



Baltimore Employees' Retirement System

Baltimore Employees'
Retirement System
Executive Summary

March 31, 2019

Total Fund Composite

Market Values

Market Value: \$1,740.3 Million and 100.0% of Fund

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	Asset Class	Market Value	3 Mo Net Cash Flows	% of Portfolio	Policy %	Policy Difference
Total Fund Composite		\$1,740,270,182	-\$36,921,174	100.0%	100.0%	\$0
Total Fixed Income Composite		\$393,053,050	-\$41,200,000	22.6%	22.0%	\$10,193,609
Mellon EB Aggregate Bond Index Fund	Core Fixed Income	\$97,465,240	-\$41,200,000	5.6%	6.0%	-\$6,950,971
Semper	MBS Fixed Income	\$70,661,115	\$0	4.1%	4.0%	\$1,050,308
PIMCO	Core Plus Fixed Income	\$78,654,045	\$0	4.5%	4.0%	\$9,043,238
Pacific Asset Management	Senior Secured Loans	\$69,094,926	\$0	4.0%	4.0%	-\$515,881
Manulife	Global Fixed Income	\$77,177,723	\$0	4.4%	4.0%	\$7,566,916
Total Domestic Equity Composite		\$484,507,695	-\$35,027,209	27.8%	27.0%	\$14,634,746
Mellon EB Large Cap SIF	Large-Cap Core	\$187,424,461	-\$9,000,000	10.8%	10.0%	\$13,397,443
Edgar Lomax	Large-Cap Value	\$106,008,457	-\$35,000,000	6.1%	6.0%	\$1,592,246
RhumbLine Advisers	Mid-Cap Growth	\$54,384,982	\$45,655,653	3.1%	3.0%	\$2,176,876
DF Dent	Mid-Cap Growth	\$54,216,600	\$45,632,975	3.1%	3.0%	\$2,008,494
Rothschild	Small-Cap Value	\$82,473,196	\$0	4.7%	5.0%	-\$4,540,313
Total International Equity Composite		\$261,390,906	-\$3,817	15.0%	14.0%	\$17,753,081
Harding Loevner LP	Non-U.S. Large-Cap Growth	\$76,118,363	-\$3,023	4.4%	3.5%	\$15,208,906
Mellon ACWI ex. USA Index	Non-U.S. Large-Cap Core	\$13,942,657	\$0	0.8%	1.0%	-\$3,460,045
Ariel Investments	Non-U.S. All-Cap Core	\$38,240,577	-\$794	2.2%	2.5%	-\$5,266,177
Mondrian	Non-U.S. Small-Cap Value	\$112,086,628	\$0	6.4%	5.0%	\$25,073,119
Lazard Emerging SC	EM Small-Cap	\$21,002,682	\$0	1.2%	2.0%	-\$13,802,722
FIS Funds Management		\$113,033,237	-\$39,261	6.5%	6.0%	\$8,617,026
Osmosis	Non-U.S. Large-Cap Core	\$11,725,874	\$0	0.7%		
Metis Global Partners	Non-U.S. Large-Cap Core	\$5,384,224	\$0	0.3%		
Ativo Capital Management	Non-U.S. Large-Cap Core	\$5,894,421	\$0	0.3%		
Redwood Investments	Non-U.S. Large-Cap Core	\$5,951,362	\$0	0.3%		
Decatur EAFE	Non-U.S. Large-Cap Core	\$15,651,400	\$0	0.9%		
Denali EAFE	Non-U.S. Large-Cap Core	\$16,979,683	\$0	1.0%		
Aubrey	Emerging Markets	\$12,246,214	-\$620	0.7%		
FIS Group	Global Core Equity	\$19,625,019	\$0	1.1%		
zzzChange Global Investments	Emerging Markets	\$14,325,334	\$0	0.8%		
zzzAlgert Coldiron International SC	Non-U.S. Small-Cap Core	\$5,193,443	\$0	0.3%		
Defensive Equity Composite		\$76,076,764	\$0	4.4%	3.0%	\$23,868,659
Neuberger Berman	Defensive Equity	\$76,076,764	\$0	4.4%	3.0%	\$23,868,659
Risk Premia Composite		\$44,637,472	\$0	2.6%	2.0%	\$9,832,068
Lombard Odier	Other Alternative	\$44,637,472	\$0	2.6%	2.0%	\$9,832,068



Total Fund Composite

Market Values

Market Value: \$1,740.3 Million and 100.0% of Fund

Ending March 31, 2019

	Asset Class	Market Value	3 Mo Net Cash Flows	% of Portfolio	Policy %	Policy Difference
Total Real Estate Composite		\$207,246,291	-\$378,858	11.9%	13.0%	-\$18,988,833
American Realty	Core Real Estate	\$107,403,943	-\$228,731	6.2%	5.0%	\$20,390,434
Barings	Core Real Estate	\$94,818,213	-\$150,126	5.4%	5.0%	\$7,804,703
Thor Equities	Value-Added Real Estate	\$2,138,433	\$0	0.1%	1.5%	-\$23,965,620
Ares Management VEF VI, L.P.	Value-Added Real Estate	\$2,885,703	\$0	0.2%	1.5%	-\$23,218,350
Private Equity Composite		\$108,750,276	\$7,161,788	6.2%	13.0%	-\$117,484,848
Abbott PE Fund III	U.S. Private Equity FoF	\$513,000	\$0	0.0%		
Abbott PE Fund V	U.S. Private Equity FoF	\$5,913,547	-\$600,000	0.3%		
Abbott PE Fund VI	U.S. Private Equity FoF	\$26,139,404	-\$1,800,000	1.5%		
Abbott Select Buyouts Partners III	LBO Private Equity FoF	\$9,859,470	-\$150,000	0.6%		
Adams Street Partnership Fund - 2012 LP	Global Divers. Private Equity FoF	\$18,202,473	\$0	1.0%		
Fairview Venture III	U.S. Private Equity FoF	\$3,872,289	-\$590,891	0.2%		
I Squared Global Infrastructure II	Global Infrastructure	\$3,803,792	-\$168,960	0.2%		
Landmark Partners XVI	Secondary Private Equity FoF	\$766,934	\$482,275	0.0%		
RCP Fund Direct Feeder	LBO Private Equity	\$1,638,761	\$0	0.1%		
RCP Fund Direct II Feeder	LBO Private Equity	\$3,382,997	-\$190,332	0.2%		
RCP Fund VII Feeder	LBO Private Equity FoF	\$14,307,047	-\$1,444,359	0.8%		
Reverence Capital Partners Opportunities Fund II	LBO Private Equity	\$2,130,287	\$2,130,287	0.1%		
RLJ Equity Partners II	LBO Private Equity	\$6,193,296	\$6,193,296	0.4%		
Siris Partners IV	LBO Private Equity	\$3,051,618	\$3,051,618	0.2%		
Summit Partners Credit Fund, LP	Mezz. Private Equity	\$1,385,700	-\$156,646	0.1%		
Summit Partners Growth Equity IX	Venture Private Equity	\$3,591,548	\$355,000	0.2%		
Warburg Pincus XII, LP	U.S. Private Equity FoF	\$3,998,113	\$50,500	0.2%		
Cash Equivalents Composite		\$51,574,491	\$32,566,184	3.0%	0.0%	\$51,574,491
BNY Mellon Cash Reserve	Cash & Equivalents	\$51,574,491	\$32,566,184	3.0%		

*Please note the following:

- \cdot Thor Equities: market value as of September 30, 2018, adjusted for capital calls/distributions.
- · Abbott Capital Fund III and V: market values as of September 30, 2018, adjusted for capital calls/distributions.
- · Abbott Select Buyouts and VI: market value as of September 30, 2018, adjusted for capital calls/distributions
- · Fairview Ventures Fund III: market value as of December 31, 2018, adjusted for capital calls/distributions.
- · RCP Fund VII Feeder: market value as of December 31, 2018; RCP Fund Direct: market value as of September 30, 2018, RCP Direct II: market value as of September 30, 2018, adjusted for capital calls/distributions.
- · Summit Partners & Summit Growth: market values as of December 31, 2018, adjusted for capital calls/distributions.
- · Adams Street 2012 Global Fund: market value as of December 31, 2018, adjusted for capital calls/distributions.
- · CBRE Global Investors, Philadelphia International, NT Takeover, Lombardia, Martin and WCM cash is in the BNY Mellon Cash Reserve.
- · Warburg Pincus: market value as of December 31, 2018, adjusted for capital calls/distributions.
- · I Squared: market value as of December 31, 2018, adjusted for capital calls/distributions.
- · Landmark: market value as of December 31, 2018, adjusted for capital calls/distributions.
- · Reverence: market value funding amount, adjusted for capital calls/distributions.
- \cdot RLJ: market value funding amount, adjusted for capital calls/distributions.
- · Siris: market value funding amount, adjusted for capital calls/distributions.
- · FIS Funds Management: market value excludes the Transition Account (\$56,265.22)



Private Equity Composite

Market Values

As of March 31, 2019

		Capital	Drawn	Remaining		Market		Since Inception	
	Vintage	Commitment	Down	Commitment	Distributed	Value	TVPI	IRR	DPI
Partnerships, as of September 30, 2018	Year	(\$)	(\$)	(\$)	(\$)	(\$)	Multiple	(%)	Multiple
Abbott Private Equity Fund III, L.P.	1999	40,000,000	38,780,000	-	65,877,572	756,540	1.7	11.7	1.7
Fairview Capital III, L.P.*	2001	-	9,918,807	-	7,673,974	-	0.8	-3.5	0.8
Abbott Private Equity Fund V, L.P.	2005	30,000,000	28,950,000	1,050,000	34,486,197	7,558,973	1.5	6.9	1.2
Fairview Ventures Fund III, L.P.	2007	5,000,000	4,920,000	80,000	5,855,708	4,439,478	2.1	14.0	1.2
Abbott Private Equity Fund VI, L.P.	2008	40,000,000	39,200,000	800,000	32,200,000	30,139,404	1.6	12.3	0.8
RCP Fund VII Feeder Fund, L.P.	2011	16,000,000	16,663,044	594,456	12,574,994	16,219,083	1.7	16.9	0.8
Summit Partners Credit Fund, L.P.	2011	10,000,000	10,330,536	1,062,584	11,474,623	1,819,162	1.3	9.1	1.1
RCP Fund Direct Feeder, L.P.	2011	4,000,000	3,294,148	705,852	8,341,065	2,006,947	3.1	47.7	2.5
Adams Street Partnership Fund - 2012, L.P.	2012	20,000,000	15,868,000	4,132,000	4,429,380	17,880,446	1.4	11.4	0.3
Abbott Select Buyouts Partners III, L.P.	2013	15,000,000	10,200,000	4,800,000	1,575,000	9,784,470	1.1	6.6	0.2
RCP Fund Direct Feeder II, L.P.	2015	4,000,000	3,266,446	733,554	997,795	4,349,293	1.6	30.2	0.3
Warburg Pincus Private Equity XII, L.P.	2015	5,000,000	3,285,000	1,715,000	108,575	3,681,954	1.2	12.4	0.0
Summit Partners Growth Equity Fund IX, L.P.	2017	5,000,000	2,369,000	3,129,681	498,681	2,306,142	1.2	35.3	0.2
ISQ Global Infrastructure Fund II	2018	15,000,000	993,328	14,006,672	-	872,520	0.9	-12.2	NM
Landmark Equity Partners XVI, L.P.	2017	10,000,000	-	10,000,000	-	185,036	NM	NM	NM
RLJ Equity Partners Fund II, L.P.	2018	20,000,000	-	20,000,000	-	-	-	-	-
Oaktree Special Situations Fund II, L.P	2019	20,000,000	-	20,000,000	-	-	-	-	-
Total Portfolio		259,000,000	188,038,309	82,809,798	186,093,564	101,999,448	1.5	10.4	1.0

*Liquidated December 2017

Total Fund Composite

Annualized Performance (Gross of Fees)

Market Value: \$1,740.3 Million and 100.0% of Fund

Ending March 31, 2019

	3 Mo	YTD	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
Total Fund Composite w/o Other	7.4%	7.4%	2.5%	3.8%	7.1%	8.5%	6.7%	6.8%	8.2%	10.3%
Policy Benchmark	7.2%	7.2%	3.3%	4.6%	7.0%	8.1%	6.2%	6.5%	7.9%	10.2%
				End	ing Marc	h 31, 201	9			
	3 Mo	YTD	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
Total Fixed Income Composite	3.1%	3.1%	3.9%	3.8%	3.2%	2.7%	2.6%	3.1%	3.0%	5.0%
BBgBarc US Aggregate TR	2.9%	2.9%	4.6%	4.5%	2.8%	2.0%	2.0%	2.7%	2.5%	3.8%
InvestorForce Public DB Total Fix Inc Gross Rank	49	49	72	58	46	51	44	33	46	47
Total Domestic Equity Composite	13.8%	13.8%	4.7%	8.5%	10.6%	13.2%	9.3%	9.7%	12.4%	15.7%
Russell 3000	14.0%	14.0%	4.7%	8.8%	11.3%	13.5%	9.9%	10.4%	12.6%	16.0%
InvestorForce Public DB US Eq Gross Rank	69	69	30	31	55	42	59	59	43	53
Total International Equity Composite	10.3%	10.3%	-4.1%	-4.7%	6.5%	8.5%	5.9%	4.1%	5.9%	10.1%
MSCI ACWI ex USA Gross	10.4%	10.4%	-1.4%	-3.7%	6.1%	8.6%	4.0%	3.0%	5.2%	9.3%
InvestorForce Public DB ex-US Eq Gross Rank	73	73	84	33	33	36	9	17	41	39
FIS Funds Management	9.7%	9.7%	-4.4%	-7.7%	2.6%	5.8%	4.1%	4.1%	7.9%	12.3%
FIS Benchmark	10.4%	10.4%	-1.4%	-3.7%	4.5%	7.8%	4.9%	5.1%	8.7%	13.2%
eV ACWI ex-US Core Equity Gross Rank	80	80	74	82	94	92	58	38	22	16
Defensive Equity Composite	7.0%	7.0%	2.2%	5.3%	4.5%					
CBOE Put Write Index	5.5%	5.5%	-2.3%	2.1%	3.0%	6.3%	5.9%	5.4%	6.4%	9.4%
50% S&P 500/50% 91 Day T-Bill	7.0%	7.0%	4.1%	6.1%	6.8%	7.4%	5.8%	5.9%	6.7%	8.1%
Risk Premia Composite	5.5%	5.5%	-0.2%							
T-Bills +5%	1.8%	1.8%	5.5%	7.2%	6.7%	6.3%	6.0%	5.8%	5.6%	5.4%
InvestorForce Public DB Hedge Funds Gross Rank	13	13	52							
Total Real Estate Composite	1.9%	1.9%	5.7%	8.0%	8.0%	8.0%	9.6%	11.0%	11.3%	8.6%
NPI	0.0%	0.0%	3.1%	4.9%	6.0%	6.4%	7.8%	8.7%	9.3%	8.3%

Ending September 30, 2018

	3 Mo	YTD	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
Private Equity Composite	4.1%	12.5%	4.1%	19.1%	16.3%	14.4%	14.1%	14.8%	14.2%	12.4%
Private Equity Benchmark	3.5%	11.5%	3.5%	17.2%	16.8%	14.0%	12.5%	9.9%	12.0%	12.7%
CPI +6%	1.6%	7.0%	1.6%	8.4%	8.4%	8.1%	7.6%	7.6%	7.6%	7.5%

Note: some closed-end funds are not included in the performance.



Investment Manager

Annualized Performance (Gross of Fees)

Market Value: \$1,740.3 Million and 100.0% of Fund

	3 Mo	YTD	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
Total Fixed Income Composite	3.1%	3.1%	3.9%	3.8%	3.2%	2.7%	2.6%	3.1%	3.0%	5.0%		
BBgBarc US Aggregate TR	2.9%	2.9%	4.6%	4.5%	2.8%	2.0%	2.0%	2.7%	2.5%	3.8%		
InvestorForce Public DB Total Fix Inc Gross Rank	49	49	72	58	46	51	44	33	46	47		
Mellon EB Aggregate Bond Index Fund	2.9%	2.9%	4.7%	4.5%	2.8%	2.0%	2.0%	2.7%	2.5%	3.8%	4.1%	Sep-08
BBgBarc US Aggregate TR	2.9%	2.9%	4.6%	4.5%	2.8%	2.0%	2.0%	2.7%	2.5%	3.8%	4.0%	Sep-08
eV US Core Fixed Inc Gross Rank	80	80	72	74	87	86	92	89	93	93	95	Sep-08
Semper	2.0%	2.0%	3.8%	4.5%	3.8%	3.9%	3.7%	4.2%	4.2%	6.4%	5.9%	Nov-97
Semper Benchmark	2.2%	2.2%	4.2%	4.4%	2.6%	1.8%	1.9%	2.6%	2.4%	3.7%	4.8%	Nov-97
eV US Core Fixed Inc Gross Rank	99	99	98	77	6	4	3	3	4	5	4	Nov-97
PIMCO	3.1%	3.1%	4.8%	4.8%	3.1%	2.3%	2.3%	2.9%	2.7%	4.5%	5.0%	Aug-08
BBgBarc US Aggregate TR	2.9%	2.9%	4.6%	4.5%	2.8%	2.0%	2.0%	2.7%	2.5%	3.8%	3.9%	Aug-08
eV US Core Fixed Inc Gross Rank	67	67	50	37	60	65	60	76	77	55	22	Aug-08
Pacific Asset Management	3.9%	3.9%	2.6%	3.5%							4.3%	Aug-17
Credit Suisse Leveraged Loans	3.8%	3.8%	2.5%	3.3%	4.0%	5.9%	4.1%	3.8%	4.6%	8.0%	4.1%	Aug-17
eV US Float-Rate Bank Loan Fixed Inc Net Rank	37	37	12	4							1	Aug-17
Manulife	4.1%	4.1%	3.8%	2.3%	2.5%	2.8%	2.5%	2.7%			3.1%	Jul-13
Barclays Multiverse	2.4%	2.4%	2.6%	-0.3%	3.3%	1.8%	2.4%	1.1%	1.4%	3.3%	1.6%	Jul-13
eV Global Fixed Inc Unhedged Gross Rank	32	32	32	34	87	52	60	38			37	Jul-13
Total Domestic Equity Composite	13.8%	13.8%	4.7%	8.5%	10.6%	13.2%	9.3%	9.7%	12.4%	15.7%		
Total Domestic Equity Composite Russell 3000	13.8% 14.0%	13.8% 14.0%	4.7% 4.7%	8.5% 8.8%	10.6% 11.3%	13.2% 13.5%	9.3% 9.9%	9.7% 10.4%	12.4% 12.6%	15.7% 16.0%	- -	
Russell 3000	14.0%	14.0%	4.7%	8.8%	11.3%	13.5%	9.9%	10.4%	12.6%	16.0%		May-06
Russell 3000 InvestorForce Public DB US Eq Gross Rank	14.0% 69	14.0% 69	4.7% 30	8.8% 31	11.3% 55	13.5% 42	9.9% 59	10.4% 59	12.6% 43	16.0% 53		May-06 <i>May-</i> 06
Russell 3000 InvestorForce Public DB US Eq Gross Rank Mellon EB Large Cap SIF	14.0% 69 14.0%	14.0% 69 14.0%	4.7% 30 5.6%	8.8% 31 9.4%	11.3% 55 11.7%	13.5% 42 13.6%	9.9% 59 10.2%	10.4% 59 10.7%	12.6% 43 12.8%	16.0% 53 16.1%	8.8%	-
Russell 3000 InvestorForce Public DB US Eq Gross Rank Mellon EB Large Cap SIF Russell 1000	14.0% 69 14.0% 14.0%	14.0% 69 14.0% 14.0%	4.7% 30 5.6% 5.5%	8.8% 31 9.4% 9.3%	11.3% 55 11.7% 11.6%	13.5% 42 13.6% 13.5%	9.9% 59 10.2% 10.1%	10.4% 59 10.7% 10.6%	12.6% 43 12.8% 12.8%	16.0% 53 16.1% 16.0%	8.8% 8.8%	May-06
Russell 3000 InvestorForce Public DB US Eq Gross Rank Mellon EB Large Cap SIF Russell 1000 eV US Large Cap Core Equity Gross Rank	14.0% 69 14.0% 14.0% 26	14.0% 69 14.0% 14.0% 26	4.7% 30 5.6% 5.5% 42	8.8% 31 9.4% 9.3% 33	11.3% 55 11.7% 11.6% 40	13.5% 42 13.6% 13.5% 34	9.9% 59 10.2% 10.1% 36	10.4% 59 10.7% 10.6% 37	12.6% 43 12.8% 12.8% 41	16.0% 53 16.1% 16.0% 31	8.8% 8.8% 60 10.4%	May-06 May-06
Russell 3000 InvestorForce Public DB US Eq Gross Rank Mellon EB Large Cap SIF Russell 1000 eV US Large Cap Core Equity Gross Rank Edgar Lomax	14.0% 69 14.0% 14.0% 26	14.0% 69 14.0% 14.0% 26 9.8%	4.7% 30 5.6% 5.5% 42 8.4%	8.8% 31 9.4% 9.3% 33	11.3% 55 11.7% 11.6% 40 10.9%	13.5% 42 13.6% 13.5% 34 12.8%	9.9% 59 10.2% 10.1% 36 9.9%	10.4% 59 10.7% 10.6% 37 9.9%	12.6% 43 12.8% 12.8% 41 12.3%	16.0% 53 16.1% 16.0% 31 16.3%	8.8% 8.8% 60 10.4%	May-06 May-06 Dec-92
Russell 3000 InvestorForce Public DB US Eq Gross Rank Mellon EB Large Cap SIF Russell 1000 eV US Large Cap Core Equity Gross Rank Edgar Lomax S&P 500 Value	14.0% 69 14.0% 14.0% 26 9.8% 12.2%	14.0% 69 14.0% 14.0% 26 9.8% 12.2%	4.7% 30 5.6% 5.5% 42 8.4% 4.5%	8.8% 31 9.4% 9.3% 33 10.8% 5.9%	11.3% 55 11.7% 11.6% 40 10.9% 6.8%	13.5% 42 13.6% 13.5% 34 12.8% 10.6%	9.9% 59 10.2% 10.1% 36 9.9% 7.8%	10.4% 59 10.7% 10.6% 37 9.9% 8.0%	12.6% 43 12.8% 12.8% 41 12.3% 11.0%	16.0% 53 16.1% 16.0% 31 16.3% 14.5%	8.8% 8.8% 60 10.4% 8.9% 9.7%	May-06 May-06 Dec-92 Dec-92
Russell 3000 InvestorForce Public DB US Eq Gross Rank Mellon EB Large Cap SIF Russell 1000 eV US Large Cap Core Equity Gross Rank Edgar Lomax S&P 500 Value Russell 1000 Value	14.0% 69 14.0% 14.0% 26 9.8% 12.2% 11.9%	14.0% 69 14.0% 14.0% 26 9.8% 12.2% 11.9%	4.7% 30 5.6% 5.5% 42 8.4% 4.5% 4.4%	8.8% 31 9.4% 9.3% 33 10.8% 5.9%	11.3% 55 11.7% 11.6% 40 10.9% 6.8% 6.3%	13.5% 42 13.6% 13.5% 34 12.8% 10.6% 10.5%	9.9% 59 10.2% 10.1% 36 9.9% 7.8% 7.3%	10.4% 59 10.7% 10.6% 37 9.9% 8.0% 7.7%	12.6% 43 12.8% 12.8% 41 12.3% 11.0% 11.1%	16.0% 53 16.1% 16.0% 31 16.3% 14.5%	8.8% 8.8% 60 10.4% 8.9% 9.7%	May-06 May-06 Dec-92 Dec-92 Dec-92
Russell 3000 InvestorForce Public DB US Eq Gross Rank Mellon EB Large Cap SIF Russell 1000 eV US Large Cap Core Equity Gross Rank Edgar Lomax S&P 500 Value Russell 1000 Value eV US Large Cap Value Equity Gross Rank	14.0% 69 14.0% 14.0% 26 9.8% 12.2% 11.9% 92	14.0% 69 14.0% 26 9.8% 12.2% 11.9% 92	4.7% 30 5.6% 5.5% 42 8.4% 4.5% 4.4%	8.8% 31 9.4% 9.3% 33 10.8% 5.9%	11.3% 55 11.7% 11.6% 40 10.9% 6.8% 6.3%	13.5% 42 13.6% 13.5% 34 12.8% 10.6% 10.5% 12	9.9% 59 10.2% 10.1% 36 9.9% 7.8% 7.3% 11	10.4% 59 10.7% 10.6% 37 9.9% 8.0% 7.7%	12.6% 43 12.8% 12.8% 41 12.3% 11.0% 11.1%	16.0% 53 16.1% 16.0% 31 16.3% 14.5% 13	8.8% 8.8% 60 10.4% 8.9% 9.7% 43	May-06 May-06 Dec-92 Dec-92 Dec-92 Dec-92
Russell 3000 InvestorForce Public DB US Eq Gross Rank Mellon EB Large Cap SIF Russell 1000 eV US Large Cap Core Equity Gross Rank Edgar Lomax S&P 500 Value Russell 1000 Value eV US Large Cap Value Equity Gross Rank RhumbLine Advisers	14.0% 69 14.0% 14.0% 26 9.8% 12.2% 11.9% 92	14.0% 69 14.0% 26 9.8% 12.2% 11.9% 92	4.7% 30 5.6% 5.5% 42 8.4% 4.5% 4.4% 8	8.8% 31 9.4% 9.3% 33 10.8% 5.9% 5.7% 7	11.3% 55 11.7% 11.6% 40 10.9% 6.8% 6.3% 10	13.5% 42 13.6% 13.5% 34 12.8% 10.6% 10.5% 12	9.9% 59 10.2% 10.1% 36 9.9% 7.8% 7.3% 11	10.4% 59 10.7% 10.6% 37 9.9% 8.0% 7.7% 14	12.6% 43 12.8% 12.8% 41 12.3% 11.0% 11.1% 23	16.0% 53 16.1% 16.0% 31 16.3% 14.5% 13	8.8% 8.8% 60 10.4% 8.9% 9.7% 43	May-06 May-06 Dec-92 Dec-92 Dec-92 Dec-92 Jan-19
Russell 3000 InvestorForce Public DB US Eq Gross Rank Mellon EB Large Cap SIF Russell 1000 eV US Large Cap Core Equity Gross Rank Edgar Lomax S&P 500 Value Russell 1000 Value eV US Large Cap Value Equity Gross Rank RhumbLine Advisers Russell MidCap Growth	14.0% 69 14.0% 14.0% 26 9.8% 12.2% 11.9% 92 19.6%	14.0% 69 14.0% 26 9.8% 12.2% 11.9% 92 19.6%	4.7% 30 5.6% 5.5% 42 8.4% 4.5% 4.4% 8	8.8% 31 9.4% 9.3% 33 10.8% 5.9% 5.7% 7	11.3% 55 11.7% 11.6% 40 10.9% 6.8% 6.3% 10	13.5% 42 13.6% 13.5% 34 12.8% 10.6% 10.5% 12	9.9% 59 10.2% 10.1% 36 9.9% 7.8% 7.3% 11	10.4% 59 10.7% 10.6% 37 9.9% 8.0% 7.7% 14	12.6% 43 12.8% 12.8% 41 12.3% 11.0% 11.1% 23	16.0% 53 16.1% 16.0% 31 16.3% 14.5% 13	8.8% 8.8% 60 10.4% 8.9% 9.7% 43 19.6%	May-06 May-06 Dec-92 Dec-92 Dec-92 Dec-92 Jan-19
Russell 3000 InvestorForce Public DB US Eq Gross Rank Mellon EB Large Cap SIF Russell 1000 eV US Large Cap Core Equity Gross Rank Edgar Lomax S&P 500 Value Russell 1000 Value eV US Large Cap Value Equity Gross Rank RhumbLine Advisers Russell MidCap Growth eV US Mid Cap Growth Equity Gross Rank	14.0% 69 14.0% 26 9.8% 12.2% 11.9% 92 19.6% 44	14.0% 69 14.0% 26 9.8% 12.2% 11.9% 92 19.6% 44	4.7% 30 5.6% 5.5% 42 8.4% 4.5% 4.4% 8	8.8% 31 9.4% 9.3% 33 10.8% 5.9% 5.7% 7	11.3% 55 11.7% 11.6% 40 10.9% 6.8% 6.3% 10	13.5% 42 13.6% 13.5% 34 12.8% 10.6% 12 15.1%	9.9% 59 10.2% 10.1% 36 9.9% 7.8% 7.3% 11	10.4% 59 10.7% 10.6% 37 9.9% 8.0% 7.7% 14 	12.6% 43 12.8% 41 12.3% 11.0% 23 13.0%	16.0% 53 16.1% 16.0% 31 16.3% 14.5% 13 17.6%	8.8% 8.8% 60 10.4% 8.9% 9.7% 43 19.6% 19.6%	May-06 May-06 Dec-92 Dec-92 Dec-92 Jan-19 Jan-19
Russell 3000 InvestorForce Public DB US Eq Gross Rank Mellon EB Large Cap SIF Russell 1000 eV US Large Cap Core Equity Gross Rank Edgar Lomax S&P 500 Value Russell 1000 Value eV US Large Cap Value Equity Gross Rank RhumbLine Advisers Russell MidCap Growth eV US Mid Cap Growth Equity Gross Rank DF Dent	14.0% 69 14.0% 14.0% 26 9.8% 12.2% 11.9% 92 19.6% 44	14.0% 69 14.0% 26 9.8% 12.2% 11.9% 92 19.6% 44 19.3%	4.7% 30 5.6% 5.5% 42 8.4% 4.5% 4.4% 8	8.8% 31 9.4% 9.3% 33 10.8% 5.9% 5.7% 7	11.3% 55 11.7% 11.6% 40 10.9% 6.8% 6.3% 10 	13.5% 42 13.6% 13.5% 34 12.8% 10.6% 12 15.1%	9.9% 59 10.2% 10.1% 36 9.9% 7.8% 7.3% 11 9.7%	10.4% 59 10.7% 10.6% 37 9.9% 8.0% 7.7% 14 	12.6% 43 12.8% 41 12.3% 11.0% 23 13.0% 	16.0% 53 16.1% 16.0% 31 16.3% 14.5% 13 	8.8% 8.8% 60 10.4% 8.9% 9.7% 43 19.6% 44	May-06 May-06 Dec-92 Dec-92 Dec-92 Jan-19 Jan-19 Jan-19
Russell 3000 InvestorForce Public DB US Eq Gross Rank Mellon EB Large Cap SIF Russell 1000 eV US Large Cap Core Equity Gross Rank Edgar Lomax S&P 500 Value Russell 1000 Value eV US Large Cap Value Equity Gross Rank RhumbLine Advisers Russell MidCap Growth eV US Mid Cap Growth Equity Gross Rank DF Dent Russell MidCap Growth	14.0% 69 14.0% 14.0% 26 9.8% 12.2% 11.9% 92 19.6% 44 19.3% 19.6%	14.0% 69 14.0% 26 9.8% 12.2% 11.9% 92 19.6% 44 19.3% 19.6%	4.7% 30 5.6% 5.5% 42 8.4% 4.5% 4.4% 8	8.8% 31 9.4% 9.3% 33 10.8% 5.9% 5.7% 7	11.3% 55 11.7% 11.6% 40 10.9% 6.8% 6.3% 10 	13.5% 42 13.6% 13.5% 34 12.8% 10.6% 12 15.1%	9.9% 59 10.2% 10.1% 36 9.9% 7.8% 7.3% 11 9.7%	10.4% 59 10.7% 10.6% 37 9.9% 8.0% 7.7% 14 	12.6% 43 12.8% 41 12.3% 11.0% 23 13.0% 	16.0% 53 16.1% 16.0% 31 16.3% 14.5% 13 17.6%	8.8% 8.8% 60 10.4% 8.9% 9.7% 43 19.6% 44 19.3%	May-06 May-06 Dec-92 Dec-92 Dec-92 Jan-19 Jan-19 Jan-19 Jan-19
Russell 3000 InvestorForce Public DB US Eq Gross Rank Mellon EB Large Cap SIF Russell 1000 eV US Large Cap Core Equity Gross Rank Edgar Lomax S&P 500 Value Russell 1000 Value eV US Large Cap Value Equity Gross Rank RhumbLine Advisers Russell MidCap Growth eV US Mid Cap Growth Equity Gross Rank DF Dent Russell MidCap Growth eV US Mid Cap Growth Equity Gross Rank	14.0% 69 14.0% 14.0% 26 9.8% 12.2% 11.9% 92 19.6% 44 19.3% 19.6% 47	14.0% 69 14.0% 26 9.8% 12.2% 11.9% 92 19.6% 44 19.3% 19.6% 47	4.7% 30 5.6% 5.5% 42 8.4% 4.5% 4.4% 8	8.8% 31 9.4% 9.3% 33 10.8% 5.9% 5.7% 7 11.5%	11.3% 55 11.7% 11.6% 40 10.9% 6.8% 6.3% 10 15.6% 	13.5% 42 13.6% 13.5% 34 12.8% 10.6% 10.5% 12 15.1% 	9.9% 59 10.2% 10.1% 36 9.9% 7.8% 7.3% 11 9.7% 9.7%	10.4% 59 10.7% 10.6% 37 9.9% 8.0% 7.7% 14 10.9% 	12.6% 43 12.8% 41 12.3% 11.0% 23 13.0% 13.0%	16.0% 53 16.1% 16.0% 31 16.3% 14.5% 13 	8.8% 8.8% 60 10.4% 8.9% 9.7% 43 19.6% 44 19.3% 19.6% 47	May-06 May-06 Dec-92 Dec-92 Dec-92 Jan-19 Jan-19 Jan-19 Jan-19 Jan-19
Russell 3000 InvestorForce Public DB US Eq Gross Rank Mellon EB Large Cap SIF Russell 1000 eV US Large Cap Core Equity Gross Rank Edgar Lomax S&P 500 Value Russell 1000 Value eV US Large Cap Value Equity Gross Rank RhumbLine Advisers Russell MidCap Growth eV US Mid Cap Growth Equity Gross Rank DF Dent Russell MidCap Growth eV US Mid Cap Growth Equity Gross Rank Rothschild	14.0% 69 14.0% 14.0% 26 9.8% 12.2% 11.9% 92 19.6% 44 19.3% 19.6% 47	14.0% 69 14.0% 26 9.8% 12.2% 11.9% 92 19.6% 44 19.3% 19.6% 47	4.7% 30 5.6% 5.5% 42 8.4% 4.5% 4.4% 8 8.1% 8.1%	8.8% 31 9.4% 9.3% 33 10.8% 5.9% 5.7% 7 11.5%	11.3% 55 11.7% 11.6% 40 10.9% 6.8% 6.3% 10 15.6% 15.6% 1.9%	13.5% 42 13.6% 13.5% 34 12.8% 10.6% 10.5% 12 15.1% 15.1%	9.9% 59 10.2% 10.1% 36 9.9% 7.8% 7.3% 11 9.7% 9.7%	10.4% 59 10.7% 10.6% 37 9.9% 8.0% 7.7% 14 10.9% 6.2%	12.6% 43 12.8% 41 12.3% 11.0% 11.1% 23 13.0% 13.0%	16.0% 53 16.1% 16.0% 31 16.3% 14.5% 13 17.6% 17.6%	8.8% 8.8% 60 10.4% 8.9% 9.7% 43 19.6% 44 19.3% 19.6% 47 11.2% 9.3%	May-06 May-06 Dec-92 Dec-92 Dec-92 Jan-19 Jan-19 Jan-19 Jan-19 Jan-19 Oct-96

Investment Manager

Annualized Performance (Gross of Fees)

Market Value: \$1,740.3 Million and 100.0% of Fund

	3 Mo	YTD	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
Total International Equity Composite	10.3%	10.3%	-4.1%	-4.7%	6.5%	8.5%	5.9%	4.1%	5.9%	10.1%		
MSCI ACWI ex USA Gross	10.4%	10.4%	-1.4%	-3.7%	6.1%	8.6%	4.0%	3.0%	5.2%	9.3%		
InvestorForce Public DB ex-US Eq Gross Rank	73	73	84	33	33	36	9	17	41	39		
Harding Loevner LP	11.6%	11.6%	-3.1%	-3.5%	7.6%	10.3%	6.4%				6.4%	Mar-15
MSCI ACWI ex USA Gross	10.4%	10.4%	-1.4%	-3.7%	6.1%	8.6%	4.0%	3.0%	5.2%	9.3%	4.0%	Mar-15
eV All ACWI ex-US Equity Gross Rank	42	42	55	33	37	23	25				25	Mar-15
Mellon ACWI ex. USA Index	10.4%	10.4%	-1.5%	-3.7%	6.0%	8.5%	3.8%	2.9%			4.3%	May-13
MSCI ACWI ex USA Gross	10.4%	10.4%	-1.4%	-3.7%	6.1%	8.6%	4.0%	3.0%	5.2%	9.3%	4.5%	May-13
eV All ACWI ex-US Equity Gross Rank	64	64	33	35	56	48	70	70			83	May-13
Ariel Investments	7.9%	7.9%	0.0%	-2.9%							-3.4%	Feb-18
MSCI ACWI ex USA Gross	10.4%	10.4%	-1.4%	-3.7%	6.1%	8.6%	4.0%	3.0%	5.2%	9.3%	-5.0%	Feb-18
eV ACWI ex-US Large Cap Core Eq Net Rank	93	93	11	13							11	Feb-18
Mondrian	10.0%	10.0%	-5.9%	-3.7%	7.4%	7.6%	6.7%	4.5%	7.6%		8.0%	Sep-10
MSCI World ex USA Small Cap	10.9%	10.9%	-7.8%	-8.7%	5.2%	7.3%	5.9%	3.7%	7.0%	12.2%	6.7%	Sep-10
eV ACWI ex-US Small Cap Equity Gross Rank	72	72	30	14	50	72	52	62	79		56	Sep-10
Lazard Emerging SC	11.0%	11.0%	-6.4%	-16.4%	-1.8%	5.2%	2.8%	1.8%			0.4%	Apr-13
MSCI Emerging Markets Small Cap	7.8%	7.8%	-4.2%	-12.4%	1.9%	5.9%	1.9%	1.8%	2.6%	10.4%	1.2%	Apr-13
eV Emg Mkts Small Cap Equity Gross Rank	28	28	79	88	95	92	83	86			97	Apr-13
FIS Funds Management	9.7%	9.7%	-4.4%	-7.7%	2.6%	5.8%	4.1%	4.1%	7.9%	12.3%	-	
FIS Benchmark	10.4%	10.4%	-1.4%	-3.7%	4.5%	7.8%	4.9%	5.1%	8.7%	13.2%		
eV ACWI ex-US Core Equity Gross Rank	80	80	74	82	94	92	58	38	22	16		
Osmosis	8.3%	8.3%	-8.9%	-9.4%	-						-4.7%	Oct-17
MSCI EAFE Gross	10.1%	10.1%	-2.3%	-3.2%	5.6%	7.8%	3.7%	2.8%	6.1%	9.5%	-1.4%	Oct-17
eV EAFE Large Cap Core Gross Rank	94	94	97	95							86	Oct-17
Metis Global Partners	8.1%	8.1%	-7.4%	-10.5%	-						-0.2%	Apr-17
MSCI EAFE Gross	10.1%	10.1%	-2.3%	-3.2%	5.6%	7.8%	3.7%	2.8%	6.1%	9.5%	4.5%	Apr-17
eV EAFE Large Cap Core Gross Rank	95	95	97	99							99	Apr-17
Ativo Capital Management	10.0%	10.0%	-2.8%	-1.6%	6.7%	5.8%	5.0%				4.7%	Feb-15
MSCI EAFE + Canada	10.4%	10.4%	-2.4%	-3.1%	5.0%	7.3%	2.7%	1.9%	5.0%	8.7%	2.2%	Feb-15
eV EAFE Large Cap Equity Gross Rank	58	58	48	25	31	84	22				19	Feb-15
Redwood Investments	11.0%	11.0%	-4.7%	-3.3%				-			8.3%	Apr-17
MSCI EAFE + Canada	10.4%	10.4%	-2.4%	-3.1%	5.0%	7.3%	2.7%	1.9%	5.0%	8.7%	4.1%	Apr-17
eV EAFE Large Cap Core Gross Rank	38	38	78	37							6	Apr-17
Decatur EAFE	9.8%	9.8%	-4.1%	-6.5%							-4.4%	Oct-17
MSCI EAFE + Canada	10.4%	10.4%	-2.4%	-3.1%	5.0%	7.3%	2.7%	1.9%	5.0%	8.7%	-1.7%	Oct-17
eV EAFE Large Cap Core Gross Rank	74	74	70	75							82	Oct-17
Denali EAFE	8.1%	8.1%	-0.5%	-3.2%	-			-			-1.3%	Oct-17
MSCI EAFE + Canada	10.4%	10.4%	-2.4%	-3.1%	5.0%	7.3%	2.7%	1.9%	5.0%	8.7%	-1.7%	Oct-17
eV EAFE Large Cap Core Gross Rank	95	95	17	37							38	Oct-17



Investment Manager

Annualized Performance (Gross of Fees)

Market Value: \$1,740.3 Million and 100.0% of Fund

	3 Mo	YTD	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
Aubrey	13.8%	13.8%	-3.7%	-7.6%							0.7%	Oct-17
MSCI Emerging Markets Gross	10.0%	10.0%	0.9%	-7.1%	7.9%	11.1%	4.9%	4.1%	3.1%	9.3%	-1.5%	Oct-17
eV Emg Mkts Equity Gross Rank	15	15	87	48							22	Oct-17
FIS Group	10.6%	10.6%	-4.7%	-8.3%	2.2%	4.7%	1.9%				2.2%	Feb-15
MSCI ACWI	12.2%	12.2%	2.1%	2.6%	8.6%	10.7%	6.7%	6.5%	8.4%	12.0%	6.2%	Feb-15
eV Global Core Equity Gross Rank	81	81	92	99	99	99	99				99	Feb-15
zzzChange Global Investments	7.5%	7.5%	-2.5%	-12.1%							-2.1%	Apr-17
MSCI Emerging Markets Gross	10.0%	10.0%	0.9%	-7.1%	7.9%	11.1%	4.9%	4.1%	3.1%	9.3%	7.1%	Apr-17
eV Emg Mkts Equity Gross Rank	87	87	78	87							99	Apr-17
zzzAlgert Coldiron International SC	11.1%	11.1%	-9.8%	-14.3%	2.4%	6.7%	6.5%	6.1%			6.0%	Feb-14
MSCI EAFE Small Cap Gross	10.8%	10.8%	-7.7%	-9.0%	6.2%	7.9%	6.8%	4.8%	8.6%	13.1%	4.7%	Feb-14
eV EAFE Small Cap Equity Gross Rank	36	36	59	85	90	64	56	32			27	Feb-14
Defensive Equity Composite	7.0%	7.0%	2.2%	5.3%	4.5%	-		-	-			
CBOE Put Write Index	5.5%	5.5%	-2.3%	2.1%	3.0%	6.3%	5.9%	5.4%	6.4%	9.4%		
50% S&P 500/50% 91 Day T-Bill	7.0%	7.0%	4.1%	6.1%	6.8%	7.4%	5.8%	5.9%	6.7%	8.1%		
Neuberger Berman	7.0%	7.0%	2.3%	5.4%	4.5%			-			4.6%	Feb-17
CBOE Put Write Index	5.5%	5.5%	-2.3%	2.1%	3.0%	6.3%	5.9%	5.4%	6.4%	9.4%	3.1%	Feb-17
50% S&P 500/50% 91 Day T-Bill	7.0%	7.0%	4.1%	6.1%	6.8%	7.4%	5.8%	5.9%	6.7%	8.1%	6.5%	Feb-17
Risk Premia Composite	5.5%	5.5%	-0.2%	-								
T-Bills +5%	1.8%	1.8%	5.5%	7.2%	6.7%	6.3%	6.0%	5.8%	5.6%	5.4%		
InvestorForce Public DB Hedge Funds Gross Rank	13	13	52									
Lombard Odier	5.5%	5.5%									-0.1%	Jul-18
T-Bills + 5%	1.8%	1.8%	5.5%	7.2%	6.7%	6.3%	6.0%	5.8%	5.6%	5.4%	4.9%	Jul-18
Total Real Estate Composite	1.9%	1.9%	5.7%	8.0%	8.0%	8.0%	9.6%	11.0%	11.3%	8.6%		
NPI	0.0%	0.0%	3.1%	4.9%	6.0%	6.4%	7.8%	8.7%	9.3%	8.3%		,
CPI +5%	2.4%	2.4%	4.6%	6.9%	7.2%	7.3%	6.9%	6.5%	6.5%	6.9%		
InvestorForce Public DB Real Estate Priv Gross Rank	18	18	25	32	31	59	25	16	21	40		
American Realty	1.7%	1.7%	6.0%	8.2%	8.1%	7.7%	9.1%	9.8%	10.4%	7.8%	5.1%	Jul-08
NPI	0.0%	0.0%	3.1%	4.9%	6.0%	6.4%	7.8%	8.7%	9.3%	8.3%	6.1%	Jul-08
Barings	2.1%	2.1%	5.4%	7.7%	7.9%	8.0%	9.5%	9.9%			9.9%	Jul-12
NPI	0.0%	0.0%	3.1%	4.9%	6.0%	6.4%	7.8%	8.7%	9.3%	8.3%	9.3%	Jul-12