WEST VIRGINIA INVESTMENT MANAGEMENT BOARD

PARTICIPANT PLAN PERFORMANCE REPORT

NOVEMBER 30, 2015



	6/30/2015		11/30/2015	_	Performance %							
	Asset (\$000)	%	Asset (\$000)	%	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year	10 Year	
/IMB Fund Assets	17,180,853	100.0	16,711,864	100.0								
nsion Assets	13,635,608	79.4	13,160,017	78.8								
Public Employees' Retirement System	5,742,388	33.5	5,573,497	33.4	(0.3)	1.8	(1.9)	1.4	8.7	8.6	6.5	
Teachers' Retirement System	6,753,118	39.3	6,481,657	38.8	(0.3)	1.8	(1.9)	1.4	8.7	8.5	6.2	
EMS Retirement System	56,547	0.3	56,176	0.3	(0.3)	1.8	(1.9)	1.4	8.7	8.5		
Public Safety Retirement System	607,339	3.5	579,294	3.5	(0.3)	1.9	(1.8)	1.5	8.7	8.6	6.5	
Judges' Retirement System	170,727	1.0	166,076	1.0	(0.3)	1.8	(1.8)	1.5	8.7	8.5	6.4	
State Police Retirement System	131,954	8.0	131,841	0.8	(0.3)	1.8	(1.8)	1.4	8.7	8.5	6.4	
Deputy Sheriffs' Retirement System	170,181	1.0	167,776	1.0	(0.3)	1.8	(1.8)	1.4	8.7	8.5	6.5	
Municipal Police & Firefighter Retirement System	1,944	0.0	2,336	0.0	(0.3)	1.8	(1.8)	1.4	8.2	6.7		
Municipal Model A	1,410	0.0	1,364	0.0	(0.3)	1.8	(1.9)	1.4				
urance Assets	2,550,823	14.8	2,563,122	15.3								
Workers' Compensation Old Fund	1,290,486	7.5	1,298,776	7.8	(0.3)	1.0	(1.0)	(0.4)	3.2	4.4		
Workers' Comp. Self-Insured Guaranty Risk Pool	15,756	0.1	33,413	0.2	(0.1)	0.9	(1.4)	0.0	4.2	5.0		
Workers' Comp. Self-Insured Security Risk Pool	9,046	0.0	56,274	0.3	0.0	0.9	(1.3)	(0.1)				
Workers' Comp. Uninsured Employers' Fund	10,889	0.1	10,728	0.1	(0.2)	0.7	(1.5)	(0.1)	4.1	4.9		
Pneumoconiosis	261,369	1.5	252,349	1.5	(0.2)	0.8	(1.5)	(0.2)	4.1	4.9	4.8	
Board of Risk & Insurance Management	137,824	0.8	130,692	0.8	(0.2)	0.7	(1.6)	(0.3)	4.1	5.0	5.3	
Public Employees' Insurance Agency	218,202	1.3	184,729	1.1	(0.2)	0.8	(1.5)	(0.1)	4.2	5.0	5.0	
WV Retiree Health Benefit Trust Fund	607,251	3.5	596,161	3.5	(0.3)	1.9	(1.8)	1.4	8.6	7.9		
dowment Assets	994,422	5.8	988,725	5.9								
Berkeley County Development Authority	-	0.0	5,980	0.0	(0.3)							
Wildlife Fund	54,655	0.3	53,851	0.3	(0.3)	1.9	(1.8)	1.4	8.6	8.5	6.4	
Prepaid Tuition Trust	66,440	0.4	55,925	0.3	(0.4)	2.4	0.1	1.5	6.9	7.3	6.3	
Revenue Shortfall Reserve Fund	376,714	2.2	375,199	2.2	(0.1)	0.0	(0.4)	(0.6)	(0.1)	3.0		
Revenue Shortfall Reserve Fund - Part B	384,146	2.2	380,063	2.3	(0.3)	1.1	(1.1)	(0.4)	3.1	4.7		
WV DEP Trust	8,254	0.1	8,039	0.1	(0.4)	1.7	(2.6)	(0.4)	7.9			
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West Virginia Investment Management Board

Composite Asset Allocation & Performance Net of Fees As of November 30, 2015

<u>-</u>	Asset (\$000)	%	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year	10 Year
Investment Pools Composite	16,718,024	100.00							
Total Equity Composite +/- Total Equity Policy Index (b)	8,454,047	50.57	(0.73) (0.07)	2.83 (0.15)	(3.45) (0.11)	(1.38) 0.26	10.91 <i>0.97</i>	9.84 1.01	6.51 1.16
US Equity Composite +/- Russell 3000 Index	4,303,800	25.74	0.52 <i>(0.03)</i>	5.03 (0.31)	0.88 <i>0.25</i>	2.99 <i>0.41</i>	16.26 <i>0.26</i>	14.64 <i>0.51</i>	7.78 <i>0.</i> 19
Large Cap Composite +/- S& <i>P 500 Index</i>	3,506,292	20.97	0.25 (0.05)	5.62 (0.45)	1.97 <i>0.21</i>	3.34 <i>0.5</i> 9	16.46 <i>0.37</i>	14.79 <i>0.</i> 39	7.58 <i>0.10</i>
Non-Large Cap Composite +/- Russell 2500 Index	797,508	4.77	1.73 (0.23)	2.50 (0.35)	(3.73) (0.31)	1.42 <u>(1.18)</u>	15.01 <i>0.00</i>	13.80 <i>0.9</i> 2	8.45 <i>0.4</i> 2
International Equity Composite +/- MSCI AC World ex US IMI Index (c)	4,150,247	24.83	(1.99) <i>(0.12)</i>	0.61 <i>(0.04)</i>	(7.70) (0.51)	(5.81) 0.03	5.60 <i>1.57</i>	4.98 1.37	5.74 1.59
Fixed Income Composite +/- Barclays Capital Universal (d)	3,328,158	19.91	(0.19) 0.17	0.40 <i>0.0</i> 6	0.16 <i>(0.47)</i>	0.64 (0.11)	2.12 <i>0.44</i>	3.68 <i>0.30</i>	4.72 (0.14)
Core Fixed Income +/- Barclays Capital Aggregate	996,168	5.96	(0.21) 0.05	0.52 <i>0.09</i>	1.02 <i>0.04</i>	1.88 <i>0.91</i>	2.07 <i>0.57</i>	3.74 <i>0.65</i>	
Total Return Fixed Income +/- Barclays Capital Universal	2,331,990	13.95	(0.18) 0.18	0.33 <i>(0.01)</i>	(0.23) (0.86)	0.07 <i>(0.68)</i>	2.19 <i>0.51</i>	3.67 <i>0.</i> 29	5.04 <i>0.21</i>
TIPS Composite +/- Barclays Capital U.S.TIPS	429,241	2.57	(0.10) 0.00	(0.44) (0.01)	(0.99) 0.00	(1.77) 0.01	(2.24) (0.02)	2.37 (0.02)	
Cash Composite +/- Citigroup 90 Day T-Bill (e)	186,590	1.12	0.01 <i>0.00</i>	0.04 <i>0.0</i> 3	0.05 <i>0.0</i> 3	0.12 <i>0.0</i> 9	0.13 <i>0.04</i>	0.12 <i>(0.03)</i>	1.41 <i>0.0</i> 2
Private Equity Composite +/- Russell 3000 + 3% (f, g)	1,342,018	8.02	(0.06)	0.37	(0.90)	9.61	11.87	13.08 <i>(5.22)</i>	
Real Estate Composite +/- NCREIF + 1% (f)	1,398,283	8.36	0.40	2.81	2.65	10.24	10.65	10.35 <i>(</i> 3.25)	
Hedge Fund Composite +/- HFRI FOF + 1% (h)	1,579,687	9.45	0.29 (0.21)	(0.86) (0.55)	(2.13) (0.19)	1.45 <i>(0.20)</i>	6.37 2.99	5.22 1.44	

West Virginia Investment Management Board Participant Plans Allocation vs. Strategy As of November 30, 2015

As of November 30, 2013	Domestic E Actual % Str			Equity Strategy %		Income Strategy %		Equity Strategy %	Real E Actual % S		Hedge F Actual % S		Cash ctual % St	
Pension Assets														
Public Employees' Retirement System	28.3	27.5	27.2	27.5	14.1	15.0	9.7	10.0	10.1	10.0	10.4	10.0	0.2	0.0
Teachers' Retirement System	28.2	27.5	27.3	27.5	13.9	15.0	9.7	10.0	10.1	10.0	10.5	10.0	0.3	0.0
EMS Retirement System	28.2	27.5	27.5	27.5	14.5	15.0	9.7	10.0	10.0	10.0	9.8	10.0	0.3	0.0
Public Safety Retirement System	28.4	27.5	27.4	27.5	14.0	15.0	9.8	10.0	10.2	10.0	10.2	10.0	0.0	0.0
Judges' Retirement System	28.3	27.5	27.3	27.5	14.1	15.0	9.6	10.0	10.4	10.0	10.2	10.0	0.1	0.0
State Police Retirement System	28.0	27.5	27.4	27.5	14.6	15.0	9.7	10.0	10.0	10.0	9.8	10.0	0.5	0.0
Deputy Sheriffs' Retirement System	28.2	27.5	27.2	27.5	14.5	15.0	9.7	10.0	10.0	10.0	10.1	10.0	0.3	0.0
Municipal Police & Firefighter Retirement System	27.5	27.5	26.8	27.5	14.2	15.0	9.6	10.0	9.4	10.0	9.5	10.0	3.0	0.0
Municipal Model A	28.4	27.5	27.6	27.5	13.1	15.0	9.7	10.0	10.0	10.0	9.6	10.0	1.6	0.0
Insurance Assets														
Workers' Compensation Old Fund	15.5	15.0	14.8		64.0	70.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7	0.0
Workers' Comp. Self-Insured Guaranty Risk Pool	7.2	15.0	6.9	15.0	20.6		0.0	0.0	0.0	0.0	9.3	20.0	56.0	5.0
Workers' Comp. Self-Insured Security Risk Pool	2.4	15.0	2.3		6.9	45.0	0.0	0.0	0.0	0.0	3.1	20.0	85.3	5.0
Workers' Comp. Uninsured Employers Fund	15.7	15.0	15.1	15.0	39.5	40.0	0.0	0.0	0.0	0.0	19.9	20.0	9.8	10.0
Pneumoconiosis	15.6	15.0	14.9	15.0	44.6		0.0	0.0	0.0	0.0	20.4	20.0	4.5	5.0
Board of Risk & Insurance Mgmt.	15.5	15.0	14.9	15.0	44.4	45.0	0.0	0.0	0.0	0.0	20.3	20.0	4.9	5.0
Public Employees' Insurance Agency	15.4	15.0	15.0		49.3	50.0	0.0	0.0	0.0	0.0	20.3	20.0	0.0	0.0
WV Retiree Health Benefit Trust Fund	28.4	27.5	27.3	27.5	14.5	15.0	9.7	10.0	10.1	10.0	9.9	10.0	0.1	0.0
Endowment Assets														
Berkeley County Development Authority	27.7	27.5	27.0	27.5	15.0	15.0	10.0	10.0	10.1	10.0	10.1	10.0	0.1	0.0
Wildlife Fund	28.2	27.5	27.3	27.5	14.7	15.0	9.7	10.0	10.0	10.0	9.9	10.0	0.2	0.0
Prepaid Tuition Trust	28.7	27.5	22.8	22.5	46.4	50.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0
Revenue Shortfall Reserve Fund	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	15.8	15.0	15.2		69.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WV DEP Trust	33.7	32.5	32.2		14.0		0.0	0.0	0.0	0.0	20.1	20.0	0.0	0.0
WV DEP Agency	21.0	20.0	19.5	20.0	38.4	40.0	0.0	0.0	0.0	0.0	19.1	20.0	2.0	0.0

West Virginia Investment Management Board

Footnotes

As of November 30, 2015

- (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.
- (k) Security Capital Benchmark is 40% Wilshire US REIT Index, 30% Wells Fargo Hybrid & Preferred Securities REIT Index, and 30% BC REIT Bond Index.

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