



Montana Board of Investments

Investment Performance Analysis

Period Ended: December 31, 2016



Montana Board of Investments
Comparative Performance
Retirement Plans

As of December 31, 2016

	QTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2015	2014	2013	2012	2011
Public Employees' Retirement - Net	1.08	4.35	7.32	5.71	9.44	8.83	5.32	1.86	8.07	17.38	13.24	2.13
Public Employees' Benchmark	1.32	4.61	9.09	6.46	10.33	9.35	5.60	1.40	9.08	17.94	14.88	1.67
Difference	-0.24	-0.26	-1.77	-0.75	-0.89	-0.52	-0.28	0.46	-1.01	-0.56	-1.64	0.46
Public Employees' Retirement - Gross	1.18	4.56	7.78	6.20	9.97	9.38	5.84	2.31	8.61	17.96	13.83	2.68
All Public Plans > \$3B Total Fund Median	0.96	4.63	8.01	4.86	8.29	7.90	5.20	0.34	6.81	14.65	13.08	1.24
Rank	27	52	58	3	1	1	11	8	8	6	32	32
Teachers' Retirement - Net	1.07	4.35	7.33	5.73	9.45	8.84	5.32	1.86	8.09	17.38	13.24	2.14
Teachers' Benchmark	1.32	4.61	9.08	6.47	10.34	9.35	5.60	1.40	9.11	17.94	14.89	1.66
Difference	-0.25	-0.26	-1.75	-0.74	-0.89	-0.51	-0.28	0.46	-1.02	-0.56	-1.65	0.48
Teachers' Retirement - Gross	1.18	4.55	7.80	6.21	9.98	9.39	5.84	2.32	8.63	17.96	13.84	2.68
All Public Plans > \$3B Total Fund Median	0.96	4.63	8.01	4.86	8.29	7.90	5.20	0.34	6.81	14.65	13.08	1.24
Rank	28	52	58	3	1	1	11	8	8	6	32	31
Police Retirement - Net	1.07	4.34	7.32	5.71	9.45	8.81	5.28	1.86	8.07	17.41	13.23	2.10
Police Benchmark	1.32	4.61	9.08	6.47	10.32	9.31	5.56	1.41	9.10	17.92	14.80	1.66
Difference	-0.25	-0.27	-1.76	-0.76	-0.87	-0.50	-0.28	0.45	-1.03	-0.51	-1.57	0.44
Police Retirement - Gross	1.18	4.55	7.78	6.20	9.97	9.35	5.80	2.31	8.61	18.00	13.78	2.65
All Public Plans > \$3B Total Fund Median	0.96	4.63	8.01	4.86	8.29	7.90	5.20	0.34	6.81	14.65	13.08	1.24
Rank	28	53	58	3	1	1	11	8	8	5	36	34

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 December 31, 2016

	QTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2015	2014	2013	2012	2011
Firefighters' Retirement - Net	1.08	4.34	7.32	5.71	9.45	8.81	5.31	1.87	8.07	17.41	13.22	2.10
Firefighters' Benchmark	1.32	4.61	9.09	6.47	10.32	9.31	5.58	1.41	9.10	17.92	14.80	1.66
Difference	-0.24	-0.27	-1.77	-0.76	-0.87	-0.50	-0.27	0.46	-1.03	-0.51	-1.58	0.44
Firefighters' Retirement - Gross	1.18	4.55	7.78	6.20	9.97	9.35	5.83	2.32	8.61	17.99	13.81	2.64
All Public Plans > \$3B Total Fund Median	0.96	4.63	8.01	4.86	8.29	7.90	5.20	0.34	6.81	14.65	13.08	1.24
Rank	27	53	58	3	1	1	11	8	8	5	34	34
Sheriffs' Retirement - Net	1.08	4.36	7.33	5.71	9.43	8.81	5.31	1.86	8.05	17.35	13.19	2.12
Sheriffs' Benchmark	1.32	4.62	9.10	6.46	10.32	9.32	5.60	1.40	9.07	17.91	14.84	1.65
Difference	-0.24	-0.26	-1.77	-0.75	-0.89	-0.51	-0.29	0.46	-1.02	-0.56	-1.65	0.47
Sheriffs' Retirement - Gross	1.19	4.57	7.79	6.20	9.95	9.35	5.83	2.32	8.59	17.93	13.79	2.66
All Public Plans > \$3B Total Fund Median	0.96	4.63	8.01	4.86	8.29	7.90	5.20	0.34	6.81	14.65	13.08	1.24
Rank	27	52	58	3	1	1	11	8	8	6	36	33
Highway Patrol Retirement - Net	1.07	4.35	7.30	5.71	9.45	8.84	5.32	1.87	8.08	17.38	13.24	2.12
Highway Patrol Benchmark	1.31	4.61	9.09	6.47	10.34	9.35	5.61	1.41	9.10	17.94	14.88	1.65
Difference	-0.24	-0.26	-1.79	-0.76	-0.89	-0.51	-0.29	0.46	-1.02	-0.56	-1.64	0.47
Highway Patrol Retirement - Gross	1.17	4.55	7.77	6.20	9.97	9.39	5.84	2.32	8.62	17.96	13.84	2.66
All Public Plans > \$3B Total Fund Median	0.96	4.63	8.01	4.86	8.29	7.90	5.20	0.34	6.81	14.65	13.08	1.24
Rank	28	52	58	3	1	1	11	8	8	6	32	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 December 31, 2016

	QTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2015	2014	2013	2012	2011
Game Wardens' Retirement - Net	1.08	4.37	7.31	5.70	9.42	8.81	5.30	1.88	8.03	17.34	13.20	2.09
Game Wardens' Benchmark	1.32	4.63	9.11	6.46	10.32	9.32	5.60	1.41	9.06	17.90	14.85	1.64
Difference	-0.24	-0.26	-1.80	-0.76	-0.90	-0.51	-0.30	0.47	-1.03	-0.56	-1.65	0.45
Game Wardens' Retirement - Gross	1.18	4.57	7.78	6.19	9.95	9.35	5.82	2.33	8.57	17.92	13.79	2.63
All Public Plans > \$3B Total Fund Median	0.96	4.63	8.01	4.86	8.29	7.90	5.20	0.34	6.81	14.65	13.08	1.24
Rank	27	52	58	3	1	1	11	8	8	6	35	34
Judges' Retirement - Net	1.08	4.36	7.32	5.71	9.43	8.82	5.32	1.86	8.06	17.36	13.20	2.12
Judges' Benchmark	1.32	4.62	9.10	6.46	10.32	9.33	5.61	1.40	9.08	17.92	14.84	1.64
Difference	-0.24	-0.26	-1.78	-0.75	-0.89	-0.51	-0.29	0.46	-1.02	-0.56	-1.64	0.48
Judges' Retirement - Gross	1.18	4.57	7.79	6.20	9.96	9.37	5.84	2.32	8.60	17.94	13.79	2.66
All Public Plans > \$3B Total Fund Median	0.96	4.63	8.01	4.86	8.29	7.90	5.20	0.34	6.81	14.65	13.08	1.24
Rank	27	52	58	3	1	1	11	8	8	6	35	33
Volunteer Firefighters' Retirement - Net	1.07	4.36	7.16	5.69	9.42	8.84	5.31	1.91	8.09	17.42	13.18	2.09
Volunteer Firefighters' Benchmark	1.32	4.62	9.08	6.47	10.33	9.36	5.60	1.42	9.11	17.97	14.79	1.70
Difference	-0.25	-0.26	-1.92	-0.78	-0.91	-0.52	-0.29	0.49	-1.02	-0.55	-1.61	0.39
Volunteer Firefighters' Retirement - Gross	1.18	4.56	7.63	6.17	9.95	9.39	5.82	2.36	8.63	18.00	13.77	2.63
All Public Plans > \$3B Total Fund Median	0.96	4.63	8.01	4.86	8.29	7.90	5.20	0.34	6.81	14.65	13.08	1.24
Rank	28	52	63	3	1	1	11	8	8	5	36	34

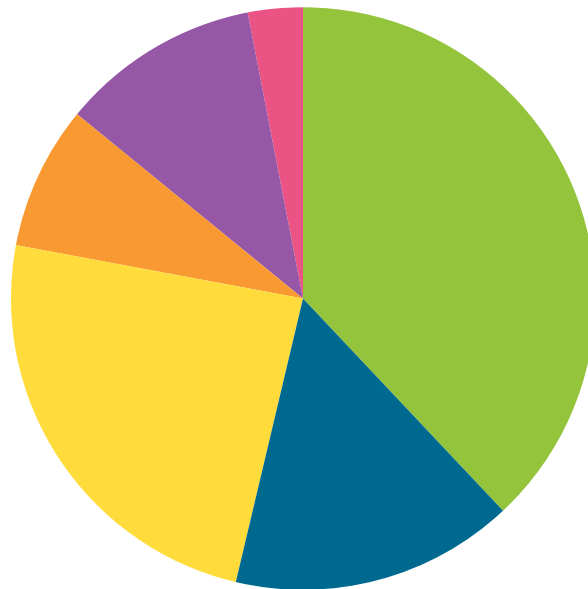
Net performance shown is net of all manager fees and expenses (Net-All). All Public Plans > \$3B Total Fund Median is reported gross of fees. Benchmark returns reflect unmanaged indices which are not impacted by management fees. Fiscal year ends on June 30.

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

As of December 31, 2016

	Domestic Equity		International Equity		Domestic Fixed Income		Real Estate		Private Equity		Cash Equivalent		Total Fund	
	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%
Public Employees' Retirement	1,958,825,555	37.97	809,737,321	15.70	1,249,627,232	24.23	411,216,003	7.97	570,072,480	11.05	158,776,169	3.08	5,158,254,760	49.98
Teachers' Retirement	1,416,016,042	38.03	585,346,594	15.72	903,337,266	24.26	297,262,473	7.98	412,094,219	11.07	109,486,713	2.94	3,723,543,307	36.08
Police Retirement	133,091,207	37.91	55,016,788	15.67	84,904,746	24.19	27,939,713	7.96	38,732,841	11.03	11,366,049	3.24	351,051,344	3.40
Firefighters' Retirement	136,834,189	37.99	56,563,106	15.70	87,291,309	24.23	28,725,148	7.97	39,820,985	11.06	10,970,801	3.05	360,205,537	3.49
Sheriffs' Retirement	117,616,263	38.00	48,619,004	15.71	75,031,534	24.24	24,690,795	7.98	34,228,252	11.06	9,312,063	3.01	309,497,911	3.00
Highway Patrol Retirement	49,925,090	37.87	20,638,060	15.65	31,849,664	24.16	10,480,788	7.95	14,529,676	11.02	4,407,514	3.34	131,830,792	1.28
Game Wardens' Retirement	61,359,348	37.90	25,363,887	15.67	39,142,996	24.18	12,880,893	7.96	17,856,315	11.03	5,294,464	3.27	161,897,904	1.57
Judges' Retirement	34,348,468	38.01	14,198,618	15.71	21,912,084	24.25	7,210,659	7.98	9,995,959	11.06	2,710,335	3.00	90,376,122	0.88
Volunteer Firefighters' Retirement	12,776,779	38.13	5,281,773	15.76	8,151,074	24.32	2,682,267	8.00	3,718,550	11.10	902,248	2.69	33,512,692	0.32
Retirement Plans Total Fund Composite	3,920,792,941	37.99	1,620,765,152	15.70	2,501,247,906	24.24	823,088,739	7.98	1,141,049,278	11.06	313,226,356	3.04	10,320,170,370	100.00

December 31, 2016 : \$10,320,170,371



Segments

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

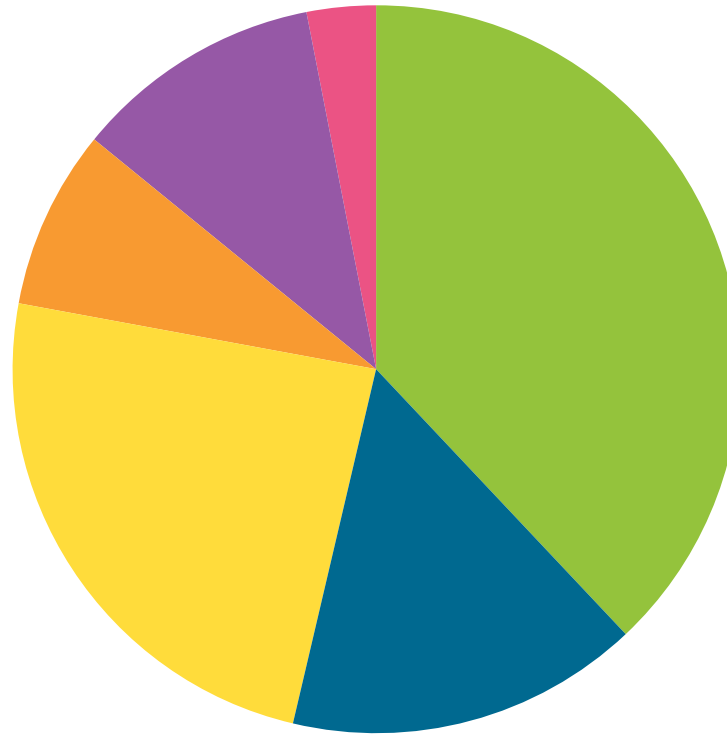
**Market Value
(\$)**

**Allocation
(%)**

Domestic Equity	3,920,792,941	37.99
International Equity	1,620,765,152	15.70
Domestic Fixed Income	2,501,247,906	24.24
Real Estate	823,088,739	7.98
Private Equity	1,141,049,278	11.06
Cash Equivalent	313,226,356	3.04

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.

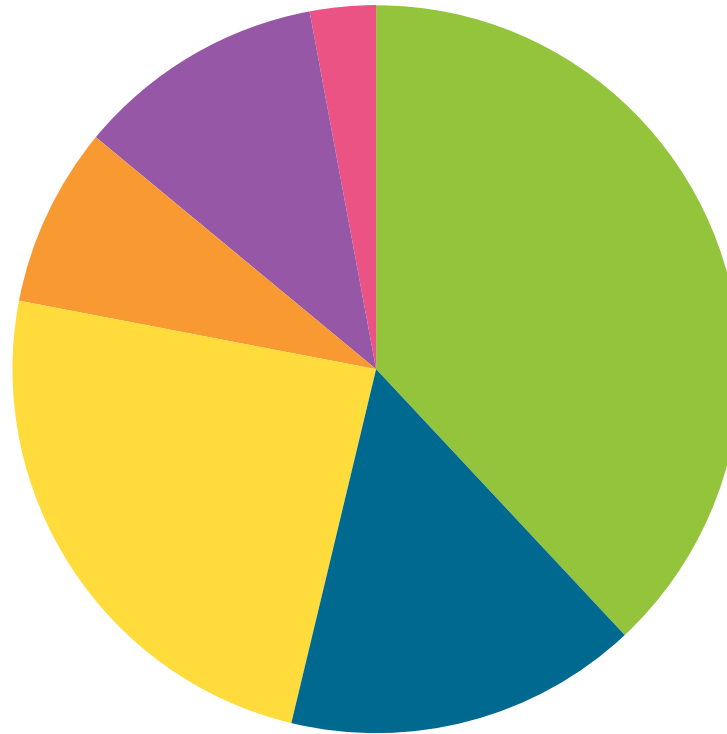
December 31, 2016 : \$5,158,254,760



Segments	Market Value (\$)	Allocation (%)
Domestic Equity	1,958,825,555	37.97
International Equity	809,737,321	15.70
Domestic Fixed Income	1,249,627,232	24.23
Real Estate	411,216,003	7.97
Private Equity	570,072,480	11.05
Cash Equivalent	158,776,169	3.08

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

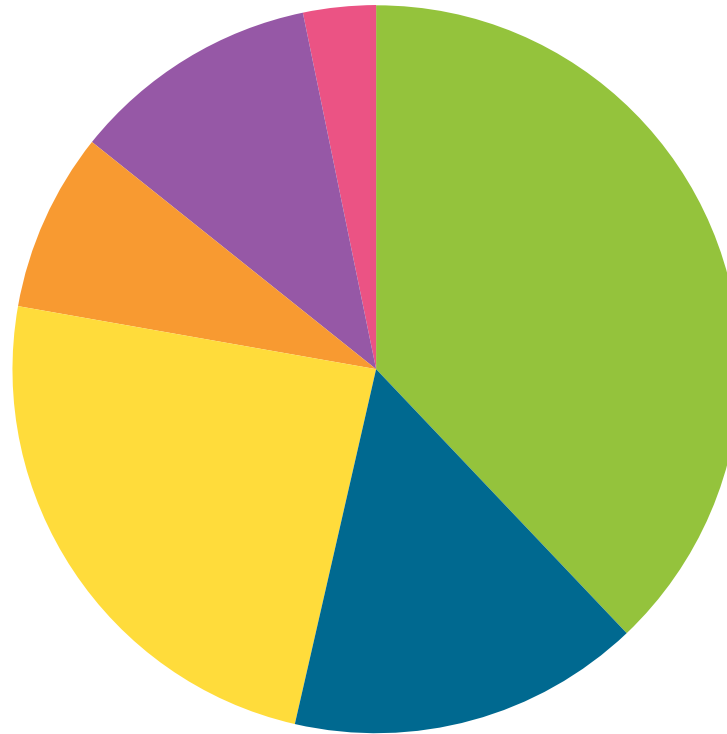
December 31, 2016 : \$3,723,543,308



Segments	Market Value (\$)	Allocation (%)
Domestic Equity	1,416,016,042	38.03
International Equity	585,346,594	15.72
Domestic Fixed Income	903,337,266	24.26
Real Estate	297,262,473	7.98
Private Equity	412,094,219	11.07
Cash Equivalent	109,486,713	2.94

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

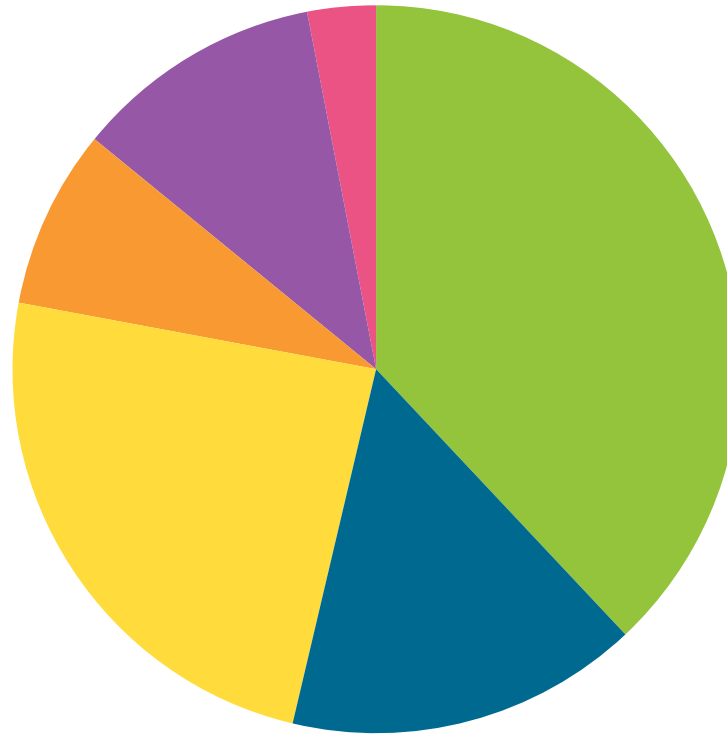
December 31, 2016 : \$351,051,344



Segments	Market Value (\$)	Allocation (%)
Domestic Equity	133,091,207	37.91
International Equity	55,016,788	15.67
Domestic Fixed Income	84,904,746	24.19
Real Estate	27,939,713	7.96
Private Equity	38,732,841	11.03
Cash Equivalent	11,366,049	3.24

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

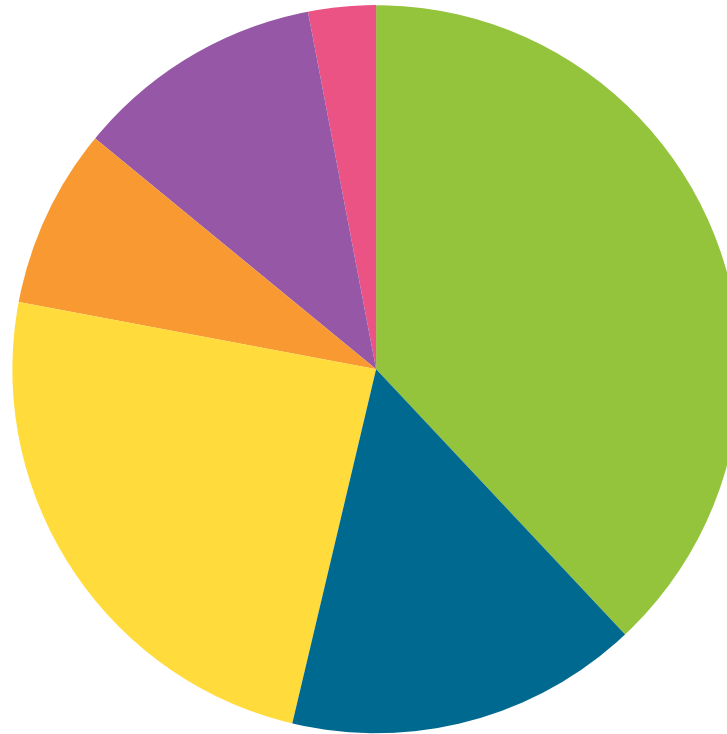
December 31, 2016 : \$360,205,537



Segments	Market Value (\$)	Allocation (%)
Domestic Equity	136,834,189	37.99
International Equity	56,563,106	15.70
Domestic Fixed Income	87,291,309	24.23
Real Estate	28,725,148	7.97
Private Equity	39,820,985	11.06
Cash Equivalent	10,970,801	3.05

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

December 31, 2016 : \$309,497,911



Segments	Market Value (\$)	Allocation (%)
Domestic Equity	117,616,263	38.00
International Equity	48,619,004	15.71
Domestic Fixed Income	75,031,534	24.24
Real Estate	24,690,795	7.98
Private Equity	34,228,252	11.06
Cash Equivalent	9,312,063	3.01

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

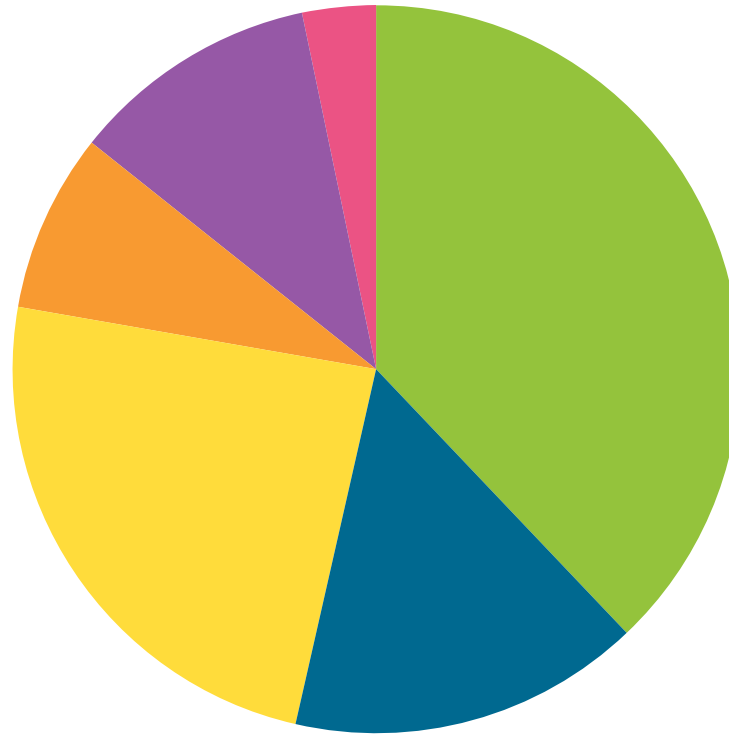
December 31, 2016 : \$131,830,792



Segments	Market Value (\$)	Allocation (%)
Domestic Equity	49,925,090	37.87
International Equity	20,638,060	15.65
Domestic Fixed Income	31,849,664	24.16
Real Estate	10,480,788	7.95
Private Equity	14,529,676	11.02
Cash Equivalent	4,407,514	3.34

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

December 31, 2016 : \$161,897,904



Segments	Market Value (\$)	Allocation (%)
Domestic Equity	61,359,348	37.90
International Equity	25,363,887	15.67
Domestic Fixed Income	39,142,996	24.18
Real Estate	12,880,893	7.96
Private Equity	17,856,315	11.03
Cash Equivalent	5,294,464	3.27

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

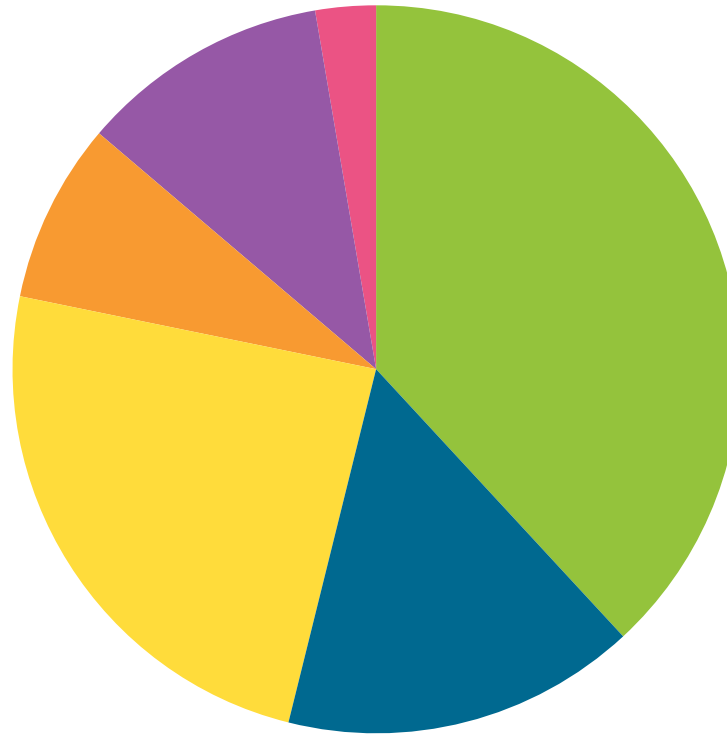
December 31, 2016 : \$90,376,122



Segments	Market Value (\$)	Allocation (%)
Domestic Equity	34,348,468	38.01
International Equity	14,198,618	15.71
Domestic Fixed Income	21,912,084	24.25
Real Estate	7,210,659	7.98
Private Equity	9,995,959	11.06
Cash Equivalent	2,710,335	3.00

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

December 31, 2016 : \$33,512,692



Segments	Market Value (\$)	Allocation (%)
Domestic Equity	12,776,779	38.13
International Equity	5,281,773	15.76
Domestic Fixed Income	8,151,074	24.32
Real Estate	2,682,267	8.00
Private Equity	3,718,550	11.10
Cash Equivalent	902,248	2.69

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Montana Board of Investments
Comparative Performance
Investment Pools

As of December 31, 2016

	QTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2015	2014	2013	2012	2011
Montana Domestic Equity Pool	4.06	8.33	11.46	8.07	14.55	12.67	6.77	0.86	12.28	34.19	16.44	0.44
S&P 1500 Comp Index	4.32	8.47	13.03	8.89	14.77	13.04	7.19	1.01	13.08	32.80	16.17	1.75
Difference	-0.26	-0.14	-1.57	-0.82	-0.22	-0.37	-0.42	-0.15	-0.80	1.39	0.27	-1.31
Montana International Equity Pool	-1.99	4.60	3.87	-1.30	5.56	3.22	0.23	-3.57	-4.00	16.39	17.11	-14.63
International Custom Benchmark	-1.57	5.37	4.41	-1.49	5.27	3.19	1.12	-4.60	-4.03	15.62	16.96	-14.07
Difference	-0.42	-0.77	-0.54	0.19	0.29	0.03	-0.89	1.03	0.03	0.77	0.15	-0.56
Retirement Funds Bond Pool	-2.62	-1.77	3.98	3.53	3.35	4.94	5.16	0.48	6.19	-0.95	7.31	7.69
Bloomberg US Agg Bond Index	-2.98	-2.53	2.65	3.03	2.23	3.63	4.34	0.55	5.97	-2.02	4.21	7.84
Difference	0.36	0.76	1.33	0.50	1.12	1.31	0.82	-0.07	0.22	1.07	3.10	-0.15
Trust Funds Investment Pool	-2.32	-1.67	4.02	4.25	3.87	5.13	5.47	1.83	6.96	-0.25	6.99	8.20
Bloomberg US Agg Bond Index	-2.98	-2.53	2.65	3.03	2.23	3.63	4.34	0.55	5.97	-2.02	4.21	7.84
Difference	0.66	0.86	1.37	1.22	1.64	1.50	1.13	1.28	0.99	1.77	2.78	0.36
Real Estate Pool*	1.67	3.81	8.82	11.72	11.04	9.87	2.94	14.27	12.13	10.16	9.90	14.19
NCREIF ODCE Index (AWA) (Net) (Qtr Lag)	1.83	3.77	9.08	11.42	11.34	11.37	5.05	13.86	11.36	11.97	10.47	17.18
Difference	-0.16	0.04	-0.26	0.30	-0.30	-1.50	-2.11	0.41	0.77	-1.81	-0.57	-2.99
Short Term Investment Pool	0.18	0.34	0.61	0.31	0.28	0.29	1.07	0.22	0.10	0.19	0.30	0.28
ICE 1 Mo LIBOR Index (USD)	0.15	0.28	0.49	0.28	0.26	0.25	0.99	0.20	0.16	0.19	0.24	0.23
Difference	0.03	0.06	0.12	0.03	0.02	0.04	0.08	0.02	-0.06	0.00	0.06	0.05
iMoney.net Money Fund (Gross) Median	0.20	0.34	0.61	0.34	0.31	0.31	1.12	0.25	0.17	0.22	0.30	0.27
Difference	-0.02	0.00	0.00	-0.03	-0.03	-0.02	-0.05	-0.03	-0.07	-0.03	0.00	0.01

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.

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 Investment Pools

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	QTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2015	2014	2013	2012	2011
Private Equity Pool*	3.37	5.83	7.37	9.95	11.71	12.68	9.34	7.20	15.47	14.52	14.28	16.11
S&P 1500+4% (Qtr Lag)	4.98	8.68	19.49	14.93	20.44	17.29	11.44	3.70	22.57	24.43	34.18	4.92
<i>Difference</i>	<i>-1.61</i>	<i>-2.85</i>	<i>-12.12</i>	<i>-4.98</i>	<i>-8.73</i>	<i>-4.61</i>	<i>-2.10</i>	3.50	<i>-7.10</i>	<i>-9.91</i>	<i>-19.90</i>	11.19

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.

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	QTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2015	2014	2013	2012	2011
Montana Domestic Equity Pool	4.13	8.47	11.76	8.36	14.87	13.03	7.12	1.14	12.59	34.61	16.77	0.85
All Public Plans-US Equity Segment Median	4.11	8.61	12.65	7.93	14.33	12.95	7.12	0.14	11.42	33.76	16.57	0.84
Rank	48	57	72	33	25	43	50	22	21	41	39	50
Population	69	68	67	65	56	47	25	93	50	48	44	44
Montana International Equity Pool	-1.92	4.75	4.15	-1.06	5.85	3.54	0.60	-3.35	-3.77	16.80	17.45	-14.32
All Public Plans-Intl. Equity Segment Median	-2.11	4.76	3.74	-0.68	6.87	4.63	1.83	-2.48	-3.00	18.68	18.94	-12.65
Rank	45	51	42	69	72	89	96	68	75	78	81	90
Population	67	67	67	60	51	41	23	87	47	44	39	39
Retirement Funds Bond Pool	-2.59	-1.72	4.09	3.63	3.47	5.05	5.26	0.59	6.30	-0.83	7.44	7.82
All Public Plans-US Fixed Income Segment Median	-2.11	-0.69	4.84	3.54	3.20	4.83	4.88	0.30	6.04	-1.40	7.57	7.93
Rank	69	74	67	46	45	40	30	36	40	37	53	57
Population	71	71	71	68	60	48	27	82	50	50	49	46
Trust Funds Investment Pool	-2.29	-1.62	4.12	4.34	3.97	5.23	5.55	1.89	7.08	-0.14	7.11	8.30
All Public Plans-US Fixed Income Segment Median	-2.11	-0.69	4.84	3.54	3.20	4.83	4.88	0.30	6.04	-1.40	7.57	7.93
Rank	57	73	66	23	36	36	29	4	26	26	58	44
Population	71	71	71	68	60	48	27	82	50	50	49	46
Real Estate Pool	1.86	4.17	10.26	13.13	12.51	11.53	4.28	15.68	13.51	11.73	11.44	15.96
All Public Plans-Real Estate Segment Median	2.00	4.41	10.09	12.37	12.84	12.16	N/A	13.42	14.01	13.91	12.36	N/A
Rank	64	55	43	26	60	73	N/A	11	60	69	85	N/A
Population	36	31	26	21	19	14	N/A	31	18	16	13	N/A

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

Montana Board of Investments
Comparative Performance
Equity Composites

As of December 31, 2016

	QTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2015	2014	2013	2012	2011
Domestic Large Cap Equity - Net	3.92	8.00	11.30	8.83	14.79	12.76	N/A	1.76	13.82	33.14	16.14	0.54
S&P 500 Index (Cap Wtd)	3.82	7.82	11.96	8.87	14.66	12.83	6.95	1.38	13.69	32.39	16.00	2.11
Difference	0.10	0.18	-0.66	-0.04	0.13	-0.07	N/A	0.38	0.13	0.75	0.14	-1.57
Domestic Large Cap Equity - Gross	3.95	8.07	11.45	8.99	14.98	13.00	N/A	1.91	13.99	33.34	16.39	0.87
IM U.S. Large Cap Equity (SA+CF) Median	3.85	7.87	10.98	8.28	14.52	12.73	7.28	0.94	12.92	33.52	15.84	1.23
Rank	49	47	47	27	33	39	N/A	40	32	53	42	55
Domestic Large Cap Active - Net	4.06	8.36	9.63	8.57	14.91	12.74	N/A	2.40	14.01	34.90	16.03	-0.10
S&P 500 Index (Cap Wtd)	3.82	7.82	11.96	8.87	14.66	12.83	6.95	1.38	13.69	32.39	16.00	2.11
Difference	0.24	0.54	-2.33	-0.30	0.25	-0.09	N/A	1.02	0.32	2.51	0.03	-2.21
Domestic Large Cap Active - Gross	4.17	8.60	10.12	9.08	15.45	13.27	N/A	2.88	14.56	35.55	16.56	0.35
IM U.S. Large Cap Equity (SA+CF) Median	3.85	7.87	10.98	8.28	14.52	12.73	7.28	0.94	12.92	33.52	15.84	1.23
Rank	45	42	57	24	23	28	N/A	33	25	33	39	60
Domestic Mid Cap Equity - Net	3.58	8.14	12.29	4.94	13.17	12.08	7.41	-3.31	6.45	38.18	16.27	1.28
Russell Mid Cap Index	3.21	7.87	13.80	7.92	14.72	13.68	7.86	-2.44	13.22	34.76	17.28	-1.55
Difference	0.37	0.27	-1.51	-2.98	-1.55	-1.60	-0.45	-0.87	-6.77	3.42	-1.01	2.83
Domestic Mid Cap Equity - Gross	3.74	8.46	12.96	5.56	13.81	12.71	8.02	-2.74	7.07	38.95	16.83	1.79
IM U.S. Mid Cap Equity (SA+CF) Median	3.90	8.75	12.12	7.13	14.69	13.62	8.76	-1.19	9.78	36.40	16.52	-1.06
Rank	51	53	46	67	59	67	74	68	73	34	48	25
Domestic Small Cap Equity - Net	8.48	16.29	19.31	7.37	15.04	13.64	7.49	-1.61	5.44	40.65	15.76	-2.50
Russell 2000 Index	8.83	18.68	21.31	6.74	14.46	13.24	7.07	-4.41	4.89	38.82	16.35	-4.18
Difference	-0.35	-2.39	-2.00	0.63	0.58	0.40	0.42	2.80	0.55	1.83	-0.59	1.68
Domestic Small Cap Equity - Gross	8.66	16.69	19.97	8.06	15.76	14.39	8.19	-0.93	6.16	41.54	16.40	-1.64
IM U.S. Small Cap Equity (SA+CF) Median	9.11	17.37	20.88	7.79	15.45	14.48	8.48	-2.39	5.36	41.32	16.48	-1.89
Rank	55	55	57	48	46	52	57	35	43	49	52	48

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 December 31, 2016

	QTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2015	2014	2013	2012	2011
International Large Cap Passive - Net	-1.34	5.57	4.87	-1.27	5.28	3.11	N/A	-4.71	-3.70	14.95	16.92	-13.55
MSCI ACW Ex US Index (USD) (Net)	-1.25	5.57	4.50	-1.78	5.00	2.93	0.96	-5.66	-3.87	15.29	16.83	-13.71
Difference	-0.09	0.00	0.37	0.51	0.28	0.18	N/A	0.95	0.17	-0.34	0.09	0.16
International Large Cap Passive - Gross	-1.32	5.61	4.96	-1.19	5.37	3.20	N/A	-4.63	-3.62	15.05	17.02	-13.48
International Equity Active - Net	-3.23	3.28	2.63	-0.50	6.72	3.96	0.72	0.41	-4.39	19.23	17.87	-15.39
MSCI ACW Ex US Index (USD) (Net)	-1.25	5.57	4.50	-1.78	5.00	2.93	0.96	-5.66	-3.87	15.29	16.83	-13.71
Difference	-1.98	-2.29	-1.87	1.28	1.72	1.03	-0.24	6.07	-0.52	3.94	1.04	-1.68
International Equity Active - Gross	-3.09	3.56	3.17	0.00	7.23	4.45	1.21	0.90	-3.94	19.75	18.36	-14.98
IM International Large Cap Core Equity (SA+CF) Median	-1.87	5.12	1.14	-0.84	7.50	5.25	1.99	0.33	-3.94	23.31	19.45	-12.26
Rank	76	66	25	29	56	66	80	44	51	74	66	82
International Value - Net	-1.02	4.82	5.59	-0.73	5.84	3.05	-0.52	-5.94	-1.49	17.15	15.88	-15.46
MSCI ACW Ex US Val Index (USD) (Net)	3.29	11.34	8.92	-2.40	4.58	2.28	0.34	-10.06	-5.10	15.04	16.97	-13.20
Difference	-4.31	-6.52	-3.33	1.67	1.26	0.77	-0.86	4.12	3.61	2.11	-1.09	-2.26
International Value - Gross	-0.88	5.10	6.17	-0.19	6.43	3.64	0.07	-5.46	-0.94	17.82	16.55	-14.96
IM International Large Cap Value Equity (SA+CF) Median	-0.29	6.96	3.44	-0.64	7.07	4.83	2.04	-1.80	-4.25	23.25	17.95	-10.80
Rank	62	66	25	47	69	83	96	86	15	78	66	77
International Growth - Net	-5.20	0.74	0.51	-1.38	6.12	3.46	0.74	1.69	-6.15	18.55	18.37	-14.99
MSCI ACW Ex US Grth Index (USD) (Net)	-5.72	0.00	0.12	-1.27	5.34	3.51	1.52	-1.25	-2.65	15.49	16.67	-14.21
Difference	0.52	0.74	0.39	-0.11	0.78	-0.05	-0.78	2.94	-3.50	3.06	1.70	-0.78
International Growth - Gross	-5.05	1.05	1.12	-0.86	6.65	3.99	1.27	2.21	-5.72	19.09	18.89	-14.56
IM International Large Cap Growth Equity (SA+CF) Median	-4.05	2.15	-0.09	-0.68	7.33	5.39	2.80	2.12	-3.37	20.92	19.67	-11.44
Rank	66	62	32	54	76	86	80	50	79	70	59	80
International Small Cap - Net	-3.73	4.34	1.84	0.63	8.66	6.89	2.11	5.16	-4.87	25.30	18.64	-15.36
MSCI ACWI Ex US Sm Cap Index IMI (USD) (Net)	-3.52	4.11	3.91	0.77	7.74	5.78	2.90	2.60	-4.03	19.73	18.52	-18.50
Difference	-0.21	0.23	-2.07	-0.14	0.92	1.11	-0.79	2.56	-0.84	5.57	0.12	3.14
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	-3.74	4.50	1.06	2.37	11.54	9.02	4.74	10.39	-3.38	31.13	23.44	-13.72
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;I (DFISX), 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 December 31, 2016

	QTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2015	2014	2013	2012	2011
Domestic Large Cap Passive - Net	3.85	7.87	12.01	8.70	14.57	12.81	6.91	0.83	13.73	32.41	16.06	2.20
S&P 500 Index (Cap Wtd)	3.82	7.82	11.96	8.87	14.66	12.83	6.95	1.38	13.69	32.39	16.00	2.11
Difference	0.03	0.05	0.05	-0.17	-0.09	-0.02	-0.04	-0.55	0.04	0.02	0.06	0.09
Domestic Large Cap Passive - Gross	3.86	7.87	12.03	8.71	14.58	12.82	6.98	0.84	13.74	32.42	16.07	2.21
IM U.S. Large Cap Index Equity (SA+CF) Median	3.84	8.03	12.03	8.64	14.66	12.88	7.10	0.95	13.29	32.56	16.18	1.56
Rank	47	65	52	45	72	74	68	57	18	64	55	22
Domestic Large Cap Enhanced - Net	2.84	6.65	9.73	8.62	14.76	13.17	6.33	3.18	13.19	32.89	16.87	1.94
S&P 500 Index (Cap Wtd)	3.82	7.82	11.96	8.87	14.66	12.83	6.95	1.38	13.69	32.39	16.00	2.11
Difference	-0.98	-1.17	-2.23	-0.25	0.10	0.34	-0.62	1.80	-0.50	0.50	0.87	-0.17
Domestic Large Cap Enhanced - Gross	2.90	6.79	10.05	8.95	15.11	13.52	6.65	3.50	13.54	33.31	17.21	2.25
IM U.S. Large Cap Core Equity (SA+CF) Median	3.84	7.65	10.51	8.45	14.56	12.73	7.29	1.27	13.43	32.94	15.71	2.02
Rank	70	62	58	35	34	22	77	23	49	47	31	47
Domestic Large Cap 130/30 - Net	5.34	10.18	9.54	8.53	15.69	12.74	N/A	1.61	14.84	36.94	18.42	-1.74
S&P 500 Index (Cap Wtd)	3.82	7.82	11.96	8.87	14.66	12.83	6.95	1.38	13.69	32.39	16.00	2.11
Difference	1.52	2.36	-2.42	-0.34	1.03	-0.09	N/A	0.23	1.15	4.55	2.42	-3.85
Domestic Large Cap 130/30 - Gross	5.49	10.51	10.22	9.22	16.44	13.48	N/A	2.26	15.59	37.83	19.18	-1.05
IM U.S. Large Cap Core Equity (SA+CF) Median	3.84	7.65	10.51	8.45	14.56	12.73	7.29	1.27	13.43	32.94	15.71	2.02
Rank	17	18	55	30	12	22	N/A	37	21	13	15	77

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 December 31, 2016

	QTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2015	2014	2013	2012	2011	Since Incep.	Inception Date
Domestic Large Cap Equity														
BlackRock Equity Idx Fund A (CF) - Net	3.82	7.83	11.98	8.91	14.70	12.89	7.03	1.44	13.73	32.41	16.05	2.19	4.72	05/01/2000
S&P 500 Index (Cap Wtd)	3.82	7.82	11.96	8.87	14.66	12.83	6.95	1.38	13.69	32.39	16.00	2.11	4.65	
Difference	0.00	0.01	0.02	0.04	0.04	0.06	0.08	0.06	0.04	0.02	0.05	0.08	0.07	
BlackRock Equity Idx Fund A (CF) - Gross	3.82	7.83	11.99	8.92	14.71	12.91	7.04	1.45	13.74	32.42	16.06	2.22	4.73	05/01/2000
IM U.S. Large Cap Index Equity (SA+CF) Median	3.84	8.03	12.03	8.64	14.66	12.88	7.10	0.95	13.29	32.56	16.18	1.56	4.91	
Rank	64	69	59	11	33	47	54	24	18	64	56	21	53	
Domestic Equity Pool SPY - 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	5.79	11/01/2016
S&P 500 Index (Cap Wtd)	3.82	7.82	11.96	8.87	14.66	12.83	6.95	1.38	13.69	32.39	16.00	2.11	5.75	
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	0.04	
Domestic Equity Pool STIF - Net	0.13	0.29	0.50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.35	04/01/2015
ICE 1 Mo LIBOR Index (USD)	0.15	0.28	0.49	0.28	0.26	0.25	0.99	0.20	0.16	0.19	0.24	0.23	0.37	
Difference	-0.02	0.01	0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.02	
INTECH Enhanced Plus (SA) - Net	2.07	4.16	7.56	8.32	14.10	12.84	6.99	2.83	14.91	32.46	14.89	4.33	7.72	06/01/2006
S&P 500 Index (Cap Wtd)	3.82	7.82	11.96	8.87	14.66	12.83	6.95	1.38	13.69	32.39	16.00	2.11	7.78	
Difference	-1.75	-3.66	-4.40	-0.55	-0.56	0.01	0.04	1.45	1.22	0.07	-1.11	2.22	-0.06	
INTECH Enhanced Plus (SA) - Gross	2.16	4.34	7.93	8.69	14.50	13.22	7.38	3.18	15.31	32.92	15.28	4.68	8.09	06/01/2006
IM U.S. Large Cap Core Equity (SA+CF) Median	3.84	7.65	10.51	8.45	14.56	12.73	7.29	1.27	13.43	32.94	15.71	2.02	8.03	
Rank	79	84	81	45	52	32	47	26	25	51	58	20	47	
T. Rowe U.S. Structured Research (SA) - Net	3.16	7.73	10.68	8.78	14.83	12.72	7.33	3.30	12.58	33.23	16.42	1.67	8.17	06/01/2006
S&P 500 Index (Cap Wtd)	3.82	7.82	11.96	8.87	14.66	12.83	6.95	1.38	13.69	32.39	16.00	2.11	7.78	
Difference	-0.66	-0.09	-1.28	-0.09	0.17	-0.11	0.38	1.92	-1.11	0.84	0.42	-0.44	0.39	
T. Rowe U.S. Structured Research (SA) - Gross	3.21	7.86	10.98	9.10	15.17	13.05	7.67	3.61	12.92	33.63	16.77	1.98	8.50	06/01/2006
IM U.S. Large Cap Core Equity (SA+CF) Median	3.84	7.65	10.51	8.45	14.56	12.73	7.29	1.27	13.43	32.94	15.71	2.02	8.03	
Rank	65	46	46	31	33	40	36	23	59	44	36	51	32	

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 December 31, 2016

	QTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2015	2014	2013	2012	2011	Since Incep.	Inception Date
Analytic Investors 130/30 (SA) - Net	5.22	6.31	8.74	9.30	15.69	13.07	N/A	5.94	13.33	35.22	17.38	3.13	7.87	03/01/2008
S&P 500 Index (Cap Wtd)	3.82	7.82	11.96	8.87	14.66	12.83	6.95	1.38	13.69	32.39	16.00	2.11	8.41	
Difference	1.40	-1.51	-3.22	0.43	1.03	0.24	N/A	4.56	-0.36	2.83	1.38	1.02	-0.54	
Analytic Investors 130/30 (SA) - Gross	5.33	6.53	9.22	9.80	16.23	13.63	N/A	6.42	13.88	35.86	17.94	3.70	8.42	03/01/2008
IM U.S. Large Cap Core Equity (SA+CF) Median	3.84	7.65	10.51	8.45	14.56	12.73	7.29	1.27	13.43	32.94	15.71	2.02	8.57	
Rank	19	65	67	21	15	21	N/A	7	41	25	24	32	56	
J.P. Morgan 130/30 (SA) - Net	5.41	12.29	10.30	8.37	15.74	12.65	N/A	0.01	15.38	37.55	18.64	-3.38	9.66	03/01/2008
S&P 500 Index (Cap Wtd)	3.82	7.82	11.96	8.87	14.66	12.83	6.95	1.38	13.69	32.39	16.00	2.11	8.41	
Difference	1.59	4.47	-1.66	-0.50	1.08	-0.18	N/A	-1.37	1.69	5.16	2.64	-5.49	1.25	
J.P. Morgan 130/30 (SA) - Gross	5.59	12.68	11.09	9.15	16.57	13.46	N/A	0.72	16.21	38.53	19.48	-2.65	10.45	03/01/2008
IM U.S. Large Cap Core Equity (SA+CF) Median	3.84	7.65	10.51	8.45	14.56	12.73	7.29	1.27	13.43	32.94	15.71	2.02	8.57	
Rank	16	8	44	31	11	23	N/A	57	15	11	13	86	7	

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 December 31, 2016

	QTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2015	2014	2013	2012	2011	Since Incep.	Inception Date
Domestic Mid Cap Equity														
Artisan Partners (SA) - Net	7.75	12.55	23.60	4.47	11.87	11.59	N/A	-9.68	2.12	37.20	12.02	6.93	8.01	03/01/2007
Russell Mid Cap Val Index	5.52	10.22	20.00	9.45	15.70	14.32	7.59	-4.78	14.75	33.46	18.51	-1.38	7.32	
Difference	2.23	2.33	3.60	-4.98	-3.83	-2.73	N/A	-4.90	-12.63	3.74	-6.49	8.31	0.69	
Artisan Partners (SA) - Gross	7.92	12.91	24.41	5.15	12.61	12.34	N/A	-9.09	2.79	38.11	12.79	7.69	8.78	03/01/2007
IM U.S. Mid Cap Value Equity (SA+CF) Median	6.60	12.11	18.36	8.71	15.66	13.99	8.51	-3.47	11.86	36.24	17.27	-0.96	8.35	
Rank	29	35	14	88	93	85	N/A	88	97	41	88	2	38	
Iridian Asset Management (SA) - Net	-1.45	6.25	3.29	4.67	N/A	N/A	N/A	-1.62	12.84	N/A	N/A	N/A	10.76	05/01/2013
Russell Mid Cap Val Index	5.52	10.22	20.00	9.45	15.70	14.32	7.59	-4.78	14.75	33.46	18.51	-1.38	12.00	
Difference	-6.97	-3.97	-16.71	-4.78	N/A	N/A	N/A	3.16	-1.91	N/A	N/A	N/A	-1.24	
Iridian Asset Management (SA) - Gross	-1.27	6.65	4.07	5.47	N/A	N/A	N/A	-0.87	13.73	N/A	N/A	N/A	11.62	05/01/2013
IM U.S. Mid Cap Value Equity (SA+CF) Median	6.60	12.11	18.36	8.71	15.66	13.99	8.51	-3.47	11.86	36.24	17.27	-0.96	12.14	
Rank	100	96	100	85	N/A	N/A	N/A	19	24	N/A	N/A	N/A	67	
BlackRock Mid Cap Eq Idx A (CF) - Net	7.41	11.86	20.72	9.03	15.33	14.24	9.19	-2.17	9.75	33.51	17.90	-1.72	9.58	01/01/2005
S&P Mid Cap 400 Index (Cap Wtd)	7.42	11.87	20.74	9.04	15.33	14.24	9.16	-2.18	9.77	33.50	17.88	-1.73	9.53	
Difference	-0.01	-0.01	-0.02	-0.01	0.00	0.00	0.03	0.01	-0.02	0.01	0.02	0.01	0.05	
BlackRock Mid Cap Eq Idx A (CF) - Gross	7.43	11.90	20.82	9.12	15.43	14.33	9.27	-2.09	9.85	33.62	18.00	-1.65	9.65	01/01/2005
TimesSquare Capital Management (SA) - Net	0.63	4.76	7.91	4.81	13.59	11.99	N/A	0.96	5.69	37.79	19.19	-1.37	8.22	03/01/2007
Russell Mid Cap Grth Index	0.46	5.07	7.33	6.23	13.51	12.93	7.83	-0.20	11.90	35.74	15.81	-1.65	7.60	
Difference	0.17	-0.31	0.58	-1.42	0.08	-0.94	N/A	1.16	-6.21	2.05	3.38	0.28	0.62	
TimesSquare Capital Management (SA) - Gross	0.81	5.12	8.65	5.53	14.38	12.78	N/A	1.65	6.42	38.75	20.03	-0.64	9.00	03/01/2007
IM U.S. Mid Cap Growth Equity (SA+CF) Median	0.51	4.86	5.44	5.25	12.99	12.68	8.59	0.79	8.63	36.40	15.13	-0.95	8.40	
Rank	41	48	22	44	28	46	N/A	42	71	36	15	46	32	

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 December 31, 2016

	QTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2015	2014	2013	2012	2011	Since Incep.	Inception Date
Domestic Small Cap Equity														
Vaughan Nelson Management (SA) - Net	9.31	15.85	20.50	9.60	16.17	14.20	N/A	0.16	9.09	39.30	15.36	-3.61	10.43	03/01/2007
Russell 2000 Val Index	14.07	24.19	31.74	8.31	15.07	13.14	6.26	-7.47	4.22	34.52	18.05	-5.50	6.34	
Difference	-4.76	-8.34	-11.24	1.29	1.10	1.06	N/A	7.63	4.87	4.78	-2.69	1.89	4.09	
Vaughan Nelson Management (SA) - Gross	9.53	16.32	21.49	10.51	17.13	15.16	N/A	0.98	10.00	40.47	16.32	-2.77	11.37	03/01/2007
IM U.S. Small Cap Value Equity (SA+CF) Median	12.19	20.87	26.14	8.76	15.95	14.66	8.61	-4.31	5.71	38.09	17.48	-3.15	8.47	
Rank	76	84	75	21	24	39	N/A	8	10	36	60	49	5	
DFA US Small Cap Trust (CF) - Net	11.89	20.03	24.42	8.26	16.39	15.33	8.40	-2.64	4.75	42.42	18.20	-2.07	12.99	03/01/2003
Russell 2000 Index	8.83	18.68	21.31	6.74	14.46	13.24	7.07	-4.41	4.89	38.82	16.35	-4.18	11.53	
Difference	3.06	1.35	3.11	1.52	1.93	2.09	1.33	1.77	-0.14	3.60	1.85	2.11	1.46	
DFA US Small Cap Trust (CF) - Gross	11.98	20.24	24.85	8.64	16.79	15.73	8.78	-2.29	5.12	42.90	18.59	-1.70	13.30	03/01/2003
IM U.S. Small Cap Core Equity (SA+CF) Median	9.70	17.71	20.73	8.51	16.17	15.17	8.38	-1.39	6.54	41.28	16.86	-1.38	12.94	
Rank	12	26	21	46	33	34	42	62	63	41	34	54	38	
Alliance Bernstein (SA) - Net	2.46	10.40	6.82	1.39	N/A	N/A	N/A	-0.84	-1.61	45.22	N/A	N/A	8.55	04/01/2012
Russell 2000 Grth Index	3.57	13.12	11.32	5.05	13.74	13.23	7.76	-1.38	5.60	43.30	14.59	-2.91	11.55	
Difference	-1.11	-2.72	-4.50	-3.66	N/A	N/A	N/A	0.54	-7.21	1.92	N/A	N/A	-3.00	
Alliance Bernstein (SA) - Gross	2.70	10.90	7.80	2.31	N/A	N/A	N/A	0.05	-0.71	46.52	N/A	N/A	9.53	04/01/2012
IM U.S. Small Cap Growth Equity (SA+CF) Median	3.19	12.05	11.20	4.65	13.87	13.78	8.48	-0.71	4.01	45.48	14.72	-1.31	11.58	
Rank	59	61	68	76	N/A	N/A	N/A	42	82	46	N/A	N/A	80	
Voya Investment Management (SA) - Net	2.71	12.42	13.14	5.69	N/A	N/A	N/A	-1.01	5.41	N/A	N/A	N/A	11.10	05/01/2013
Russell 2000 Grth Index	3.57	13.12	11.32	5.05	13.74	13.23	7.76	-1.38	5.60	43.30	14.59	-2.91	11.23	
Difference	-0.86	-0.70	1.82	0.64	N/A	N/A	N/A	0.37	-0.19	N/A	N/A	N/A	-0.13	
Voya Investment Management (SA) - Gross	2.94	12.91	14.14	6.62	N/A	N/A	N/A	-0.15	6.35	N/A	N/A	N/A	12.07	05/01/2013
IM U.S. Small Cap Growth Equity (SA+CF) Median	3.19	12.05	11.20	4.65	13.87	13.78	8.48	-0.71	4.01	45.48	14.72	-1.31	11.38	
Rank	55	43	35	34	N/A	N/A	N/A	44	31	N/A	N/A	N/A	43	

Gross of fees performance is not available (N/A) for the following funds: Domestic Equity Pool SPY and Domestic Equity Pool STIF.
The current annual expense ratios for the Domestic Equity Pool STIF and Domestic Equity Pool SPY are 0.18% and 0.09%, 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
International Equity Managers

As of December 31, 2016

	QTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2015	2014	2013	2012	2011	Since Incep.	Inception Date
International Developed Large Cap Equity														
Acadian Asset Non-US Equity (SA) - Net	3.00	11.04	12.40	1.22	7.67	5.69	0.37	-7.75	0.00	17.60	18.66	-10.60	1.25	11/01/2006
MSCI ACW Ex US Val Index (USD) (Net)	3.29	11.34	8.92	-2.40	4.58	2.28	0.34	-10.06	-5.10	15.04	16.97	-13.20	1.01	
Difference	-0.29	-0.30	3.48	3.62	3.09	3.41	0.03	2.31	5.10	2.56	1.69	2.60	0.24	
Acadian Asset Non-US Equity (SA) - Gross	3.14	11.34	13.01	1.75	8.25	6.28	0.95	-7.26	0.52	18.22	19.37	-10.10	1.82	11/01/2006
IM International Large Cap Value Equity (SA+CF) Median	-0.29	6.96	3.44	-0.64	7.07	4.83	2.04	-1.80	-4.25	23.25	17.95	-10.80	2.65	
Rank	6	13	4	13	32	33	89	91	11	77	34	38	84	
Lazard Asset Management (SA) - Net	-4.41	-0.28	0.22	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-5.61	06/01/2015
MSCI ACW Ex US Val Index (USD) (Net)	3.29	11.34	8.92	-2.40	4.58	2.28	0.34	-10.06	-5.10	15.04	16.97	-13.20	-4.73	
Difference	-7.70	-11.62	-8.70	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.88	
Lazard Asset Management (SA) - Gross	-4.27	0.00	0.77	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-5.09	06/01/2015
IM International Large Cap Value Equity (SA+CF) Median	-0.29	6.96	3.44	-0.64	7.07	4.83	2.04	-1.80	-4.25	23.25	17.95	-10.80	-3.97	
Rank	94	95	82	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	70	
BlackRock ACWI Ex-US SuperFund A (CF) - Net	-1.23	5.63	4.77	-1.58	5.21	3.13	N/A	-5.49	-3.73	15.51	17.07	-13.54	5.72	06/01/2009
MSCI ACW Ex US Index (USD) (Net)	-1.25	5.57	4.50	-1.78	5.00	2.93	0.96	-5.66	-3.87	15.29	16.83	-13.71	5.52	
Difference	0.02	0.06	0.27	0.20	0.21	0.20	N/A	0.17	0.14	0.22	0.24	0.17	0.20	
BlackRock ACWI Ex-US SuperFund A (CF) - Gross	-1.21	5.67	4.86	-1.51	5.29	3.22	N/A	-5.42	-3.65	15.61	17.17	-13.46	5.81	06/01/2009
Baillie Gifford (SA) - Net	-7.35	0.50	0.73	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-4.13	06/01/2015
MSCI ACW Ex US Grth Index (USD) (Net)	-5.72	0.00	0.12	-1.27	5.34	3.51	1.52	-1.25	-2.65	15.49	16.67	-14.21	-5.55	
Difference	-1.63	0.50	0.61	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.42	
Baillie Gifford (SA) - Gross	-7.22	0.78	1.28	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-3.62	06/01/2015
IM International Large Cap Growth Equity (SA+CF) Median	-4.05	2.15	-0.09	-0.68	7.33	5.39	2.80	2.12	-3.37	20.92	19.67	-11.44	-4.52	
Rank	90	66	30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	34	
Invesco (SA) - Net	-3.44	0.94	0.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-5.21	06/01/2015
MSCI ACW Ex US Grth Index (USD) (Net)	-5.72	0.00	0.12	-1.27	5.34	3.51	1.52	-1.25	-2.65	15.49	16.67	-14.21	-5.55	
Difference	2.28	0.94	0.20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.34	
Invesco (SA) - Gross	-3.27	1.28	1.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-4.56	06/01/2015
IM International Large Cap Growth Equity (SA+CF) Median	-4.05	2.15	-0.09	-0.68	7.33	5.39	2.80	2.12	-3.37	20.92	19.67	-11.44	-4.52	
Rank	33	61	33	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	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 funds. Fiscal year ends on June 30.

Montana Board of Investments
Comparative Performance
International Equity Managers

As of December 31, 2016

	QTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2015	2014	2013	2012	2011	Since Incep.	Inception Date
International Equity Pool STIF - Net	0.14	0.26	0.47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.33	04/01/2015
ICE 1 Mo LIBOR Index (USD)	0.15	0.28	0.49	0.28	0.26	0.25	0.99	0.20	0.16	0.19	0.24	0.23	0.37	
Difference	-0.01	-0.02	-0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.04	
International Developed Small Cap Equity														
American Century Investment Mgmt (SA) - Net	-7.95	-0.80	-5.31	N/A	N/A	N/A	N/A	11.32	N/A	N/A	N/A	N/A	-1.88	03/01/2014
MSCI ACW Ex US SCG Index (USD) (Net)	-6.08	0.50	-0.28	0.79	7.24	5.79	2.50	6.50	-3.59	18.52	16.87	-17.86	-0.40	
Difference	-1.87	-1.30	-5.03	N/A	N/A	N/A	N/A	4.82	N/A	N/A	N/A	N/A	-1.48	
American Century Investment Mgmt (SA) - Gross	-7.74	-0.37	-4.49	N/A	N/A	N/A	N/A	12.25	N/A	N/A	N/A	N/A	-1.04	03/01/2014
IM International Small Cap Growth Equity (SA+CF) Median	-5.90	1.39	-1.71	1.55	10.56	8.56	4.83	12.85	-3.62	31.15	23.59	-14.83	0.41	
Rank	77	68	83	N/A	N/A	N/A	N/A	52	N/A	N/A	N/A	N/A	72	
BlackRock ACWI Ex-US Small Cap (CF) - Net	-3.54	4.26	4.26	1.03	N/A	N/A	N/A	2.87	-3.84	19.87	N/A	N/A	6.25	02/01/2012
MSCI ACWI Ex US Sm Cap Index IMI (USD) (Net)	-3.52	4.11	3.91	0.77	7.74	5.78	2.90	2.60	-4.03	19.73	18.52	-18.50	6.04	
Difference	-0.02	0.15	0.35	0.26	N/A	N/A	N/A	0.27	0.19	0.14	N/A	N/A	0.21	
BlackRock ACWI Ex-US Small Cap (CF) - Gross	-3.50	4.35	4.44	1.21	N/A	N/A	N/A	3.04	-3.67	20.08	N/A	N/A	6.44	02/01/2012
DFA Intl Sm Co;I (DFISX) - Net	-2.09	6.55	5.74	1.61	9.70	7.56	3.44	5.89	-6.29	27.49	18.75	-15.36	7.46	11/01/2004
MSCI Wrld Ex US Sm Cap Index (USD) (Net)	-2.74	5.04	4.32	1.36	8.96	7.04	2.69	5.46	-5.35	25.55	17.48	-15.81	6.70	
Difference	0.65	1.51	1.42	0.25	0.74	0.52	0.75	0.43	-0.94	1.94	1.27	0.45	0.76	
Templeton Investment Counsel (SA) - Net	-3.76	4.16	-1.13	N/A	N/A	N/A	N/A	1.81	N/A	N/A	N/A	N/A	-1.24	03/01/2014
MSCI ACW Ex US Sm Cap Val Index (USD) (Net)	-0.94	7.81	8.24	0.69	8.20	5.73	3.25	-1.25	-4.49	20.92	20.15	-19.12	-0.36	
Difference	-2.82	-3.65	-9.37	N/A	N/A	N/A	N/A	3.06	N/A	N/A	N/A	N/A	-0.88	
Templeton Investment Counsel (SA) - Gross	-3.54	4.63	-0.23	N/A	N/A	N/A	N/A	2.73	N/A	N/A	N/A	N/A	-0.34	03/01/2014
IM International Small Cap Value Equity (SA+CF) Median	-1.03	8.68	6.47	1.69	11.71	8.65	5.27	5.36	-4.24	30.48	23.53	-13.45	0.82	
Rank	76	70	90	N/A	N/A	N/A	N/A	76	N/A	N/A	N/A	N/A	79	

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 December 31, 2016

	QTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2015	2014	2013	2012	2011	Since Incep.	Inception Date
International Emerging Equity														
BlackRock Emerging Mkts (CF) - Net	-4.24	4.34	10.85	-2.84	N/A	N/A	N/A	-15.15	-2.49	-2.79	N/A	N/A	-1.15	02/01/2012
MSCI Emg Mkts Index (USD) (Net)	-4.16	4.49	11.19	-2.55	1.28	0.47	1.84	-14.92	-2.19	-2.60	18.23	-18.42	-0.89	
Difference	-0.08	-0.15	-0.34	-0.29	N/A	N/A	N/A	-0.23	-0.30	-0.19	N/A	N/A	-0.26	
BlackRock Emerging Mkts (CF) - Gross	-4.19	4.45	11.08	-2.65	N/A	N/A	N/A	-14.99	-2.30	-2.57	N/A	N/A	-0.95	02/01/2012
iShares:MSCI Em Mkts (EEM) - 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	N/A	01/01/2017
MSCI Emg Mkts Index (USD) (Net)	-4.16	4.49	11.19	-2.55	1.28	0.47	1.84	-14.92	-2.19	-2.60	18.23	-18.42	N/A	
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	N/A	

Gross of fees performance is not available (N/A) for the following funds: International Equity Pool STIF, DFA Intl Sm Co;I (DFISX), and iShares:MSCI Em Mkts (EEM).
The current annual expense ratios for the International Equity Pool STIF, DFA Intl Sm Co;I (DFISX), and iShares:MSCI Em Mkts (EEM) are 0.18%, 0.53%, 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 December 31, 2016

	QTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2015	2014	2013	2012	2011	Since Incep.	Inception Date
Core Internal Bond Portfolio	-3.02	-2.51	3.08	3.55	2.90	4.63	4.94	0.83	6.82	-2.02	6.07	8.20	6.43	04/01/1995
Bloomberg US Agg Bond Index	-2.98	-2.53	2.65	3.03	2.23	3.63	4.34	0.55	5.97	-2.02	4.21	7.84	5.61	
Difference	-0.04	0.02	0.43	0.52	0.67	1.00	0.60	0.28	0.85	0.00	1.86	0.36	0.82	
Core Internal Bond Portfolio	-3.02	-2.51	3.08	3.55	2.90	4.63	4.94	0.83	6.82	-2.02	6.07	8.20	6.43	04/01/1995
IM U.S. Broad Market Core FI (SA+CF) Median	-2.80	-2.19	3.10	3.33	2.82	4.19	4.83	0.82	6.14	-1.56	5.88	7.83	5.94	
Rank	84	75	52	34	42	22	39	48	24	73	47	25	8	
Trust Funds Bond Portfolio	-2.80	-2.38	3.41	3.71	3.14	4.54	5.02	1.03	6.79	-1.43	6.15	8.16	6.13	10/01/1995
Bloomberg US Agg Bond Index	-2.98	-2.53	2.65	3.03	2.23	3.63	4.34	0.55	5.97	-2.02	4.21	7.84	5.35	
Difference	0.18	0.15	0.76	0.68	0.91	0.91	0.68	0.48	0.82	0.59	1.94	0.32	0.78	
Trust Funds Bond Portfolio	-2.80	-2.38	3.41	3.71	3.14	4.54	5.02	1.03	6.79	-1.43	6.15	8.16	6.13	10/01/1995
IM U.S. Broad Market Core FI (SA+CF) Median	-2.80	-2.19	3.10	3.33	2.82	4.19	4.83	0.82	6.14	-1.56	5.88	7.83	5.71	
Rank	50	65	41	26	32	25	33	29	25	42	44	26	9	
Reams Asset Core Plus (SA) - Net	-2.82	-2.37	4.18	2.88	3.24	4.69	N/A	0.07	4.47	-0.85	8.64	7.54	6.01	10/01/2008
Bloomberg US Unv Bond Index	-2.61	-1.68	3.91	3.28	2.78	4.05	4.57	0.43	5.56	-1.35	5.53	7.40	4.80	
Difference	-0.21	-0.69	0.27	-0.40	0.46	0.64	N/A	-0.36	-1.09	0.50	3.11	0.14	1.21	
Reams Asset Core Plus (SA) - Gross	-2.78	-2.29	4.35	3.06	3.42	4.87	N/A	0.24	4.65	-0.68	8.83	7.72	6.19	10/01/2008
IM U.S. Broad Market Core+ FI (SA+CF) Median	-2.27	-0.86	4.74	3.62	3.70	5.01	5.40	0.26	6.20	-0.52	8.17	7.47	6.17	
Rank	87	96	59	88	65	56	N/A	51	90	57	43	39	49	

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 December 31, 2016

	QTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2015	2014	2013	2012	2011	Since Incep.	Inception Date
Post High Yield Plus (SA) - Net	0.92	4.92	9.58	5.07	8.37	8.44	N/A	0.82	4.99	10.19	16.97	2.60	9.91	06/01/2009
Bloomberg US Hi Yld - 2% Issuer Cap Index	1.75	7.40	17.13	4.67	7.36	8.06	7.55	-4.43	2.46	7.44	15.78	4.96	10.61	
Difference	-0.83	-2.48	-7.55	0.40	1.01	0.38	N/A	5.25	2.53	2.75	1.19	-2.36	-0.70	
Post High Yield Plus (SA) - Gross	1.09	5.24	10.23	5.70	9.02	9.09	N/A	1.43	5.62	10.85	17.67	3.22	10.58	06/01/2009
IM U.S. High Yield Bonds (SA+CF) Median	1.58	6.60	14.07	4.46	7.13	7.98	7.24	-2.21	2.61	7.50	15.34	5.26	10.38	
Rank	73	75	83	12	6	7	N/A	7	3	10	14	82	36	
Post Trad'l High Yield LP (CF) - Gross	1.22	5.21	10.62	5.95	9.18	9.03	N/A	1.42	6.01	9.98	18.62	3.08	9.87	09/01/2009
IM U.S. High Yield Bonds (SA+CF) Median	1.58	6.60	14.07	4.46	7.13	7.98	7.24	-2.21	2.61	7.50	15.34	5.26	9.19	
Rank	70	76	80	9	6	7	N/A	8	2	13	10	83	18	
Neuberger Berman High Yield (SA) - Net	0.99	6.41	14.98	3.89	6.97	7.83	N/A	-4.32	1.93	7.78	15.90	4.07	7.83	01/01/2010
Bloomberg US Hi Yld - 2% Issuer Cap Index	1.75	7.40	17.13	4.67	7.36	8.06	7.55	-4.43	2.46	7.44	15.78	4.96	8.06	
Difference	-0.76	-0.99	-2.15	-0.78	-0.39	-0.23	N/A	0.11	-0.53	0.34	0.12	-0.89	-0.23	
Neuberger Berman High Yield (SA) - Gross	1.11	6.65	15.50	4.36	7.45	8.32	N/A	-3.89	2.38	8.26	16.42	4.54	8.32	01/01/2010
IM U.S. High Yield Bonds (SA+CF) Median	1.58	6.60	14.07	4.46	7.13	7.98	7.24	-2.21	2.61	7.50	15.34	5.26	7.98	
Rank	73	50	30	54	37	35	N/A	74	56	31	29	65	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 December 31, 2016

	QTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2015	2014	2013	2012	2011
Abandoned Mine Trust	0.04	0.13	1.10	1.16	1.38	1.67	2.66	0.90	1.49	0.63	2.82	1.49
Big Sky Economic Development Fund	-2.26	-1.61	3.98	4.17	3.78	5.05	5.35	1.82	6.77	-0.22	6.72	8.13
Butte Area One Restoration	-1.45	-1.00	2.60	2.45	2.18	2.94	N/A	1.20	3.57	-0.08	3.68	4.61
Clark Fork River Restoration	-1.36	-0.91	2.72	2.78	2.50	3.37	N/A	1.37	4.26	-0.12	4.36	5.33
Coal Tax Cultural Trust Fund	-2.26	-1.61	3.95	4.16	3.78	5.04	5.35	1.79	6.79	-0.23	6.76	8.09
Coal Tax Park Acquisition	-2.28	-1.63	3.90	4.10	3.74	5.01	5.33	1.78	6.66	-0.25	6.78	8.10
East Helena Compensation Fund	-1.05	-0.64	2.12	2.01	N/A	N/A	N/A	0.91	3.01	-0.13	N/A	N/A
Endowment for Children	-2.18	-1.54	3.66	3.99	3.65	4.91	N/A	1.70	6.66	-0.28	6.69	8.00
FWP License Account	-0.14	-0.03	0.84	0.68	0.82	1.03	1.99	0.61	0.59	0.42	1.64	1.08
FWP Mitigation Trust Fund	-0.43	-0.33	0.67	0.97	1.27	1.57	2.47	0.87	1.37	0.61	2.85	1.46
FWP Real Property Trust	-2.17	-1.54	3.82	3.99	3.62	4.83	5.16	1.73	6.47	-0.24	6.51	7.76
Group Benefits	-0.28	-0.22	1.16	1.13	1.18	1.50	2.54	1.06	1.17	0.32	2.22	1.43
Harold Hamm Endowment	0.18	0.34	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Montana Pole	-1.77	-1.22	3.23	3.40	3.09	4.15	4.59	1.56	5.44	-0.17	5.50	6.61
Montana Tech-UM Agency Funds	0.09	0.27	0.72	0.45	0.42	0.50	1.29	0.27	0.35	0.17	0.57	0.66
Montana State University	-0.05	0.18	0.95	0.73	0.68	0.86	1.61	0.39	0.85	0.12	1.07	1.23
MT BOI - Clark Fork Site	-2.02	-1.45	3.63	3.51	3.12	4.06	N/A	1.56	5.37	-0.09	5.23	6.23
MT BOI UOFM Other	-0.76	-0.39	2.34	2.01	1.69	1.92	2.52	1.13	2.57	-0.12	2.54	2.21
MUS Group Insurance	-0.07	-0.02	1.33	1.30	1.12	N/A	N/A	1.26	1.30	0.17	1.56	N/A
MUS Workers Compensation	-0.45	-0.20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Older Montanans Trust	-2.20	-1.56	3.86	4.03	3.55	4.57	N/A	1.72	6.57	-0.23	6.01	5.85
Permanent Coal Trust Excl Crp	-1.33	-0.68	3.79	4.04	3.87	4.79	5.06	2.23	6.14	0.99	6.29	7.16
PERS Defined Cont Disability	0.48	3.41	3.42	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Potter Trust Fund	-2.23	-1.58	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Resource Indemnity Trust	-2.31	-1.66	4.02	4.24	3.83	5.05	5.37	1.82	6.94	-0.27	6.86	8.18
Smelter Hill Up Restorative	-0.62	-0.35	1.79	1.73	1.53	1.90	N/A	0.92	2.49	0.01	2.47	2.83
State Fund Insurance	-1.16	-0.38	3.50	3.56	4.20	4.97	4.95	2.21	5.00	3.11	7.25	5.26
Streamside Tailings Operable Unit	-1.97	-1.38	3.58	3.81	3.46	4.53	4.96	1.69	6.22	-0.21	6.14	7.20
Tobacco Trust Fund	-2.31	-1.66	3.99	4.21	3.80	5.06	5.39	1.82	6.89	-0.27	6.77	8.12
Treasurers	0.16	0.31	0.68	0.38	0.34	0.33	1.15	0.27	0.19	0.23	0.31	0.31
Treasure State Endowment	-2.28	-1.63	3.98	4.19	3.80	5.07	5.38	1.82	6.84	-0.21	6.76	8.14
Treasure State Reg. Water System	-2.28	-1.63	3.96	4.17	3.78	5.05	5.35	1.82	6.80	-0.22	6.73	8.13
Trust and Legacy Account	-2.31	-1.66	4.01	4.23	3.82	5.06	5.37	1.82	6.92	-0.26	6.78	8.04
UCFRB Assess/Litig Cost Rec	-2.14	-1.52	3.84	3.94	3.58	4.60	5.16	1.65	6.40	-0.24	6.45	6.87
UCFRB Restoration Fund	-1.99	-1.42	3.52	3.81	3.51	4.76	5.09	1.70	6.28	-0.20	6.43	7.66
Upper Blackfoot Response	-0.61	-0.33	1.74	1.39	1.18	N/A	N/A	0.84	1.59	0.13	1.60	2.30
Weed Control Trust	-2.31	-1.66	4.02	4.24	3.81	4.87	5.13	1.82	6.94	-0.23	6.69	7.42
Wildlife Habitat Trust	-2.18	-1.55	3.79	3.98	3.61	4.82	5.16	1.73	6.49	-0.24	6.46	7.74
Zortman/Landusky LT H20	0.13	0.27	1.36	1.32	1.77	4.57	5.46	0.84	1.78	-0.51	5.47	11.21
Z/L Long Term H20 Trust Fund	0.12	0.23	1.39	1.43	1.44	4.14	5.00	1.15	1.76	-0.96	3.91	11.64

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 SPY, Domestic Equity Pool STIF, DFA Intl Sm Co;I (DFISX), International Equity Pool STIF, and iShares:MSCI Em Mkts (EEM). 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

- 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.
- Nicholas Investment Partners was liquidated in July 2016.
- 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%
- Domestic Equity Pool SPY: 0.09%
- DFA Intl Sm Co;I (DFISX): 0.53%
- International Equity Pool STIF: 0.18%
- iShares:MSCI Em Mkts (EEM): 0.72%

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