



Quarterly Investment Performance Analysis

Montana Board of Investments

Period Ended: March 31, 2017



Montana Board of Investments
Comparative Performance
Retirement Plans

As of March 31, 2017

	QTD/ CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012
Public Employees' Retirement - Net	4.12	8.65	10.37	6.42	8.66	8.94	5.52	7.32	1.86	8.07	17.38	13.24
Public Employees' Benchmark	4.37	9.18	11.23	7.00	9.49	9.46	5.89	9.09	1.40	9.08	17.94	14.88
Difference	-0.25	-0.53	-0.86	-0.58	-0.83	-0.52	-0.37	-1.77	0.46	-1.01	-0.56	-1.64
Public Employees' Retirement - Gross	4.24	8.99	10.86	6.90	9.18	9.49	6.05	7.78	2.31	8.61	17.96	13.83
All Public Plans > \$3B Total Fund Median	4.28	9.06	11.07	5.48	7.66	7.96	5.37	7.94	0.34	6.81	14.65	13.28
Rank	55	53	59	2	1	1	8	54	8	8	6	34
Teachers' Retirement - Net	4.10	8.63	10.35	6.43	8.67	8.96	5.52	7.33	1.86	8.09	17.38	13.24
Teachers' Benchmark	4.36	9.17	11.22	7.00	9.49	9.47	5.89	9.08	1.40	9.11	17.94	14.89
Difference	-0.26	-0.54	-0.87	-0.57	-0.82	-0.51	-0.37	-1.75	0.46	-1.02	-0.56	-1.65
Teachers' Retirement - Gross	4.22	8.97	10.84	6.91	9.19	9.50	6.05	7.80	2.32	8.63	17.96	13.84
All Public Plans > \$3B Total Fund Median	4.28	9.06	11.07	5.48	7.66	7.96	5.37	7.94	0.34	6.81	14.65	13.28
Rank	58	53	60	2	1	1	8	54	8	8	6	33
Police Retirement - Net	4.11	8.63	10.35	6.42	8.67	8.92	5.48	7.32	1.86	8.07	17.41	13.23
Police Benchmark	4.36	9.17	11.22	7.00	9.47	9.42	5.84	9.08	1.41	9.10	17.92	14.80
Difference	-0.25	-0.54	-0.87	-0.58	-0.80	-0.50	-0.36	-1.76	0.45	-1.03	-0.51	-1.57
Police Retirement - Gross	4.23	8.97	10.83	6.90	9.18	9.46	6.01	7.78	2.31	8.61	18.00	13.78
All Public Plans > \$3B Total Fund Median	4.28	9.06	11.07	5.48	7.66	7.96	5.37	7.94	0.34	6.81	14.65	13.28
Rank	57	53	60	2	1	1	12	54	8	8	5	37

Net performance shown is net of all manager fees and expenses (Net-All). All Public Plans > \$3B Total Fund Median is reported gross of fees. Benchmark returns reflect unmanaged indices which are not impacted by management fees. Fiscal year ends on June 30.



Montana Board of Investments
Comparative Performance
Retirement Plans

As of March 31, 2017

	QTD/ CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012
Firefighters' Retirement - Net	4.11	8.64	10.36	6.42	8.67	8.92	5.51	7.32	1.87	8.07	17.41	13.22
Firefighters' Benchmark	4.37	9.18	11.23	7.00	9.47	9.42	5.86	9.09	1.41	9.10	17.92	14.80
Difference	-0.26	-0.54	-0.87	-0.58	-0.80	-0.50	-0.35	-1.77	0.46	-1.03	-0.51	-1.58
Firefighters' Retirement - Gross	4.23	8.98	10.84	6.90	9.18	9.46	6.04	7.78	2.32	8.61	17.99	13.81
All Public Plans > \$3B Total Fund Median	4.28	9.06	11.07	5.48	7.66	7.96	5.37	7.94	0.34	6.81	14.65	13.28
Rank	56	53	60	2	1	1	9	54	8	8	5	35
Sheriffs' Retirement - Net	4.12	8.66	10.38	6.42	8.66	8.92	5.51	7.33	1.86	8.05	17.35	13.19
Sheriffs' Benchmark	4.37	9.19	11.25	7.00	9.48	9.44	5.89	9.10	1.40	9.07	17.91	14.84
Difference	-0.25	-0.53	-0.87	-0.58	-0.82	-0.52	-0.38	-1.77	0.46	-1.02	-0.56	-1.65
Sheriffs' Retirement - Gross	4.24	9.00	10.87	6.90	9.17	9.46	6.04	7.79	2.32	8.59	17.93	13.79
All Public Plans > \$3B Total Fund Median	4.28	9.06	11.07	5.48	7.66	7.96	5.37	7.94	0.34	6.81	14.65	13.28
Rank	54	53	59	2	1	1	9	54	8	8	6	37
Highway Patrol Retirement - Net	4.11	8.64	10.35	6.42	8.67	8.94	5.52	7.30	1.87	8.08	17.38	13.24
Highway Patrol Benchmark	4.36	9.17	11.22	7.00	9.49	9.46	5.89	9.09	1.41	9.10	17.94	14.88
Difference	-0.25	-0.53	-0.87	-0.58	-0.82	-0.52	-0.37	-1.79	0.46	-1.02	-0.56	-1.64
Highway Patrol Retirement - Gross	4.23	8.98	10.84	6.90	9.18	9.49	6.04	7.77	2.32	8.62	17.96	13.84
All Public Plans > \$3B Total Fund Median	4.28	9.06	11.07	5.48	7.66	7.96	5.37	7.94	0.34	6.81	14.65	13.28
Rank	57	53	60	2	1	1	8	54	8	8	6	33

Net performance shown is net of all manager fees and expenses (Net-All). All Public Plans > \$3B Total Fund Median is reported gross of fees. Benchmark returns reflect unmanaged indices which are not impacted by management fees. Fiscal year ends on June 30.

Montana Board of Investments
Comparative Performance
Retirement Plans

As of March 31, 2017

	QTD/ CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012
Game Wardens' Retirement - Net	4.13	8.67	10.38	6.42	8.65	8.92	5.51	7.31	1.88	8.03	17.34	13.20
Game Wardens' Benchmark	4.38	9.21	11.26	7.01	9.48	9.44	5.89	9.11	1.41	9.06	17.90	14.85
Difference	-0.25	-0.54	-0.88	-0.59	-0.83	-0.52	-0.38	-1.80	0.47	-1.03	-0.56	-1.65
Game Wardens' Retirement - Gross	4.25	9.01	10.87	6.90	9.17	9.46	6.03	7.78	2.33	8.57	17.92	13.79
All Public Plans > \$3B Total Fund Median	4.28	9.06	11.07	5.48	7.66	7.96	5.37	7.94	0.34	6.81	14.65	13.28
Rank	53	52	59	2	1	1	9	54	8	8	6	37
Judges' Retirement - Net	4.12	8.66	10.38	6.42	8.66	8.93	5.52	7.32	1.86	8.06	17.36	13.20
Judges' Benchmark	4.38	9.20	11.25	7.00	9.48	9.45	5.90	9.10	1.40	9.08	17.92	14.84
Difference	-0.26	-0.54	-0.87	-0.58	-0.82	-0.52	-0.38	-1.78	0.46	-1.02	-0.56	-1.64
Judges' Retirement - Gross	4.24	9.00	10.86	6.90	9.18	9.47	6.05	7.79	2.32	8.60	17.94	13.79
All Public Plans > \$3B Total Fund Median	4.28	9.06	11.07	5.48	7.66	7.96	5.37	7.94	0.34	6.81	14.65	13.28
Rank	54	53	59	2	1	1	8	54	8	8	6	36
Volunteer Firefighters' Retirement - Net	4.10	8.63	10.18	6.38	8.64	8.94	5.50	7.16	1.91	8.09	17.42	13.18
Volunteer Firefighters' Benchmark	4.35	9.16	11.21	7.00	9.48	9.46	5.88	9.08	1.42	9.11	17.97	14.79
Difference	-0.25	-0.53	-1.03	-0.62	-0.84	-0.52	-0.38	-1.92	0.49	-1.02	-0.55	-1.61
Volunteer Firefighters' Retirement - Gross	4.22	8.97	10.66	6.86	9.16	9.48	6.03	7.63	2.36	8.63	18.00	13.77
All Public Plans > \$3B Total Fund Median	4.28	9.06	11.07	5.48	7.66	7.96	5.37	7.94	0.34	6.81	14.65	13.28
Rank	60	53	63	2	2	1	10	62	8	8	5	37

Net performance shown is net of all manager fees and expenses (Net-All). All Public Plans > \$3B Total Fund Median is reported gross of fees. Benchmark returns reflect unmanaged indices which are not impacted by management fees. Fiscal year ends on June 30.

**Montana Board of Investments
Asset Allocation by Segment
Retirement Plans**

As of March 31, 2017

	Domestic Equity		International Equity		Domestic Fixed Income		Real Estate		Private Equity		Cash Equivalent		Total Fund	
	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%
Public Employees' Retirement	1,960,474,093	36.74	898,948,412	16.85	1,285,519,546	24.09	431,119,616	8.08	588,599,277	11.03	171,622,254	3.22	5,336,283,198	50.07
Teachers' Retirement	1,410,039,295	36.79	646,547,641	16.87	924,589,239	24.12	310,075,871	8.09	423,340,327	11.05	118,081,241	3.08	3,832,673,613	35.96
Police Retirement	133,319,471	36.84	61,132,439	16.89	87,420,070	24.15	29,317,714	8.10	40,026,944	11.06	10,696,963	2.96	361,913,600	3.40
Firefighters' Retirement	136,938,197	36.82	62,791,441	16.88	89,792,933	24.14	30,113,500	8.10	41,113,403	11.05	11,191,232	3.01	371,940,705	3.49
Sheriffs' Retirement	118,380,758	36.84	54,283,469	16.89	77,624,459	24.16	26,032,597	8.10	35,541,865	11.06	9,449,496	2.94	321,312,644	3.01
Highway Patrol Retirement	49,897,406	36.51	22,879,223	16.74	32,718,663	23.94	10,972,732	8.03	14,980,834	10.96	5,237,513	3.83	136,686,372	1.28
Game Wardens' Retirement	62,214,012	36.71	28,529,033	16.83	40,794,876	24.07	13,681,206	8.07	18,678,762	11.02	5,588,012	3.30	169,485,902	1.59
Judges' Retirement	34,465,115	36.75	15,803,703	16.85	22,599,417	24.10	7,579,073	8.08	10,347,572	11.03	2,983,352	3.18	93,778,230	0.88
Volunteer Firefighters' Retirement	12,488,887	36.69	5,726,113	16.82	8,189,199	24.06	2,746,382	8.07	3,749,566	11.02	1,134,546	3.33	34,034,693	0.32
Retirement Plans Total Fund Composite	3,918,217,233	36.76	1,796,641,474	16.86	2,569,248,401	24.11	861,638,691	8.08	1,176,378,549	11.04	335,984,608	3.15	10,658,108,957	100.00

March 31, 2017 : \$10,658,108,957



Segments

- Domestic Equity
- International Equity
- Domestic Fixed Income
- Real Estate
- Private Equity
- Cash Equivalent

**Market Value
(\$)**

3,918,217,233
1,796,641,474
2,569,248,401
861,638,691
1,176,378,549
335,984,608

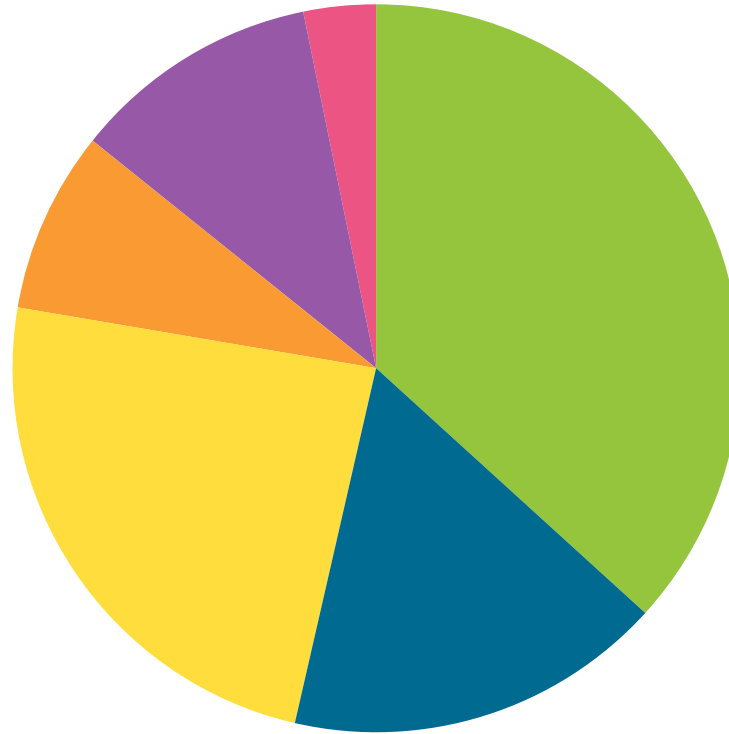
**Allocation
(%)**

36.76
16.86
24.11
8.08
11.04
3.15

Allocations shown may not sum up to 100% exactly due to rounding. Retirement Plan market values may differ from State Street due to uninvested amounts not included in segment totals.



March 31, 2017 : \$5,336,283,198



Segments	Market Value (\$)	Allocation (%)
Domestic Equity	1,960,474,093	36.74
International Equity	898,948,412	16.85
Domestic Fixed Income	1,285,519,546	24.09
Real Estate	431,119,616	8.08
Private Equity	588,599,277	11.03
Cash Equivalent	171,622,254	3.22

Allocations shown may not sum up to 100% exactly due to rounding.

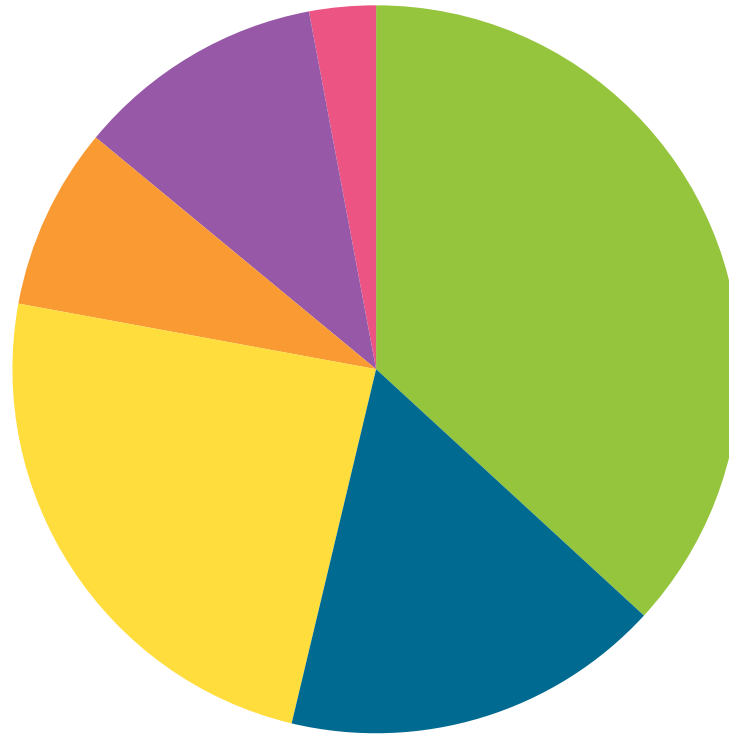
March 31, 2017 : \$3,832,673,613



Segments	Market Value (\$)	Allocation (%)
Domestic Equity	1,410,039,295	36.79
International Equity	646,547,641	16.87
Domestic Fixed Income	924,589,239	24.12
Real Estate	310,075,871	8.09
Private Equity	423,340,327	11.05
Cash Equivalent	118,081,241	3.08

Allocations shown may not sum up to 100% exactly due to rounding.

March 31, 2017 : \$361,913,600



Segments	Market Value (\$)	Allocation (%)
Domestic Equity	133,319,471	36.84
International Equity	61,132,439	16.89
Domestic Fixed Income	87,420,070	24.15
Real Estate	29,317,714	8.10
Private Equity	40,026,944	11.06
Cash Equivalent	10,696,963	2.96

Allocations shown may not sum up to 100% exactly due to rounding.

March 31, 2017 : \$371,940,705



Segments	Market Value (\$)	Allocation (%)
Domestic Equity	136,938,197	36.82
International Equity	62,791,441	16.88
Domestic Fixed Income	89,792,933	24.14
Real Estate	30,113,500	8.10
Private Equity	41,113,403	11.05
Cash Equivalent	11,191,232	3.01

Allocations shown may not sum up to 100% exactly due to rounding.

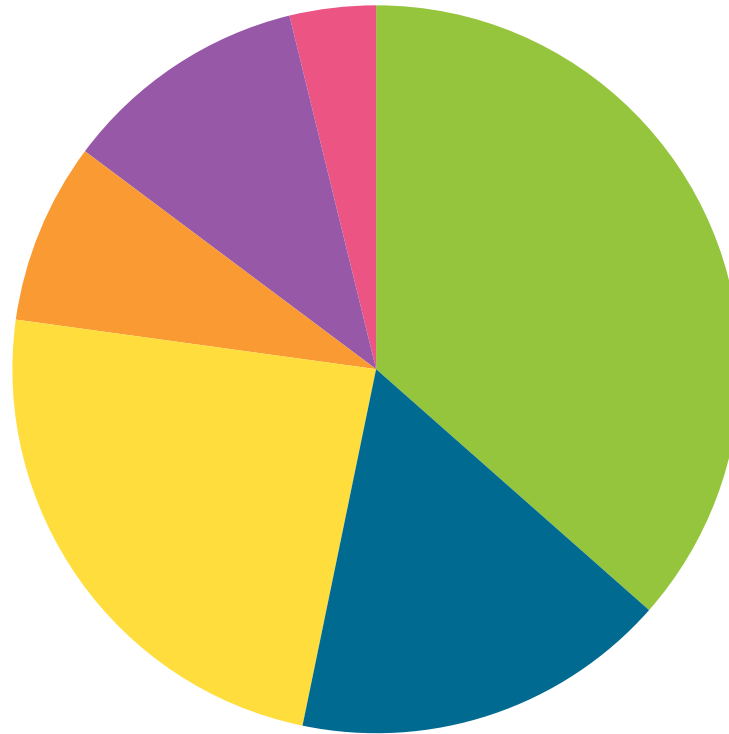
March 31, 2017 : \$321,312,644



Segments	Market Value (\$)	Allocation (%)
Domestic Equity	118,380,758	36.84
International Equity	54,283,469	16.89
Domestic Fixed Income	77,624,459	24.16
Real Estate	26,032,597	8.10
Private Equity	35,541,865	11.06
Cash Equivalent	9,449,496	2.94

Allocations shown may not sum up to 100% exactly due to rounding.

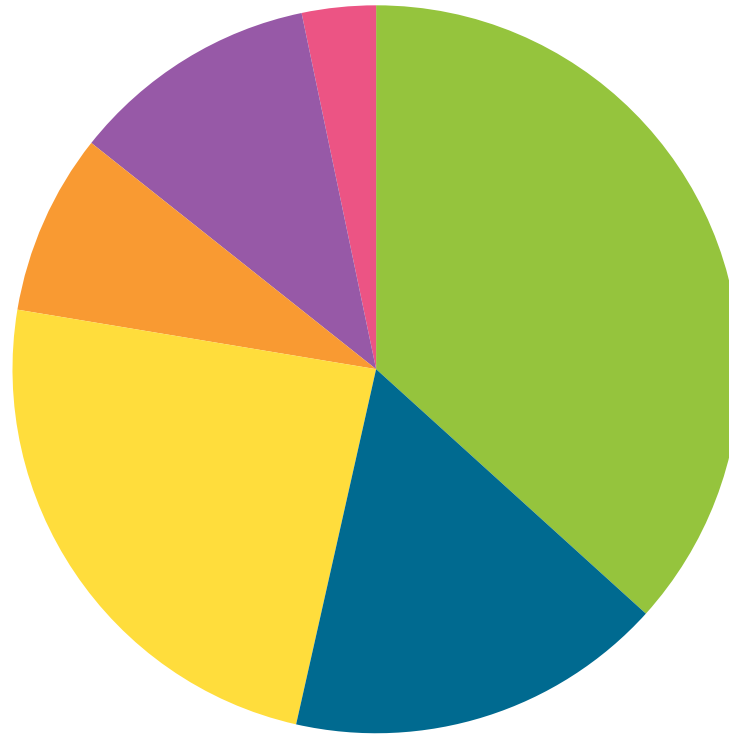
March 31, 2017 : \$136,686,372



Segments	Market Value (\$)	Allocation (%)
Domestic Equity	49,897,406	36.51
International Equity	22,879,223	16.74
Domestic Fixed Income	32,718,663	23.94
Real Estate	10,972,732	8.03
Private Equity	14,980,834	10.96
Cash Equivalent	5,237,513	3.83

Allocations shown may not sum up to 100% exactly due to rounding.

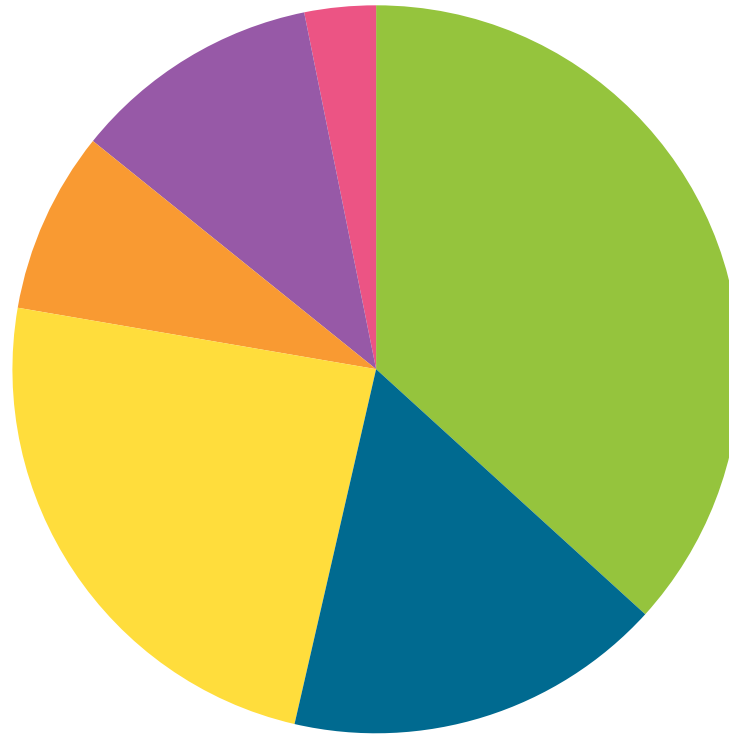
March 31, 2017 : \$169,485,902



Segments	Market Value (\$)	Allocation (%)
Domestic Equity	62,214,012	36.71
International Equity	28,529,033	16.83
Domestic Fixed Income	40,794,876	24.07
Real Estate	13,681,206	8.07
Private Equity	18,678,762	11.02
Cash Equivalent	5,588,012	3.30

Allocations shown may not sum up to 100% exactly due to rounding.

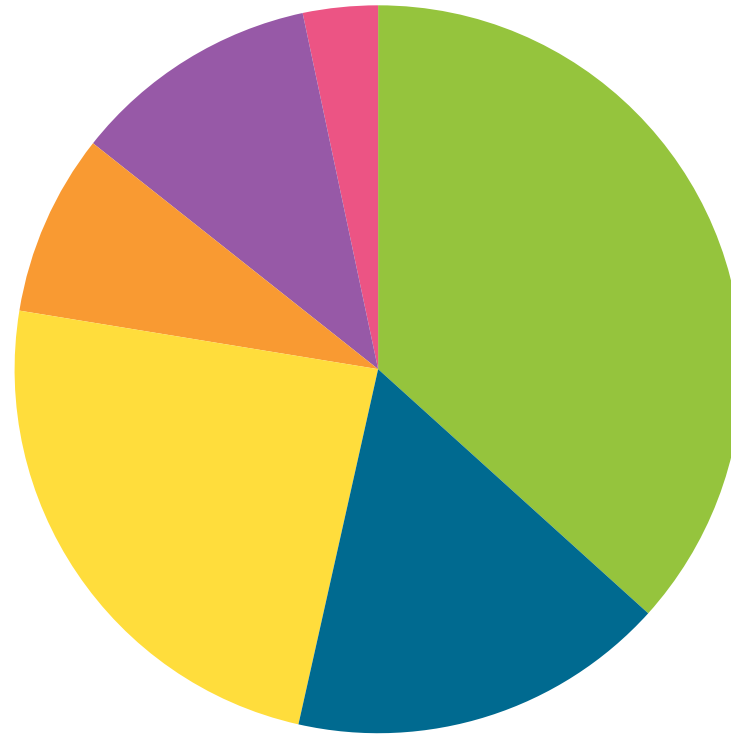
March 31, 2017 : \$93,778,230



Segments	Market Value (\$)	Allocation (%)
Domestic Equity	34,465,115	36.75
International Equity	15,803,703	16.85
Domestic Fixed Income	22,599,417	24.10
Real Estate	7,579,073	8.08
Private Equity	10,347,572	11.03
Cash Equivalent	2,983,352	3.18

Allocations shown may not sum up to 100% exactly due to rounding.

March 31, 2017 : \$34,034,693



Segments	Market Value (\$)	Allocation (%)
Domestic Equity	12,488,887	36.69
International Equity	5,726,113	16.82
Domestic Fixed Income	8,189,199	24.06
Real Estate	2,746,382	8.07
Private Equity	3,749,566	11.02
Cash Equivalent	1,134,546	3.33

Allocations shown may not sum up to 100% exactly due to rounding.

Montana Board of Investments
Comparative Performance
Investment Pools

As of March 31, 2017

	QTD/ CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012
Montana Domestic Equity Pool	5.86	14.68	17.27	9.47	13.00	12.66	7.31	11.46	0.86	12.28	34.19	16.44
S&P 1500 Comp Index	5.74	14.69	17.67	10.25	13.33	13.03	7.67	13.03	1.01	13.08	32.80	16.17
Difference	0.12	-0.01	-0.40	-0.78	-0.33	-0.37	-0.36	-1.57	-0.15	-0.80	1.39	0.27
Montana International Equity Pool	8.25	13.24	12.43	1.14	4.87	4.15	0.63	3.87	-3.57	-4.00	16.39	17.11
International Custom Benchmark	7.99	13.78	13.01	0.82	4.60	4.05	1.53	4.41	-4.60	-4.03	15.62	16.96
Difference	0.26	-0.54	-0.58	0.32	0.27	0.10	-0.90	-0.54	1.03	0.03	0.77	0.15
Montana Retirement Fixed Income	0.20	-1.57	0.90	2.89	3.12	4.51	5.01	3.98	0.48	6.19	-0.95	7.31
Bloomberg US Agg Bond Index	0.82	-1.73	0.44	2.68	2.34	3.48	4.27	2.65	0.55	5.97	-2.02	4.21
Difference	-0.62	0.16	0.46	0.21	0.78	1.03	0.74	1.33	-0.07	0.22	1.07	3.10
Trust Funds Investment Pool	0.96	-0.73	1.73	3.84	3.86	4.93	5.39	4.02	1.83	6.96	-0.25	6.99
Bloomberg US Agg Bond Index	0.82	-1.73	0.44	2.68	2.34	3.48	4.27	2.65	0.55	5.97	-2.02	4.21
Difference	0.14	1.00	1.29	1.16	1.52	1.45	1.12	1.37	1.28	0.99	1.77	2.78
Real Estate Pool*	3.94	7.90	9.98	12.09	11.23	11.52	3.28	8.82	14.27	12.13	10.16	9.90
NCREIF ODCE Index (AWA) (Net) (Qtr Lag)	1.88	5.72	7.79	11.04	11.16	12.27	4.84	9.08	13.86	11.36	11.97	10.47
Difference	2.06	2.18	2.19	1.05	0.07	-0.75	-1.56	-0.26	0.41	0.77	-1.81	-0.57
Short Term Investment Pool	0.22	0.56	0.70	0.37	0.31	0.31	0.96	0.61	0.22	0.10	0.19	0.30
ICE 1 Mo LIBOR Index (USD)	0.22	0.51	0.62	0.35	0.29	0.28	0.89	0.52	0.21	0.16	0.19	0.23
Difference	0.00	0.05	0.08	0.02	0.02	0.03	0.07	0.09	0.01	-0.06	0.00	0.07
iMoney.net Money Fund (Gross) Median	0.24	0.59	0.73	0.41	0.35	0.33	1.01	0.61	0.25	0.17	0.22	0.30
Difference	-0.02	-0.03	-0.03	-0.04	-0.04	-0.02	-0.05	0.00	-0.03	-0.07	-0.03	0.00

Performance shown is net of all manager fees and expenses (Net-All). The NCREIF ODCE Index (AWA) (Net) performance is lagged by one quarter.

*Performance is based on prior quarter's fair market value adjusted for cash flows during the most recent quarterly period.

Benchmark returns reflect unmanaged indices which are not impacted by management fees. Fiscal year ends on June 30.

Montana Board of Investments
 Comparative Performance
 Investment Pools

As of March 31, 2017

	QTD/ CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012
Private Equity Pool*	2.41	8.38	9.09	9.19	11.24	12.52	8.67	7.37	7.20	15.47	14.52	14.28
S&P 1500+4% (Qtr Lag)	5.32	14.28	17.03	12.89	18.77	17.04	11.19	19.49	3.70	22.57	24.43	34.18
<i>Difference</i>	<i>-2.91</i>	<i>-5.90</i>	<i>-7.94</i>	<i>-3.70</i>	<i>-7.53</i>	<i>-4.52</i>	<i>-2.52</i>	<i>-12.12</i>	3.50	<i>-7.10</i>	<i>-9.91</i>	<i>-19.90</i>

Performance shown is net of all manager fees and expenses (Net-All). The S&P 1500+4% performance is lagged by one quarter.

*Performance is based on prior quarter's fair market value adjusted for cash flows during the most recent quarterly period.

Benchmark returns reflect unmanaged indices that are not impacted by management fees. Fiscal year ends on June 30.

Montana Board of Investments
Comparative Performance
Investment Pools

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	QTD/ CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012
Montana Domestic Equity Pool	5.93	14.90	17.57	9.77	13.31	13.02	7.66	11.76	1.14	12.59	34.61	16.77
All Public Plans-US Equity Segment Median	5.44	14.91	18.03	9.11	12.73	12.71	7.51	12.85	0.14	11.42	33.76	16.57
Rank	27	52	59	27	17	32	29	72	23	21	41	39
Population	92	88	87	82	70	59	34	101	91	50	48	44
Montana International Equity Pool	8.33	13.47	12.74	1.40	5.16	4.46	1.00	4.15	-3.35	-3.77	16.80	17.45
All Public Plans-Intl. Equity Segment Median	8.32	13.55	13.16	1.95	6.03	5.45	2.41	3.94	-2.51	-3.00	18.68	18.94
Rank	50	53	62	70	76	89	98	46	68	75	78	81
Population	90	86	84	78	66	55	33	96	84	47	44	39
Montana Retirement Fixed Income	0.34	-1.39	1.11	3.03	3.26	4.65	5.12	4.09	0.59	6.30	-0.83	7.44
All Public Plans-US Fixed Income Segment Median	1.26	0.55	3.09	3.20	3.09	4.46	4.75	4.54	0.30	6.01	-1.39	7.57
Rank	100	89	77	55	47	44	31	60	37	39	38	54
Population	86	85	84	81	71	60	37	96	80	49	49	48
Trust Funds Investment Pool	0.99	-0.65	1.84	3.93	3.96	5.03	5.47	4.12	1.89	7.08	-0.14	7.11
All Public Plans-US Fixed Income Segment Median	1.26	0.55	3.09	3.20	3.09	4.46	4.75	4.54	0.30	6.01	-1.39	7.57
Rank	71	71	71	25	28	31	23	59	5	26	27	59
Population	86	85	84	81	71	60	37	96	80	49	49	48
Real Estate Pool	4.44	8.80	11.78	13.56	12.77	13.16	4.67	10.26	15.68	13.51	11.73	11.44
All Public Plans-Real Estate Segment Median	1.87	6.44	9.13	11.61	12.48	12.87	N/A	9.91	13.45	14.01	13.91	12.36
Rank	4	10	11	16	37	45	N/A	46	12	60	69	85
Population	44	35	35	25	22	14	N/A	35	29	18	16	13

Performance shown is gross of fees. Fiscal year ends on June 30.

Montana Board of Investments
Comparative Performance
Equity Composites

As of March 31, 2017

	QTD/ CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012
Domestic Large Cap Equity - Net	6.24	14.74	17.32	10.41	13.29	12.83	N/A	11.30	1.76	13.82	33.14	16.14
S&P 500 Index (Cap Wtd)	6.07	14.36	17.17	10.37	13.30	12.94	7.51	11.96	1.38	13.69	32.39	16.00
Difference	0.17	0.38	0.15	0.04	-0.01	-0.11	N/A	-0.66	0.38	0.13	0.75	0.14
Domestic Large Cap Equity - Gross	6.28	14.85	17.47	10.57	13.46	13.06	N/A	11.45	1.91	13.99	33.34	16.39
IM U.S. Large Cap Equity (SA+CF) Median	5.96	14.77	17.04	9.59	13.16	12.87	7.77	10.98	0.93	12.91	33.51	15.83
Rank	41	50	43	27	35	41	N/A	46	39	32	53	42
Domestic Large Cap Active - Net	6.29	15.18	17.19	10.20	13.34	12.81	N/A	9.63	2.40	14.01	34.90	16.03
S&P 500 Index (Cap Wtd)	6.07	14.36	17.17	10.37	13.30	12.94	7.51	11.96	1.38	13.69	32.39	16.00
Difference	0.22	0.82	0.02	-0.17	0.04	-0.13	N/A	-2.33	1.02	0.32	2.51	0.03
Domestic Large Cap Active - Gross	6.40	15.55	17.69	10.71	13.87	13.33	N/A	10.12	2.88	14.56	35.55	16.56
IM U.S. Large Cap Equity (SA+CF) Median	5.96	14.77	17.04	9.59	13.16	12.87	7.77	10.98	0.93	12.91	33.51	15.83
Rank	39	40	40	25	24	31	N/A	57	32	25	33	39
Domestic Mid Cap Equity - Net	5.57	14.17	16.79	5.88	11.70	12.02	7.62	12.29	-3.31	6.45	38.18	16.27
Russell Mid Cap Index	5.15	13.42	17.03	8.48	13.09	13.15	7.94	13.80	-2.44	13.22	34.76	17.28
Difference	0.42	0.75	-0.24	-2.60	-1.39	-1.13	-0.32	-1.51	-0.87	-6.77	3.42	-1.01
Domestic Mid Cap Equity - Gross	5.72	14.67	17.47	6.51	12.35	12.64	8.25	12.96	-2.74	7.07	38.95	16.83
IM U.S. Mid Cap Equity (SA+CF) Median	5.78	15.59	17.83	8.44	12.99	13.28	8.98	12.23	-1.26	9.78	36.41	16.56
Rank	52	57	52	76	61	70	69	47	68	73	34	48
Domestic Small Cap Equity - Net	2.81	19.56	23.45	7.93	13.08	12.86	7.53	19.31	-1.61	5.44	40.65	15.76
Russell 2000 Index	2.47	21.60	26.22	7.22	12.35	12.27	7.12	21.31	-4.41	4.89	38.82	16.35
Difference	0.34	-2.04	-2.77	0.71	0.73	0.59	0.41	-2.00	2.80	0.55	1.83	-0.59
Domestic Small Cap Equity - Gross	2.99	20.18	24.31	8.62	13.80	13.61	8.24	19.97	-0.93	6.16	41.54	16.40
IM U.S. Small Cap Equity (SA+CF) Median	2.85	20.78	24.09	8.15	13.37	13.68	8.46	20.88	-2.39	5.37	41.31	16.48
Rank	49	55	49	46	43	52	55	57	35	43	49	51

Net performance shown is net of all manager fees and expenses (Net-All). Gross returns are compared to median performance of similar managers. A peer group of similar managers may not exist for all composites. Fiscal year ends on June 30.

Montana Board of Investments
Comparative Performance
Equity Composites

As of March 31, 2017

	QTD/ CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012
International Large Cap Passive - Net	8.12	14.14	13.59	1.17	4.69	4.05	N/A	4.87	-4.71	-3.70	14.95	16.92
MSCI ACW Ex US Index (USD) (Net)	7.86	13.87	13.13	0.56	4.36	3.82	1.35	4.50	-5.66	-3.87	15.29	16.83
Difference	0.26	0.27	0.46	0.61	0.33	0.23	N/A	0.37	0.95	0.17	-0.34	0.09
International Large Cap Passive - Gross	8.15	14.21	13.68	1.25	4.78	4.14	N/A	4.96	-4.63	-3.62	15.05	17.02
International Equity Active - Net	8.56	12.12	10.93	2.01	6.00	4.91	1.14	2.63	0.41	-4.39	19.23	17.87
MSCI ACW Ex US Index (USD) (Net)	7.86	13.87	13.13	0.56	4.36	3.82	1.35	4.50	-5.66	-3.87	15.29	16.83
Difference	0.70	-1.75	-2.20	1.45	1.64	1.09	-0.21	-1.87	6.07	-0.52	3.94	1.04
International Equity Active - Gross	8.70	12.57	11.51	2.53	6.50	5.41	1.64	3.17	0.90	-3.94	19.75	18.36
IM International Large Cap Core Equity (SA+CF) Median	7.75	13.31	11.51	1.58	6.78	6.08	2.40	1.19	0.33	-3.83	23.21	19.44
Rank	20	59	51	21	56	64	76	26	44	51	74	66
International Value - Net	7.73	12.92	12.98	1.06	4.96	3.89	-0.21	5.59	-5.94	-1.49	17.15	15.88
MSCI ACW Ex US Val Index (USD) (Net)	6.68	18.77	16.68	-0.51	3.81	3.06	0.68	8.92	-10.06	-5.10	15.04	16.97
Difference	1.05	-5.85	-3.70	1.57	1.15	0.83	-0.89	-3.33	4.12	3.61	2.11	-1.09
International Value - Gross	7.87	13.38	13.58	1.60	5.54	4.48	0.38	6.17	-5.46	-0.94	17.82	16.55
IM International Large Cap Value Equity (SA+CF) Median	7.72	15.48	13.25	1.48	6.73	5.73	2.37	3.51	-1.88	-4.25	23.25	17.95
Rank	45	63	47	48	73	83	96	25	85	14	77	65
International Growth - Net	8.90	9.71	7.96	2.11	5.26	4.56	1.25	0.51	1.69	-6.15	18.55	18.37
MSCI ACW Ex US Grth Index (USD) (Net)	9.13	9.12	9.63	1.55	4.84	4.51	1.97	0.12	-1.25	-2.65	15.49	16.67
Difference	-0.23	0.59	-1.67	0.56	0.42	0.05	-0.72	0.39	2.94	-3.50	3.06	1.70
International Growth - Gross	9.06	10.21	8.60	2.65	5.79	5.10	1.79	1.12	2.21	-5.72	19.09	18.89
IM International Large Cap Growth Equity (SA+CF) Median	8.60	10.86	10.37	2.11	6.47	6.55	3.39	0.05	2.12	-3.37	20.84	19.61
Rank	41	54	65	41	76	87	80	34	50	79	69	58
International Small Cap - Net	9.49	14.25	12.25	2.47	7.72	7.55	2.30	1.84	5.16	-4.87	25.30	18.64
MSCI ACWI Ex US Sm Cap Index IMI (USD) (Net)	8.78	13.25	12.26	2.46	6.68	6.26	3.04	3.91	2.60	-4.03	19.73	18.52
Difference	0.71	1.00	-0.01	0.01	1.04	1.29	-0.74	-2.07	2.56	-0.84	5.57	0.12
International Small Cap - Gross	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
IM International Small Cap Equity (SA+CF) Median	8.71	13.87	11.47	4.35	10.53	10.02	5.05	1.19	10.39	-3.38	31.13	23.53
Rank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Gross of fees performance is not available (N/A) for the International Small Cap composite which currently consists of DFA Intl Sm Co;l (DFISX), DFA Emg Mkts Sm Cap;l (DEMSX), BlackRock ACWI Ex-US Small Cap (CF), Templeton Investment Counsel (SA), and American Century Investment Mgmt (SA).

Net performance shown is net of all manager fees and expenses (Net-All). Gross returns are compared to median performance of similar managers. A peer group of similar managers may not exist for all composites. Fiscal year ends on June 30.

Montana Board of Investments
Comparative Performance
Equity Sub Composites

As of March 31, 2017

	QTD/ CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012
Domestic Large Cap Passive - Net	6.11	14.45	17.26	10.21	13.22	12.91	7.48	12.01	0.83	13.73	32.41	16.06
S&P 500 Index (Cap Wtd)	6.07	14.36	17.17	10.37	13.30	12.94	7.51	11.96	1.38	13.69	32.39	16.00
Difference	0.04	0.09	0.09	-0.16	-0.08	-0.03	-0.03	0.05	-0.55	0.04	0.02	0.06
Domestic Large Cap Passive - Gross	6.11	14.46	17.27	10.22	13.23	12.92	7.55	12.03	0.84	13.74	32.42	16.07
IM U.S. Large Cap Index Equity (SA+CF) Median	6.01	14.49	17.35	10.20	13.27	12.93	7.59	12.03	0.94	13.28	32.58	16.20
Rank	19	53	54	50	59	59	63	51	56	18	64	56
Domestic Large Cap Enhanced - Net	6.80	13.90	16.78	10.51	13.39	13.24	6.94	9.73	3.18	13.19	32.89	16.87
S&P 500 Index (Cap Wtd)	6.07	14.36	17.17	10.37	13.30	12.94	7.51	11.96	1.38	13.69	32.39	16.00
Difference	0.73	-0.46	-0.39	0.14	0.09	0.30	-0.57	-2.23	1.80	-0.50	0.50	0.87
Domestic Large Cap Enhanced - Gross	6.87	14.12	17.09	10.85	13.73	13.58	7.26	10.05	3.50	13.54	33.31	17.21
IM U.S. Large Cap Core Equity (SA+CF) Median	5.97	14.32	16.32	9.80	13.22	12.92	7.74	10.52	1.28	13.41	32.96	15.70
Rank	22	53	45	25	31	23	72	58	23	48	47	31
Domestic Large Cap 130/30 - Net	5.79	16.56	17.66	9.89	13.87	12.86	N/A	9.54	1.61	14.84	36.94	18.42
S&P 500 Index (Cap Wtd)	6.07	14.36	17.17	10.37	13.30	12.94	7.51	11.96	1.38	13.69	32.39	16.00
Difference	-0.28	2.20	0.49	-0.48	0.57	-0.08	N/A	-2.42	0.23	1.15	4.55	2.42
Domestic Large Cap 130/30 - Gross	5.95	17.08	18.36	10.58	14.60	13.59	N/A	10.22	2.26	15.59	37.83	19.18
IM U.S. Large Cap Core Equity (SA+CF) Median	5.97	14.32	16.32	9.80	13.22	12.92	7.74	10.52	1.28	13.41	32.96	15.70
Rank	52	21	28	30	16	23	N/A	56	37	21	13	15

Net performance shown is net of all manager fees and expenses (Net-All). Gross returns are compared to median performance of similar managers. A peer group of similar managers may not exist for all composites. Fiscal year ends on June 30.

Montana Board of Investments
Comparative Performance
Domestic Equity Managers

As of March 31, 2017

	QTD/ CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012	Since Incep.	Inception Date
Domestic Large Cap Equity														
BlackRock Equity Idx Fund A (CF) - Net	6.07	14.37	17.17	10.41	13.34	12.99	7.59	11.98	1.44	13.73	32.41	16.05	5.01	05/01/2000
S&P 500 Index (Cap Wtd)	6.07	14.36	17.17	10.37	13.30	12.94	7.51	11.96	1.38	13.69	32.39	16.00	4.95	
Difference	0.00	0.01	0.00	0.04	0.04	0.05	0.08	0.02	0.06	0.04	0.02	0.05	0.06	
BlackRock Equity Idx Fund A (CF) - Gross	6.07	14.38	17.18	10.42	13.35	13.00	7.61	11.99	1.45	13.74	32.42	16.06	5.02	05/01/2000
IM U.S. Large Cap Index Equity (SA+CF) Median	6.01	14.49	17.35	10.20	13.27	12.93	7.59	12.03	0.94	13.28	32.58	16.20	5.02	
Rank	25	60	64	23	17	25	47	57	23	18	64	56	49	
Domestic Equity Pool STIF - Net	0.16	0.45	0.56	N/A	N/A	N/A	N/A	0.50	N/A	N/A	N/A	N/A	0.38	04/01/2015
ICE 1 Mo LIBOR Index (USD)	0.22	0.51	0.62	0.35	0.29	0.28	0.89	0.52	0.21	0.16	0.19	0.23	0.45	
Difference	-0.06	-0.06	-0.06	N/A	N/A	N/A	N/A	-0.02	N/A	N/A	N/A	N/A	-0.07	
INTECH Enhanced Plus (SA) - Net	6.77	11.22	14.27	10.06	13.23	13.03	7.51	7.56	2.83	14.91	32.46	14.89	8.18	06/01/2006
S&P 500 Index (Cap Wtd)	6.07	14.36	17.17	10.37	13.30	12.94	7.51	11.96	1.38	13.69	32.39	16.00	8.18	
Difference	0.70	-3.14	-2.90	-0.31	-0.07	0.09	0.00	-4.40	1.45	1.22	0.07	-1.11	0.00	
INTECH Enhanced Plus (SA) - Gross	6.86	11.50	14.65	10.44	13.62	13.41	7.88	7.93	3.18	15.31	32.92	15.28	8.56	06/01/2006
IM U.S. Large Cap Core Equity (SA+CF) Median	5.97	14.32	16.32	9.80	13.22	12.92	7.74	10.52	1.28	13.41	32.96	15.70	8.38	
Rank	23	77	72	34	33	28	43	81	26	24	51	58	41	
T. Rowe U.S. Structured Research (SA) - Net	6.80	15.06	17.87	10.73	13.42	12.94	7.98	10.68	3.30	12.58	33.23	16.42	8.63	06/01/2006
S&P 500 Index (Cap Wtd)	6.07	14.36	17.17	10.37	13.30	12.94	7.51	11.96	1.38	13.69	32.39	16.00	8.18	
Difference	0.73	0.70	0.70	0.36	0.12	0.00	0.47	-1.28	1.92	-1.11	0.84	0.42	0.45	
T. Rowe U.S. Structured Research (SA) - Gross	6.87	15.27	18.15	11.04	13.75	13.27	8.30	10.98	3.61	12.92	33.63	16.77	8.96	06/01/2006
IM U.S. Large Cap Core Equity (SA+CF) Median	5.97	14.32	16.32	9.80	13.22	12.92	7.74	10.52	1.28	13.41	32.96	15.70	8.38	
Rank	22	41	32	21	30	32	29	46	23	59	44	36	27	

Net performance shown is net of all manager fees and expenses (Net-All). Gross returns are compared to median performance of similar managers. A peer group of similar managers may not exist for all funds. Fiscal year ends on June 30.

Montana Board of Investments
Comparative Performance
Domestic Equity Managers

As of March 31, 2017

	QTD/ CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012	Since Incep.	Inception Date
Analytic Investors 130/30 (SA) - Net	3.27	9.78	11.97	9.71	13.37	13.07	N/A	8.74	5.94	13.33	35.22	17.38	8.02	03/01/2008
S&P 500 Index (Cap Wtd)	6.07	14.36	17.17	10.37	13.30	12.94	7.51	11.96	1.38	13.69	32.39	16.00	8.87	
Difference	-2.80	-4.58	-5.20	-0.66	0.07	0.13	N/A	-3.22	4.56	-0.36	2.83	1.38	-0.85	
Analytic Investors 130/30 (SA) - Gross	3.37	10.12	12.43	10.20	13.90	13.62	N/A	9.22	6.42	13.88	35.86	17.94	8.57	03/01/2008
IM U.S. Large Cap Core Equity (SA+CF) Median	5.97	14.32	16.32	9.80	13.22	12.92	7.74	10.52	1.28	13.41	32.96	15.70	9.03	
Rank	96	86	88	43	27	22	N/A	67	6	40	25	24	67	
J.P. Morgan 130/30 (SA) - Net	7.29	20.47	21.05	10.27	14.22	12.91	N/A	10.30	0.01	15.38	37.55	18.64	10.24	03/01/2008
S&P 500 Index (Cap Wtd)	6.07	14.36	17.17	10.37	13.30	12.94	7.51	11.96	1.38	13.69	32.39	16.00	8.87	
Difference	1.22	6.11	3.88	-0.10	0.92	-0.03	N/A	-1.66	-1.37	1.69	5.16	2.64	1.37	
J.P. Morgan 130/30 (SA) - Gross	7.48	21.11	21.89	11.05	15.04	13.72	N/A	11.09	0.72	16.21	38.53	19.48	11.03	03/01/2008
IM U.S. Large Cap Core Equity (SA+CF) Median	5.97	14.32	16.32	9.80	13.22	12.92	7.74	10.52	1.28	13.41	32.96	15.70	9.03	
Rank	11	4	8	20	10	22	N/A	44	57	15	11	13	6	

Net performance shown is net of all manager fees and expenses (Net-All). Gross returns are compared to median performance of similar managers. A peer group of similar managers may not exist for all funds. Fiscal year ends on June 30.

Montana Board of Investments
Comparative Performance
Domestic Equity Managers

As of March 31, 2017

	QTD/ CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012	Since Incep.	Inception Date
Domestic Mid Cap Equity														
Artisan Partners (SA) - Net	3.11	16.05	20.11	4.85	10.49	11.56	8.15	23.60	-9.68	2.12	37.20	12.02	8.14	03/01/2007
Russell Mid Cap Val Index	3.76	14.36	19.82	8.94	14.07	13.42	7.47	20.00	-4.78	14.75	33.46	18.51	7.53	
Difference	-0.65	1.69	0.29	-4.09	-3.58	-1.86	0.68	3.60	-4.90	-12.63	3.74	-6.49	0.61	
Artisan Partners (SA) - Gross	3.27	16.60	20.88	5.53	11.22	12.30	8.92	24.41	-9.09	2.79	38.11	12.79	8.90	03/01/2007
IM U.S. Mid Cap Value Equity (SA+CF) Median	4.19	17.15	20.88	8.92	13.81	13.28	8.50	18.23	-3.47	11.86	36.24	17.27	8.57	
Rank	80	58	50	91	95	80	40	15	88	97	41	88	41	
Iridian Asset Management (SA) - Net	8.84	15.64	12.29	6.17	N/A	N/A	N/A	3.29	-1.62	12.84	N/A	N/A	12.45	05/01/2013
Russell Mid Cap Val Index	3.76	14.36	19.82	8.94	14.07	13.42	7.47	20.00	-4.78	14.75	33.46	18.51	12.25	
Difference	5.08	1.28	-7.53	-2.77	N/A	N/A	N/A	-16.71	3.16	-1.91	N/A	N/A	0.20	
Iridian Asset Management (SA) - Gross	9.03	16.28	13.12	6.98	N/A	N/A	N/A	4.07	-0.87	13.73	N/A	N/A	13.32	05/01/2013
IM U.S. Mid Cap Value Equity (SA+CF) Median	4.19	17.15	20.88	8.92	13.81	13.28	8.50	18.23	-3.47	11.86	36.24	17.27	12.82	
Rank	3	63	100	75	N/A	N/A	N/A	100	19	24	N/A	N/A	36	
BlackRock Mid Cap Eq Idx A (CF) - Net	3.93	16.25	20.88	9.35	13.31	13.46	8.99	20.72	-2.17	9.75	33.51	17.90	9.72	01/01/2005
S&P Mid Cap 400 Index (Cap Wtd)	3.94	16.28	20.92	9.36	13.32	13.45	8.96	20.74	-2.18	9.77	33.50	17.88	9.67	
Difference	-0.01	-0.03	-0.04	-0.01	-0.01	0.01	0.03	-0.02	0.01	-0.02	0.01	0.02	0.05	
BlackRock Mid Cap Eq Idx A (CF) - Gross	3.95	16.33	20.98	9.44	13.41	13.54	9.07	20.82	-2.09	9.85	33.62	18.00	9.79	01/01/2005
TimesSquare Capital Management (SA) - Net	6.65	11.73	15.03	6.56	11.88	12.05	8.81	7.91	0.96	5.69	37.79	19.19	8.70	03/01/2007
Russell Mid Cap Grth Index	6.89	12.31	14.07	7.88	11.95	12.81	8.13	7.33	-0.20	11.90	35.74	15.81	8.12	
Difference	-0.24	-0.58	0.96	-1.32	-0.07	-0.76	0.68	0.58	1.16	-6.21	2.05	3.38	0.58	
TimesSquare Capital Management (SA) - Gross	6.82	12.29	15.80	7.28	12.65	12.83	9.59	8.65	1.65	6.42	38.75	20.03	9.48	03/01/2007
IM U.S. Mid Cap Growth Equity (SA+CF) Median	7.58	13.40	15.64	7.07	11.47	12.89	9.00	5.41	0.79	8.63	36.40	15.13	9.10	
Rank	70	70	47	43	27	53	28	21	42	71	36	15	35	

Net performance shown is net of all manager fees and expenses (Net-All). Gross returns are compared to median performance of similar managers. A peer group of similar managers may not exist for all funds. Fiscal year ends on June 30.

Montana Board of Investments
Comparative Performance
Domestic Equity Managers

As of March 31, 2017

	QTD/ CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012	Since Incep.	Inception Date
Domestic Small Cap Equity														
Vaughan Nelson Management (SA) - Net	0.56	16.49	20.98	9.04	13.74	13.04	10.04	20.50	0.16	9.09	39.30	15.36	10.22	03/01/2007
Russell 2000 Val Index	-0.13	24.03	29.37	7.62	12.54	11.59	6.09	31.74	-7.47	4.22	34.52	18.05	6.17	
Difference	0.69	-7.54	-8.39	1.42	1.20	1.45	3.95	-11.24	7.63	4.87	4.78	-2.69	4.05	
Vaughan Nelson Management (SA) - Gross	0.76	17.21	21.96	9.94	14.69	13.98	10.98	21.49	0.98	10.00	40.47	16.32	11.16	03/01/2007
IM U.S. Small Cap Value Equity (SA+CF) Median	0.77	21.75	24.57	8.67	13.70	13.40	8.43	26.14	-4.30	5.71	38.09	17.48	8.53	
Rank	51	87	73	22	26	35	7	76	8	10	36	60	6	
DFA US Small Cap Trust (CF) - Net	0.69	20.85	23.22	8.30	13.87	14.00	8.26	24.42	-2.64	4.75	42.42	18.20	12.80	03/01/2003
Russell 2000 Index	2.47	21.60	26.22	7.22	12.35	12.27	7.12	21.31	-4.41	4.89	38.82	16.35	11.51	
Difference	-1.78	-0.75	-3.00	1.08	1.52	1.73	1.14	3.11	1.77	-0.14	3.60	1.85	1.29	
DFA US Small Cap Trust (CF) - Gross	0.79	21.18	23.66	8.69	14.27	14.39	8.64	24.85	-2.29	5.12	42.90	18.59	13.12	03/01/2003
IM U.S. Small Cap Core Equity (SA+CF) Median	2.93	21.09	24.15	8.75	13.90	14.16	8.40	20.61	-1.36	6.55	41.26	16.84	12.83	
Rank	83	48	57	52	41	42	44	21	63	63	41	33	40	
Alliance Bernstein (SA) - Net	9.73	21.14	27.19	4.14	10.13	N/A	N/A	6.82	-0.84	-1.61	45.22	N/A	10.13	04/01/2012
Russell 2000 Grth Index	5.35	19.17	23.03	6.72	12.10	12.88	8.06	11.32	-1.38	5.60	43.30	14.59	12.10	
Difference	4.38	1.97	4.16	-2.58	-1.97	N/A	N/A	-4.50	0.54	-7.21	1.92	N/A	-1.97	
Alliance Bernstein (SA) - Gross	9.95	21.93	28.29	5.08	11.12	N/A	N/A	7.80	0.05	-0.71	46.52	N/A	11.12	04/01/2012
IM U.S. Small Cap Growth Equity (SA+CF) Median	5.85	18.51	23.27	6.57	12.42	13.85	8.72	11.38	-0.74	4.01	45.45	14.75	12.42	
Rank	6	26	17	70	72	N/A	N/A	69	42	82	46	N/A	72	
Voya Investment Management (SA) - Net	6.32	19.53	23.83	7.67	N/A	N/A	N/A	13.14	-1.01	5.41	N/A	N/A	12.09	05/01/2013
Russell 2000 Grth Index	5.35	19.17	23.03	6.72	12.10	12.88	8.06	11.32	-1.38	5.60	43.30	14.59	11.95	
Difference	0.97	0.36	0.80	0.95	N/A	N/A	N/A	1.82	0.37	-0.19	N/A	N/A	0.14	
Voya Investment Management (SA) - Gross	6.55	20.31	24.90	8.62	N/A	N/A	N/A	14.14	-0.15	6.35	N/A	N/A	13.08	05/01/2013
IM U.S. Small Cap Growth Equity (SA+CF) Median	5.85	18.51	23.27	6.57	12.42	13.85	8.72	11.38	-0.74	4.01	45.45	14.75	12.45	
Rank	41	35	36	34	N/A	N/A	N/A	36	44	31	N/A	N/A	43	

Gross of fees performance is not available (N/A) for the following fund: Domestic Equity Pool STIF.
The current annual expense ratio for the Domestic Equity Pool STIF is 0.18%.

Net performance shown is net of all manager fees and expenses (Net-All). Gross returns are compared to median performance of similar managers. A peer group of similar managers may not exist for all funds. Fiscal year ends on June 30.

Montana Board of Investments
Comparative Performance
International Equity Managers

As of March 31, 2017

	QTD/ CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012	Since Incep.	Inception Date
International Developed Large Cap Equity														
Acadian Asset Non-US Equity (SA) - Net	9.19	21.24	22.26	3.18	7.16	6.67	0.73	12.40	-7.75	0.00	17.60	18.66	2.07	11/01/2006
MSCI ACW Ex US Val Index (USD) (Net)	6.68	18.77	16.68	-0.51	3.81	3.06	0.68	8.92	-10.06	-5.10	15.04	16.97	1.62	
Difference	2.51	2.47	5.58	3.69	3.35	3.61	0.05	3.48	2.31	5.10	2.56	1.69	0.45	
Acadian Asset Non-US Equity (SA) - Gross	9.33	21.72	22.90	3.72	7.73	7.25	1.32	13.01	-7.26	0.52	18.22	19.37	2.65	11/01/2006
IM International Large Cap Value Equity (SA+CF) Median	7.72	15.48	13.25	1.48	6.73	5.73	2.37	3.51	-1.88	-4.25	23.25	17.95	3.28	
Rank	11	8	1	16	22	27	90	4	91	11	77	34	82	
Lazard Asset Management (SA) - Net	6.41	6.11	5.58	N/A	N/A	N/A	N/A	0.22	N/A	N/A	N/A	N/A	-1.58	06/01/2015
MSCI ACW Ex US Val Index (USD) (Net)	6.68	18.77	16.68	-0.51	3.81	3.06	0.68	8.92	-10.06	-5.10	15.04	16.97	-0.65	
Difference	-0.27	-12.66	-11.10	N/A	N/A	N/A	N/A	-8.70	N/A	N/A	N/A	N/A	-0.93	
Lazard Asset Management (SA) - Gross	6.55	6.55	6.15	N/A	N/A	N/A	N/A	0.77	N/A	N/A	N/A	N/A	-1.04	06/01/2015
IM International Large Cap Value Equity (SA+CF) Median	7.72	15.48	13.25	1.48	6.73	5.73	2.37	3.51	-1.88	-4.25	23.25	17.95	0.75	
Rank	86	96	95	N/A	N/A	N/A	N/A	83	N/A	N/A	N/A	N/A	76	
BlackRock ACWI Ex-US SuperFund A (CF) - Net	7.94	14.01	13.45	0.78	4.57	4.03	N/A	4.77	-5.49	-3.73	15.51	17.07	6.57	06/01/2009
MSCI ACW Ex US Index (USD) (Net)	7.86	13.87	13.13	0.56	4.36	3.82	1.35	4.50	-5.66	-3.87	15.29	16.83	6.37	
Difference	0.08	0.14	0.32	0.22	0.21	0.21	N/A	0.27	0.17	0.14	0.22	0.24	0.20	
BlackRock ACWI Ex-US SuperFund A (CF) - Gross	7.96	14.08	13.54	0.86	4.65	4.11	N/A	4.86	-5.42	-3.65	15.61	17.17	6.65	06/01/2009
Baillie Gifford (SA) - Net	9.94	10.49	10.08	N/A	N/A	N/A	N/A	0.73	N/A	N/A	N/A	N/A	1.54	06/01/2015
MSCI ACW Ex US Grth Index (USD) (Net)	9.13	9.12	9.63	1.55	4.84	4.51	1.97	0.12	-1.25	-2.65	15.49	16.67	-0.17	
Difference	0.81	1.37	0.45	N/A	N/A	N/A	N/A	0.61	N/A	N/A	N/A	N/A	1.71	
Baillie Gifford (SA) - Gross	10.08	10.94	10.66	N/A	N/A	N/A	N/A	1.28	N/A	N/A	N/A	N/A	2.08	06/01/2015
IM International Large Cap Growth Equity (SA+CF) Median	8.60	10.86	10.37	2.11	6.47	6.55	3.39	0.05	2.12	-3.37	20.84	19.61	0.28	
Rank	26	49	45	N/A	N/A	N/A	N/A	32	N/A	N/A	N/A	N/A	27	
Invesco (SA) - Net	8.08	9.09	6.13	N/A	N/A	N/A	N/A	0.32	N/A	N/A	N/A	N/A	-0.38	06/01/2015
MSCI ACW Ex US Grth Index (USD) (Net)	9.13	9.12	9.63	1.55	4.84	4.51	1.97	0.12	-1.25	-2.65	15.49	16.67	-0.17	
Difference	-1.05	-0.03	-3.50	N/A	N/A	N/A	N/A	0.20	N/A	N/A	N/A	N/A	-0.21	
Invesco (SA) - Gross	8.25	9.64	6.83	N/A	N/A	N/A	N/A	1.01	N/A	N/A	N/A	N/A	0.29	06/01/2015
IM International Large Cap Growth Equity (SA+CF) Median	8.60	10.86	10.37	2.11	6.47	6.55	3.39	0.05	2.12	-3.37	20.84	19.61	0.28	
Rank	57	57	78	N/A	N/A	N/A	N/A	35	N/A	N/A	N/A	N/A	50	

Net performance shown is net of all manager fees and expenses (Net-All). Gross returns are compared to median performance of similar managers. A peer group of similar managers may not exist for all funds. Fiscal year ends on June 30.

Montana Board of Investments
Comparative Performance
International Equity Managers

As of March 31, 2017

	QTD/ CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012	Since Incep.	Inception Date
International Equity Pool STIF - Net	0.15	0.41	0.53	N/A	N/A	N/A	N/A	0.47	N/A	N/A	N/A	N/A	0.36	04/01/2015
ICE 1 Mo LIBOR Index (USD)	0.22	0.51	0.62	0.35	0.29	0.28	0.89	0.52	0.21	0.16	0.19	0.23	0.45	
Difference	-0.07	-0.10	-0.09	N/A	N/A	N/A	N/A	-0.05	N/A	N/A	N/A	N/A	-0.09	
International Developed Small Cap Equity														
American Century Investment Mgmt (SA) - Net	10.66	9.77	8.54	1.83	N/A	N/A	N/A	-5.31	11.32	N/A	N/A	N/A	1.55	03/01/2014
MSCI ACW Ex US SCG Index (USD) (Net)	9.01	9.56	8.94	2.63	6.49	6.30	2.68	-0.28	6.50	-3.59	18.52	16.87	2.46	
Difference	1.65	0.21	-0.40	-0.80	N/A	N/A	N/A	-5.03	4.82	N/A	N/A	N/A	-0.91	
American Century Investment Mgmt (SA) - Gross	10.86	10.45	9.44	2.69	N/A	N/A	N/A	-4.49	12.25	N/A	N/A	N/A	2.41	03/01/2014
IM International Small Cap Growth Equity (SA+CF) Median	9.24	10.59	9.46	3.89	9.78	9.63	5.16	-1.67	12.85	-3.62	31.15	23.67	3.44	
Rank	18	51	51	67	N/A	N/A	N/A	82	52	N/A	N/A	N/A	67	
BlackRock ACWI Ex-US Small Cap (CF) - Net	8.78	13.42	12.57	2.75	6.87	N/A	N/A	4.26	2.87	-3.84	19.87	N/A	7.68	02/01/2012
MSCI ACWI Ex US Sm Cap Index IMI (USD) (Net)	8.78	13.25	12.26	2.46	6.68	6.26	3.04	3.91	2.60	-4.03	19.73	18.52	7.48	
Difference	0.00	0.17	0.31	0.29	0.19	N/A	N/A	0.35	0.27	0.19	0.14	N/A	0.20	
BlackRock ACWI Ex-US Small Cap (CF) - Gross	8.82	13.56	12.78	2.92	7.06	N/A	N/A	4.44	3.04	-3.67	20.08	N/A	7.87	02/01/2012
DFA Intl Sm Co;I (DFISX) - Net	8.40	15.50	14.18	2.95	8.51	8.00	3.47	5.74	5.89	-6.29	27.49	18.75	8.00	11/01/2004
MSCI Wrld Ex US Sm Cap Index (USD) (Net)	7.61	13.03	11.58	2.70	7.78	7.36	2.72	4.32	5.46	-5.35	25.55	17.48	7.19	
Difference	0.79	2.47	2.60	0.25	0.73	0.64	0.75	1.42	0.43	-0.94	1.94	1.27	0.81	
Templeton Investment Counsel (SA) - Net	9.21	13.76	9.45	1.72	N/A	N/A	N/A	-1.13	1.81	N/A	N/A	N/A	1.73	03/01/2014
MSCI ACW Ex US Sm Cap Val Index (USD) (Net)	8.55	17.03	15.64	2.24	6.83	6.20	3.37	8.24	-1.25	-4.49	20.92	20.15	2.36	
Difference	0.66	-3.27	-6.19	-0.52	N/A	N/A	N/A	-9.37	3.06	N/A	N/A	N/A	-0.63	
Templeton Investment Counsel (SA) - Gross	9.44	14.50	10.40	2.64	N/A	N/A	N/A	-0.23	2.73	N/A	N/A	N/A	2.65	03/01/2014
IM International Small Cap Value Equity (SA+CF) Median	7.98	15.35	12.90	3.26	10.27	9.51	5.51	6.47	5.36	-4.24	30.48	23.53	3.17	
Rank	30	63	79	67	N/A	N/A	N/A	90	76	N/A	N/A	N/A	69	

Net performance shown is net of all manager fees and expenses (Net-All). Gross returns are compared to median performance of similar managers. A peer group of similar managers may not exist for all funds. Fiscal year ends on June 30.

Montana Board of Investments
Comparative Performance
International Equity Managers

As of March 31, 2017

	QTD/ CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012	Since Incep.	Inception Date
International Emerging Equity														
BlackRock Emerging Mkts (CF) - Net	11.33	16.16	16.85	0.90	0.53	N/A	N/A	10.85	-15.15	-2.49	-2.79	N/A	0.98	02/01/2012
MSCI Emg Mkts Index (USD) (Net)	11.44	16.44	17.21	1.18	0.81	1.69	2.72	11.19	-14.92	-2.19	-2.60	18.23	1.25	
Difference	-0.11	-0.28	-0.36	-0.28	-0.28	N/A	N/A	-0.34	-0.23	-0.30	-0.19	N/A	-0.27	
BlackRock Emerging Mkts (CF) - Gross	11.41	16.37	17.12	1.11	0.74	N/A	N/A	11.08	-14.99	-2.30	-2.57	N/A	1.19	02/01/2012
iShares:MSCI Em Mkts (EEM) - Net	12.51	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	12.51	01/01/2017
MSCI Emg Mkts Index (USD) (Net)	11.44	16.44	17.21	1.18	0.81	1.69	2.72	11.19	-14.92	-2.19	-2.60	18.23	11.44	
Difference	1.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.07	
DFA Emg Mkts Sm Cap;I (DEMSX) - Net	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.10	03/01/2017
MSCI Emg Mkts Sm Cap Index (USD) (Net)	13.02	14.03	14.49	1.66	2.87	2.44	3.92	2.28	-6.85	1.01	1.04	22.22	2.63	
Difference	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.47	

Gross of fees performance is not available (N/A) for the following funds: International Equity Pool STIF, DFA Intl Sm Co;I (DFISX), iShares:MSCI Em Mkts (EEM), and DFA Emg Mkts Sm Cap;I (DEMSX).

The current annual expense ratios for the International Equity Pool STIF, DFA Intl Sm Co;I (DFISX), iShares:MSCI Em Mkts (EEM), and DFA Emg Mkts Sm Cap;I (DEMSX) are 0.18%, 0.53%, 0.72%, and 0.72%, respectively.

Net performance shown is net of all manager fees and expenses (Net-All). Gross returns are compared to median performance of similar managers. A peer group of similar managers may not exist for all funds. Fiscal year ends on June 30.

Montana Board of Investments
Comparative Performance
Fixed Income Managers

As of March 31, 2017

	QTD/ CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012	Since Incep.	Inception Date
Broad Fixed Income Portfolio	1.75	-0.80	1.64	3.44	3.16	4.44	4.94	3.08	0.83	6.82	-2.02	6.07	6.44	04/01/1995
Bloomberg US Agg Bond Index	0.82	-1.73	0.44	2.68	2.34	3.48	4.27	2.65	0.55	5.97	-2.02	4.21	5.58	
Difference	0.93	0.93	1.20	0.76	0.82	0.96	0.67	0.43	0.28	0.85	0.00	1.86	0.86	
Broad Fixed Income Portfolio	1.75	-0.80	1.64	3.44	3.16	4.44	4.94	3.08	0.83	6.82	-2.02	6.07	6.44	04/01/1995
IM U.S. Broad Market Core FI (SA+CF) Median	0.92	-1.30	1.01	2.97	2.81	3.97	4.76	3.10	0.82	6.14	-1.56	5.88	5.91	
Rank	4	29	32	18	29	22	38	53	49	24	73	47	6	
Trust Funds Bond Portfolio	0.87	-1.53	0.97	3.29	3.19	4.33	4.93	3.41	1.03	6.79	-1.43	6.15	6.10	10/01/1995
Bloomberg US Agg Bond Index	0.82	-1.73	0.44	2.68	2.34	3.48	4.27	2.65	0.55	5.97	-2.02	4.21	5.33	
Difference	0.05	0.20	0.53	0.61	0.85	0.85	0.66	0.76	0.48	0.82	0.59	1.94	0.77	
Trust Funds Bond Portfolio	0.87	-1.53	0.97	3.29	3.19	4.33	4.93	3.41	1.03	6.79	-1.43	6.15	6.10	10/01/1995
IM U.S. Broad Market Core FI (SA+CF) Median	0.92	-1.30	1.01	2.97	2.81	3.97	4.76	3.10	0.82	6.14	-1.56	5.88	5.67	
Rank	60	63	51	26	27	25	38	42	29	25	42	44	7	
Reams Asset Core Plus (SA) - Net	0.78	-1.61	1.00	2.60	2.82	4.41	N/A	4.18	0.07	4.47	-0.85	8.64	5.93	10/01/2008
Bloomberg US Unv Bond Index	1.09	-0.60	1.92	2.99	2.83	3.91	4.52	3.91	0.43	5.56	-1.35	5.53	4.79	
Difference	-0.31	-1.01	-0.92	-0.39	-0.01	0.50	N/A	0.27	-0.36	-1.09	0.50	3.11	1.14	
Reams Asset Core Plus (SA) - Gross	0.83	-1.48	1.18	2.78	3.00	4.59	N/A	4.35	0.24	4.65	-0.68	8.83	6.11	10/01/2008
IM U.S. Broad Market Core+ FI (SA+CF) Median	1.28	0.55	3.19	3.27	3.49	4.74	5.41	4.71	0.25	6.21	-0.52	8.16	6.14	
Rank	97	97	92	85	83	58	N/A	58	51	90	57	43	54	

Net performance shown is net of all manager fees and expenses (Net-All). Gross returns are compared to median performance of similar managers. Fiscal year ends on June 30.

Montana Board of Investments
Comparative Performance
Fixed Income Managers

As of March 31, 2017

	QTD/ CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012	Since Incep.	Inception Date
Post High Yield Plus (SA) - Net	2.06	7.07	9.07	4.67	7.36	8.13	N/A	9.58	0.82	4.99	10.19	16.97	9.87	06/01/2009
Bloomberg US Hi Yld - 2% Issuer Cap Index	2.70	10.30	16.39	4.58	6.82	7.79	7.54	17.13	-4.43	2.46	7.44	15.78	10.63	
Difference	-0.64	-3.23	-7.32	0.09	0.54	0.34	N/A	-7.55	5.25	2.53	2.75	1.19	-0.76	
Post High Yield Plus (SA) - Gross	2.21	7.56	9.72	5.29	8.01	8.78	N/A	10.23	1.43	5.62	10.85	17.67	10.53	06/01/2009
IM U.S. High Yield Bonds (SA+CF) Median	2.44	9.34	14.16	4.29	6.57	7.68	7.21	14.04	-2.16	2.55	7.48	15.30	10.37	
Rank	69	75	85	18	7	7	N/A	84	7	3	11	14	41	
Post Trad'l High Yield LP (CF) - Gross	2.26	7.58	9.94	5.67	8.06	8.79	N/A	10.62	1.42	6.01	9.98	18.62	9.85	09/01/2009
IM U.S. High Yield Bonds (SA+CF) Median	2.44	9.34	14.16	4.29	6.57	7.68	7.21	14.04	-2.16	2.55	7.48	15.30	9.22	
Rank	64	75	83	11	6	7	N/A	80	8	2	13	10	23	
Neuberger Berman High Yield (SA) - Net	2.40	8.96	13.44	3.78	6.38	7.58	N/A	14.98	-4.32	1.93	7.78	15.90	7.90	01/01/2010
Bloomberg US Hi Yld - 2% Issuer Cap Index	2.70	10.30	16.39	4.58	6.82	7.79	7.54	17.13	-4.43	2.46	7.44	15.78	8.17	
Difference	-0.30	-1.34	-2.95	-0.80	-0.44	-0.21	N/A	-2.15	0.11	-0.53	0.34	0.12	-0.27	
Neuberger Berman High Yield (SA) - Gross	2.52	9.33	13.94	4.24	6.85	8.06	N/A	15.50	-3.89	2.38	8.26	16.42	8.39	01/01/2010
IM U.S. High Yield Bonds (SA+CF) Median	2.44	9.34	14.16	4.29	6.57	7.68	7.21	14.04	-2.16	2.55	7.48	15.30	8.12	
Rank	42	51	54	53	38	32	N/A	31	74	55	31	29	35	

Trust Funds Bond Portfolio and Post Trad'l High Yield LP (CF) are part of the Trust Fund Investment Pool.

Net performance shown is net of all manager fees and expenses (Net-All). Gross returns are compared to median performance of similar managers. Fiscal year ends on June 30.

Montana Board of Investments
Comparative Performance
Trust Accounts

As of March 31, 2017

	QTD/ CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012
Abandoned Mine Trust	0.24	0.37	0.67	1.12	1.24	1.51	2.52	1.10	0.90	1.49	0.63	2.82
Big Sky Economic Development Fund	0.94	-0.69	1.73	3.78	3.77	4.86	5.29	3.98	1.82	6.77	-0.22	6.72
Butte Area One Restoration	0.69	-0.32	1.31	2.32	2.20	2.85	N/A	2.60	1.20	3.57	-0.08	3.68
Clark Fork River Restoration	0.67	-0.25	1.32	2.57	2.50	3.23	N/A	2.72	1.37	4.26	-0.12	4.36
Coal Tax Cultural Trust Fund	0.94	-0.68	1.74	3.77	3.77	4.85	5.28	3.95	1.79	6.79	-0.23	6.76
Coal Tax Park Acquisition	0.93	-0.72	1.69	3.71	3.73	4.82	5.26	3.90	1.78	6.66	-0.25	6.78
East Helena Compensation Fund	0.59	-0.05	1.24	1.89	N/A	N/A	N/A	2.12	0.91	3.01	-0.13	N/A
Endowment for Children	0.91	-0.65	1.62	3.60	3.64	4.72	N/A	3.66	1.70	6.66	-0.28	6.69
FWP License Account	0.30	0.27	0.69	0.73	0.76	0.97	1.88	0.84	0.61	0.59	0.42	1.64
FWP Mitigation Trust Fund	0.33	0.00	0.39	0.97	1.15	1.43	2.35	0.67	0.87	1.37	0.61	2.85
FWP Real Property Trust	0.90	-0.66	1.67	3.62	3.62	4.65	5.10	3.82	1.73	6.47	-0.24	6.51
Group Benefits	0.29	0.07	0.55	1.14	1.12	1.34	2.44	1.16	1.06	1.17	0.32	2.22
Harold Hamm Endowment	0.22	0.56	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Montana Pole	0.79	-0.44	1.50	3.10	3.09	3.98	4.52	3.23	1.56	5.44	-0.17	5.50
Montana Tech-UM Agency Funds	0.25	0.52	0.74	0.50	0.44	0.51	1.18	0.72	0.27	0.35	0.17	0.57
Montana State University	0.28	0.46	0.83	0.74	0.70	0.85	1.51	0.95	0.39	0.85	0.12	1.07
MT BOI - Clark Fork Site	0.87	-0.60	1.62	3.25	3.13	3.92	N/A	3.63	1.56	5.37	-0.09	5.23
MT BOI UOFM Other	0.51	0.12	1.32	1.93	1.71	1.91	2.44	2.34	1.13	2.57	-0.12	2.54
MUS Group Insurance	0.25	0.24	0.71	1.28	1.11	N/A	N/A	1.33	1.26	1.30	0.17	1.56
MUS Workers Compensation	0.40	0.20	0.21	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Older Montanans Trust	0.91	-0.67	1.69	3.66	3.58	4.37	N/A	3.86	1.72	6.57	-0.23	6.01
Permanent Coal Trust Excl Crp	0.77	0.09	2.06	3.66	3.80	4.63	4.99	3.79	2.23	6.14	0.99	6.29
PERS Defined Cont Disability	3.96	7.50	7.38	N/A	N/A	N/A	N/A	3.42	N/A	N/A	N/A	N/A
Potter Trust Fund	0.92	-0.68	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Resource Indemnity Trust	0.95	-0.72	1.73	3.83	3.83	4.86	5.31	4.02	1.82	6.94	-0.27	6.86
Smelter Hill Up Restorative	0.44	0.09	1.01	1.62	1.53	1.85	N/A	1.79	0.92	2.49	0.01	2.47
State Fund Insurance	1.48	1.10	2.76	3.59	3.98	4.77	4.94	3.50	2.21	5.00	3.11	7.25
Streamside Tailings Operable Unit	0.86	-0.53	1.63	3.45	3.45	4.37	4.91	3.58	1.69	6.22	-0.21	6.14
Tobacco Trust Fund	0.95	-0.72	1.71	3.81	3.80	4.87	5.32	3.99	1.82	6.89	-0.27	6.77
Treasurers	0.21	0.51	0.68	0.44	0.36	0.35	1.04	0.68	0.27	0.19	0.23	0.31
Treasure State Endowment	0.95	-0.70	1.73	3.80	3.80	4.88	5.32	3.98	1.82	6.84	-0.21	6.76
Treasure State Reg. Water System	0.95	-0.70	1.72	3.78	3.77	4.86	5.29	3.96	1.82	6.80	-0.22	6.73
Trust and Legacy Account	0.95	-0.72	1.73	3.83	3.82	4.87	5.31	4.01	1.82	6.92	-0.26	6.78
UCFRB Assess/Litig Cost Rec	0.90	-0.63	1.69	3.57	3.60	4.43	5.09	3.84	1.65	6.40	-0.24	6.45
UCFRB Restoration Fund	0.89	-0.54	1.49	3.46	3.51	4.57	5.02	3.52	1.70	6.28	-0.20	6.43
Upper Blackfoot Response	0.44	0.11	0.98	1.38	1.20	N/A	N/A	1.74	0.84	1.59	0.13	1.60
Weed Control Trust	0.95	-0.72	1.73	3.83	3.81	4.69	5.06	4.02	1.82	6.94	-0.23	6.69
Wildlife Habitat Trust	0.89	-0.68	1.65	3.59	3.60	4.63	5.10	3.79	1.73	6.49	-0.24	6.46
Zortman/Landusky LT H20	0.15	0.42	0.72	1.11	1.68	4.20	5.42	1.36	0.84	1.78	-0.51	5.47
Z/L Long Term H20 Trust Fund	0.22	0.45	0.79	1.33	1.51	3.87	4.89	1.39	1.15	1.76	-0.96	3.91

Performance shown is gross of fees. Fiscal year ends on June 30.

Performance Notes

- All gross and net performance data is provided by State Street Analytics (SSA). Reported gross returns for the retirement plans prior to July 1, 2002 are net of all fees.
- Gross performance for the retirement plans is calculated with fee accruals provided by Montana's Accounting department.
- Retirement plan custom benchmarks are provided by State Street Bank and are calculated daily using actual allocations.
- Gross of fees performance is not available (N/A) for the following funds: Domestic Equity Pool STIF, DFA Intl Sm Co;I (DFISX), International Equity Pool STIF, iShares:MSCI Em Mkts (EEM), and DFA Emg Mkts Sm Cap;I (DEMSX). The current annual expense ratios are as listed below.

Index Notes

- The Montana International Custom Benchmark consists of 100% MSCI EAFE Index (USD) (Net) through 10/31/2006, 100% MSCI ACW Ex US Index (USD) (Net) through 6/30/2007, 92.5% MSCI ACW Ex US Index (USD) (Net) and 7.5% MSCI ACW Ex US SC IM Index (USD) (Net) through 2/28/2014, and 100% MSCI ACW Ex-US IM Index thereafter.

Trust Accounts Comments

- The Potter Trust Fund and the Harold Hamm Endowment were added in June 2016.
- MUS Workers Compensation was added in April 2016.

Manager Transition Comments

- In March 2017, the Core Internal Bond Portfolio was split into five fixed income portfolios: Investment Grade Credit, Mortgage-Backed, TIPS, US Treasury & Agency, and Broad Fixed Income.
- DFA Emg Mkts Sm Cap;I (DEMSX) was funded in February 2017.
- Domestic Equity Pool SPY was liquidated in January 2017.
- iShares:MSCI Em Mkts (EEM) was funded in December 2016.
- Domestic Equity Pool SPY was initially funded in September 2015, was then liquidated in December 2015, and was re-funded in October 2016.
- Wells Capital Management (SA), Domestic Equity Pool SPIF, and International Equity Pool SPIF were liquidated in October 2016. Wells Capital Management (SA) residual assets from liquidation were distributed in March 2017.
- Nicholas Investment Partners was liquidated in July 2016. Residual assets from liquidation were distributed in March 2017.
- Effective July 2016, the Metropolitan West Capital Management legal entity merged into the Wells Capital Management Incorporated legal entity. The Metropolitan West Capital Mgmt (SA) has been updated to Wells Capital Management (SA) to reflect the change.
- iShares S&P SmallCap 600 Index ETF (IJR) was liquidated in January 2016.
- Effective May 2014, ING rebranded to Voya. The ING Investment Management (SA) has been updated to Voya Investment Management (SA) to reflect the change.

Miscellaneous Comments

- Fiscal year ends on June 30.

Expense Ratios

• Domestic Equity Pool STIF:	0.18%
• DFA Intl Sm Co;I (DFISX):	0.53%
• International Equity Pool STIF:	0.18%
• iShares:MSCI Em Mkts (EEM):	0.72%
• DFA Emg Mkts Sm Cap;I (DEMSX):	0.72%

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