PERSPECTIVES THAT DRIVE ENTERPRISE SUCCESS

PERIOD ENDING: SEPTEMBER 30, 2016

Participant Plan Performance Review for

West Virginia Investment Management Board

	6/30/2016		9/30/2016		Performance %						
	Asset ($000)	%	Asset ($000)	%	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year	10 Year
WVIMB Fund Assets	**16,747,244**	**100.0**	**17,030,754**	**100.0**							
Pension Assets	**13,230,134**	**79.0**	**13,575,107**	**79.7**							
Public Employees' Retirement System	5,597,558	33.4	5,779,001	33.9	0.4	3.7	3.7	9.6	6.6	9.6	6.1
Teachers' Retirement System	6,513,312	38.9	6,643,443	39.0	0.4	3.7	3.7	9.5	6.5	9.6	5.8
EMS Retirement System	58,844	0.4	61,646	0.4	0.4	3.7	3.7	9.6	6.6	9.6	
Public Safety Retirement System	578,762	3.5	589,935	3.5	0.4	3.7	3.7	9.6	6.6	9.7	6.1
Judges' Retirement System	167,178	1.0	172,677	1.0	0.4	3.8	3.8	9.6	6.6	9.7	6.1
State Police Retirement System	138,127	0.8	144,611	0.8	0.4	3.8	3.8	9.6	6.6	9.6	6.1
Deputy Sheriffs' Retirement System	171,949	1.0	178,867	1.1	0.4	3.7	3.7	9.6	6.6	9.6	6.1
Municipal Police & Firefighter Retirement System	3,080	0.0	3,571	0.0	0.4	3.7	3.7	9.2	6.4	7.9	
Municipal Model A	1,324	0.0	1,356	0.0	0.4	3.7	3.7	9.5	6.4		
Insurance Assets	**2,545,860**	**15.2**	**2,565,581**	**15.2**							
Workers' Compensation Old Fund	1,284,843	7.7	1,304,492	7.7	0.3	2.9	2.9	7.9	4.0	5.1	4.2
Workers' Comp. Self-Insured Guaranty Risk Pool	33,418	0.2	33,827	0.2	0.4	3.0	3.0	6.7	4.0	5.5	3.9
Workers' Comp. Self-Insured Security Risk Pool	53,881	0.3	54,519	0.3	0.4	3.0	3.0	6.9			
Workers' Comp. Uninsured Employers' Fund	10,841	0.1	11,148	0.1	0.4	2.8	2.8	6.1	3.8	5.3	3.7
Pneumoconiosis	246,635	1.5	249,838	1.5	0.4	3.0	3.0	6.5	3.9	5.5	4.6
Board of Risk & Insurance Management	132,322	0.8	136,212	0.8	0.4	2.9	2.9	6.4	3.9	5.5	5.1
Public Employees' Insurance Agency	176,829	1.0	145,438	0.9	0.4	2.8	2.8	6.5	4.1	5.3	4.8
WV Retiree Health Benefit Trust Fund	607,091	3.6	630,107	3.7	0.4	3.8	3.8	9.7	6.6	8.9	
Endowment Assets	**971,250**	**5.8**	**890,066**	**5.1**							
Berkeley County Development Authority	6,089	0.0	6,319	0.0	0.4	3.8	3.8				
Wildlife Fund	54,571	0.3	56,761	0.3	0.4	3.8	3.8	9.7	6.6	9.6	6.1
Prepaid Tuition Trust	54,948	0.3	50,250	0.3	0.4	3.5	3.5	9.1	6.0	8.3	5.9
Revenue Shortfall Reserve Fund	336,013	2.0	239,246	1.4	0.3	1.3	1.3	5.5	2.9	2.8	2.7
Revenue Shortfall Reserve Fund - Part B	390,670	2.4	402,065	2.4	0.4	2.9	2.9	8.2	4.1	5.3	3.7
WV DEP Trust	7,808	0.1	8,164	0.0	0.6	4.6	4.6	8.9	5.4	9.3	
WV DEP Agency	121,151	0.7	127,261	0.7	0.4	3.6	3.6	7.5			

	Asset ($000)	%	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year	10 Year
			Performance %						
Investment Pools Composite	17,039,595	100.00							
Total Equity Composite	8,598,985	50.47	0.70	5.95	5.95	12.64	6.22	12.28	5.95
+/- Total Equity Policy Index (b)			*(0.10)*	*0.19*	*0.19*	*(0.03)*	*0.50*	*0.72*	*1.19*
US Equity Composite	4,042,425	23.73	0.01	3.73	3.73	12.58	10.26	16.34	7.42
+/- Russell 3000 Index			*(0.15)*	*(0.67)*	*(0.67)*	*(2.38)*	*(0.18)*	*(0.02)*	*0.05*
Large Cap Composite	3,235,209	18.99	0.09	2.98	2.98	13.48	11.33	16.44	7.32
+/- S&P 500 Index			*0.07*	*(0.87)*	*(0.87)*	*(1.95)*	*0.17*	*0.07*	*0.08*
Non-Large Cap Composite	807,216	4.74	(0.29)	6.83	6.83	8.30	6.11	15.34	7.72
+/- Russell 2500 Index			*(0.77)*	*0.27*	*0.27*	*(6.13)*	*(1.66)*	*(0.96)*	*(0.22)*
International Equity Composite	4,556,560	26.74	1.32	8.01	8.01	12.53	2.09	8.07	4.69
+/- MSCI AC World ex US IMI Index (c)			*(0.13)*	*0.87*	*0.87*	*2.20*	*1.02*	*1.27*	*1.93*
Fixed Income Composite	3,329,382	19.54	0.15	1.75	1.75	6.05	3.97	4.09	4.77
+/- Barclays Capital Universal (d)			*0.13*	*0.79*	*0.79*	*(0.06)*	*(0.30)*	*0.47*	*(0.30)*
Core Fixed Income	1,016,293	5.97	0.08	0.49	0.49	5.23	4.41	3.74	
+/- Barclays Capital Aggregate			*0.14*	*0.03*	*0.03*	*0.04*	*0.38*	*0.66*	
Total Return Fixed Income	2,313,089	13.57	0.18	2.31	2.31	6.41	3.77	4.30	4.98
+/- Barclays Capital Universal			*0.16*	*1.35*	*1.35*	*0.30*	*(0.50)*	*0.68*	*(0.02)*
TIPS Composite	372,590	2.19	0.56	0.98	0.98	6.58	2.38	1.90	
+/- Barclays Capital U.S.TIPS			*0.01*	*0.01*	*0.01*	*0.00*	*(0.02)*	*(0.02)*	
Cash Composite	129,843	0.76	0.04	0.08	0.08	0.28	0.17	0.16	1.03
+/- Citigroup 90 Day T-Bill (e)			*0.02*	*0.01*	*0.01*	*0.05*	*0.07*	*0.01*	*0.02*
Private Equity Composite	1,447,764	8.49	0.08	0.78	0.78	10.27	13.32	12.35	
+/- Russell 3000 + 3% (f, g)								*(7.55)*	
Real Estate Composite	1,540,659	9.04	(0.09)	(0.01)	(0.01)	9.33	10.46	10.49	
+/- NCREIF + 1% (f)								*(2.02)*	
Hedge Fund Composite	1,620,372	9.51	0.41	2.22	2.22	(0.19)	3.37	5.03	
+/- HFRI FOF + 1% (h)			*(0.12)*	*(0.42)*	*(0.42)*	*(1.66)*	*1.17*	*1.97*	

	Domestic Equity		Int'l Equity		Fixed Income		Private Equity		Real Estate		Hedge Funds		Cash	
	Actual %	Strategy %	Actual %	Strategy %	Actual %	Strategy %	Actual %	Strategy %	Actual %	Strategy %	Actual %	Strategy %	Actual %	Strategy %
Pension Assets														
Public Employees' Retirement System	25.6	27.5	29.1	27.5	13.9	15.0	10.1	10.0	10.7	10.0	10.3	10.0	0.3	0.0
Teachers' Retirement System	25.8	27.5	28.9	27.5	13.8	15.0	10.2	10.0	11.0	10.0	10.2	10.0	0.1	0.0
EMS Retirement System	25.8	27.5	28.7	27.5	14.4	15.0	10.1	10.0	9.9	10.0	10.4	10.0	0.7	0.0
Public Safety Retirement System	26.0	27.5	29.1	27.5	13.7	15.0	10.2	10.0	10.9	10.0	10.1	10.0	0.0	0.0
Judges' Retirement System	25.9	27.5	29.2	27.5	13.9	15.0	10.1	10.0	10.1	10.0	10.6	10.0	0.2	0.0
State Police Retirement System	25.8	27.5	28.9	27.5	14.4	15.0	10.1	10.0	9.8	10.0	10.5	10.0	0.5	0.0
Deputy Sheriffs' Retirement System	25.7	27.5	29.0	27.5	14.0	15.0	10.1	10.0	10.3	10.0	10.6	10.0	0.3	0.0
Municipal Police & Firefighter Retirement System	24.6	27.5	26.9	27.5	14.0	15.0	9.5	10.0	9.3	10.0	9.4	10.0	6.3	0.0
Municipal Model A	25.9	27.5	29.2	27.5	14.1	15.0	10.2	10.0	9.9	10.0	10.0	10.0	0.7	0.0
Insurance Assets														
Workers' Compensation Old Fund	14.4	15.0	16.3	15.0	64.2	70.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	0.0
Workers' Comp. Self-Insured Guaranty Risk Pool	14.3	15.0	15.9	15.0	43.6	45.0	0.0	0.0	0.0	0.0	22.1	20.0	4.1	5.0
Workers' Comp. Self-Insured Security Risk Pool	14.1	15.0	16.2	15.0	45.0	45.0	0.0	0.0	0.0	0.0	20.5	20.0	4.2	5.0
Workers' Comp. Uninsured Employers Fund	14.1	15.0	15.8	15.0	38.6	40.0	0.0	0.0	0.0	0.0	21.5	20.0	10.0	10.0
Pneumoconiosis	14.2	15.0	16.2	15.0	44.8	45.0	0.0	0.0	0.0	0.0	20.5	20.0	4.3	5.0
Board of Risk & Insurance Mgmt.	14.2	15.0	15.5	15.0	44.0	45.0	0.0	0.0	0.0	0.0	21.3	20.0	5.0	5.0
Public Employees' Insurance Agency	14.5	15.0	15.6	15.0	49.8	50.0	0.0	0.0	0.0	0.0	20.1	20.0	0.0	0.0
WV Retiree Health Benefit Trust Fund	25.7	27.5	28.7	27.5	14.7	15.0	10.1	10.0	10.3	10.0	10.4	10.0	0.1	0.0
Endowment Assets														
Berkeley County Development Authority	25.8	27.5	29.1	27.5	14.4	15.0	10.1	10.0	10.4	10.0	10.0	10.0	0.2	0.0
Wildlife Fund	25.4	27.5	29.1	27.5	14.4	15.0	10.1	10.0	10.3	10.0	10.5	10.0	0.2	0.0
Prepaid Tuition Trust	27.2	27.5	23.1	22.5	47.8	50.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0
Revenue Shortfall Reserve Fund	0.0	0.0	0.0	0.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Revenue Shortfall Reserve Fund - Part B	14.2	15.0	15.9	15.0	69.8	70.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
WV DEP Trust	29.9	32.5	34.5	32.5	14.8	15.0	0.0	0.0	0.0	0.0	20.8	20.0	0.0	0.0
WV DEP Agency	18.6	20.0	21.3	20.0	39.3	40.0	0.0	0.0	0.0	0.0	20.8	20.0	0.0	0.0

(a) As of January 2014, the PERS Policy is 30% Russell 3000, 30% MSCI ACW ex USA (IMI), and 40% Barclays Capital Universal. From April 2008 to December 2013, the PERS Policy was 30% Russell 3000, 30% MSCI ACW ex USA (Standard), and 40% Barclays Capital Universal. Prior periods were 42% Russell 3000, 18% MSCI ACW ex USA, and 40% Barclays Capital Aggregate.

(b) As of January 2014, the Total Equity Policy Index is 50% Russell 3000 and 50% MSCI ACW ex USA (IMI). From April 2008 to December 2013, the Total Equity Policy Index was 50% Russell 3000 and 50% MSCI ACW ex USA (Standard). Prior periods were 40% S&P 500, 30% Russell 2500, and 30% MSCI ACW ex USA.

(c) Prior to January 2014, the index was the MSCI ACW ex USA (Standard).

(d) Prior to April 2008, the index was Barclays Capital Aggregate.

(e) Prior to January 2014, the index was Citigroup 90 Day T-Bill plus 15 basis points.

(f) The Private Equity Composite and Real Estate Composite are long-term programs whose benchmarks are only reported for 5 years and beyond.

(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) Franklin Benchmark is 50% JPM EMBI Global Diversified and 50% JPM GBI EM Diversified.

(j) Prior to April 2008, the index was a custom index.

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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