



**PERSPECTIVES
THAT DRIVE
ENTERPRISE
SUCCESS**



PERIOD ENDING: OCTOBER 31, 2023

Participant Plan Performance Review for

West Virginia Investment Management Board

Participant Plans Allocation & Performance Net of Fees

Period Ending: October 31, 2023

	6/30/2023		10/31/2023		Performance %							
	Asset (\$000)	%	Asset (\$000)	%	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year	10 Year	20 Year
WVIMB Fund Assets	24,219,305	100.0	23,422,342	100.0								
Pension Assets	19,790,811	81.7	18,984,502	81.1								
Public Employees' Retirement System	8,398,434	34.7	8,046,472	34.4	(1.8)	(4.9)	(3.0)	6.3	7.9	7.9	7.5	7.5
Teachers' Retirement System	9,319,703	38.5	8,908,158	38.0	(1.8)	(4.9)	(3.0)	6.3	7.9	7.8	7.4	7.4
EMS Retirement System	125,180	0.5	122,069	0.5	(1.8)	(4.9)	(3.0)	6.3	7.8	7.9	7.5	
Public Safety Retirement System	778,439	3.2	737,443	3.2	(1.8)	(4.9)	(3.0)	6.4	7.9	7.9	7.5	7.5
Judges' Retirement System	278,545	1.2	268,832	1.2	(1.8)	(4.9)	(3.0)	6.3	7.9	7.9	7.5	7.5
State Police Retirement System	320,094	1.3	312,773	1.3	(1.8)	(4.9)	(3.0)	6.3	7.8	7.9	7.5	7.5
Deputy Sheriffs' Retirement System	316,039	1.3	305,986	1.3	(1.8)	(4.9)	(3.0)	6.3	7.8	7.9	7.5	7.5
Municipal Police & Firefighter Retirement System	34,945	0.1	35,607	0.2	(1.7)	(4.9)	(3.0)	6.2	7.7	7.8	7.3	
Natural Resources Police Office Retirement System	27,643	0.1	27,140	0.1	(1.8)	(4.9)	(3.0)	6.3				
Municipal Model A	189,153	0.8	217,354	0.9	(1.8)	(4.7)	(2.8)	6.6	8.4	8.2	7.7	
Municipal Model B	2,636	0.0	2,668	0.0	(2.4)	(6.8)	(4.6)	7.7	2.7			
Insurance Assets	3,216,097	13.3	3,027,988	12.9								
Workers' Compensation Old Fund	851,245	3.4	800,610	3.4	(1.3)	(3.7)	(2.2)	5.5	1.8	4.0	3.9	
Workers' Comp. Self-Insured Guaranty Risk Pool	37,044	0.2	36,122	0.1	(1.3)	(3.7)	(2.2)	5.5	2.4	4.2	4.0	
Workers' Comp. Self-Insured Security Risk Pool	48,517	0.2	46,559	0.2	(1.3)	(3.7)	(2.2)	5.5	2.4	4.2		
Workers' Comp. Uninsured Employers' Fund	16,767	0.1	16,518	0.1	(1.3)	(3.7)	(2.2)	5.5	2.3	4.1	3.9	
Pneumoconiosis	200,150	0.8	190,488	0.8	(1.3)	(3.7)	(2.2)	5.5	2.4	4.2	4.0	4.8
Board of Risk & Insurance Management	183,857	0.8	114,863	0.5	(1.3)	(3.7)	(2.2)	5.5	2.4	4.2	4.0	
Public Employees' Insurance Agency	135,642	0.6	132,798	0.6	(1.2)	(3.5)	(2.1)	5.4	1.8	3.9	3.8	
WV Retiree Health Benefit Trust Fund	1,742,875	7.2	1,690,030	7.2	(1.8)	(4.9)	(3.0)	6.3	7.8	7.9	7.5	
Endowment Assets	1,212,397	5.0	1,409,852	6.0								
Berkeley County Development Authority	8,558	0.0	5,943	0.0	(1.8)	(4.9)	(3.0)	6.3	7.8	7.9		
Wildlife Fund	72,283	0.3	66,945	0.3	(1.8)	(4.9)	(3.0)	6.3	7.8	7.8	7.4	7.5
WV State Parks and Recreation Endowment Fund	35,050	0.1	37,058	0.2	(1.8)	(4.9)	(3.0)	6.2				
Revenue Shortfall Reserve Fund	334,187	1.4	558,573	2.4	(0.9)	(2.7)	(1.8)	3.9	(2.2)	1.3	1.5	
Revenue Shortfall Reserve Fund - Part B	514,884	2.2	500,797	2.1	(1.3)	(3.9)	(2.7)	4.5	(0.4)	3.1	3.3	
WV DEP Trust	11,478	0.0	11,106	0.0	(2.0)	(5.4)	(3.2)	9.5	6.1	6.5	6.1	
WV DEP Agency	235,957	1.0	229,430	1.0	(1.7)	(4.6)	(2.8)	6.9	3.1	4.7	4.6	

Composite Asset Allocation & Performance Net of Fees

Period Ending: October 31, 2023

	Asset (\$000)	%	Performance %								
			1 Month	3 Month	FYTD	1 Year	3 Year	5 Year	10 Year	20 Year	
Investment Pools Composite	23,435,327	100.00									
Portable Alpha Composite +/- S&P 500 Index	4,869,124	20.78	(1.82) 0.28	(7.86) 0.39	(5.18) 0.13	8.48 (1.66)	10.68 0.32				
Large Cap Domestic Equity Composite +/- S&P 500 Index	282,050	1.20	(2.09) 0.01	(8.24) 0.01	(5.33) (0.02)	10.06 (0.08)	10.26 (0.10)	11.08 0.07	11.08 (0.10)	9.34 0.04	
Non-Large Cap Domestic Equity Composite +/- Russell 2500 Index	928,313	3.96	(6.13) (0.06)	(12.72) 2.08	(9.53) 1.04	0.38 5.01	8.59 3.08	6.90 1.42	7.39 0.50	9.03 0.65	
International Equity Composite +/- MSCI AC World ex US IMI Index (a)	3,694,752	15.77	(4.65) (0.33)	(9.64) 1.68	(5.15) 2.41	15.84 3.64	4.67 1.15	4.55 0.60	3.91 0.78	6.88 0.88	
Fixed Income Composite +/- Bloomberg Universal (b)	4,148,000	17.70	(1.35) 0.15	(3.99) 0.44	(3.45) 0.89	3.11 1.92	(3.43) 1.61	1.16 0.95	1.95 0.77	3.54 0.31	
Core Fixed Income Composite +/- Bloomberg US Aggregate	1,853,835	7.91	(1.62) (0.04)	(4.41) 0.28	(4.55) 0.21	1.09 0.73	(4.55) 1.02	0.78 0.84	1.52 0.64		
Total Return Fixed Income Composite (c) +/- Bloomberg Universal	2,294,165	9.79	(1.14) 0.36	(3.65) 0.78	(2.55) 1.79	4.66 3.47	(2.73) 2.31	1.43 1.22	2.18 1.00	3.97 0.86	
TIPS Composite +/- Bloomberg US TIPS 1-10 Yr (d)	485,116	2.07	(0.14) (0.02)	(1.56) 0.01	(1.13) 0.00	1.42 0.05	(1.27) 0.05	2.77 0.08	1.86 0.03		
Cash Composite +/- FTSE 3 Month US T-Bill (e)	164,902	0.70	0.44 (0.03)	1.35 (0.04)	1.76 (0.10)	4.75 (0.19)	1.85 (0.09)	1.69 (0.11)	1.13 (0.03)	1.48 (0.02)	
Private Equity Composite +/- Russell 3000 + 3% (f, g)	2,785,465	11.89	0.23 2.63	0.15 8.49	0.16 4.99	5.52 (5.86)	21.86 9.67	20.75 7.52	18.18 4.62		
Real Estate Composite +/- NCREIF + 1% (f)	2,492,773	10.64	(1.17) (0.80)	(1.93) (0.40)	(1.73) 0.36	(6.50) (0.30)	6.22 (1.33)	5.16 (1.53)	7.44 (1.24)		
Hedge Fund Composite +/- HFRI FOF + 1% (h)	2,538,539	10.83	0.15 1.29	1.32 2.86	2.55 2.91	7.19 3.30	7.88 3.63	6.07 1.33	4.77 0.94		
Private Credit & Income Composite +/- SOFR + 4% (f, i)	1,046,293	4.46	(0.17) (0.96)	(0.54) (2.89)	(0.10) (3.23)	3.23 (7.49)	7.22 0.26	6.38 0.59			

Participant Plans Allocation vs. Strategy

Period Ending: October 31, 2023

	Equity		Fixed Income		Private Equity		Real Estate		Private Credit & Income		Hedge Funds		Cash	
	Actual %	Strategy %	Actual %	Strategy %	Actual %	Strategy %	Actual %	Strategy %	Actual %	Strategy %	Actual %	Strategy %	Actual %	Strategy %

Pension Assets

Public Employees' Retirement System	44.3	45.0	14.9	15.0	13.0	12.0	11.7	12.0	4.9	6.0	10.8	10.0	0.4	0.0
Teachers' Retirement System	44.5	45.0	14.9	15.0	13.1	12.0	11.7	12.0	4.9	6.0	10.8	10.0	0.1	0.0
EMS Retirement System	44.3	45.0	14.6	15.0	13.0	12.0	11.6	12.0	4.9	6.0	10.6	10.0	1.0	0.0
Public Safety Retirement System	44.6	45.0	14.9	15.0	13.1	12.0	11.7	12.0	4.9	6.0	10.8	10.0	0.0	0.0
Judges' Retirement System	44.4	45.0	15.2	15.0	13.0	12.0	11.6	12.0	4.9	6.0	10.7	10.0	0.2	0.0
State Police Retirement System	44.0	45.0	15.0	15.0	12.9	12.0	11.6	12.0	4.9	6.0	10.6	10.0	1.0	0.0
Deputy Sheriffs' Retirement System	44.3	45.0	14.8	15.0	13.0	12.0	11.6	12.0	4.9	6.0	10.7	10.0	0.7	0.0
Municipal Police & Firefighter Retirement System	43.0	45.0	14.2	15.0	12.5	12.0	11.2	12.0	4.7	6.0	10.2	10.0	4.2	0.0
Natural Resources Police Office Retirement System	43.9	45.0	14.3	15.0	12.9	12.0	11.5	12.0	4.8	6.0	10.6	10.0	2.0	0.0
Municipal Model A	44.6	45.0	14.8	15.0	13.0	12.0	11.6	12.0	4.9	6.0	10.7	10.0	0.4	0.0
Municipal Model B	51.6	55.0	42.9	45.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5	0.0

Insurance Assets

Workers' Compensation Old Fund	24.2	25.0	45.5	45.0	4.4	4.0	3.9	4.0	1.6	2.0	16.2	15.0	4.2	5.0
Workers' Comp. Self-Insured Guaranty Risk Pool	24.1	25.0	45.1	45.0	4.3	4.0	3.9	4.0	1.6	2.0	15.9	15.0	5.1	5.0
Workers' Comp. Self-Insured Security Risk Pool	24.2	25.0	45.3	45.0	4.3	4.0	3.9	4.0	1.6	2.0	16.0	15.0	4.7	5.0
Workers' Comp. Uninsured Employers' Fund	24.1	25.0	45.0	45.0	4.3	4.0	3.9	4.0	1.6	2.0	15.8	15.0	5.3	5.0
Pneumoconiosis	24.2	25.0	45.5	45.0	4.4	4.0	3.9	4.0	1.6	2.0	16.1	15.0	4.3	5.0
Board of Risk & Insurance Management	24.0	25.0	44.8	45.0	4.3	4.0	3.9	4.0	1.6	2.0	16.2	15.0	5.2	5.0
Public Employees' Insurance Agency	19.3	20.0	54.8	55.0	2.1	2.0	1.9	2.0	0.8	1.0	21.1	20.0	0.0	0.0
WV Retiree Health Benefit Trust Fund	44.3	45.0	15.4	15.0	13.0	12.0	11.7	12.0	4.9	6.0	10.7	10.0	0.0	0.0

Endowment Assets

Berkeley County Development Authority	44.3	45.0	15.2	15.0	13.1	12.0	11.7	12.0	4.9	6.0	10.8	10.0	0.0	0.0
Wildlife Fund	44.3	45.0	15.3	15.0	13.0	12.0	11.6	12.0	4.9	6.0	10.7	10.0	0.2	0.0
WV State Parks and Recreation Endowment Fund	43.0	45.0	14.8	15.0	12.5	12.0	11.2	12.0	4.7	6.0	10.3	10.0	3.5	0.0
Revenue Shortfall Reserve Fund	9.5	10.0	80.1	80.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.4	10.0
Revenue Shortfall Reserve Fund - Part B	16.9	17.5	72.9	72.5	2.2	2.0	1.9	2.0	0.8	1.0	5.3	5.0	0.0	0.0
WV DEP Trust	48.7	50.0	15.4	15.0	11.1	10.0	9.9	10.0	4.2	5.0	10.7	10.0	0.0	0.0
WV DEP Agency	33.8	35.0	40.0	40.0	2.2	2.0	1.9	2.0	0.8	1.0	21.3	20.0	0.0	0.0

Footnotes

- (a) Prior to January 2014, the index was the MSCIACW ex USA (Standard).
- (b) Prior to April 2008, the index was Bloomberg US Aggregate.
- (c) From October 2015 to March 2017, performance returns from the Opportunistic Income Pool were included in the Total Return Fixed Income Composite.
- (d) Prior to June 2023, the index was Bloomberg US TIPS.
- (e) Prior to January 2014, the index was FTSE 3 Month US T-Bill plus 15 basis points.
- (f) Private Equity, Real Estate, and Private Credit & Income consist primarily of private market investments. The time lag in determining the fair value of these investments makes the comparison to their public market benchmarks less meaningful over shorter time periods.
- (g) Prior to January 2014, the index was S&P 500 plus 500 basis points.
- (h) Prior to January 2014, the index was Libor plus 400 basis points.
- (i) From April 2017 to May 2023, the index was CS Leveraged Loan plus 200 basis points. Prior to April 2017, the index was CS Leveraged Loan plus 250 basis points.

Note: Participant returns are net of fees. Portfolio returns are net of management fees. Returns shorter than one year are unannualized.

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