Approve the asset class to be managed, investment style, scope of investment activities and maximum percent of the Fund that may be allocated to each Investment Manager and General Partner.

xi. Prohibit on a prospective basis any specific investment that the Board finds to be contrary to the Investment Objectives of the Funds. In the event that the Board determines that any activity undertaken or proposed to be undertaken pursuant to this Investment Policy is contrary to the Investment Objectives, the Board shall direct the Administrator to take the appropriate corrective action.

xii. Submit a report annually on the performance and the value of each investment class to the governor, the president and minority leader of the senate, and the speaker and the minority leader of the house of representatives.

xiii. Advise the Administrator of the Board's criteria for approving proposed dividends submitted to it pursuant to R.C. 4123.32 and Ohio Admin. Code 4123-17-10.

The Board may appoint members to an Investment Committee for the express purpose of assisting the Board to carry out any of the responsibilities enumerated here.

B. OBWC Staff Responsibilities

The Chief Investment Officer shall be employed by the Administrator, with the advice and consent of the Board, and shall be a senior member of the OBWC staff with the primary responsibility for implementing the Investment Policy. Subject to the supervision and control of the Administrator, the Chief Investment Officer shall:

i. Consult with and receive approval from the Board regarding the appropriate strategic asset allocation and investment policy for the Funds and periodically review such policy in light of any changes in actuarial variables, market conditions, or other evolving relevant facts or situations.

ii. Recommend permissible asset classes for investment to the Board.

iii. Monitor and review the investment performance of the Funds on a monthly basis to determine achievement of goals and compliance with Investment Policy. Provide a report of monthly market value changes by investment asset class.

iv. Consult with and receive approval from the Board on the selection and termination of all Investment Consultants.

v. Consult with and receive approval from the Board on the selection and termination of all Investment Managers and General Partners.

vi. Consult with and receive approval from the Board on the asset class to be managed, investment style, scope of investment activities and maximum percent of the Fund that may be allocated to each Investment Manager and General Partner.

vii. Implement the directives of the Board.

viii. Supervise the management of each Fund's assets in accordance with this Investment Policy and the objectives and guidelines set forth herein.

ix. Consult with and receive approval from the Board regarding criteria and procedures to be utilized to select Investment Managers and General Partners.

x. Monitor all managed assets to insure compliance with the guidelines set forth in this Investment Policy and report same to the Board on a monthly basis.

xi. Inform and receive approval by the Board of any significant change in investment strategy of approved Investment Managers and General Partners.

xii. Monitor manager trade execution.

xiii. Promptly vote all proxies and related actions in a manner consistent with the long-term interests and objectives of the Funds set forth herein. The CIO may retain a third party proxy voting service or direct investment managers to vote the proxies related to securities held in their respective portfolios.

xiv. Maintain detailed records of said voting of proxies and related actions and comply with all regulatory obligations related thereto.

xv. Report to the Board on at least an annual basis summary trade activity by brokerage firm and communicate any unusual trading activity to the Board in a timely manner, including any discussions with Investment Managers regarding such trading activity.

xvi. Consult with the Funds' Investment Managers on at least a quarterly basis to discuss account performance and other material information.

xvii. Collect and review the current Form ADV of each Investment Manager and Investment Consultant on an annual basis and provide a summary report to the Board.

C. Investments Managers' Responsibilities

Each Investment Manager shall:

i. Be a bank, insurance company, investment management company, or investment advisor as defined by the Investment Advisors Act of 1940.

ii. Manage the plan assets under its care, custody and/or control in accordance with the Investment Policy set forth herein and in compliance with applicable Ohio statutory requirements.

iii. Exercise full investment discretion over the assets in their care within the guidelines set forth herein, their Investment Management Agreement and the specific portfolio guidelines contained therein.

iv. Subject to any exceptions expressly set forth herein, Investment Managers shall be directly responsible for executing trades related to the portfolios they manage for the Funds. Investment Managers shall be responsible for seeking the best execution of trades. Any Broker used by any Investment Manager must be properly licensed.

v. Provide monthly performance evaluation reports that comply with the Global Performance Presentation Standards (GPPS) issued by the CFA Institute.

vi. Provide the CIO with firm's Brokerage, Soft Dollar and Trade Execution Policy on an annual basis.

vii. Provide the CIO with a report on at least monthly basis on the trading activities of the Funds, including, but not limited to, the volume of trades and related commissions executed by each Broker.

viii. Provide the CIO with the firm's Ethics Policy and quarterly confirmation of its compliance with said policy.

ix. Provide the CIO with the firm's most recent Form ADV on an annual basis.

x. Comply with the Campaign Contribution Policy as set forth in the Ohio Revised Code (O.R.C.) Section 3517 and provide written evidence of such compliance on a quarterly basis.

xi. Promptly inform the CIO in writing of all changes of a material nature pertaining to the firm's organization and professional staff.

xii. If directed by the Administrator and/or the Chief Investment Officer, shall promptly vote all proxies and related actions in a manner consistent with the long-term interests and objectives of the Funds. Each manager designated to vote shall provide OBWC with firm's proxy voting policy on an annual basis, keep detailed records of said voting of proxies and related action and comply with all regulatory obligations related thereto.

xiii. Report to the CIO on at least a quarterly basis on the status of the portfolio and its performance for various time periods and meet with the staff at least semi-annually to report on the economic outlook and compliance with goals and objectives.

xiv. Acknowledge and agree in writing to their fiduciary responsibility to fully comply with the entire Investment Policy.

D. General Partners' Responsibilities

Each General Partner shall:

i. Manage the plan assets under its care, custody and/or control in accordance with the Investment Policy set forth herein and in compliance with applicable Ohio statutory requirements.

ii. Exercise full investment discretion over the assets in their care within the guidelines set forth herein, their Partnership and/or Subscription Agreement and the specific portfolio guidelines contained therein.

iii. Provide the CIO with quarterly financial statements and an audited annual financial statement for each partnership or fund to which the Ohio BWC has made a commitment.

iv. Provide the CIO with an annual Valuation Certification attesting to the value of the Ohio BWC holdings in each partnership or fund.

v. Provide the CIO with the firm's Ethics Policy and annual confirmation of its compliance with said policy (for agreements entered into after January 1, 2006 only).

vi. Promptly provide the CIO with a detailed report of all capital calls and/or distributions for each partnership or fund.

vii. Comply with the Campaign Contribution Policy as set forth in the Ohio Revised Code (O.R.C.) Section 3517 and provide written evidence of such compliance on an annual basis (for agreements entered into after January 1, 2006 only).

viii. Promptly inform the CIO in writing of all changes of a material nature pertaining to the firm's organization and professional staff.

E. Investment Consultants' Responsibilities

The Investment Consultant shall:

i. Provide independent and unbiased information to the Board, the Administrator and the CIO.

ii. Assist in the development and amendment of this Investment Policy.

iii. Assist in the establishment of strategic asset allocation targets.

iv. Assist in the development of performance measurement standards.

v. Report the quarterly investment performance results and quarterly risk characteristics of the Funds to the Board.

vi. Monitor and evaluate Investment Manager performance on an ongoing basis.

vii. Conduct due diligence on the Funds' current and prospective Investment Managers.

viii. Establish a procedural due diligence search process.

ix. Assist in the development of criteria and procedures to be utilized for the selection of all Investment Managers.

x. Provide the CIO with the firm's most recent Form ADV on an annual basis.

xi. Provide any other advice or services that the Board or the Administrator and Chief Investment Officer determine from time to time is necessary, useful or appropriate to fulfill the objectives of this Investment Policy in accordance with the Investment Consulting Agreement.

IV. INVESTMENT POLICY GUIDELINES

A. Asset Allocation Guidelines

The Funds are part of the Ohio Workers' Compensation System, an exclusive state insurance fund system that is held for the sole benefit of the injured workers and employers of Ohio.

Asset allocation refers to the strategic deployment of assets among the major classes of investments such as fixed income, U.S. equity, non-U.S. equity, alternative investments and cash equivalents. The asset allocation decision reflects the Funds' return requirements as well as the Funds' tolerance for return variability (risk) within the context of the expected liabilities of the Funds. The liability considerations shall include, but not be limited to, current and expected future values of the benefits, premiums and total assets. These factors are important for identifying the investment horizon of the Funds and their cash flow requirements. A formal asset/liability analysis for each Fund will be conducted annually, or more frequently if conditions warrant.

The Board has adopted a long-term asset allocation policy for each Fund that identifies the strategic target weights to each of the major asset classes. These policies are detailed in Section VII.

B. Rebalancing Policy

Rebalancing is the periodic adjustment of an asset portfolio for the purposes of shifting the asset allocation back towards the desired target percentages. Rebalancing policies are put in place to provide a reliable discipline to keep a portfolio in balance as market fluctuations change the percentages that are committed to various assets classes. Over, time the asset mix of any portfolio will tend to drift away from its strategic target asset allocation, acquiring risk and return characteristics that are unintended.

The Board has adopted a policy of rebalancing when actual asset allocations fall outside of the desired ranges as detailed in Section VII A. through F. For purposes of rebalancing, the percentages that each asset class constitutes of the total market value of the fund of which it is a part will be computed at the end of every calendar quarter. If the actual percentage of an assets class falls outside of the allowable ranges as outlined in Section VII by any amount, a rebalancing event will be triggered.

The following sequence of actions will be applied for any rebalancing activity:

1. When a rebalancing event is triggered, the Chief Investment Officer will notify the Administrator that a rebalancing event is imminent.
2. The Investment Division will then contact the appropriate outside investment managers and the BWC investment consultant to discuss market conditions and potential rebalancing actions.
3. The Investment Division will calculate a specific rebalancing dollar reallocation that will factor in appropriate future trust fund cash flows and the desired asset allocations after rebalancing. In general, the Board's policy, when rebalancing becomes necessary, is to restore an asset allocation for the out-of-balance asset class that is halfway between the outer bound that was violated and the original targeted asset percentage. Thus, as an example, if equities have a target allocation of 20%, and an allowable lower limit of 17%, but fall to 16% at a quarter's end as a result of market action, the proposed rebalancing plan would seek to restore equities to 18½% of the total fund (halfway between 17% and 20%).
4. The Chief Investment Officer will present a rebalancing recommendation to the Senior Officer Review Team, which consists of the BWC Administrator, the Chief Operating Officer, and the Chief Fiscal & Planning Officer, for approval before any such asset rebalancing can be implemented and executed.
5. Finally, the Chief Investment Officer will provide a written summary of the fully executed rebalancing activity for any respective trust fund portfolio to the BWC Investment Committee at its next scheduled meeting.

In order to minimize turnover, Fund cash flows, such as premiums received or benefits paid, will be used to the fullest extent to achieve rebalancing objectives.

During periods of extreme market conditions and consequent illiquid markets whereby the ability to execute identified Fund assets rebalancing adjustments is made difficult and costly in the judgment of the Administrator and Chief Investment Officer, such rebalancing actions may be suspended. The suspension of such rebalancing actions and the reason for such decision will be reported promptly to the Board by the Administrator and Chief Investment Officer. Any required rebalancing action for a Fund will be implemented when the impacted financial markets become sufficiently liquid so as to execute such rebalancing action with reasonable cost in the judgment of the Administrator and Chief Investment Officer.

C. General Guidelines

The following represent the general guidelines that will apply to the management of Fund assets. In addition, each Investment Manager will have specific guidelines that are part of their Investment Management Agreement that will document the Funds' performance expectations and the Investment Manager's role in the overall portfolio. The Funds use these guidelines to establish, guide and control the strategy for each Investment Manager.

i. The following guidelines serve to diversify the organizational risk of Investment Management firms or General Partners providing services to the Funds and to minimize the dependence by the Funds on any one investment firm. The diversification guidelines are as follows:

- No one investment organization or General Partner, utilizing active investment strategies, should manage more than 15% of the Funds' assets at the time it is hired.
- An investment organization, utilizing passive investment strategies, may manage up to 100% of the Funds' assets at the time it is hired. This guideline has been established to allow the BWC to take full advantage of the benefits of low fees resulting from the economies of scale that exist with passive management. The Board, Staff and the Consultant will closely monitor this organizational risk to ensure the security of Fund assets. The maximum allocation under this guideline will only be utilized in circumstances where the fee benefit is believed to outweigh the organizational risk to the Funds.
- The Funds' assets managed by any one firm, utilizing either active or passive investment strategies, or General Partner should not exceed 5% of the total assets managed by the firm or General Partner for all clients in that asset class at the time it is hired. For purposes of this constraint, "asset class" shall be broadly defined to include all styles, sub-sectors, or specialty portfolios managed by a firm within a particular asset class.

ii. **Fixed Income Investments**

The investment goal of the fixed income investments is to protect the Funds against adverse changes in the value of the Funds' assets relative to their liabilities. The Board has adopted a policy to invest each Fund's fixed income portfolio in a manner that will approximate the duration and yield curve characteristics of its liabilities in order to preserve the reserve, provide for stable premiums and grow the surplus.

Average Weighted Credit Quality
The minimum average weighted quality of the total fixed income portfolio shall be A, as measured by the lower of the Moody's or Standard & Poor's (S&P) rating.

Duration
The duration of the fixed income portfolio in aggregate shall be maintained within a range of +/- 5% of each Fund's fixed income benchmark.

Diversification
The fixed income portfolio in the aggregate shall be diversified as specified below[1] to minimize the risk of losses:

By Sector:

Sector Allocation	Max. % of Fixed Income
U.S. Governments:	***100%***
Treasuries	100%
Agencies	100%
Mortgages	***40%***
Agencies	40%
Non-Agency	10%
Collateralized Mortgage Obligations (CMOs) (must be rated AA or better)	10%
Commercial Mortgage Backed Securities (CMBS) and Project Loans	10%
Floating Rate Mortgages	10%
Investment Grade Credit	***70%***
Finance	35%
Industrial	35%
Transportation	35%
Utilities	35%
Yankees	15%
Asset Backed Securities (ABS) (must be rated AA or better)	10%
Foreign Governments	***5%***
Below Investment Grade Credit	***7.5%***

[1] Percentages represent a maximum allocation and will not sum to 100%

By Credit Quality:

Credit Quality	Max. % of Fixed Income	Credit Name Max %
Governments/Agencies	100%	N.A.
Aaa/AAA or below	80%	1.00% (AAA only)
Aa/AA or below	65%	1.00% (AA only)
A/A or below	40%	0.75% (A only)
Baa/BBB or below	25%	0.50% (BBB only)
Ba/BB or below	7.5%	0.25% (BB only)
B/B or below	*	0.10% (B only)
CCC	**	0.05% (CCC only)
Below CCC	0%	0.00%

***Maximum of 70% of "Ba/BB or below" securities owned**
****Maximum of 20% of "Ba/BB or below" securities owned**

Individual credit name limits are applicable for actively managed fixed income mandates, and are not applicable for passively managed (index) fixed income mandates. Credit name is defined as unique ticker symbol, such that each distinct credit name has a different ticker symbol as represented on Bloomberg or other such informational source used by the sponsor of the fixed income benchmark index approved.

Maximum percentages refer to market value of each security or credit name owned for the Funds' Fixed Income portfolio in its aggregate. Credit ratings recognized are Moody's, Standard & Poor's and Fitch. Credit rating applicable is the lower of the two ratings if such security is rated by only two of the three rating agencies. Credit rating applicable is the middle rating if such security is rated by all three rating agencies, as consistent with the rules used by the sponsor of the fixed income benchmark index approved. The Chief Investment Officer will report to the Board the details of any guideline violation at the next scheduled Board meeting, or sooner if warranted in the judgment of the Chief Investment Officer. Each Investment Manager will be required to adhere to this Investment Policy in general and will be provided with specific investment security guidelines by the Chief Investment Officer consistent with these Credit Quality and Sector Allocation guidelines in the aggregate.

In the event that downgraded securities result in a violation of these constraints, the Board shall grant an exemption that would allow the Investment Manager to continue to hold the downgraded security or securities, at their discretion, for a period of up to three months. An Investment Manager shall immediately report any guideline violation resulting from a downgraded security in their portfolio to the Chief Investment Officer. The Investment Manager shall also provide an action plan to bring the portfolio back in compliance with the applicable guidelines to the Chief Investment Officer. Such action plan will be reflected in the compliance report of the Chief Investment Officer to be presented at the next scheduled Board meeting.

The Funds may invest in Rule 144A and private placement securities subject to the sector and credit constraints specified above.

iii. U.S. Equity

The investment goal of the domestic equity investments is to offer the Funds a broad exposure to the return opportunities and investment characteristics associated with the U.S. domestic equity market.

Diversification

The U.S. Equity portfolio shall be diversified as specified below to minimize the risk of losses:

- Investments will be diversified by capitalization size and by style (growth and value) to approximate the overall market as measured by each Fund's U.S. Equity benchmark.
- No single holding shall account for more than 5% of the U.S. equity portfolio at market of any single active U.S. equity manger. These restrictions are applicable to actively managed U.S. Equity mandates only, and are not applicable to passively managed (index) equity mandates.
- No single holding shall account for more than 5% of the outstanding equity securities of any one corporation

Non-U.S. Equity

The investment goal of the non-U.S. equity investments is to offer the Funds a broad exposure to the return opportunities, diversification effects and investment characteristics associated with the non-U.S. equity market.

Diversification

The Non-U.S. Equity portfolio shall be diversified as specified below to minimize the risk of losses:

- Investments will be diversified by capitalization size and by style (growth and value) to approximate the overall market as measured by each Fund's Non-U.S. Equity benchmark.
- Investments will be diversified by geographic region and sector, so as to optimize the relationship of expected return to expected risk after taking into consideration the asset allocation of each Fund.
- No single holding shall account for more than 5% of each Fund's total Non-U.S. equity portfolio at market.
- No single holding shall account for more than 5% of the outstanding equity securities of any one corporation

iv. **Alternative Investments**

The State Insurance Fund has allocated a portion of its investment portfolio to private equity securities, limited partnerships and funds of funds subject to all applicable legal requirements and limits set forth in this Investment Policy. The purpose of investing in private equity securities, partnerships or funds is to enhance the overall investment returns of the Funds.

Future investments in Alternative Investments are not presently anticipated.

v. **Cash Equivalents**

Cash equivalents may be held to meet each Fund's short term cash flow needs.

vi. **Securities Lending**

Securities lending shall be engaged by the Funds or their Investment Managers as determined and approved by the Board.

vii. **Derivatives**

A derivative is broadly defined as a contract whose value is based on the performance of an underlying financial asset, index or other investment. The most common forms of derivatives are futures, options, swaps and forwards.

The use of derivatives by the Funds or their Investment Managers is prohibited unless specifically approved by the Board. Specific approvals include:

1. Permission is granted to passive indexed investment managers to use futures on financial contracts in the management of commingled investment funds. The Board anticipates that this use of financial futures may be initiated by investment managers for specific risk-control purposes such as the facilitation of the investment of a large inflow of new money into the commingled fund.

   The Board also recognizes that the language of the policies of some commingled funds permits other financial derivatives such as options and swaps. The Board has a very low tolerance for the use of other financial derivatives in commingled funds. On the infrequent occasions when financial derivatives such as options and swaps are used in commingled funds, the Board will carefully evaluate whether remaining invested in that commingled fund is appropriate.

2. Permission is granted to investment managers to use futures on financial contracts in the management of portfolio transitions. This use of financial futures will be reported to the Board in advance and will typically begin and end in short periods of time.

   In every case where financial derivatives are used, the Board requires the investment staff of the BWC to report the use of the derivatives to the Board at the next scheduled meeting after the derivatives position has been initiated so that the Board may judge the appropriateness of the risks of the derivatives position.

3. Other derivatives that are generally approved for use include: collateralized mortgage obligations (CMOs), asset backed securities (ABS), and TBA mortgaged-backed securities in accordance with the restrictions outlined below and in Section IV.C.ii above. Other broad classes of derivatives may be added in the future as deemed necessary and desireable by the Board.

   CMOs are mortgage-backed bonds that separate mortgage pools into different maturity classes. Issued by the Federal Home Loan Mortgage Corporation (Freddie Mac) and private issuers, CMOs are usually backed by government-guaranteed or other top-grade mortgages. To qualify for investment by the Funds, CMOs must be rated AA or better and not be levered. Interest-only (IOs) and principal-only (POs) instruments are prohibited.

   ABS are bonds or notes backed by loan paper on accounts receivable originated by banks, credit card companies or other providers of credit and often "enhanced" by a bank letter of credit or by insurance coverage provided by an institution other than the issuer. To qualify for investment by the Funds, ABS must be rated AA or better.

   TBA ("to be announced") pools are mortgage-backed securities in which the specific underlying mortgage pools are not identified at the time of commitment to purchase, but which share defined characteristics such as coupon and term to stated maturity. TBA pools are sometimes either sold before settlement or extended in settlement from original settlement date to a future settlement date that is typically in the next month. To qualify for investment by the Funds, TBA pools must be issued by Freddie Mac, Federal National Mortgage Association (Fannie Mae), or Government National Mortgage Association (Ginnie Mae).

viii. **Commission Recapture / Directed Brokerage**

The Funds shall not engage in commission recapture or directed brokerage programs.

ix. **General Prohibitions**

The following activities or investments are expressly prohibited within the Funds:

a. Short selling in any form.
b. The use of all forms of leverage or the purchase of securities with borrowed money is prohibited, except that the Board recognizes that financial futures are generally purchased on margin and this is permitted.
c. Coins, artwork, horses, jewelry, gems, stamps, antiques, artifacts, collectibles, and memorabilia.
d. Direct or indirect investments in vehicles that target specified assets, which includes unregulated investments that are not commonly part of an institutional portfolio, that lack liquidity and that lack readily determinable valuation.

V. PERFORMANCE OBJECTIVES

A. Total Fund

The primary performance objective for each Fund is to achieve an aggregate rate of return that exceeds the return of each Fund's Performance Benchmark on a consistent basis. The Benchmark combines designated market and/or custom indexes for asset classes, weighted by asset-allocation targets. Currently, the indexes are:

Asset Class	Benchmark
Total Fixed Income:	***N/A***
Intermediate Duration	Lehman Intermediate U.S. Government/Credit Index
Long Duration	Lehman Long U.S. Government/Credit Index
High Yield	Merrill Lynch High Yield Master II
Inflation-Protected Securities	Lehman U.S. TIPS
U.S. Equity	***Wilshire 5000***
Large Cap	S&P 500
Small/Mid Cap	Wilshire 4500 / Russell 2500
Alternative Investments	Wilshire 5000 + 5%
Non-U.S. Equity	***MSCI EAFE***
Cash Equivalents	***90-Day T-Bill***

B. Asset Class Composites

Each asset class shall be measured relative to its designated market and/or custom index. It is expected that any active management of individual asset classes will provide an investment return in excess of the index, net of expenses, on a consistent basis.

C. Investment Managers

On a timely basis, but not less that four times a year, the Chief Investment Officer will meet with the Investment Consultants to:

- Evaluate the performance of each Investment Manager.
- Review each Investment Manager's adherence to this Investment Policy.
- Analyze any material changes in the Investment Manager's organization, investment strategies or personnel.
- Review each Investment Manager's performance relative to appropriate indices and peer groups.

Each Investment Manager's performance shall be evaluated relative to an appropriate benchmark index and a relative peer group of managers as indicated below. They are expected to (1) rank above median versus their respective peer groups and (2) earn investment returns, net of expenses, that equal or exceed their respective benchmark index.

The performance of each Investment Manager will be monitored on an ongoing basis and the Administrator and the Chief Investment Office shall take any appropriate corrective action, including, subject to approval by the Board, the termination and replacement of an Investment Manager. Factors that may lead to terminating a manager relationship include:

- Performance below median (50th percentile) of their peer group.
- Realization of investment returns, net of expenses, that lag their respective benchmark index.
- Failure to adhere to this Policy or the portfolio's Investment Guidelines.
- Failure to comply with the Ethics Policy of the firm or the Board.
- Violation of any law.
- Style drift.
- Organizational changes including:
    - Change in professional staff
    - Significant loss of clients
    - Significant growth of new business
    - Change in ownership

VI. COMMUNICATIONS

- Each Investment Manager will provide written reports at least monthly, including asset inventories, market commentary or anything else deemed significant at the time of reporting.
- Each Private Equity General Partner will provide written reports at least quarterly, including asset inventories, market commentary or anything else deemed significant at the time of reporting.
- Each Investment Manager will provide all reporting required under Section III. C. of this Policy.
- Each Investment Manager is expected to meet with the Administrator and/or the Chief Investment Officer at least annually at OBWC offices.
- Frequent and regular communication with the OBWC by all Investment Managers is encouraged.

VII. TARGET ASSET MIXES AND RANGES

A. State Insurance Fund (SIF)

The State Insurance Fund liabilities consist of the following primary components:

- Indemnity cost: the compensation paid to injured workers for lost wages
- Medical cost: the cost of providing medical coverage to injured workers

These liabilities are long-term in nature, with an approximate duration of 10 years. Premiums are set each year at a level that is expected to cover the cost of future claims. Future claims are estimated based on actuarial methods that measure the expected indemnity and medical costs. These costs are discounted at a rate that is consistent with the guidelines as established by the Government Accounting Standards Board (GASB).

The actual liabilities of the Fund may vary from the expectations at the time premiums are set due to future changes in the discount rate, unanticipated medical inflation, and/or actual claim experience that differs from actuarial expectations. In order to protect the Fund against adverse changes in the Fund's assets relative to its liabilities, the Board has adopted a policy to invest the reserves primarily in a fixed income portfolio that will approximate the duration and yield curve characteristics of the liabilities as measured by the Fund's actuary and Consultant on an annual basis, or more frequently if conditions warrant. A portion of the reserve and surplus may also be invested in equity, inflation-protected, or other securities in order to protect the reserve against unexpected medical inflation and adverse claims experience and/or for the purpose of growing the surplus.

The Board has adopted a long-term asset allocation policy that identifies the strategic target weights to each of the major asset classes.

The table below highlights the general asset classes approved for investment and the strategic target weights. The allowable range for all target weights is reflected in the following table.

			Management Style	
Asset Class	Policy Target[1]	Policy Range	Passive	Active
Total Fixed Income:	***79%***	***76-82%***	***47%***	***32%***
Long Duration	54%	51-57%	27%	27%
High Yield	5%	4-6%	0%	5%
Inflation-Protected Securities	20%	17-23%	20%	0%
Cash Equivalents	***1%***	***0-6%***	***NA***	***NA***
Total Equity	***20%***	***17-23%***	***12%***	***8%***
U.S. Equity				
Large Cap	12%	9-15%	12%	0%
Small/Mid Cap	3%	2-4%	0%	3%
Alternative Investments	0%	NA	NA	NA
Non-U.S. Equity	5%	4-6%	0%	5%

[1] Alternative Investments includes private equity and the coin fund. This asset class targets will be combined with that of Small/Mid Cap U.S. Equity until a final determination has been made regarding the potential liquidation of these assets

B. Coal Workers' Pneumoconiosis Fund (CWPF)

The Coal Workers' Pneumoconiosis Fund ("CWPF") provides benefits for injured workers under the Federal Coal Mine Health and Safety Act of 1969. The CWPF provides voluntary coverage to employers who have employees who are exposed to coal dust, as required by federal law.

These liabilities are long-term in nature, with an approximate duration of 11 years. Premiums are set each year at a level that is expected to cover the cost of future claims. These costs are discounted at a rate that is consistent with the guidelines as established by the GASB.

The actual liabilities of the Fund may vary from the expectations at the time premiums are set due to future changes in the discount rate, unanticipated medical inflation, and/or actual claim experience that differs from actuarial expectations. In order to protect the Fund against adverse changes in the Fund's assets relative to its liabilities, the Board has adopted a policy to invest the reserves primarily in a fixed income portfolio that will approximate the duration and yield curve characteristics of the liabilities as measured by the Fund's actuary and Consultant on an annual basis, or more frequently if conditions warrant. A portion of the reserve and surplus may also be invested in equity, inflation-protected, or other securities in order to protect the reserve against unexpected medical inflation and adverse claims experience and/or for the purpose of growing the surplus.

The Board has adopted a long-term asset allocation policy that identifies the strategic target weights to each of the major asset classes.

The table below highlights the general asset classes approved for investment and the strategic target weights. The allowable range for all target weights is reflected in the following table

			Management Style	
Asset Class	**Policy Target**	**Policy Range**	**Passive**	**Active**
Total Fixed Income:	***79%***	***76-82%***	***74%***	***5%***
Long Duration	54%	51-57%	54%	0%
High Yield	5%	4-6%	0%	5%
Inflation-Protected Securities	20%	17-23%	20%	0%
Cash Equivalents	***1%***	***0-6%***	***NA***	***NA***
Total Equity	***20%***	***17-23%***	***20%***	***0%***
U.S. Equity	20%			
Large Cap	17%	9-15%	17%	0%
Small/Mid Cap	3%	2-4%	3%	0%
Alternative Investments	0%	NA	NA	NA
Non-U.S. Equity	0%	NA	NA	NA

C. Marine Industry Fund (MIF)

The Marine Industry Fund ("MIF") provides voluntary coverage to employers who have employees who work on or about navigable waters as required by the Federal Longshoremen and Harbor Workers' Act.

These liabilities are intermediate-term in nature, with an approximate duration of 3-4 years. Premiums are set each year at a level that is expected to cover the cost of future claims. These costs are discounted at a rate that is consistent with the guidelines as established by the GASB.

The actual liabilities of the Fund may vary from the expectations at the time premiums are set due to future changes in the discount rate, unanticipated medical inflation, and/or actual claim experience that differs from actuarial expectations. In order to protect the Fund against adverse changes in the Fund's assets relative to its liabilities, the Board has adopted a policy to invest the reserves primarily in a fixed income portfolio that will approximate the duration and yield curve characteristics of the liabilities[2] as measured by the Fund's actuary and Consultant on an annual basis, or more frequently if conditions warrant. A portion of the reserve and surplus may also be invested in equity, inflation-protected, or other securities in order to protect the reserve against unexpected medical inflation and adverse claims experience and/or for the purpose of growing the surplus.

The Board has adopted a long-term asset allocation policy that identifies the strategic target weights to each of the major asset classes.

The table below highlights the general asset classes approved for investment and the strategic target weights. The allowable range for all target weights is +/- 10% of the policy target weight.

Asset Class	Policy Target
Total Fixed Income:	***99%***
Intermediate Duration	99%[3]
Cash Equivalents	***1%***
Total Equity	***0%***

[2] Expected to be implemented by December 31, 2006

[3]Approval to invest the assets of the MIF on an interim basis in the institutional money market fund that is currently utilized for BWC's cash balance assets was passed in the April 26, 2007 Workers' Compensation Oversight Commission meeting.

D. Disabled Workers' Relief Fund (DWRF)

The Disabled Workers' Relief Fund ("DWRF") provides supplementary payments to workers whose combined Permanent and Total Disabled plus Social Security disability benefits are lower than the DWRF entitlement amount.

These liabilities are long-term in nature, with an approximate duration of 10 years. Premiums are set each year at a level that is expected to cover the cost of future claims. These costs are discounted at a rate that is consistent with the guidelines as established by the GASB.

The actual liabilities of the Fund may vary from the expectations at the time premiums are set due to future changes in the discount rate, unanticipated medical inflation, and/or actual claim experience that differs from actuarial expectations. In order to protect the Fund against adverse changes in the Fund's assets relative to its liabilities, the Board has adopted a policy to invest the reserves primarily in a fixed income portfolio that will approximate the duration and yield curve characteristics of the liabilities as measured by the Fund's actuary and Consultant on an annual basis, or more frequently if conditions warrant. A portion of the reserve and surplus may also be invested in equity, inflation-protected, or other securities in order to protect the reserve against unexpected medical inflation and adverse claims experience and/or for the purpose of growing the surplus.

The Board has adopted a long-term asset allocation policy that identifies the strategic target weights to each of the major asset classes.

The table below highlights the general asset classes approved for investment and the strategic target weights. The allowable range for all target weights is reflected in the following table

			Management Style	
Asset Class	**Policy Target**	**Policy Range**	**Passive**	**Active**
Total Fixed Income:	***79%***	***76-82%***	***47%***	***32%***
Long Duration	54%	51-57%	27%	27%
High Yield	5%	4-6%	0%	5%
Inflation-Protected Securities	20%	17-23%	20%	0%
Cash Equivalents	***1%***	***0-6%***	***NA***	***NA***
Total Equity	***20%***	***17-23%***	***12%***	***8%***
U.S. Equity	15%			
Large Cap	12%	9-15%	12%	0%
Small/Mid Cap	3%	2-4%	0%	3%
Alternative Investments	0%	NA	NA	NA
Non-U.S. Equity	5%	4-6%	0%	5%

E. Public Work-Relief Employees' Fund (PWRF)

The Public Work-Relief Employees' Fund ("PWRF") provides benefits for "work-relief employees" who are engaged in any public relief employment and receiving "work-relief" in the form of public funds or goods in exchange for any service or labor rendered in connection with any public relief employment.

These liabilities are intermediate-term in nature, with an approximate duration of 3-4 years. Premiums are set each year at a level that is expected to cover the cost of future claims. These costs are discounted at a rate that is consistent with the guidelines as established by the GASB.

The actual liabilities of the Fund may vary from the expectations at the time premiums are set due to future changes in the discount rate, unanticipated medical inflation, and/or actual claim experience that differs from actuarial expectations. In order to protect the Fund against adverse changes in the Fund's assets relative to its liabilities, the Board has adopted a policy to invest the reserves primarily in a fixed income portfolio that will approximate the duration and yield curve characteristics of the liabilities as measured by the Fund's actuary and Consultant on an annual basis, or more frequently if conditions warrant. A portion of the reserve and surplus may also be invested in equity, inflation-protected, or other securities in order to protect the reserve against unexpected medical inflation and adverse claims experience and/or for the purpose of growing the surplus.

The Board has adopted a long-term asset allocation policy that identifies the strategic target weights to each of the major asset classes.

The table below highlights the general asset classes approved for investment and the strategic target weights. The allowable range for all target weights is +/- 10% of the policy target weight.

Asset Class	Policy Target
Total Fixed Income:	***99%***
Intermediate Duration	99%[1]
Cash Equivalents	***1%***
Total Equity	***0%***

[1] Approval to invest the assets of the PWRF on an interim basis in the institutional money market fund that is currently utilized for BWC's cash balance assets was passed in the April 26, 2007 Workers' Compensation Oversight Commission meeting.

F. Self Insured Employers Guarantee Fund (SIEGF)

The Self Insured Employers Guarantee Fund ("SIEGF")/Surety Bond Fund ("SBF") provides for payment of compensation and benefits to injured workers of bankrupt self-insured employers.

The Board has adopted a long-term asset allocation policy that identifies the strategic target weights to each of the major asset classes.

The table below highlights the general asset classes approved for investment and the strategic target weights. The allowable range for all target weights is +/- 10% of the policy target weight.

Asset Class	Policy Target
Total Fixed Income:	***0%***
Cash Equivalents	***100%***
Total Equity	***0%***

VIII. REVIEW PROCEDURES

The Board in conjunction with the Administrator, Chief Investment Officer and Investment Consultant will review this policy statement at least once a year, to determine if revisions are warranted and will publish the policy statement and any changes it adopts and make copies available to all interested parties.

It is not expected that this Investment Policy will change frequently; in particular short-term changes in the financial markets should generally not require an adjustment in this Investment Policy.

IX. FAIR CONSIDERATION / PUBLIC INTEREST POLICY

The Board desires that Staff and the Investment Consultant identify, research and evaluate qualified Ohio managers, minority managers and women-owned managers and that Investment Managers give consideration to such managers and brokers in their efforts to fulfill the Funds' investment objectives, but only in compliance with their respective fiduciary duties to the Funds.

<u>Qualified Ohio Managers - Criteria</u>

As used in this Investment Policy, a qualified Ohio-qualified investment manager or broker is one that meets at least one of the following requirements:

- Has its corporate headquarters or principal place of business in Ohio
- Employs at least 500 individuals in Ohio
- Has a principal place of business in Ohio and employs at least 20 residents of the State

<u>Minority Managers – Criteria</u>

As used in this Investment Policy, a minority manager shall be defined as an investment manager or broker that is U.S. domiciled and is majority-owned by one, or any combination, of the following groups: African American, Native American, Hispanic American and Asian American.

Additionally, Investment Managers who are majority-owned by women are included in this Policy

In addition to the requirements above, any qualified Ohio manager, and any minority or women-owned Investment Manager must be a registered investment advisor under the Investment Advisors Act of 1940. Any Broker must be properly licensed.

It is the Board's intention to give such firms consideration in their efforts to fulfill the Funds' investment objective; however, the Board is not obligated to hire any qualified Ohio manager, minority or women-owned firm on behalf of the Funds if such hiring is inconsistent with its fiduciary duty to the Funds and their stakeholders.