

Ohio Bureau of Workers' Compensation Strategic Asset Allocation Analysis for Coal Workers' Pneumoconiosis Fund and Disabled Workers' Relief Fund

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Guy M. Cooper
Jordan Nault
Kweku Obed

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Coal Workers' Pneumoconiosis Fund

Coal Workers' Pneumoconiosis Fund

Specialty Fund Description

- Provides benefits to injured workers under the Federal Coal Mine Health and Safety Act of 1969. The federal government sets benefit levels and determines claim eligibility for benefits
- Provides voluntary coverage (employers may choose to purchase the insurance from BWC, from a private carrier, or self insure) to employers who have employee exposure to coal dust, as required by federal law
- Provides Permanent and Total Disabled (PTD) pension benefits and medical payments to employees who have contracted pneumoconiosis in the course of their employment
- Provides for Death benefits for surviving spouses of injured workers who have contracted pneumoconiosis in the course of their employment and subsequently died from pneumoconiosis
- Calculates and applies premium rates designed to provide premiums equal to the cost of all coal mining lung related occupational diseases that have injury dates during the policy year

Note: A moratorium on premium collections has been in place for the policy year 7-1-1999 through 7-1-2008 due to the high level of net assets. Premiums are paid only by employers who have newly subscribed to the Coal Workers' Pneumoconiosis Fund on

Coal Workers' Pneumoconiosis Fund

Current Status

- June 30, 2009 Funding Ratio = 3.63
 - \$235M (funded assets) / \$65M (funded liabilities)
- Surplus of assets is not available for other uses under current legislation
- No reason to take additional investment risk in order to increase assets
- Mercer suggests a conservative asset allocation approach for Coal Workers' Pneumoconiosis Fund
 - Secure funded status
 - Reduce risk / volatility
- Given that in addition to interest rate sensitivity, Coal Workers' Pneumoconiosis Fund has exposure to cost of living experience sensitivity – TIPS are a good fit for this fund
- Given the favorable funding ratio of the Coal Workers' Pneumoconiosis Fund – shorter duration fixed income is a better fit for this fund

Coal Workers' Pneumoconiosis Fund

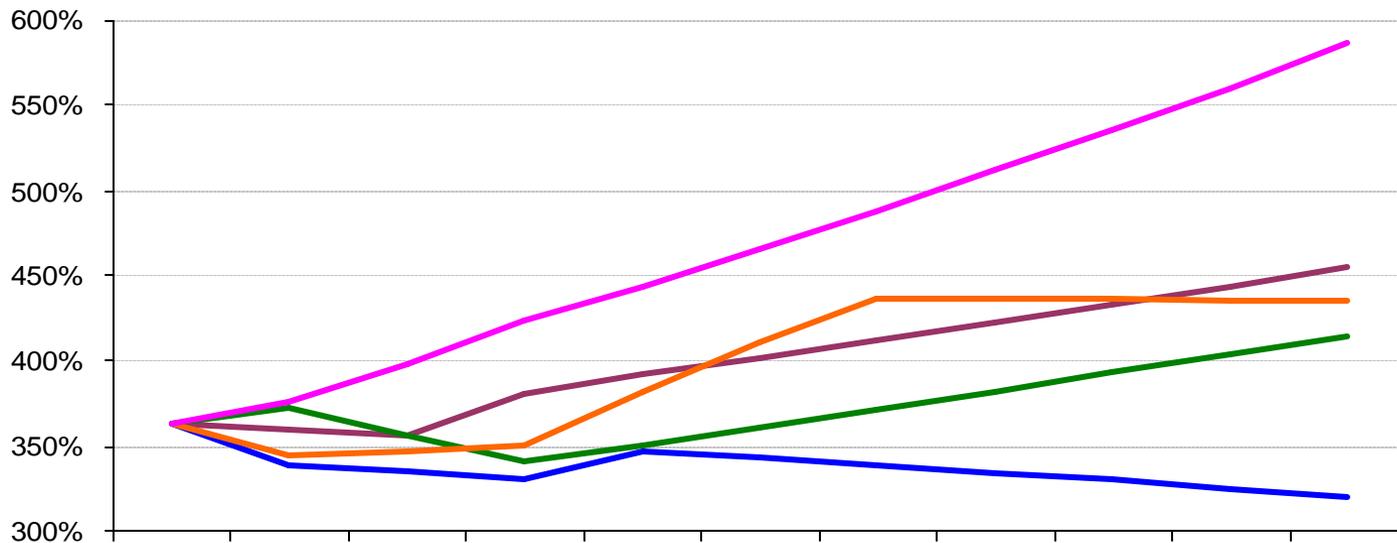
Alternative Mixes

	Mix A (current)	Mix B	Mix C	Mix D	Mix E	Mix F	Mix G
	20% Eq 80% FI	20% Eq 80% FI	30% Eq 70% FI	15% Eq 85% FI	20% Eq 80% FI	25% Eq 75% FI	20% Eq 80% FI
Equity							
US Equities - All Caps	20.0%	13.3%	20.0%	10.0%	13.3%	16.7%	13.0%
World x-US	0.0%	6.7%	10.0%	5.0%	6.7%	8.3%	7.0%
Total - Public Equity	20.0%	20.0%	30.0%	15.0%	20.0%	25.0%	20.0%
Public Equity: (US Equity : Non-US Equity)	100:0	67:33	67:33	67:33	67:33	67:33	65:35
Fixed Income							
US FI - Agg (Dur = 4.3)			15.0%	21.0%	19.7%	17.7%	39.0%
US FI - TIPS (Dur = 2.0)	20.0%	79.0%	17.0%	63.0%	59.3%	56.3%	40.0%
US FI - Long Credit (Dur = 11.4)			28.0%				
US FI - Long Gov (Dur = 15.0)			9.0%				
US FI - Long G/C (Dur = 11.6)	59.0%						
Cash (Dur = 0.2)	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Total - Fixed Income	80.0%	80.0%	70.0%	85.0%	80.0%	75.0%	80.0%
Est. Weighted Average Duration of US Fixed Income	9	2	8	3	3	3	3
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total Portfolio Statistics							
Long-Term Expected Passive Annual Return	5.9%	5.7%	6.6%	5.5%	5.7%	5.9%	5.8%
Standard Deviation of Returns	8.8%	5.3%	8.2%	4.8%	5.2%	5.8%	5.3%
% of Liability Interest Rate Risk Hedged	292%	64%	223%	87%	82%	76%	100%

- *Notice long duration fixed income over hedges interest rate risk (80% - 100% hedge is sufficient) and increases volatility*

Coal Workers' Pneumoconiosis Fund – Current Mix

Funded Ratio Projections



	Funded Ratio at 6/30/										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Base Case	363%	359%	357%	382%	392%	402%	412%	423%	433%	444%	455%
Stagflation	363%	339%	335%	330%	348%	343%	339%	334%	330%	325%	321%
Recession	363%	373%	357%	341%	351%	361%	371%	382%	393%	404%	415%
Inflationary Growth	363%	345%	348%	351%	383%	411%	436%	436%	436%	436%	436%
Ideal Growth	363%	376%	398%	424%	444%	466%	488%	511%	535%	561%	587%

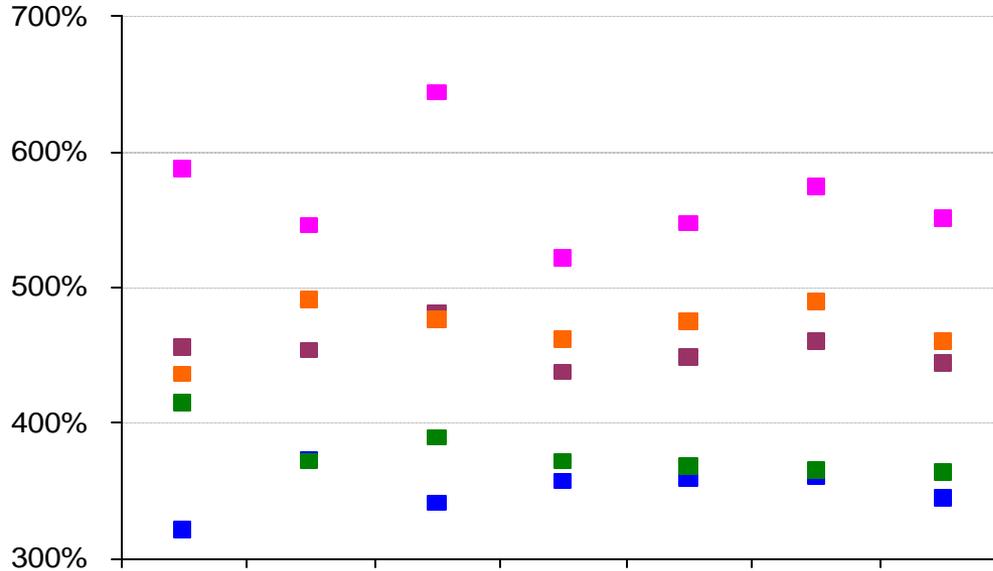
Funded ratio expected to increase under all scenarios except Stagflation

Under Stagflation, high inflation experience drives benefits and liability higher, more so than the offsetting increases in the discount rate as the 10-year treasury yield rise. Poor equities returns, and the long bonds decrease in value also.

Coal Workers' Pneumoconiosis Fund – Alternative Mixes

Funded Ratio in 2019

Investment Strategy
Mix A - Current
Mix B - 79% TIPS
Mix C - SIF allocation, 70% FI
Mix D - 85%FI, 75:25 TIPS to Agg
Mix E - 80%FI, 75:25 TIPS to Agg
Mix F - 75%FI, 75:25 TIPS to Agg
Mix G - 80%FI, 50:50 TIPS to Agg



Mix B - Large TIPS exposure provides one of the smallest ranges of result outcome, and the most protection to funded ratio in Stagflation scenario

Mixes A and C – Long bond exposure has largest range of result outcomes

Mix D – Lower equity exposure and combination of TIPS and Aggregate bonds provides smallest range of result

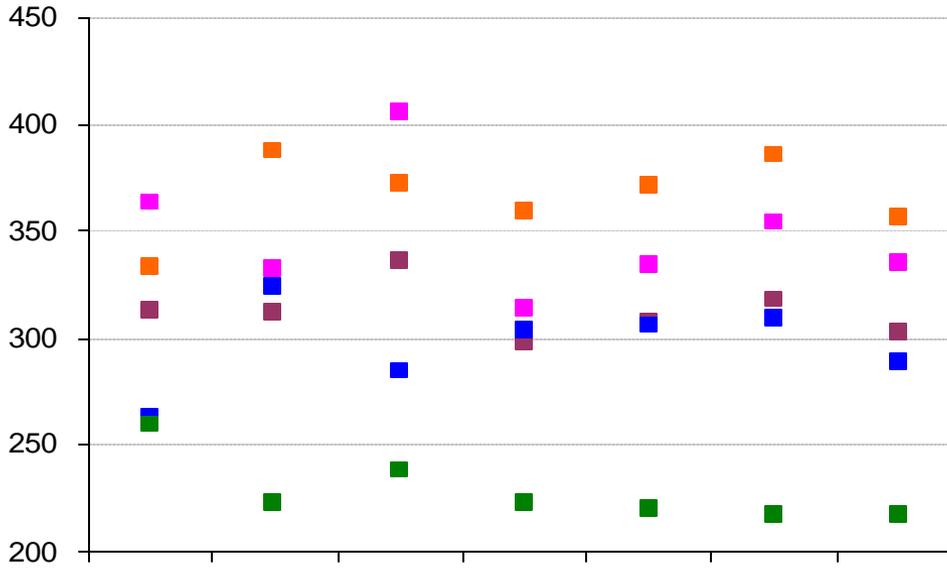
Mixes E and F – As equity exposure is increased (compare to Mix D) and keep mixture of TIPS and aggregate bonds, funded ratio under recession scenario decreases, other are improved

Mix G – Compared to Mix E, as decrease exposure to TIPS, not as much protection to the funded ratio in high inflation scenarios, but improvement under Ideal scenario

	Funded Ratio at 6/30/2019						
	Mix A	Mix B	Mix C	Mix D	Mix E	Mix F	Mix G
Base Case	455%	454%	481%	438%	449%	460%	444%
Stagflation	321%	373%	340%	356%	358%	360%	343%
Recession	415%	372%	389%	371%	367%	364%	363%
Inflationary Growth	436%	490%	475%	462%	474%	488%	459%
Ideal Growth	587%	545%	644%	521%	547%	574%	550%

Coal Workers' Pneumoconiosis Fund – Alternative Mixes

Surplus / (Deficit) in 2019



Investment Strategy
Mix A - Current
Mix B - 79% TIPS
Mix C - SIF allocation, 70% FI
Mix D - 85%FI, 75:25 TIPS to Agg
Mix E - 80%FI, 75:25 TIPS to Agg
Mix F - 75%FI, 75:25 TIPS to Agg
Mix G - 80%FI, 50:50 TIPS to Agg

Funding ratio in dollar amount shown
Fund is expected to remain in high surplus position

Results are skewed as funded ratio surplus is heavily influenced by the growth in asset compared to smaller liabilities

(\$millions)

	Projected Surplus / (Deficit) at 6/30/2019						
	Mix A	Mix B	Mix C	Mix D	Mix E	Mix F	Mix G
Base Case	313	312	336	298	308	318	303
Stagflation	262	324	285	304	306	309	289
Recession	259	223	238	223	220	217	217
Inflationary Growth	333	387	372	359	372	385	356
Ideal Growth	363	332	406	314	334	354	335

Coal Workers' Pneumoconiosis Fund

Discussion

- Mix G, in our view, represents an improvement over the current investment strategy and offers the most sensible balance of diversification, risk, and return of all the proposed alternative mixes
 - Minimal (10bps) decrease in expected return, but substantial decrease in expected standard deviation (350 bps) versus current mix
 - Funded status volatility reduced due to elimination of long duration fixed income exposure and diversification of equity assets
 - Liability interest rate risk reasonably hedged
 - Increased allocation to TIPS makes sense given the benefit escalating nature of the liability
 - Fixed income allocation well diversified between Core Aggregate Bonds (Treasury, Agencies, Corporates, Mortgages) and TIPS (Inflation Indexed Treasury Bonds)

Disabled Relief Workers' Fund

Disabled Workers' Relief Fund

Specialty Fund Description

Disabled Workers' Relief Fund I

- Provides supplementary payments to workers whose combined Permanent and Total Disabled (PTD) pension benefits and medical payments plus Social Security disability benefits are lower than Disabled Workers' Relief Fund entitlement amount on claims that occurred prior to 1987
- Allows for cost of living increases to injured workers receiving PTD benefits
- Operates on a terminal funding or cash flow basis in which premiums collected each policy year are equal to the payments made in the same policy year without regard to the accident/injury year

Disabled Workers' Relief Fund II

- Provides supplementary payments to workers whose combined PTD plus Social Security benefits are lower than the Disabled Workers' Relief Fund entitlement amount on claims that occurred in 1987 and after
- Allows for cost of living increases to injured workers receiving PTD benefits
- Current rate is 0.1% of premium base rate

Note: Financial statements combine Disabled Workers' Relief Fund I and II. Disabled Workers' Relief Fund I will eventually expire when all PTD claims prior to 1987 are no longer being paid. Disabled Workers' Relief Fund II will continue to grow as the

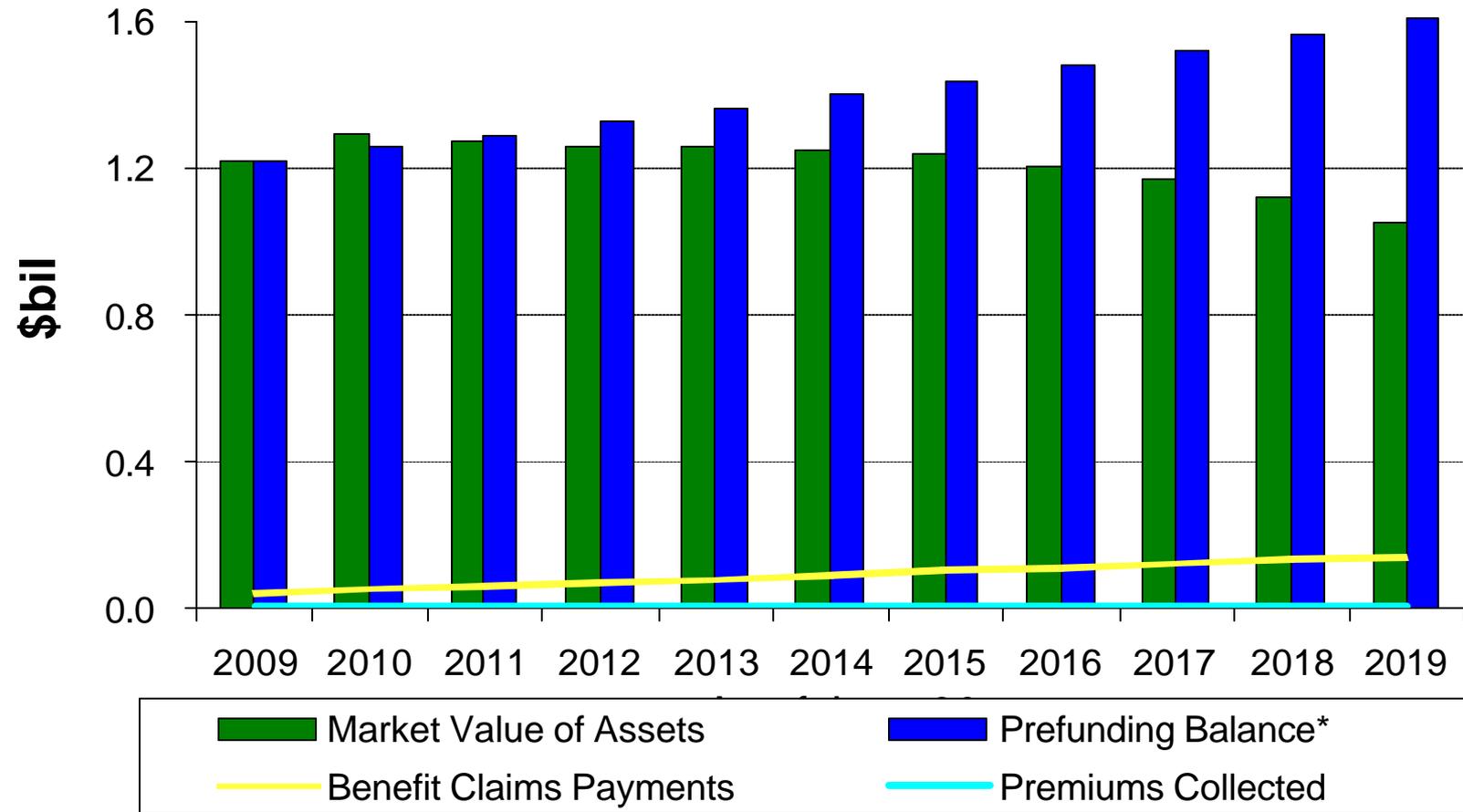
Disabled Workers' Relief Fund

Current Status

- Disabled Workers' Relief Fund operates on a terminal funding or cash flow basis
 - It is Pay As You Go
- Disabled Workers' Relief Fund I premiums are structured to match benefit claims
- Disabled Workers' Relief Fund II premiums are kept low and the prefunded balance is utilized to cover the gap between premiums collected and benefit claims
 - Disabled Workers' Relief Fund II accumulated a prefunded balance (1987-1993) prior to a formal Attorney General opinion mandating the Pay As You Go status
- Since the fund is operating on a Pay As You Go basis, the funding ratio is not the most useful metric to consider when defining the appropriate investment strategy
- Target prefunded balance objectives need to be established
- Current prefunded balance is \$1.2B
- Disabled Workers' Relief Fund II benefit claims are estimated to increase over time and will erode the prefunded balance

Disabled Workers' Relief Fund II – Current Mix

10 Year Projection Illustration of Base Case Scenario



Asset levels expected to erode as portfolio returns and premiums do not cover future benefit payment increases

*Current value adjusted for inflation

Disabled Workers' Relief Fund II

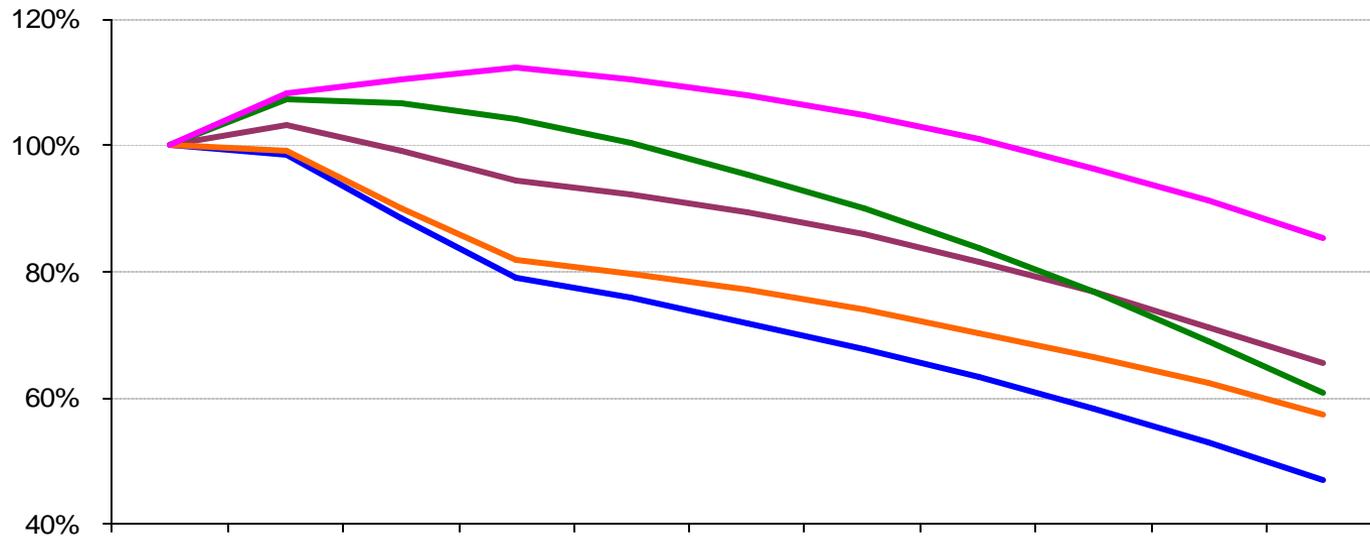
Alternative Mixes

	Mix A (current)	Mix B	Mix C	Mix D	Mix E
	20% Eq 80% FI	30% Eq 70% FI	30% Eq 70% FI	100% Eq 0% FI	70% Eq 30% FI
Equity					
US Equities - All Caps	20.0%	20.0%	20.0%	67.0%	26.7%
World x-US	0.0%	10.0%	10.0%	33.0%	13.3%
Total - Public Equity	20.0%	30.0%	30.0%	100.0%	40.0%
Public Equity: (US Equity : Non-US Equity)	100:0	67:33	67:33	67:33	67:33
Fixed Income					
US FI - Agg (Dur = 4.3)		15.0%	34.0%		29.0%
US FI - TIPS (Dur = 2.0)	20.0%	17.0%	35.0%		
US FI - Long Credit (Dur = 11.4)		28.0%			
US FI - Long Gov (Dur = 15.0)		9.0%			
US FI - Long G/C (Dur = 11.6)	59.0%				
Cash (Dur = 0.2)	1.0%	1.0%	1.0%		1.0%
Total - Fixed Income	80.0%	70.0%	70.0%	0.0%	30.0%
Est. Weighted Average Duration of US Fixed Income	9	8	3	0	4
Alternatives					
Private Equity					30%
Total - Alternatives	0.0%	0.0%	0.0%	0.0%	30.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%
Total Portfolio Statistics					
Long-Term Expected Passive Annual Return	5.9%	6.6%	6.2%	8.6%	8.4%
Standard Deviation of Returns	8.8%	8.2%	6.4%	17.0%	14.2%

- Mix A represents the current asset allocation
- Mix B reflects the new SIF asset allocation and provides a higher expected return at a reduced risk compared to the current Disabled Workers' Relief Fund
- Mix C includes a fixed income allocation with a shorter duration resulting in reduced risk
- Mix D represents a theoretical all equity allocation
- Mix E represents the required asset allocation policy to preserve the prefunded balance at over 100% in the Base Case Scenario

Disabled Workers' Relief Fund II – Current Mix

Market Value of Assets as a % of Prefunding Balance*



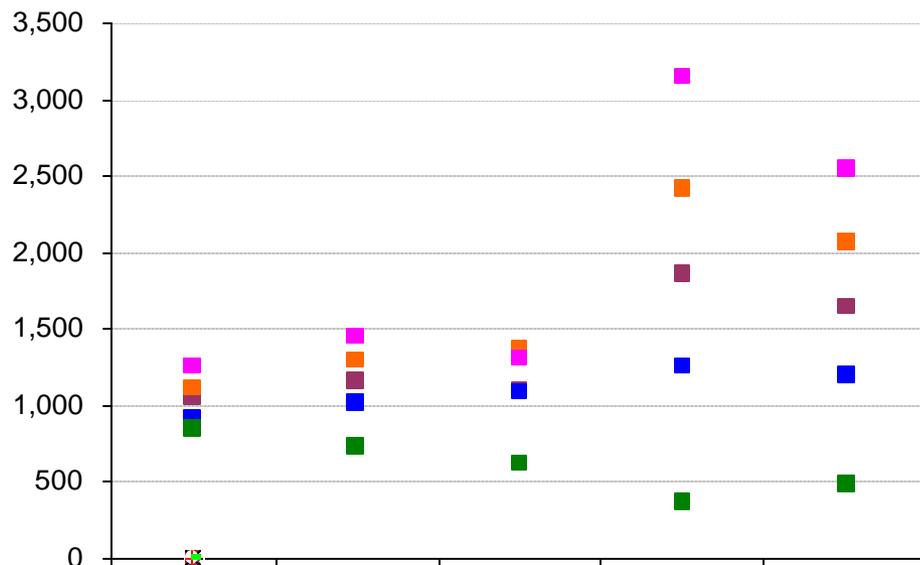
	MVA as % of Target Prefunding Balance										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Base Case	100%	103%	99%	95%	92%	89%	86%	82%	77%	71%	65%
Stagflation	100%	98%	88%	79%	76%	72%	68%	63%	58%	53%	47%
Recession	100%	107%	107%	104%	100%	95%	90%	84%	77%	69%	61%
Inflationary Growth	100%	99%	90%	82%	80%	77%	74%	70%	67%	62%	57%
Ideal Growth	100%	108%	110%	112%	110%	108%	105%	101%	97%	91%	85%

*Current value adjusted for inflation

Disabled Workers' Relief Fund II – Alternative Mixes

Market Value of Assets – 10 Years Out

Investment Strategy
Mix A - Current
Mix B - SIF allocation, 70% FI
Mix C - FI with shorter duration
Mix D - All equity
Mix E - 70% Equity w/30% PE



Mix B – Improvement in asset levels under all scenarios, except Recession

Mix C – Improvement in asset levels under all scenarios, except Recession

Mix D – Highest variability in asset levels

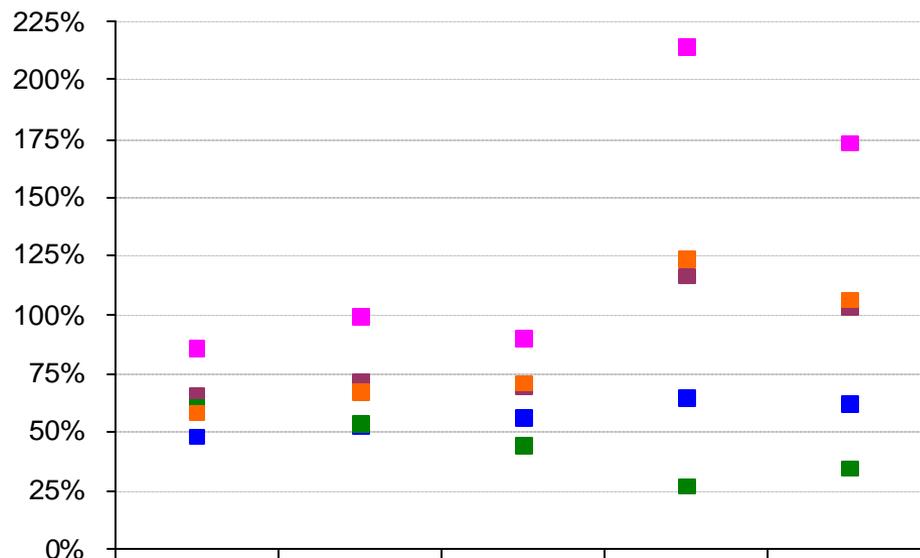
Mix E – High variability in asset levels outcomes

(\$millions)

	Projected MVA as of 6/30/2019				
	Mix A	Mix B	Mix C	Mix D	Mix E
Base Case	1,050	1,153	1,103	1,862	1,647
Stagflation	919	1,018	1,078	1,254	1,196
Recession	844	738	614	372	471
Inflationary Growth	1,117	1,297	1,364	2,411	2,070
Ideal Growth	1,254	1,450	1,314	3,151	2,543

Disabled Workers' Relief Fund II – Alternative Mixes

Market Value of Assets as a % of Prefunding Balance* in 2019



Investment Strategy
Mix A - Current
Mix B - SIF allocation, 70% FI
Mix C - FI with shorter duration
Mix D - All equity
Mix E - 70% Equity w/30% PE

Mix B illustrates improvement in the ratio metric in all scenarios except Recession (compared to Mix A)

Mix C illustrates improvement in the ratio metric in all scenarios except Recession (compared to Mix A)

Mix D illustrates the high variability presented in an all equity portfolio

Mix E illustrates it requires a high equity exposure to maintain the ratio at 100%. Also displays the variability in outcomes over the projection period

	MVA as % of Prefunding Bal. as of 6/30/2019				
	Mix A	Mix B	Mix C	Mix D	Mix E
Base Case	65%	72%	69%	116%	102%
Stagflation	47%	52%	55%	64%	62%
Recession	61%	53%	44%	27%	34%
Inflationary Growth	57%	67%	70%	124%	106%
Ideal Growth	85%	98%	89%	214%	173%

*Current asset value as of 6/30/09 adjusted for inflation in future years

Appendix

Deterministic Economic Scenario Environments

Contrasting Economic Growth and Inflation

		U.S. INFLATION		
		Low	Medium	High
U.S. ECONOMIC GROWTH	Low	<p>U.S. Prolonged Recession</p> <p>Economic growth and inflation fall over a three year time period and then recover partially, but not all the way back to equilibrium. Interest rates decline and remain at the lower level. Equity returns are initially negative, but rebound. Fixed income returns are initially very strong, but fall to a lower equilibrium level of return.</p>		<p>U.S. Stagflation</p> <p>Economic growth declines over a three year time period and recovers slightly, but not all the way back to equilibrium. Inflation jumps up and stays high for the forecast period. Initial equity and fixed income returns are negative, but once a new equilibrium is established, high nominal returns are earned, but returns are lower on an inflation-adjusted basis.</p>
	Moderate		<p>U.S. Base Case</p> <p>A projection of average economic growth and inflation. Equity returns based on current capital market assumptions. We assume that the yield curve rises at the short and intermediate maturities over a three year time horizon. After three years, fixed income starts to earn returns slightly above the equilibrium rate.</p>	
	High	<p>U.S. Ideal Growth</p> <p>Economic growth increases and stays above average for the remaining forecast period. Inflation drops to lower levels and stays low for the forecast period. Short term interest rates increase slightly while long term rates decline. Bond and equity returns are above average on an inflation-adjusted basis.</p>		<p>U.S. Inflationary Growth</p> <p>Economic growth increases over the first three years, then remains level for the remainder of the period. Inflation increases and stays high for the forecast period. Equities are initially hurt by rising inflation and interest rates, but reach a high equilibrium level of nominal return.</p>

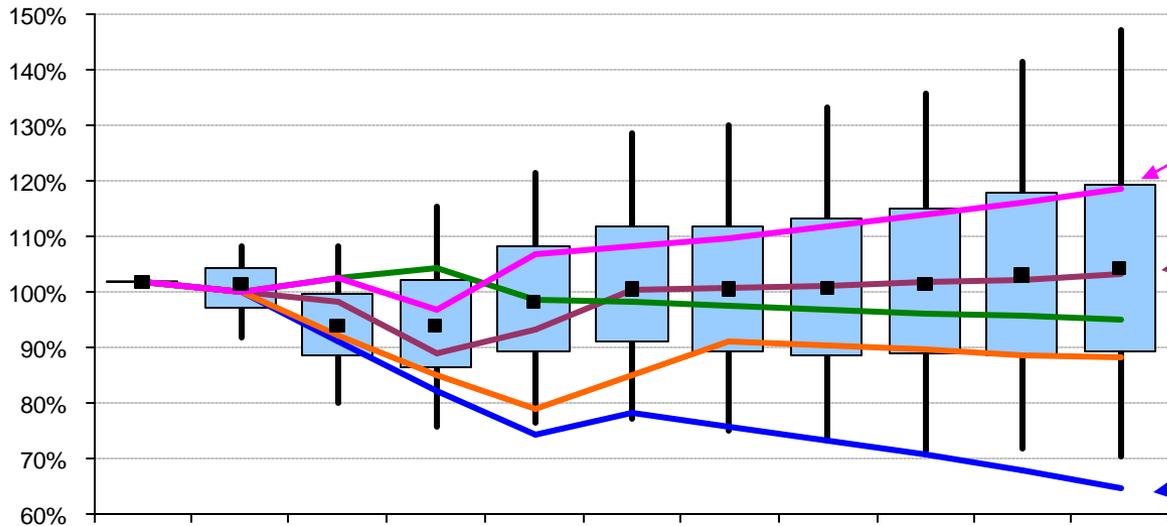
Scenario Analysis

- This scenario analysis does not employ stochastic methods but it yields equivalent results.
- Stochastic analysis focused on a series of vertical bar charts that depicted the range of results that could be expected from alternative policies. These bar charts aggregated the results of 1000 simulated future time periods.
- Scenario Analysis creates an equivalent version of these bar charts.
 - Base Case represents the most likely outcome (median)
 - Ideal Growth represents a best case outcome (75th percentile)
 - Inflationary Growth represents a worst case outcome (25th percentile)
 - Stagflation represents a worst case outcome (5th percentile)
 - Recession usually represents a below median outcome (35th percentile)
 - Heavily influenced by economic sensitivity of the liabilities to inflation and/or medical inflation

Comparison of Stochastic versus Deterministic Analysis

SIF Results (Base on January analysis)

Baseline Mix (80 FI/20 Eq), Smoothed Discount Rate Methodology



Observations

- Ideal growth scenario fairly represents the 75th (25% upside probability)
- Base Case scenario and 50th percentile track fairly closely, especially during 2013 to 2018.
- Stagflation scenario is very representative of the worst case 5% percentile event, in later projection years, the stagflation scenario actually illustrates greater levels of risk

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
95th	102%	108%	108%	115%	121%	129%	130%	133%	136%	141%	147%
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%
5th	102%	92%	80%	76%	76%	77%	75%	73%	71%	72%	70%
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%

Description of the Economic Environments

Base Case

Reflects current conditions as starting point; Treasury bond yields are expected to rise dramatically while corporate bond yields are rising at the very short and long end of the yield curve, decreasing in the mid range; equity returns, starting in year ending 2010 offer an expected risk premium over bonds.

Base Case		Initial Value	June 2010	June 2011	June 2012	June 2013	June 2014	June 2015	June 2016	June 2017	June 2018	June 2019
Yields	Inflation		2.8%	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%
	Economic Growth		3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%
	Health Care Inflation		6.0%	7.0%	8.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
	3-Month Treasury	0.19%	0.19%	2.45%	3.60%	3.60%	3.60%	3.60%	3.60%	3.60%	3.60%	3.60%
	2-yr Treasury	1.11%	1.11%	3.12%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%
	5-yr Treasury	2.54%	2.54%	3.84%	4.60%	4.60%	4.60%	4.60%	4.60%	4.60%	4.60%	4.60%
	10yr Treasury	3.53%	3.53%	4.44%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
	30yr Treasury	4.52%	4.52%	4.74%	5.10%	5.10%	5.10%	5.10%	5.10%	5.10%	5.10%	5.10%
	Real 10yr TIPS	1.78%	1.78%	1.93%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
	3-Mo Corp AA	0.84%	0.84%	3.01%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%
	2-Yr Corp AA	2.97%	2.97%	3.99%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
	5-Yr Corp AA	4.32%	4.32%	4.77%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%
	10-Yr Corp AA	5.62%	5.62%	5.54%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
30-Yr Corp AA	6.17%	6.17%	5.85%	6.20%	6.20%	6.20%	6.20%	6.20%	6.20%	6.20%	6.20%	
Returns	Domestic Equities		22.4%	8.2%	8.2%	8.2%	8.2%	8.2%	8.2%	8.2%	8.2%	8.2%
	International Equities		26.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%
	Mkt Bonds		2.8%	0.4%	1.2%	5.4%	5.4%	5.4%	5.4%	5.4%	5.4%	5.4%
	Long Bonds		7.2%	0.2%	0.8%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%	5.9%
	Long Corp		11.3%	1.3%	1.8%	6.4%	6.4%	6.4%	6.4%	6.4%	6.4%	6.4%
	Long Gov		2.5%	-1.0%	-0.3%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%
	Extra Long Bonds		0.3%	-4.7%	-4.4%	5.4%	5.4%	5.4%	5.4%	5.4%	5.4%	5.4%
	Cash		0.6%	1.9%	3.0%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%
	TIPS		6.04%	4.0%	4.1%	4.9%	4.9%	4.9%	4.9%	4.9%	4.9%	4.9%
	Private Eq		37.0%	9.6%	9.6%	9.6%	9.6%	9.6%	9.6%	9.6%	9.6%	9.6%
High Yields		19.4%	6.9%	6.9%	6.4%	6.4%	6.4%	6.4%	6.4%	6.4%	6.4%	

Description of the Economic Environments

Stagflation

Federal budget deficit causes sharp increase in debt issuance; foreign investors back away from US asset ownership, causing bond yields to rise, slowing economic growth as cost of capital rises.

- Inflation and yields rise until June 2012 and stay at that level thereafter.
- Equity returns are low until June 2012 due to declining economic growth and rebound the following year.

Stagflation		Initial Value	June 2010	June 2011	June 2012	June 2013	June 2014	June 2015	June 2016	June 2017	June 2018	June 2019
Yields	Inflation		3.5%	4.3%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
	Economic Growth		0.0%	0.5%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
	Health Care Inflation		7.0%	8.5%	10.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%
	3-Month Treasury	0.19%	0.19%	4.05%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
	2-yr Treasury	1.11%	1.11%	4.52%	6.30%	6.30%	6.30%	6.30%	6.30%	6.30%	6.30%	6.30%
	5-yr Treasury	2.54%	2.54%	5.10%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%	6.50%
	10yr Treasury	3.53%	3.53%	5.57%	6.70%	6.70%	6.70%	6.70%	6.70%	6.70%	6.70%	6.70%
	30yr Treasury	4.52%	4.52%	5.88%	6.80%	6.80%	6.80%	6.80%	6.80%	6.80%	6.80%	6.80%
	Real 10yr TIPS	1.78%	1.78%	1.59%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
	3-Mo Corp AA	0.84%	0.84%	5.08%	7.30%	7.30%	7.30%	7.30%	7.30%	7.30%	7.30%	7.30%
	2-Yr Corp AA	2.97%	2.97%	5.86%	7.80%	7.80%	7.80%	7.80%	7.80%	7.80%	7.80%	7.80%
	5-Yr Corp AA	4.32%	4.32%	6.51%	8.10%	8.10%	8.10%	8.10%	8.10%	8.10%	8.10%	8.10%
	10-Yr Corp AA	5.62%	5.62%	7.14%	8.40%	8.40%	8.40%	8.40%	8.40%	8.40%	8.40%	8.40%
30-Yr Corp AA	6.17%	6.17%	7.45%	8.60%	8.60%	8.60%	8.60%	8.60%	8.60%	8.60%	8.60%	
Returns	Domestic Equities		15.3%	-0.7%	-0.3%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
	International Equities		19.4%	-0.2%	0.2%	8.1%	8.1%	8.1%	8.1%	8.1%	8.1%	8.1%
	Mkt Bonds		-0.6%	-3.1%	-1.3%	7.4%	7.4%	7.4%	7.4%	7.4%	7.4%	7.4%
	Long Bonds		1.5%	-6.0%	-4.1%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%
	Long Corp		5.1%	-5.4%	-3.3%	8.7%	8.7%	8.7%	8.7%	8.7%	8.7%	8.7%
	Long Gov		-2.1%	-6.0%	-4.3%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
	Extra Long Bonds		-10.1%	-17.8%	-16.7%	7.3%	7.3%	7.3%	7.3%	7.3%	7.3%	7.3%
	Cash		0.9%	3.1%	5.1%	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%
	TIPS		7.79%	6.9%	7.6%	6.6%	6.6%	6.6%	6.6%	6.6%	6.6%	6.6%
	Private Eq		28.0%	-1.7%	-1.2%	9.2%	9.2%	9.2%	9.2%	9.2%	9.2%	9.2%
	High Yields		14.5%	1.9%	3.3%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%

Description of the Economic Environments

Recession

An event causing investors to jump from stocks to bonds; were the shock large enough, it could depress economy that is still trying to revive itself.

- Economic growth falls over a three year time period and then recovers.
- Inflation rate increases over a three year time period and remains at the lower level.
- Both intermediate and longer term bond yields decrease significantly over three years.
- Equity returns are initially low (even negative), but rebound to a lower equilibrium level.
- Fixed income returns are initially very strong, but fall to a lower equilibrium level.

Recession		Initial Value	June 2010	June 2011	June 2012	June 2013	June 2014	June 2015	June 2016	June 2017	June 2018	June 2019
Yields	Inflation		0.5%	1.0%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
	Economic Growth		-0.7%	-0.3%	0.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
	Health Care Inflation		6.0%	6.5%	6.5%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
	3-Month Treasury	0.19%	0.19%	0.21%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%
	2-yr Treasury	1.11%	1.11%	0.82%	0.75%	0.75%	0.75%	0.75%	0.75%	0.75%	0.75%	0.75%
	5-yr Treasury	2.54%	2.54%	1.44%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
	10yr Treasury	3.53%	3.53%	2.27%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%
	30yr Treasury	4.52%	4.52%	2.68%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
	Real 10yr TIPS	1.78%	1.78%	1.43%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%
	3-Mo Corp AA	0.84%	0.84%	1.25%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%
	2-Yr Corp AA	2.97%	2.97%	2.09%	2.15%	2.15%	2.15%	2.15%	2.15%	2.15%	2.15%	2.15%
	5-Yr Corp AA	4.32%	4.32%	2.84%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%
	10-Yr Corp AA	5.62%	5.62%	3.91%	3.55%	3.55%	3.55%	3.55%	3.55%	3.55%	3.55%	3.55%
30-Yr Corp AA	6.17%	6.17%	4.39%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	
Returns	Domestic Equities		7.6%	-12.9%	-15.2%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%
	International Equities		12.2%	-11.8%	-13.9%	4.9%	4.9%	4.9%	4.9%	4.9%	4.9%	4.9%
	Mkt Bonds		7.1%	5.2%	4.9%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%
	Long Bonds		15.3%	10.2%	10.1%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%
	Long Corp		17.3%	8.5%	8.3%	3.3%	3.3%	3.3%	3.3%	3.3%	3.3%	3.3%
	Long Gov		12.6%	11.7%	11.7%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
	Extra Long Bonds		21.9%	23.0%	22.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%
	Cash		0.1%	0.2%	0.2%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
	TIPS		6.05%	4.3%	4.7%	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%
	Private Eq		18.4%	-17.0%	-19.8%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
	High Yields		11.7%	-4.3%	-5.5%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%

Description of the Economic Environments

Inflationary Growth

The Fed slows fight against inflation; job market tightens while productivity falls translating into a rise in inflation; less turmoil in the Middle East while up-tick in U.S. savings rate translates into increased domestic growth.

- Similar annual inflation, yields and fixed income returns as for the Stagflation economic scenario but with higher equity returns due to stronger economic growth.

Inflationary Growth		Initial Value	June 2010	June 2011	June 2012	June 2013	June 2014	June 2015	June 2016	June 2017	June 2018	June 2019
Yields	Inflation		3.5%	4.3%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
	Economic Growth		3.4%	3.7%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
	Health Care Inflation		6.0%	7.5%	9.0%	10.0%	11.0%	12.0%	12.0%	12.0%	12.0%	12.0%
	3-Month Treasury	0.19%	0.19%	4.71%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%
	2-yr Treasury	1.11%	1.11%	5.18%	7.30%	7.30%	7.30%	7.30%	7.30%	7.30%	7.30%	7.30%
	5-yr Treasury	2.54%	2.54%	5.70%	7.40%	7.40%	7.40%	7.40%	7.40%	7.40%	7.40%	7.40%
	10yr Treasury	3.53%	3.53%	6.10%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%
	30yr Treasury	4.52%	4.52%	6.44%	7.65%	7.65%	7.65%	7.65%	7.65%	7.65%	7.65%	7.65%
	Real 10yr TIPS	1.78%	1.78%	1.93%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
	3-Mo Corp AA	0.84%	0.84%	5.08%	7.30%	7.30%	7.30%	7.30%	7.30%	7.30%	7.30%	7.30%
	2-Yr Corp AA	2.97%	2.97%	5.86%	7.80%	7.80%	7.80%	7.80%	7.80%	7.80%	7.80%	7.80%
	5-Yr Corp AA	4.32%	4.32%	6.44%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%
	10-Yr Corp AA	5.62%	5.62%	7.07%	8.30%	8.30%	8.30%	8.30%	8.30%	8.30%	8.30%	8.30%
	30-Yr Corp AA	6.17%	6.17%	7.42%	8.55%	8.55%	8.55%	8.55%	8.55%	8.55%	8.55%	8.55%
Returns	Domestic Equities		21.4%	8.0%	9.1%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%	11.7%
	International Equities		25.3%	8.1%	9.1%	11.6%	11.6%	11.6%	11.6%	11.6%	11.6%	11.6%
	Mkt Bonds		-1.0%	-3.3%	-1.4%	8.1%	8.1%	8.1%	8.1%	8.1%	8.1%	8.1%
	Long Bonds		0.9%	-6.4%	-4.3%	8.4%	8.4%	8.4%	8.4%	8.4%	8.4%	8.4%
	Long Corp		5.4%	-5.0%	-3.0%	8.8%	8.8%	8.8%	8.8%	8.8%	8.8%	8.8%
	Long Gov		-4.3%	-8.1%	-5.8%	7.8%	7.8%	7.8%	7.8%	7.8%	7.8%	7.8%
	Extra Long Bonds		-13.6%	-22.5%	-21.4%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
	Cash		1.0%	3.6%	5.9%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%
	TIPS		6.59%	5.5%	6.3%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%
	Private Eq		35.7%	9.2%	10.5%	13.8%	13.8%	13.8%	13.8%	13.8%	13.8%	13.8%
High Yields		19.3%	8.7%	10.6%	10.1%	10.1%	10.1%	10.1%	10.1%	10.1%	10.1%	

Description of the Economic Environments

Ideal Growth

Jobs grow; consumers continue spending resulting in economic growth; Fed completes anticipated increase in fed funds rate, minimizing fears of inflation on the part of investors; productivity gains also suppress inflation.

- Economic growth becomes stronger and rises to 4% by December 2012.
- Equities slightly boom and earn near 25% in 2010 through 2012.
- Inflation remains tame, subsides to 1.8% by December 2012.

Ideal Growth		Initial Value	June 2010	June 2011	June 2012	June 2013	June 2014	June 2015	June 2016	June 2017	June 2018	June 2019
Yields	Inflation		2.5%	2.1%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%
	Economic Growth		3.4%	3.7%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
	Health Care Inflation		6.0%	6.5%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
	3-Month Treasury	0.19%	0.19%	1.85%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%
	2-yr Treasury	1.11%	1.11%	2.48%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%
	5-yr Treasury	2.54%	2.54%	3.10%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
	10yr Treasury	3.53%	3.53%	3.60%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%
	30yr Treasury	4.52%	4.52%	4.01%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
	Real 10yr TIPS	1.78%	1.78%	1.76%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%
	3-Mo Corp AA	0.84%	0.84%	2.15%	2.90%	2.90%	2.90%	2.90%	2.90%	2.90%	2.90%	2.90%
	2-Yr Corp AA	2.97%	2.97%	3.09%	3.65%	3.65%	3.65%	3.65%	3.65%	3.65%	3.65%	3.65%
	5-Yr Corp AA	4.32%	4.32%	3.77%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
	10-Yr Corp AA	5.62%	5.62%	4.51%	4.45%	4.45%	4.45%	4.45%	4.45%	4.45%	4.45%	4.45%
30-Yr Corp AA	6.17%	6.17%	4.99%	4.90%	4.90%	4.90%	4.90%	4.90%	4.90%	4.90%	4.90%	
Returns	Domestic Equities		35.2%	23.2%	21.6%	8.7%	8.7%	8.7%	8.7%	8.7%	8.7%	8.7%
	International Equities		38.4%	22.5%	21.1%	8.8%	8.8%	8.8%	8.8%	8.8%	8.8%	8.8%
	Mkt Bonds		4.9%	2.9%	3.2%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%	4.3%
	Long Bonds		10.9%	4.7%	4.7%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%
	Long Corp		15.2%	6.0%	6.0%	5.1%	5.1%	5.1%	5.1%	5.1%	5.1%	5.1%
	Long Gov		7.4%	4.9%	4.9%	4.2%	4.2%	4.2%	4.2%	4.2%	4.2%	4.2%
	Extra Long Bonds		6.4%	3.1%	3.2%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
	Cash		0.5%	1.4%	2.3%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%
	TIPS		6.38%	4.0%	3.7%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%
	Private Eq		52.9%	28.2%	26.2%	10.1%	10.1%	10.1%	10.1%	10.1%	10.1%	10.1%
High Yields		24.0%	12.2%	11.4%	5.7%	5.7%	5.7%	5.7%	5.7%	5.7%	5.7%	

Coal Workers' Pneumoconiosis Fund

Assumptions – Enterprise Report July 2009

- 6/30/09 Financial Statement Liability (in thousands) = \$112,857
 - \$64,900 in Reserves/Liability
 - \$47,117 Investment Payables
 - \$840 Other Liabilities
- 6/30/09 Financial Statement Assets (in thousands) = \$283,329
 - \$234,504 in Investable Assets
 - \$48,824 Investment Receivables
- June 30, 2009 Funding Ratio = 3.63
 - \$235,417 (funded assets) / \$64,900 (funded liabilities)
- June 30, 2009 Discount Rate = 4.50%
- June 30, 2009 Inflation Assumption (COLA) = 4.0%
- June 30, 2009 Medical Inflation Trend = 1st year: 6.0%, 2nd year: 7.0%, 3rd year: 8.0%, Long term: 9.0%

Coal Workers' Pneumoconiosis Fund

Assumptions – Sensitivities to economic changes

- Interest Rate Sensitivity
 - A 1% change in interest rate, such as from 5% to 4%, will increase the liability by 9.0%
- Inflation Sensitivity (effects 90% of the liabilities)
 - A 1% point increase in wage escalation factor will increase the discounted liability by 9.7%
- Medical Inflation Sensitivity (effects 9% of the liabilities)
 - A 1% point increase in medical inflation will increase the discounted liability by 0.9%
- Small portion of the liabilities are not sensitive to wage or medical inflation

Disabled Workers' Relief Fund

Assumptions – Enterprise Report July 2009

- 6/30/09 Financial Statement Liability (in thousands) = \$2,108,640
- 6/30/09 Financial Statement Assets (in thousands) = \$2,950,535
- June 30, 2009 Discount Rate = 4.50%
- June 30, 2009 Inflation Assumption (COLA) = 4.0%
- June 30, 2009 Medical Inflation Trend = 1st year: 6.0%, 2nd year: 7.0%, 3rd year: 8.0%, Long term: 9.0%

Disabled Workers' Relief Fund

Assumptions – Sensitivities to economic changes

- Interest Rate Sensitivity
 - A 1% change in interest rate, such as from 5% to 4%, will increase the liability by 12.38%
- Inflation Sensitivity
 - A 1% point increase in wage inflation (from 4% to 5%) will increase the discounted liability by 17.14%
- Expected Disabled Workers' Relief Fund II Benefit Payments over the next ten years (in millions, based on 2008 projection model)

Year Ending	Benefit Payments	Year Ending	Benefit Payments
2010	46.6	2015	93.9
2011	55.4	2016	104.1
2012	64.6	2017	114.4
2013	74.2	2018	124.7
2014	83.9	2019	135.2

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Services provided by Mercer Investment Consulting, Inc.

DATE: December 10, 2009

TO: BWC Investment Committee
BWC Board of Directors

FROM: Bruce Dunn, CFA, Chief Investment Officer

SUBJECT: **Chief Investment Officer Recommendation**
Asset Allocation Strategy
Coal Workers' Pneumoconiosis Fund (Black Lung Fund)

The BWC Chief Investment Officer (CIO) is supportive of the asset allocation mix represented as Mix G for the Coal Workers' Pneumoconiosis Fund or Black Lung Fund (BL) investment portfolio reflected in the Mercer Strategic Asset Allocation Analysis report dated December 16, 2009 to be presented to the BWC Investment Committee. Given the strong funded surplus status of this specialty fund, Mix G provides a balanced and justifiably conservative asset allocation weighting that maintain the current 80/20 target fixed income (including cash)/equity asset allocation for BL.

As the asset mix table on page 5 of this Mercer report illustrates, Mix G provides a materially lower 5.3% expected standard deviation or variability of return to the 8.8% level for the existing implemented asset allocation Mix A for BL. This is largely because Mix A emphasizes highly volatile long duration bonds for 59% of total targeted invested assets. Yet Mix G provides a comparable long-term expected 5.8% annual rate of return to the 5.9% expected annual rate of return of current Mix A. The weighted average duration of the 80% fixed income portfolio is a much lower 3 years for asset Mix G compared to a three times higher duration of 9 years for asset Mix A. This means that if interest rate levels rise significantly across the yield curve, the large fixed income portfolio of BL will fall in value by three times as much as the portfolio under Mix G. Given the very strong current funding level of BL, there is no reason to subject its investment portfolio to the potential risk of significant erosion of its large surplus level by continuing to invest in long duration bonds. Mercer projects that the much shorter duration fixed income portfolio of Mix G still achieves an annual long-term expected return comparable to the current mix.

The CIO also supports Mix G as its fixed income allocation between U.S. TIPS and the very broad Barclays Capital U.S. Aggregate fixed income benchmark index is virtually equally weighted (40/39% TIPS/Aggregate) and very balanced. The U.S. Aggregate benchmark index represents a very broad and diversified cross section of the investment-grade fixed income market that includes Treasuries, Agencies, Mortgages and Credits. A doubling of target asset allocation exposure to TIPS to 40% from currently 20% is justified given the large exposure of BL to cost of living adjustments in liability payments. The CIO, however, is not comfortable with an asset allocation mix that

provides what is arguably an extreme fixed income allocation exposure to TIPS of a 3:1 proportion or even higher proportion compared to the Aggregate index. U.S. TIPS have only been issued and traded since 1997 and there are currently around \$500 billion of securities outstanding. During the period of the recent financial crisis in 4Q08 and 1Q09, the liquidity of U.S. TIPS was actually less than high quality corporate bonds and certainly much less than U.S. Treasuries, as measured by bid/ask spread and volume of trading. The Barclays Capital U.S. Aggregate index currently has around a 35% weighting towards U.S. Treasuries and U.S. Agency debt which provides a better balance of U.S. government supported debt for the Black Lung portfolio. The CIO cautions against an overdependence on the U.S. TIPS asset class, as represented by some alternative asset allocation mixes tested and reflected in the referenced Mercer report.

The CIO is supportive of a 13:7 proportion of U.S. and non-U.S. equity allocation within the 20% equity asset class allocation weighting for BL represented by Mix G. It is appropriate and beneficial to diversify the BL equity assets towards ownership of foreign equities. The projected growth rates of foreign economies and their demands for goods and services in the aggregate are higher than the projected growth rates of the U.S. economy. The total market capitalization of publicly owned stocks in foreign equity markets is now larger than the U.S. equity markets. With respect to the U.S. public equity portfolio, a shift to the Russell 3000 index benchmark recommended by Mercer from the S&P 500 index benchmark is endorsed by the CIO. This public equity benchmark change will increase the diversity of stock holdings for the BL portfolio to include small-cap stocks and increase exposure and ownership of mid-cap stocks.

Attached to this CIO recommendation is the current Section VI.C of the BWC Statement of Investment Policy and Guidelines (IPS) pertaining to the Black Lung Fund. In addition, attached is both a marked version followed by a clean version of recommended changes to Section VI.C of the IPS prepared by Mercer that reflects the target asset allocation of Mix G recommended for consideration for the Black Lung Fund by Mercer and the CIO. These recommended marked changes shown in blue pertain to investment asset categories, target allocation percentage and permissible ownership range percentages of each asset class, and the performance benchmark of each asset class category. As reflected in the second paragraph of IPS Section VI.C, the recommended marked changes shown in red were prepared by John Pedrick, BWC Chief Actuarial Officer.

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

C. 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 Board has 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.

<u>Coal Workers' Pneumoconiosis Fund</u>			
<u>Investment Category</u>	<u>Target Allocation</u>	<u>Permissible Range</u>	<u>Performance Benchmark</u>
Indexed Long Duration Fixed Income	59%	55% - 63%	Barclays Capital U.S. Long Government / Credit Index
Indexed Treasury Inflation Protected Securities	20%	17% - 23%	Barclays Capital U.S. Treasury: U.S. TIPS Index
Cash and Cash Equivalents	1%	0 - 6%	3 Month U.S. Treasury Bills
Total Fixed Income	80%		
Indexed U.S. Equity	20%	17% - 23%	Standard & Poor's 500 Stock Index
Total Public Equity	20%		
			Fund Performance Benchmark
Total: Coal Workers' Pneumoconiosis Fund	100%		<u>A weighted index consisting of:</u>
			59% BC U.S. Gov/Credit Long Term Index
			20% BC U.S. TIPS Index
			1% 3 Month U.S. Treasury Bills
			20% S&P 500 Index

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

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Coal Workers' Pneumoconiosis Fund			
<u>Investment Category</u>	<u>Target Allocation</u>	<u>Permissible Range</u>	<u>Performance Benchmark</u>
Indexed Barclays Capital Aggregate Fixed Income	39%	35% - 43%	Barclays Capital U.S. Aggregate Index
Indexed Treasury Inflation Protected Securities	40%	36% - 44%	Barclays Capital U.S. Treasury: U.S. TIPS Index
Cash and Cash Equivalents	1%	0 - 6%	3 Month U.S. Treasury Bills
Total Fixed Income	80%		
Indexed U.S. Equity	13%	10% - 16%	Russell 3000 Stock Index
Index Non-U.S. Equity	7%	4% - 10%	MSCI All World ex-U.S. Index
Total Public Equity	20%		
Fund Performance Benchmark			
Total: Coal Workers' Pneumoconiosis Fund	100%		A weighted index consisting of: 39% BC U.S. Aggregate Index , 40% BC U.S. TIPS Index , 1% 3 Month U.S. Treasury Bills , 13% Russell 3000 Index , 7% MSCI All World Ex-U.S. Index

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Statement of Investment Policy and Guidelines**

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Total Fixed Income	80%		
Indexed U.S. Equity	13%	10% - 16%	Russell 3000 Stock Index
Index Non-U.S. Equity	7%	4% - 10%	MSCI All World ex-U.S. Index
Total Public Equity	20%		
			Fund Performance Benchmark
Total: Coal Workers' Pneumoconiosis Fund	100%		<u>A weighted index consisting of:</u> 39% BC U.S. Aggregate Index 40% BC U.S. TIPS Index 1% 3 Month U.S. Treasury Bills 13% Russell 3000 Index 7% MSCI All World Ex-U.S. Index



To: Marsha Ryan, Administrator
Date: December 9, 2009
From: Ray Mazzotta, Chief Operating Officer
Subject: Recommendations for Specialty Funds Funding Policies

The recent Mercer presentation, Strategic Asset Allocation Analysis of the Coal Workers' Pneumoconiosis Fund and Disabled Workers' Relief Fund, suggested that we develop goals for our specialty funds. Before the Investment Committee can proceed with developing an Investment Policy Statement for these funds, the Committee has requested BWC management to give it more guidance on the goals for these funds.

In Deloitte's comprehensive study, the consultants made a number of recommendations with respect to each of the specialty funds. They made one recommendation that applied to all the specialty funds:

- **Reconsider whether Disabled Workers' Relief Fund, Marine Industry Fund, and Coal Workers' Pneumoconiosis Fund should remain separate funds:** The BWC should consider whether specialty funds should be combined with the State Insurance Fund. The benefits to be gained include the efficiencies from reducing the obligation to manage a large number of separate funds. BWC should consider whether it is feasible to combine the Funds so as to make the management of the overall risk presented by the Funds more effective and efficient. This change would require legislation.

Management agrees with Deloitte's recommendation. Our initial research on the subject does not indicate that there are any constitutional barriers to combining the funds. Operationally, all benefits could be distributed to affected parties in the same manner that they are delivered today. Our plan for legislative changes would be to make these changes part of BWC's next biennial budget bill in 2011.

Once statutory changes are enacted to allow for the Disabled Workers' Relief Fund to be accounted for within the State Insurance Fund, BWC would combine Disabled Workers' Relief Fund into the State Insurance Fund. We would continue to have separate accounts within the State Insurance Fund that would allow for the reporting of assessments and expenses associated with the Disabled Workers' Relief Fund. The State Insurance Fund net assets would increase by around \$900 million as the assets and liabilities of the Disabled Workers' Relief Fund are combined into the State Insurance Fund.

From the investment management perspective, consolidating the Disabled Workers' Relief Fund into the State Insurance Fund would result in lower overall investment management fees, brokerage trading fees, custodial fees and internal administrative fees. In addition, Investment staff time and resources devoted to closely monitoring distinct Disabled Workers' Relief Fund investment accounts with multiple managers would be eliminated and refocused to the enlarged State Insurance Fund portfolio. The financial strength and stability of the Disabled Workers' Relief Fund is better accomplished under a combined State Insurance fund, as recommended by Deloitte, than under a separate fund.

Deloitte also made a number of recommendations specific to each fund to address longer term issues of proper funding and equitable premium treatment. Combining these funds does not impede our ability to address these recommendations. We would look to address those issues when we move to consolidate the funds.

BWC will continue to fund and administer these specialty accounts in accordance with statutory requirements. Combining these funds with the State Insurance Fund will have no operational impacts to covered employer subscribers or to benefit recipients.

The Senior team consensus would be to consolidate the Specialty Funds into the State Insurance Fund in 2011. However, the strong business reasons to update the Investment Policy Statements for these funds now should not be delayed. We support guidance given by Mercer that would suggest a prudent "interim" step adopting an improved asset allocation mix for identified Specialty Funds to better balance portfolio risk and return.

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

Asset Sector	Market Value Nov 30, 2009	% Assets	Market Value Oct 31, 2009	% Assets	Increase(Decrease) Prior Month-End	% Change	Market Value June 30, 2009	% Assets	Increase (Decrease) Prior Fiscal Year-End	% Change
Bonds	12,932,117,136	68.6%	12,722,170,342	69.1%	209,946,794	1.7%	\$13,230,413,310	76.9%	(298,296,174)	-2.3%
Equity	5,506,099,056	29.2%	5,220,474,490	28.3%	285,624,566	5.5%	3,522,150,726	20.5%	1,983,948,330	56.3%
Net Cash - OIM	53,212,881	0.3%	76,427,942	0.4%	(23,215,061)	-30.4%	27,624,432	0.2%	25,588,449	92.6%
Net Cash - Operating	297,585,885	1.6%	343,727,225	1.9%	(46,141,340)	-13.4%	366,634,742	2.1%	(69,048,857)	-18.8%
Net Cash - SIEGF	54,921,033	0.3%	55,806,413	0.3%	(885,380)	-1.6%	54,583,234	0.3%	337,799	0.6%
Total Net Cash	405,719,799	2.2%	475,961,580	2.6%	(70,241,781)	-14.8%	448,842,408	2.6%	(43,122,609)	-9.6%
Total Invested Assets	\$18,843,935,991	100%	\$18,418,606,412	100%	\$425,329,579	2.3%	\$17,201,406,444	100%	\$1,642,529,547	9.5%

OIM: Outside Investment Managers

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.

November 2009/October 2009 Comparisons

- Net investment income in November 2009 was \$472 million representing a monthly net portfolio return of +2.5% (unaudited).
- Bond market value increase of \$210.0 mm comprised of \$46.4 mm in interest income, \$161.3 mm in OIM realized/unrealized gains (\$11.0 mm net realized gain), and by \$2.3 mm in OIM/TM net purchases, representing a monthly net return of +1.6% (unaudited).
- Equity market value increase of \$285.6 mm comprised of \$10.1 mm of dividend income, \$254.9 mm in net realized/unrealized gains (\$6.5 mm net realized loss) and by \$20.6 mm in OIM/TM net purchases, representing a monthly net return of +5.0% (unaudited).
- Net cash balances decreased \$(70.2) mm in November 2009 largely due to decreased operating cash balances (\$46.1 mm) and to decreased OIM cash balances (\$23.2 mm). JPMorgan US Govt. money market fund had 30-day average yield of 0.09% for November 2009 (0.11% for Oct09) and 7-day average yield of 0.07% on 11/30/09 (0.10% on 10/31/09).

November 2009/June 2009 FYTD Results

- Net investment income for FYTD2010 was \$1,717 million comprised of \$320 mm of interest/dividend income and \$1,399 mm of net realized/unrealized gains (\$646 mm net realized loss), offset by \$2 mm in fees, representing a FYTD2010 net portfolio return of +10.0% (unaudited).
- Bond market value decrease of \$(298) mm for FYTD2010 comprised of \$282 mm in interest income and \$726 mm of net realized/unrealized gains (\$17 mm net realized loss), offset by \$1,251 mm in OIM/TM net bond sales and \$55 mm in OIM rebalancing redemptions, representing a FYTD2010 net return of +7.9% (unaudited).
- Equity market value increase of \$1,984 mm for FYTD2010 comprised of \$36 mm in dividend income, \$673 mm in realized/unrealized gains (\$628 mm net realized loss), \$1,220 mm in OIM/TM net purchases and \$55 mm in portfolio OIM rebalancing purchases, representing a FYTD2010 net return of +18.5% (unaudited).

Ohio Bureau of Workers' Compensation Investment Asset Allocation - Combining Schedule

As of November 30, 2009

(in thousands)

	SIF	% Trust	DWRF	% Trust	BLF	% Trust	PWRF	% Trust	MIF	% Trust	SIEGF	% Trust	ACF	% Trust	Totals	% of Total
Bonds	\$ 11,721,986	67.9%	\$ 962,105	78.6%	\$ 205,814	79.0%	\$ 24,161	99.1%	\$ 18,051	98.3%	\$ -	0.0%	\$ -	0.0%	\$ 12,932,117	68.5%
Long Credit	5,040,887	29.2%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	5,040,887	26.8%
Long Government	1,302,933	7.5%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1,302,933	6.9%
Long Gov/Credit	-	0.0%	705,938	57.7%	152,192	58.4%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	858,130	4.6%
TIPS	2,978,307	17.3%	256,167	20.9%	53,622	20.6%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	3,288,096	17.4%
Aggregate	2,399,859	13.9%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	2,399,859	12.7%
Intermediate Gov/Credit	-	0.0%	-	0.0%	-	0.0%	24,161	99.1%	18,051	98.3%	-	0.0%	-	0.0%	42,212	0.1%
Stocks	\$ 5,187,038	30.0%	\$ 263,596	21.5%	\$ 55,465	21.3%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ -	0.0%	\$ 5,506,099	29.3%
Russell 3000	3,925,221	22.7%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	3,925,221	20.8%
MSCI ACWI ex-U.S.	1,247,561	7.3%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1,247,561	6.6%
S&P 500	-	0.0%	262,986	21.5%	55,337	21.3%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	318,323	1.8%
Dividends Receivable	10,360	0.0%	610	0.0%	128	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	11,098	0.1%
Miscellaneous	3,896	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	3,896	0.0%
Net Cash & Cash Equivalents	354,299	2.1%	(2,559)	-0.1%	(839)	-0.3%	223	0.9%	315	1.7%	54,921	100.0%	(640)	100.0%	405,720	2.2%
Total Cash & Investments	\$ 17,263,323	100.0%	\$ 1,223,142	100.0%	\$ 260,440	100.0%	\$ 24,384	100.0%	\$ 18,366	100.0%	\$ 54,921	100.0%	\$ (640)	100.0%	\$ 18,843,936	100.0%

Market value of bonds includes accrued investment income.

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

State Insurance Fund (SIF)

Overall SIF allocation from 80% bonds/20% stocks to 70% bonds/30% stocks planning/execution continued in November, 2009 (new asset allocation transitions began in July, 2009). Transitions are effectively complete for the Russell 3000, Barclays US Aggregate and the Long Credit/Government split. The final fourth tranche of the international equity transition (initiated in August 2009 with a targeted 10% policy allocation) will complete the overall new asset allocation for SIF by asset class. International equity full asset allocation as well as concluding transitions to final investment managers is anticipated throughout the remainder of 2009 and into First Quarter, 2010.

The Russell 3000 (+5.68%), MSCI ACWI ex-U.S. (+2.87%) as well as the S&P 500 (+6.0%) benchmarks increased in return for the month of November. This resulted in an overall increase in equity asset allocation from 29.2% to 30.0% over the month of November, 2009. The strong performance in equities caused a reduction in overall bond asset allocation. All bond indices returns increased as well with a strong Barclays U.S. TIPS Index (+2.78%) return followed by the Barclays Capital Government Long Term Index (+1.68%), U.S. Aggregate Bond Index (+1.29%), and Credit Long Term Index (+1.20%) returns.

Cash allocations decreased from 2.4% at end of October to 2.1% at end of November due to a reduction in SIF operating cash and by decreased investment manager cash balances.

Disabled Workers' Relief and Coal Workers' Pneumoconiosis Funds (DWRF and BLF)

Mercer Consultant presented the initial asset/liability studies at the November, 2009 BWC Board of Directors Investment Committee meeting. Further consultant presentations are anticipated to continue at the December meeting and into First Quarter, 2010.

PWRF, MIF, SIEGF

Possible asset allocation changes may occur with consultants' reviews in Fiscal Year 2010.

	Fund Asset Allocation:			Total
	Equity	Bonds	Cash	
SIF	30%	69%	1%	100%
DWRF	20%	79%	1%	100%
BLF	20%	79%	1%	100%
PWRF		99%	1%	100%
MIF		99%	1%	100%
SIEGF			100%	100%
ACF	Not Applicable			

SIF: State Insurance Fund

DWRF: Disabled Workers' Relief Fund

PWRF: Public Workers' Relief Fund

SIEGF: Self-Insured Employers Guaranty Fund

BLF: Coal Workers' Pneumoconiosis Fund

MIF: Marine Industry Fund

ACF: Administrative Cost Fund

Ohio Bureau of Workers' Compensation Investment Asset Allocation - Combining Schedule

As of October 31, 2009

(in thousands)

	SIF	% Trust	DWRF	% Trust	BLF	% Trust	PWRF	% Trust	MIF	% Trust	SIEGF	% Trust	ACF	% Trust	Totals	% of Total
Bonds	\$ 11,542,101	68.4%	\$ 937,795	78.6%	\$ 200,617	79.0%	\$ 23,843	99.0%	\$ 17,814	98.2%	\$ -	0.0%	\$ -	0.0%	\$ 12,722,170	69.0%
Long Credit	4,994,133	29.6%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	4,994,133	27.1%
Long Government	1,284,166	7.6%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1,284,166	7.0%
Long Gov/Credit	-	0.0%	688,139	57.7%	148,358	58.4%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	836,497	4.5%
TIPS	2,902,611	17.2%	249,656	20.9%	52,259	20.6%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	3,204,526	17.4%
Aggregate	2,361,214	14.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	2,361,214	12.8%
Intermediate Gov/Credit	-	0.0%	-	0.0%	-	0.0%	23,843	99.0%	17,814	98.2%	-	0.0%	-	0.0%	41,657	0.2%
MSCI ACWI ex-U.S.	(23)	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	(23)	0.0%
Stocks	4,919,783	29.2%	248,419	20.8%	52,272	20.6%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	5,220,474	28.4%
Russell 3000	3,716,323	22.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	3,716,323	20.2%
MSCI ACWI ex-U.S.	1,194,054	7.2%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	1,194,054	6.5%
S&P 500	-	0.0%	248,104	20.8%	52,206	20.6%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	300,310	1.7%
Dividends Receivable	5,510	0.0%	315	0.0%	66	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	5,891	0.0%
Miscellaneous	3,896	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	3,896	0.0%
Net Cash & Cash Equivalents	406,961	2.4%	5,501	0.6%	1,091	0.4%	239	1.0%	334	1.8%	55,806	100.0%	6,030	100.0%	475,962	2.6%
Total Cash & Investments	\$ 16,868,845	100.0%	\$ 1,191,715	100.0%	\$ 253,980	100.0%	\$ 24,082	100.0%	\$ 18,148	100.0%	\$ 55,806	100.0%	\$ 6,030	100.0%	\$ 18,418,606	100.0%

Market value of bonds includes accrued investment income.

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

State Insurance Fund (SIF)

Overall SIF allocation from 80% bonds/20% stocks to 70% bonds/30% stocks continued in October, 2009 (new asset allocation transitions began in July, 2009). The domestic equity transition from the S&P500 to the Russell 3000 mandate was executed and completed this month. The international equity transition (initiated in August 2009 with a targeted 10% policy allocation) continued to progress in October, 2009 with a third 2.4% shift towards the mandate (MSCI ACWI ex-U.S.). As a result, the total SIF stock allocation increased from 26.9% to 29.2% with the completion of the third tranche of the international equity transition. In addition, the TIPS allocation decreased from 19.0% to 17.2% to fund this third phase of the ACWI ex-U.S. mandate. Transitions are effectively complete for the Russell 3000, Barclays US Aggregate and the Long Credit/Government split. The final transitions are anticipated to continue throughout the remainder of 2009 and into First Quarter, 2010.

Equity indices returns declined for the Russell 3000 (-2.57%), MSCI ACWI ex-U.S. (-1.24%) as well as for the S&P500 (-1.86%) for October, 2009. Bond indices returns overall remained slightly positive with a strong Barclays Capital U.S. TIPS index (+1.23%) and U.S. Aggregate Bond index (+0.49%) offset by negative performance for the Barclays Capital U.S. Government Long Term index (-1.40%) and the Barclays Capital U.S. Credit Long Term index (-0.20%).

Cash allocations decreased from 3.6% at the end of September to 2.4% at end of October due to a significant reduction in SIF operating cash of \$218 million.

Disabled Workers' Relief and Coal Workers' Pneumoconiosis Funds (DWRF and BLF)

Mercer Consultants anticipate completion of an asset/liability study in the Fall of 2009.

PWRF, MIF, SIEGF

No changes to asset allocations are anticipated in Fiscal Year 2010.

	Fund Asset Allocation:			Total
	Equity	Bonds	Cash	
SIF	30%	69%	1%	100%
DWRF	20%	79%	1%	100%
BLF	20%	79%	1%	100%
PWRF		99%	1%	100%
MIF		99%	1%	100%
SIEGF			100%	100%
ACF			Not Applicable	

SIF: State Insurance Fund

DWRF: Disabled Workers' Relief Fund
BLF: Coal Workers' Pneumoconiosis Fund

PWRF: Public Workers' Relief Fund
MIF: Marine Industry Fund

SIEGF: Self-Insured Employers Guaranty Fund
ACF: Administrative Cost Fund

INVESTMENT DIVISION

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

FROM: Bruce Dunn, CFA, Chief Investment Officer

DATE: December 9, 2009

SUBJECT: CIO Report November, 2009

Fiscal Year 2010 Goals

The Investment Division has three major goals for the new fiscal year 2010. These goals and brief comments on action plans for each goal follow:

1. Provide support and execute new BWC Investment Policy resulting from investment consultant Asset-Liability studies.
2. Explore for investment consideration and subsequently initiate implementation processes pertaining to appropriate identified subject matters.
3. Continued establishment and execution of appropriate internal investment controls and compliance procedures.

Strategic Goal One – PORTFOLIO TRANSITION

BWC investment consultant Mercer completed an asset-liability study and related investment strategy recommendation for the State Insurance Fund that was approved by the Investment Committee and BWC Board of Directors at their respective March, 2009 meetings. A new Investment Policy Statement reflecting the new approved investment strategy target asset allocation for the State Insurance Fund was approved by the Investment Committee and BWC Board of Directors at their respective April, 2009 meetings.

As a result of these important actions, the Investment Division issued an RFP document on July 2, 2009 for Passive Index Management Services inviting proposals from qualified passive index investment managers for one or more of eight investment class mandates, six of which are the benchmark index mandates for the State Insurance Fund under its new targeted portfolio asset allocation as well as two holdover benchmark index mandates that remain applicable for the Disabled Workers Fund and the Coal Workers Fund.

The Bureau received four qualified responses to this RFP on August 4, 2009. The RFP Evaluation Committee has evaluated these RFP responses and is conducting a thorough and complete RFP evaluation process with the intention to present finalists for recommendation to the Investment Committee and Board of Directors at the monthly scheduled meetings over the period September through January, 2010.

During the interim period until these finalist managers are identified and ultimately approved by the Board and under contract, a detailed asset allocation transition implementation plan approved by the Investment Committee and BWC Board of Directors at their respective May, 2009 meetings is being executed by the Investment Division with recently approved BWC transition managers. This plan identified five distinct asset class transitions and prioritized each transition with an expected timeline. This plan will enable the State Insurance Fund to achieve its targeted asset class mandate exposure for its approved new asset class mandates (intermediate duration bonds, international equities, small/mid cap U.S. equities represented in the Russell 3000 index) months sooner than when new target asset managers can be funded.

The Investment Division will support investment consultant Mercer as necessary to perform and complete asset-liability studies on each of five speciality trust funds (Disabled Workers Fund, Coal Workers Fund, Public Work-Relief Employees Fund, Marine Industry Fund, Self Insured Employers Guarantee Fund) for the purpose of presenting investment strategy recommendations for each of these funds for consideration by the Investment Committee and Board.

The Investment Division will also provide assistance as desired by the Investment Committee in revising the BWC Investment Policy Statement to accommodate the implementation and execution of new asset class mandates for all affected BWC portfolios.

Strategic Goal Two – NEW INVESTMENT CONSIDERATIONS

Over the course of fiscal year 2010, the Investment Division intends to explore for investment consideration certain additional identified asset classes as well as the potential employment of active investment management of certain to be identified asset classes. The employment of active management is closely associated with any prospective minority manager program to be implemented by the Investment Division upon consideration and approval by the Investment Committee and Board.

The Mercer asset-liability study for the State Insurance Fund presented to the Investment Committee in March, 2009 suggests in its Mix 5 strategy that a 5% asset allocation to high yield bonds and a further 5% asset allocation to alternative investments (2 ½% to each of private equity and real estate) provides a higher long-term expected portfolio rate of return and lower standard deviation of expected returns than alternative mixes presented in this Mercer study that either exclude one or both of these two asset classes.

A three-step phase timeline for addressing investment policy decisions was presented by Mercer in its asset-liability study that logically addresses each of these investment considerations mentioned above. The Investment Division is in the process of implementing Phase 1 presented in this study for the State Insurance Fund as reflected in the Investment Policy Statement revisions approved in April, 2009 by the Investment Committee and Board. It is anticipated that Phase 1 will largely be completed by sometime in the January-March, 2010 quarter. Phase 2 and Phase 3 presented in the Mercer study addresses high yield bonds, alternative investments, active management and minority manager engagement. Once Phase 1 is largely completed, the Investment Division will focus on Phase 2 and Phase 3 topics in close coordination with Mercer and the Investment Committee over the second half of fiscal year 2010 (Jan-June 2010). Appropriate and necessary education will be provided to the Investment Committee by Mercer working closely with the Investment Division.

One important additional subject that will be explored during the second half of fiscal year 2010 involves the daily cash management of all trust fund portfolios by the Investment Division. The BWC Fiscal and Planning Division currently manages all cash balances of each of these portfolios, including operating cash, with virtually all cash being invested in a single U.S. government money market fund managed by JP Morgan that is utilized as an overnight cash sweep vehicle. The Investment Division intends to explore expanding the use of other higher yielding money market funds available as well as direct investments in short-term money market investments (commercial paper, certificates of deposit, repurchase agreements, etc.) in order to improve investment income and returns on its cash investments while maintaining desired liquidity.

Strategic Goal Three – INTERNAL INVESTMENT PROCEDURES

The Investment Division will continue to establish and improve upon internal investment policies and procedures. Such procedures will be written and mapped through the use of the Web Methods schematic mapping process. Among the procedures recently addressed in fiscal year 2010 were policies and procedures regarding the selection of transition managers. The BWC Internal Audit Division will be engaged as appropriate in auditing the Investment Division internal policies and processes.

The Investment Division has previously focused on establishing internal policies and processes on management oversight of the passive style investment managers, compliance, performance reporting, portfolio rebalancing, RFP/RFQ/RFI processes vendor invoice payments, as well as other investment activities to support the BWC Investment Policy. Internal processes will also 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 active investment strategy approved. The formulation of proper detailed policies and processes with regards to potential Investment Division cash management of portfolio assets will also be essential.

Passive Index Management Services Master RFP

There were four qualified responses received by the Bureau on August 4, 2009 for its RFP for Passive Index Management Services that was issued on July 2, 2009. This master RFP includes eight investment class mandates consisting of each of the six bond or stock benchmark index mandates under its new targeted portfolio asset allocation for the State Insurance Fund as well as two holdover benchmark index mandates that remain applicable for the Disabled Workers Fund and the Coal Workers Fund.

The four respondents to this RFP were Barclays, Mellon, Northern Trust and State Street. Three of these four respondents provided proposals on each of the eight distinct asset class mandates of the RFP. The other respondent provided proposals on all but one mandate, the exception being the international equities mandate.

The BWC RFP Evaluation Committee has completed the grading of the RFP proposals. The RFP Evaluation Committee has identified preliminary investment manager finalists for each of the six asset class mandates for the State Insurance Fund. Further due diligence analysis is conducted by members of the RFP Evaluation Committee with each prospective investment manager finalist for each mandate, including full-scale on-site meetings, before any investment manager finalists are confirmed by the RFP Evaluation Committee for presentation to the Investment Committee.

It is the intention of the Evaluation Committee to present investment manager finalists for recommendation to the Investment Committee and Board for consideration at the monthly scheduled meetings over the period September, 2009 through January, 2010. The Transition Activity Update section of this report that follows provides updated information on certain investment manager finalists approved by the Investment Committee and Board in the respective September, October and November, 2009 meetings.

Transition Activity Update

The Priority #1 Transition for the State Insurance Fund (SIF) involving the investment in fixed income securities of the broad Barclays Capital U.S. Aggregate Index commenced in late July, 2009 and was essentially completed in mid-August, 2009 by the transition manager chosen by the BWC Transition Manager Evaluation Committee. This U.S. Aggregate Index has a targeted 15% asset allocation for the SIF portfolio under its new Investment Policy Statement. A total of approximately \$2,327 million of invested assets were allocated to this transition whereby approximately \$2,204 million of assets at market value were contributed from the Long Government bond portfolio (mostly bonds with some cash) and the remaining approximately \$123 million in market value were contributed from the Long Credit bond portfolio. All of these Long Credit bonds were in-kind transferred to the transition account to be strategically retained by the transition manager to represent the long credit bond portion (approximately 5%) of the target U.S. Aggregate Index. Over approximately a three-week period, the BWC transition manager sold longer duration bonds received from the legacy Long Government bond portfolio and purchased shorter duration bonds represented in the target benchmark index. The transition manager reduced the duration of this \$2.3 billion transition account bond portfolio from 11.7 years to the target benchmark index duration of 4.4 years by the end of the second day of heavy trading. This significant achievement was accomplished by selling the longest duration bonds first and accumulating short duration securities and cash in order to achieve the portfolio duration target of the U.S. Aggregate bond index as quickly as feasible. Once the duration target of the target benchmark bond index was achieved, additional trading was conducted by the transition manager to both maintain the duration target of this transition account consistent with the target benchmark index while also continually reducing tracking error to the index by accumulating additional bonds represented in the target benchmark index for the transition account portfolio to better match the asset sector profile of the index.

Since mid-August 2009 when the Priority #1 transition account portfolio was determined by the transition manager to be sufficiently correlated in performance to the target benchmark index, the BWC transition manager has been serving as an interim index investment manager for the Bureau. State Street Global Advisors (SSGA) was recommended by the RFP Evaluation Committee and approved by the Board as the single finalist investment manager for the U.S. Aggregate index mandate at the October, 2009 Board meeting. Necessary background checks on the identified index management team of the approved target asset manager(s) and legal contracting of the management services agreement will occur before the services of the transition manager are no longer needed by the Bureau, enabling the transition account assets to be transferred to the chosen final target manager. It is the current goal of the Investment Division to complete this transfer of transition account assets in December, 2009.

The Investment Division has now completed the first three phases of the Priority #2 transition for SIF involving investments in a targeted 10% asset allocation in non-U.S. equities of the All Country World Index (ACWI ex-US). The third stage of this transition was completed in late October and early November, 2009. The first two phases of this transition occurred between late August and early October, 2009. The BWC transition manager chosen by the BWC Transition Manager Evaluation Committee for this specific transition largely sold Long Government bonds (in first two transition phases) and TIPS (in third transition phase) that were all transferred in-kind to the new transition account for the purpose of funding the purchase of non-U.S. equities with approximate initial respective market values aggregating \$1,199 million to date. Each transition varied between \$375-425 million in assets sold to fund the international equities purchases. This Priority #2 Transition will continue with a final stage to be implemented this month. Legal requirements for some of the underlying emerging market country non-securities lending funds being launched as well as the master commingled fund being launched that BWC will invest in are currently being addressed by the Board approved single finalist investment manager (BlackRock, formerly Barclays Global Investors). It appears that legal requirements for these new funds will be completed in the Jan-Feb 2010 timeframe, at which time the transition account assets will be transferred to BlackRock as finalist investment manager.

The Priority #3 Transition for SIF involving the transition of the domestic U.S. equity portfolio (\$3.8 billion market value) was executed in October, 2009 by the transition manager chosen by the BWC Transition Manager Evaluation Committee. This transition included a change in the benchmark index for this 20% targeted asset allocation mandate to the broad Russell 3000 Index from the large-cap stock S&P 500 Index. All 500 stocks held in the SIF S&P 500 index separate account managed by Northern Trust (valued at \$3.75 billion) were transferred in-kind to the transition account. The transition manager implemented the Priority #3 Transition by selling a portion (15-20% on average) of each of the S&P 500 stocks received into the transition account in order to fund many of the mid-cap and small-cap stocks represented in the Russell 3000 index. These sales aggregated \$715 million in market value. This transition manager retained the remaining shares of each of the S&P 500 stocks as those stocks are included in the Russell 3000 index and represent approximately 85% of the total current market value of the benchmark index.

Barclays Global Investors (now BlackRock with the completion of its acquisition of BGI) was recommended by the RFP Evaluation Committee and approved by the Board in November, 2009 as the exclusive passive index manager for the SIF U.S. Long Government mandate for a targeted 9% asset allocation as well as one of the two SIF passive index managers (along with SSGA) for the SIF U.S. Long Credit mandate and SIF U.S. TIPS mandate. Priority is being given by the Investment Division to transferring the assets of the SIF U.S. Long Government portfolio currently managed by SSGA (\$535 million) to BlackRock (currently managing \$760 million of this SIF mandate) by the end of December, 2009. Legal contracting with BlackRock to accomplish this goal is proceeding.

Compliance

The investment portfolios were in compliance with the BWC Investment Policy at the end of November, 2009.

Quarterly Investment Manager Meetings Summary (Third Quarter 2009)

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

The BWC Chief Investment Officer and Director of Investments visited the offices of Northern Trust in Chicago on November 3, 2009 for the dual purposes of conducting an on-site quarterly investment manager meeting as well as to meet with additional Northern Trust professionals on requested focused topics. The remaining BWC investment staff participated in this quarterly meeting via conference call.

At this meeting, Northern Trust executives expressed their belief that their banking institution has come through the financial crisis of the past twelve months in the best shape of any major U.S. bank. Northern Trust accepted \$1.5 billion in TARP funds last year from the federal government due to its low cost of capital terms being offered, not because the firm actually needed the capital as Northern Trust is one of the best capitalized major banks in the nation. Northern Trust completely repaid to the federal government by August 2009 all TARP funds received, including repurchase of warrants owned by the government. The Tier 1 risk-based capital ratio of Northern Trust was a strong 13.2% on 9/30/09, with Tier 1 capital of \$6.4 billion. Its U.S. interest-bearing deposit base has grown significantly over the first nine months of 2009 which management attributes as a flight to quality by individuals and corporations. The bank has attracted a number of new corporate banking accounts in 2009 and has stepped up its prime corporate lending commitments to a range of \$50-60 million from \$20-30 million. The bank has also largely avoided problems with commercial real estate loans as it has only slight exposure in this current challenging area.

With respect to its investment management business, Northern Trust has seen good growth and demand for its non-securities lending indexed management products. The firm has especially seen a perceptible increase in demand by defined contribution plans for non-lending funds. Northern Trust has loosened restrictions on clients redeeming funds from securities lending commingled funds. Management has clearly instituted changes in the management of the securities lending collateral pools that are more conservative.

The total return of the State Insurance Fund portfolio was 15.54% for 3Q09 as reported by Northern Trust versus 15.61% for the benchmark S&P 500 index. This was on top of a 2Q09 similar very positive performance of 15.86% for the SIF S&P 500 portfolio as the strong rebound of the U.S. equities markets continued. The Disabled Workers' Relief Fund (DWRF) and Black Lung Fund (BLF) converted their S&P 500 indexed separate accounts to a non-securities lending commingled B fund (for non-ERISA clients) on 6/29/09 so these speciality funds had their first full quarter of performance in this commingled fund in 3Q09. This Northern Trust non-lending commingled B fund had a return of 15.64% versus the 15.61% S&P 500 benchmark index return for 3Q09. The outperformance of 3 basis points for the quarter is largely attributable to several significant class action settlement distributions received by the commingled fund from class action lawsuits originated years ago. DWRF and BL benefitted from these distributions even though the two funds were not investors in the commingled fund at the earlier time of the financial loss incurred by the commingled fund. In addition, Northern Trust effectively eliminated performance drag in performance from cash holdings during a strong positive performance quarter due to effective management of S&P 500 futures positions to minimize net cash positions. This commingled B fund typically maintains an average 1.5% of total assets in S&P 500 futures on a non-leveraged basis to employ idle cash. For the SIF portfolio, the 7 basis points of underperformance versus the benchmark index (15.54% vs. 15.61%) is largely attributed to cash drag since the cash position averages 10-20 basis points of portfolio value largely resulting from dividend payment accumulations prior to being reinvested by the portfolio manager.

Barclays Global Investors

(Passive Long Government Fixed Income; Passive Long Credit Fixed Income)

The BWC investment staff met with the Barclays Global Investors (BGI) fixed income strategist (Chris Barr) on November 4, 2009 at the Investment Division offices. The BWC primary relationship manager was also scheduled to attend this meeting but became ill the day of the meeting and was unable to attend.

The impending BGI merger with BlackRock is proceeding well and is scheduled to occur on December 1, 2009 with BlackRock being the name of the combined firm upon consummation of the merger. The \$350-400 billion in passively managed fixed income assets of BGI will be unaffected by the merger. BGI and BlackRock examine investment risk in a similar manner. The quantitative risk system integrated into the combined organization will be unparalleled, in the opinion of Chris Barr of BGI.

The BWC initiated split of the State Insurance Fund LDFI portfolio managed by BGI into separate Long Government and Long Credit fixed income portfolios occurred on August 13, 2009. This involved the in-kind transfers of cash and securities of the SIF LDFI portfolios totalling \$1.63 billion market value respective into separate account portfolios of Long Government bonds (\$740 million MV at inception) and Long Credit bonds (\$887 million MV at inception). As reported by BGI, the performance of the new Long Government portfolio had a total return of 4.74% from 8/13/09 inception date through 9/30/09 compared to the benchmark return of 4.78%. BGI indicated pricing on certain agency issues not well traded accounted for the shortfall in performance over this period. As reported by BGI, the performance of the new Long Credit portfolio had a total return of 5.27% from 8/13/09 inception date through 9/30/09 compared to the benchmark return of 5.19%. This outperformance was largely due to slight overweights in A and BBB rated securities versus the index during a period of strong performance where credit spreads continued to tighten versus Treasury yields with the biggest spread tightening occurring in BBB and A rated credits. The BGI fixed income strategist indicated there continues to be persistent demand for long credit bonds. The Pension Protection Act and FASB 157 promoting appropriate asset-liability balancing for pension funds are drivers for the strong demand for long credit bonds. The BGI fixed income strategist indicated that an additional 50 basis point in credit spread tightening to Treasuries for long A and BBB credits is very possible into next year as there are still wide spreads between narrower credit default swap spreads and wider actual bond spreads.

State Street Global Advisors

(Passive Long Government Fixed Income; Passive Long Credit Fixed Income; Passive Intermediate Duration Fixed Income; Passive TIPS Fixed Income)

The BWC CIO and Director of Investments visited the offices of State Street Global Advisors (SSGA) in Boston on November 6, 2009 for the dual purposes of conducting an on-site quarterly investment manager meeting as well as to meet with additional SSGA professionals and senior management on requested focused topics. The remaining BWC investment staff participated in the quarterly meeting via conference call.

State Street Corporation had just announced on the date of this meeting that it added an additional \$250 million in legal reserves to total an adjusted \$443 million for the purposes of establishing sufficient reserves related to a potential resolution of proceedings by the SEC to address legal exposure related to losses incurred by investors in certain active managed fixed income strategies whereby the risk of such strategies were allegedly not sufficiently revealed to investors by State Street. State Street management believes this additional reserve should be sufficient to settle these related litigation matters.

The BWC initiated split of the large State Insurance Fund LDFI portfolio managed by SSGA into separate Long Government and Long Credit fixed income portfolios occurred on July 23, 2009. This involved the in-kind transfer of cash and securities of the SIF LDFI portfolio totalling \$7.23 billion market value into separate account portfolios of Long Government bonds (\$3.43 billion MV at inception) and Long Credit bonds (\$3.80 billion MV at inception). Subsequent to this portfolio split, a total of approximately \$3.0 billion was redeemed from the new Long Government portfolio account to fund both the SIF Priority #1 Transition into the U.S. Aggregate fixed income index securities (\$2.2 billion) in late July and the first two stages of the SIF Priority #2 Transition into the ACWI ex-U.S. equities index investments (\$800 million). As reported by SSGA, the performance of the new SIF Long Government portfolio was a total return of 3.95% from 7/23/09 inception date through 9/30/09 compared to the benchmark return of 3.86%. The outperformance is mostly explained by the favorable timing during the quarter of the transition funding redemptions from the account on a weighted return comparison to the benchmark index. As reported by SSGA, the performance of the new SIF Long Credit portfolio was a total return of 5.24% from 7/23/09 inception date through 9/30/09 which exactly matched the benchmark return for the period.

Total 3Q09 returns of the DWRF and Black Lung LDFI portfolio reported by SSGA were 8.37% and 8.45%, respectively, as compared to the 8.53% benchmark index return. The underperformance was monthly attributed to cash drag during a very strong performance period and not being able to obtain sufficient broker allocations on many new credit issues coming to market entering the benchmark index that were substantially oversubscribed by investors. The two specialty funds (Public Work-Relief Employees' Fund and Marine Industry Fund) investment in the commingled Intermediate Duration Fixed Income fund managed by SSGA had a return of 3.21% versus a benchmark return of 3.25% for 3Q09.

The TIPS portfolios managed by SSGA for each of SIF, DWRF and Black Lung had total returns of 3.09% for 3Q09 as represented by SSGA compared to the benchmark quarterly return of 3.08%. The demand for TIPS continued to grow over the period and the U.S. Treasury recently announced it would be issuing 30 year maturity TIPS instead of 20 year maturity issues. This was an anticipated and welcomed development by the market. The issuance of 30 year TIPS will clearly result in the lengthening of the average duration of the Barclays Capital U.S. TIPS benchmark index and therefore the respective TIPS portfolios of BWC.

12-month Investment Committee Calendar

Date	December	Notes
12/16/2009	<ol style="list-style-type: none"> 1. Passive Indexed Investment Manager RFP finalists recommendation, possible vote 2. Specialty Funds (DWRF, Coal) Asset Allocation Analysis report and recommendation, second review, possible vote on Coal new asset allocation 3. SIF Transition Activity Update (in CIO Report) 	
Date	January	
1/21/2010	<ol style="list-style-type: none"> 1. Passive Indexed Investment Manager RFP finalists recommendation, possible vote 2. Specialty Funds (DWRF, Coal) Asset Allocation Analysis report and recommendation, third review, possible vote on DWRF new asset allocation 3. Custodian Fiscal Year 2009 annual review 4. SIF Transition Activity Update (in CIO Report) 	
Date	February	
2/25/2010	<ol style="list-style-type: none"> 1. Investment Consultant Performance Report 4Q09 2. SIF Transition Activity Update (in CIO Report) 3. Possible education session, topic to be determined 	
Date	March	
3/25/2010	<ol style="list-style-type: none"> 1. Investment Consultant contract renewal, possible vote 2. Mercer Active Portfolio Management education, session two 3. Possible education session, topic to be determined 	
Date	April	
4/29/2010	<ol style="list-style-type: none"> 1. Mercer Alternative Asset classes education, session one 2. Possible education session, topic to be determined 	
Date	May	
5/27/2010	<ol style="list-style-type: none"> 1. Investment Consultant Performance Report 1Q10 2. Possible education session, topic to be determined 	