Monthly Investment Performance Analysis Wyoming State Treasurer's Office

Period Ended: July 31, 2023



										Sha	rpe Ratio		Annualized Statis	tics (02/2	2006 - 07/20)23)
	2015	2016	2017	2018	2019	2020	2021	2022	CYTD (As of 07/23)	Asset Class	Historical 10 Years Sharpe Ratio	Forecasted Sharpe Ratio		Return	Standard Deviation	Sharpe Ratio
Best	15.02	21.95	27.19	10.40	31.49	21.68	39.92	26.26	20.65	S&P 500 Index - US Large Cap	0.81	0.19	S&P 500 Index - US Large Cap	9.86	15.41	0.61
1	6.01	21.31	21.83	8.35	25.53	19.96	39.33	7.47	14.70	Russell 2000 Index - US Small Cap	0.45	0.16	Russell 2000 Index - US Small Cap	7.84	20.21	0.41
	5.47	13.24	18.44	1.87	21.51	18.40	28.71	1.46	13.92	International Equity Custom Index - International	0.32	0.28	International Equity Custom Index - International	3.86	17.16	0.23
	1.38	11.96	15.21	0.44	17.64	10.88	22.17	-0.68	12.09	Cambridge US PE Index - Private Equity	1.26	0.24	Cambridge US PE Index - Private Equity	13.06	10.83	1.07
	0.55	10.16	14.65	0.01	13.82	10.65	14.82	-3.34	7.76	NCREIF ODCE Index - Real Estate	1.24	Core 0.20 / Non-Core 0.19	NCREIF ODCE Index - Real Estate	6.74	7.94	0.70
	0.18	9.94	9.11	-4.02	13.47	7.97	7.82	-5.27	7.20	HFRI FOF Comp Index	0.49	0.31	HFRI FOF Comp Index	2.80	5.39	0.30
	-0.27	8.77	7.77	-4.25	8.72	7.51	6.17	-12.04	3.63	Preferred Stock Custom Index	0.45	0.22	Preferred Stock Custom Index	4.46	15.64	0.28
	-0.69	4.50	7.62	-4.38	8.64	3.12	5.71	-13.01	3.35	MLP Custom Index	0.17	0.15	MLP Custom Index	7.63	24.39	0.38
	-4.41	2.65	4.12	-6.21	8.39	1.50	4.66	-13.90	2.66	Bloomberg US Agg Bond Index - Fixed Income	0.13	0.28	Bloomberg US Agg Bond Index - Fixed Income	3.02	3.94	0.45
	-5.66	1.94	3.54	-11.01	7.55	1.19	0.05	-16.00	2.49	Bank Loans Custom Index	0.56	0.43	Bank Loans Custom Index	4.60	7.35	0.47
ţ	-14.92	0.51	0.84	-11.67	5.34	0.67	-1.55	-18.11	2.02	EMD Custom Index	-0.07	0.39	EMD Custom Index	3.60	12.00	0.25
Worst	-35.07	0.38	-5.58	-14.20	2.47	-25.60	-3.26	-20.44	-5.76	JP Morgan Cash Custom Index - Cash Equiv	0.64	0.00	JP Morgan Cash Custom Index - Cash Equiv	1.53	0.55	1.10

The International Equity Custom Index consists of the MSCI EAFE Index (USD) (Gross) through July 2010 and the MSCI ACW Ex US Index (USD) (Net) thereafter.

The Preferred Stock Custom Index consists of S&P U.S. Preferred Stock Index through 06/30/2021, and 60% ICE BofAML US IG Inst Capital Securities Index, 20% ICE BofAML Core Fixed Rate

Preferred Securities Index, and 20% Bloomberg Barclays Developed Market USD Contingent Capital Index thereafter.

The MLP Custom Index consists of the S&P MLP Index (TR) through 06/30/2019, the Alerian MLP Index through 12/31/2019, and 50% Alerian MLP Index / 50% Alerian MLP Index (TR) through 06/30/2019.

The Bank Loans Custom Index consists of S&P LSTA Lvgd Loan Index through 06/30/2021, the S&P LSTA US Lvgd Loan 100 Index through 6/30/2023, and the Cresit Suisse Leveraged Loan Index threeafter.

The EMD Custom Index consists of the JPM GBI-EM GbI Dvf'd Index through 02/29/2020, 70% JPM GBI-EM GbI Dvf'd Index / 30% JPM CEMBI Brd Dvf'd Index through 11/30/2020,

and 1/3 JPM GBI-EM GbI Dvfd Index, 1/3 JPM CEMBI Brd Dvfd Index, and 1/3 JPM EMBI GbI Dvfd Index thereafter.

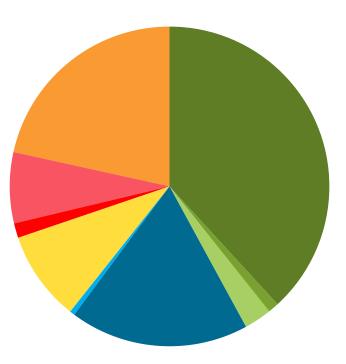
The JP Morgan Cash Custom Index is calculated monthly using beginning of the month investment weights applied to each corresponding primary benchmark return.

The primary benchmark for JP Morgan Cash is the ICE BofAML 3 Mo US T-Bill Index and for JP Morgan Extd is the JP Morgan Blended Index through 06/30/2019,

and the ICE BofAML 3 Mo US T-Bill Index thereafter.



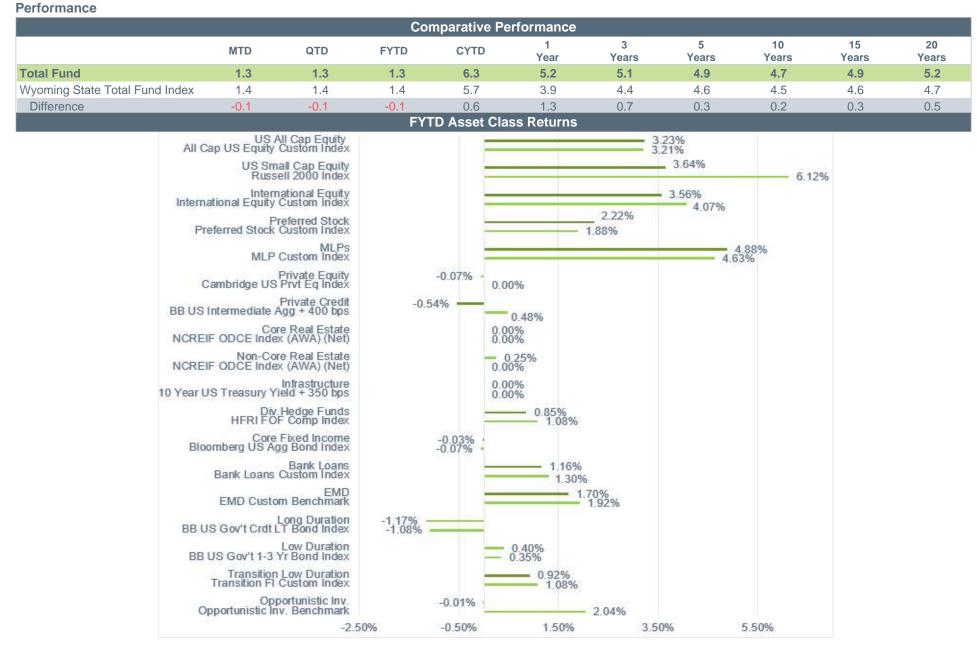
July 31, 2023 : \$26,916,094,288



	Market Value (\$)	Allocation (%)
Permanent Mineral Trust	10,279,318,491	38.19
Permanent Land Fund	287,588,010	1.07
University Permanent Land Fund	32,316,337	0.12
Hathaway Scholarship	722,928,168	2.69
Common School PLF	4,870,304,044	18.09
Higher Education	137,904,434	0.51
Workers Compensation Fund	2,455,952,648	9.12
Pool A	398,573,508	1.48
LSRA	1,932,902,442	7.18
State Agency Pool	5,798,306,207	21.54

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Wyoming State Treasurer's Office Total Fund



Allocations shown may not sum up to 100% exactly due to rounding. Performance shown is net of fees and excludes Public Purpose Investments (PPIs) and operational cash. Fiscal year begins 7/1/2023.



Wyoming State Treasurer's Office Asset Allocation, Performance & Schedule of Investable Assets

	Market Value (\$)	%	Performance (%) FYTD		Market Value (\$)	%
Total Fund	26,916,094,288	100.00	1.29	Non-Core Real Estate Composite	629,440,152	2.3
All Cap US Equity Composite	2,062,796,702	7.66	3.23	SC Core LP	104,017,474	0.3
State Street All Cap	1,940,935,534	7.21	3.21	Realterm Logistics Income Fund LP	311,790,159	1.1
Internal Domestic Equity Quantamental	31,234	0.00	0.43	M&G Real Estate Debt III LP	1,777,237	0.0
Internal Domestic Equity Quantitative	94,027,437	0.35	3.59	Northwood Real Estate Partners (Series IV) LP	203,562,189	0.7
SPDR S&P 500 ETF Trust	27,802,497	0.10	3.26	WestRiver Real Estate Finance LP	8,293,093	0.0
UW Portfolio Mgmt Program	1,979,917	0.01	4.18	Infrastructure Composite	249,005,167	0.9
Small Cap US Equity Composite	497,503,405	1.85	3.64	Macquarie Infrastructure	182,370,490	0.6
Van Berkom	267,940,437	1.00	2.41	MGIF Co-Investment 3	26,400,302	0.1
BlackRock Small Cap	58,112,079	0.22	5.63	Grosvenor Silvery Lupine Fund Class E	40,234,375	0.1
Internal Small Cap Equity Quantamental	77,220,150	0.29	4.34	Diversified Hedge Funds Composite	1,183,487,247	4.4
Internal Small Cap Equity Quantitative	94,230,739	0.35	5.41	PAAMCO - Jackalope Fund	69,194	0.0
Int'l Equity	3,229,297,296	12.00	3.56	Grosvenor Diversified Hedge Funds	474,863,192	1.7
Northern Trust	1,402,665,379	5.21	4.05	Internal Diversified Hedge Funds	708,554,860	2.6
Arrowstreet	1,081,563,983	4.02	3.87	Core Fixed Income	3,352,140,427	12.4
Harding Loevner	681,312,515	2.53	2.48	Internal Intermediate Gov't Fixed Income	1,137,434,461	4.2
Vanguard FTSE All World Ex US ETF	63,755,419	0.24	3.73	Payden & Rygel IGC	595,984,770	2.2
Preferred Stock	304,974,355	1.13	2.22	JP Morgan MBS	742,463,146	2.7
Cohen & Steers Preferred Stock	304,974,355	1.13	2.22	IShares Core US Agg Bond ETF	9,794	0.0
MLPs Composite	1,177,728,890	4.38	4.88	PIMCO	876,248,256	3.2
Harvest Fund Advisors	632,966,157	2.35	5.16	SAP Fixed Income Composite	4,560,218,393	16.9
Harvest Fund Advisors Passive	544,762,733	2.02	4.55	Internal SAP Fixed Income Portfolio	4,560,218,393	16.9
Private Equity Composite	1,247,575,104	4.64	-0.07	Bank Loans Composite	1,536,239,248	5.7
Access Venture Partners II LP	519,392	0.00	N/A	Credit Suisse	3,213	0.0
Cheyenne Equity Capital LP	92,554,256	0.34	N/A	Credit Suisse SMA	397,026,631	1.4
Hamilton Lane Wyoming Nowood LP	118,409,709	0.44	N/A	Octagon	21,531	0.0
NB Sauger LP	146,438,229	0.54	N/A	Octagon SMA	651,895,249	2.4
BlackRock LTPC, L.P.	621,054,607	2.31	N/A	KKR	487,292,624	1.8
Valor Equity Partners V LP	61,977,389	0.23	N/A	Emerging Market Debt Composite	1,051,674,240	3.9
GTCR Fund XIII	50,662,995	0.19	N/A	Global Evolution	124,868,223	0.4
Veritas Capital Vantage Fund	16,307,385	0.06	N/A	Global Evolution Hard	141,418,275	0.5
Veritas Capital Fund VIII	20,537,317	0.08	N/A	Goldman Sachs	204,822,325	0.7
StepStone Fund V	25,334,862	0.09	N/A	Eaton Vance	243,015,481	0.9
Nautic Partners X LP	21,784,281	0.08	N/A	Finisterre	246,567,059	0.9
Dragoneer Opp Fund VI	8,696,815	0.03	NA	Wellington	90,982,878	0.3
Accel KKR Growth Capital Partners IV	7,767,291	0.03	N/A	Long Duration Fixed Income Composite	650,037,899	2.4
Morgan Stanley Ashbridge	53,946,461	0.20	N/A	Internal Long Duration Fixed Income	313,630,729	1.1
BVP Forge Institutional LP	1,584,115	0.01	N/A	Metlife	336,407,171	1.2
Private Credit Composite	228,040,251	0.85	-0.54	Low Duration Fixed Income	646,909,139	1.2 2.4
BlackRock GCO Fund II LP	76,479,936	0.28	N/A	Internal Low Duration Fixed Income	646,909,139	2.4
Atalaya Evergreen Fund	60,071,203	0.28	N/A N/A	Transition Low Duration Composite	700,713,624	2.4
AG Direct Lending Evergreen LP	49,060,810	0.22	N/A	PIMCO Transition Low Duration	700,713,624	2.6
KLCP Domestic III LP		0.18	N/A N/A			2.0 0.0
	42,428,303			Grosvenor Silvery Lupine Fund	11,803,369	
Core Real Estate	1,430,391,748	5.31	0.00	Opportunistic Investments Composite	120,383,830	0.4
Clarion Lion Properties LP	856,987,508	3.18	0.00	Grosvenor Opportunistic Class D	120,337,887	0.4
UBS Trumbull	162,934,267	0.61	0.00	Wyoming Internal Opportunistic	45,943	0.0
Morgan Stanley Prime Property LLC	410,469,973	1.52	0.00	Cash Equivalents	1,795,907,338	6.6
				Public Purpose Investments	248,557,612	0.9
				nd Composite Ex Public Purpose Invest		
Periods Ending	Beginning	g	Net	Gain/Loss (\$)	Ending	

Periods Ending	Beginning Market Value (\$)	Net Cash Flow (\$)	Gain/Loss (\$)	Ending Market Value (\$)	Unit Value
FYTD	26,438,935,216	-95,994,784	325,307,311	26,668,247,744	101.23

Allocations may not sum up to 100% exactly due to rounding. Performance shown is net of fees and excludes Public Purpose Investments (PPIs) and operational cash. Market value shown for Public Purpose Investments (PPIs) is as of 6/30/2023. Investment manager fees are accounted for on a quarterly basis. Wyoming State Treasurer's Office fiscal year ends on June 30th. Fiscal year begins 7/1/2023.



Performance (%) FYTD

0.25

N/A

N/A

N/A

N/A

N/A

0.00

0.01

0.00

-0.02

0.85

N/A

0.83

0.87

-0.03

-0.31

0.32

-0.06

-0.01

0.06

0.35

0.35

1.16

0.43

1.19

0.41

1.05

1.27

1.70

2.98

2.06

1.22

1.66

1.08

2.30

-1.17

-2.15

-0.24

0.40

0.40

0.92

0.92

0.04

-0.01

-0.01

3.26

0.44

N/A

Wyoming State Treasurer's Office Permanent Funds

			Comparat	ive Perform	ance					
	MTD	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years
Permanent Mineral Trust	1.7	1.7	1.7	7.8	7.2	8.1	6.6	6.1	5.7	6.2
PMTF - Total Fund Index	2.0	2.0	2.0	7.4	5.8	7.5	6.2	5.9	5.3	5.7
Difference	-0.3	-0.3	-0.3	0.4	1.4	0.6	0.4	0.2	0.4	0.5
70% MSCI ACW/30% B US Agg	2.5	2.5	2.5	13.1	8.0	5.9	6.2	6.7	6.0	7.0
Permanent Land Fund	1.7	1.7	1.7	7.9	7.5	8.3	6.7	6.1	5.6	N/A
PLF - Total Fund Index	2.0	2.0	2.0	7.4	5.8	7.5	6.2	5.9	5.2	N/A
Difference	-0.3	-0.3	-0.3	0.5	1.7	0.8	0.5	0.2	0.4	N/A
University PLF	1.7	1.7	1.7	7.5	7.1	8.3	6.7	6.4	5.7	N/A
University PLF - Total Fund Index	2.0	2.0	2.0	7.4	5.8	7.5	6.2	6.1	5.4	N/A
Difference	-0.3	-0.3	-0.3	0.1	1.3	0.8	0.5	0.3	0.3	N/A
Hathaway Scholarship	1.5	1.5	1.5	7.6	8.3	8.8	7.0	6.0	6.2	N/A
Hathaway - Total Fund Index	2.0	2.0	2.0	7.4	5.8	7.5	6.2	5.6	5.7	N/A
Difference	-0.5	-0.5	-0.5	0.2	2.5	1.3	0.8	0.4	0.5	N/A
Common School PLF	1.7	1.7	1.7	6.2	5.1	5.8	5.2	5.4	5.4	6.0
Common School - Total Fund Index	1.8	1.8	1.8	6.5	4.8	5.3	4.8	5.2	4.9	5.3
Difference	-0.1	-0.1	-0.1	-0.3	0.3	0.5	0.4	0.2	0.5	0.7
Higher Education	1.7	1.7	1.7	6.4	5.8	5.9	5.1	5.0	5.5	N/A
Higher Education - Total Fund Index	1.8	1.8	1.8	6.5	4.8	5.3	4.8	4.9	5.2	N/A
Difference	-0.1	-0.1	-0.1	-0.1	1.0	0.6	0.3	0.1	0.3	N/A
Workers Compensation Fund	0.6	0.6	0.6	4.6	0.1	0.5	4.2	4.1	5.0	5.0
Workers Comp - Total Fund Index	0.6	0.6	0.6	4.7	-0.2	-0.1	3.8	3.9	4.6	4.6
Difference	0.0	0.0	0.0	-0.1	0.3	0.6	0.4	0.2	0.4	0.4

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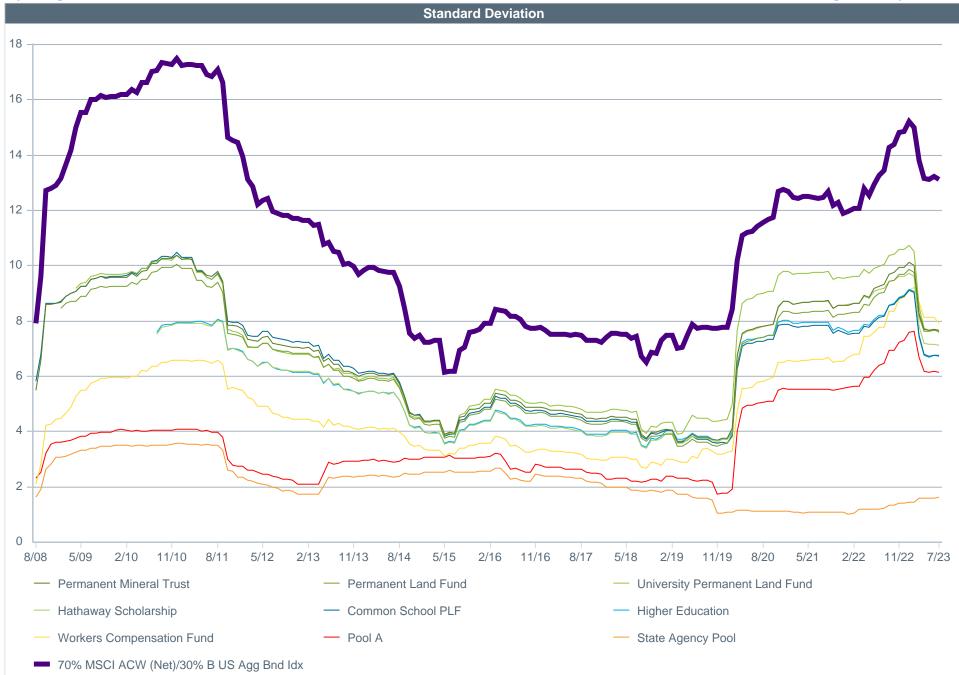


Wyoming State Treasurer's Office Non-Permanent Funds Performance

		C	omparative	e Performar	nce					
	MTD	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years
LSRA Total Fund	1.2	1.2	1.2	5.8	3.7	2.6	N/A	N/A	N/A	N/A
LSRA - Total Fund Index	1.2	1.2	1.2	5.0	2.6	2.1	N/A	N/A	N/A	N/A
Difference	0.0	0.0	0.0	0.8	1.1	0.5	N/A	N/A	N/A	N/A
LSRA Long Term Reserve	3.2	3.2	3.2	14.2	12.8	11.9	N/A	N/A	N/A	N/A
LSRA LT Reserve - Total Fund Index	3.2	3.2	3.2	12.4	11.2	11.4	N/A	N/A	N/A	N/A
Difference	0.0	0.0	0.0	1.8	1.6	0.5	N/A	N/A	N/A	N/A
LSRA Int Term Reserve	0.0	0.0	0.0	2.4	-2.9	-4.4	N/A	N/A	N/A	N/A
LSRA IT Reserve - Total Fund Index	-0.1	-0.1	-0.1	2.0	-3.4	-4.5	N/A	N/A	N/A	N/A
Difference	0.1	0.1	0.1	0.4	0.5	0.1	N/A	N/A	N/A	N/A
LSRA Short Term Reserve	0.4	0.4	0.4	1.6	0.9	-0.4	N/A	N/A	N/A	N/A
LSRA ST Reserve - Total Fund Index	0.3	0.3	0.3	1.4	0.1	-1.0	N/A	N/A	N/A	N/A
Difference	0.1	0.1	0.1	0.2	0.8	0.6	N/A	N/A	N/A	N/A
Pool A	1.4	1.4	1.4	5.7	3.5	3.6	4.5	3.5	4.3	4.6
Pool A - Total Fund Index	1.3	1.3	1.3	5.1	2.6	3.0	4.0	3.2	3.9	4.0
Difference	0.1	0.1	0.1	0.6	0.9	0.6	0.5	0.3	0.4	0.6
State Agency Pool	0.3	0.3	0.3	1.9	1.4	-0.3	1.4	1.8	2.9	3.3
State Agency Pool - AA Index	0.3	0.3	0.3	1.9	1.4	-0.3	1.5	1.8	2.7	3.1
Difference	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.2	0.2

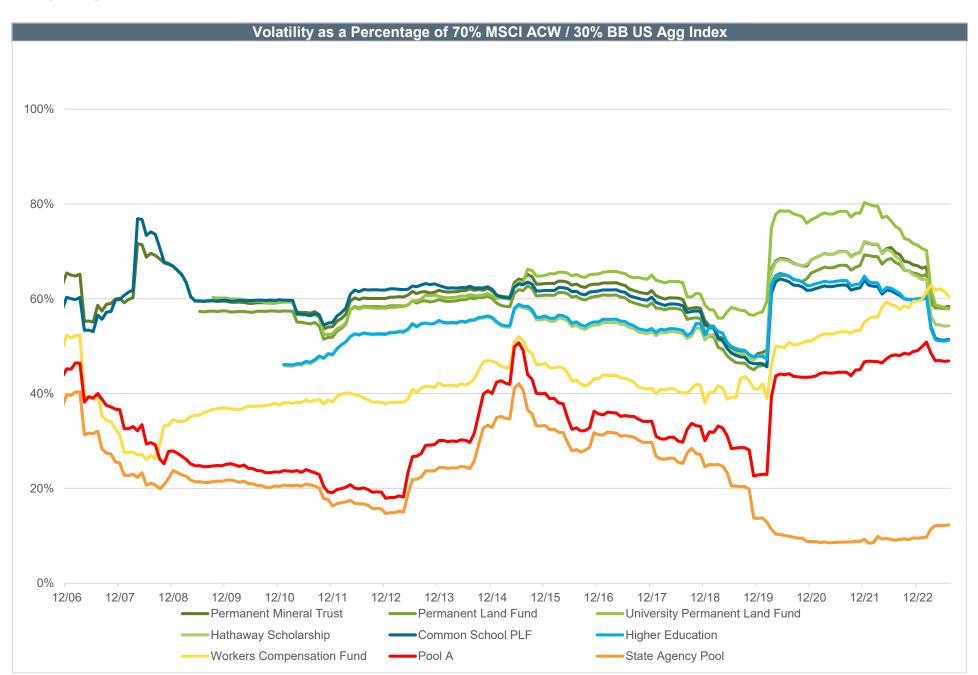


Wyoming State Treasurer's Office



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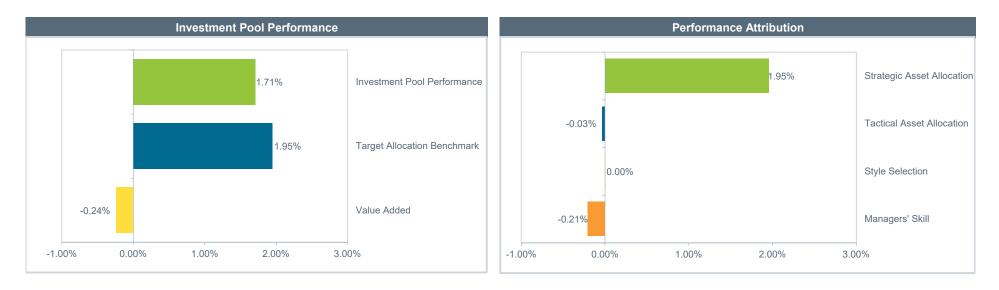
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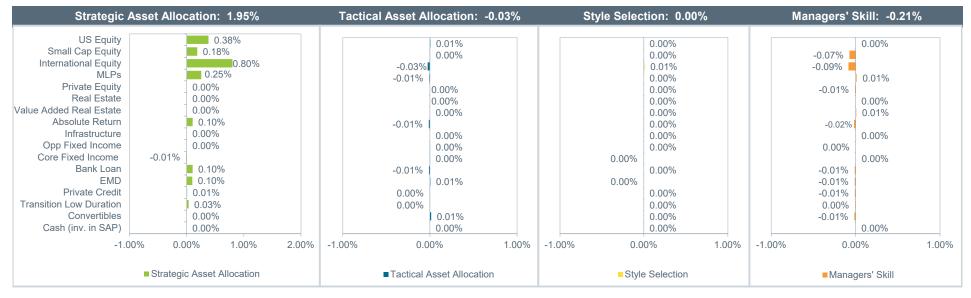


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Wyoming State Treasurer's Office Pool Attribution - IDP Methodology Permanent Mineral Trust Fund vs. Target Allocation Index FYTD Ending July 31, 2023





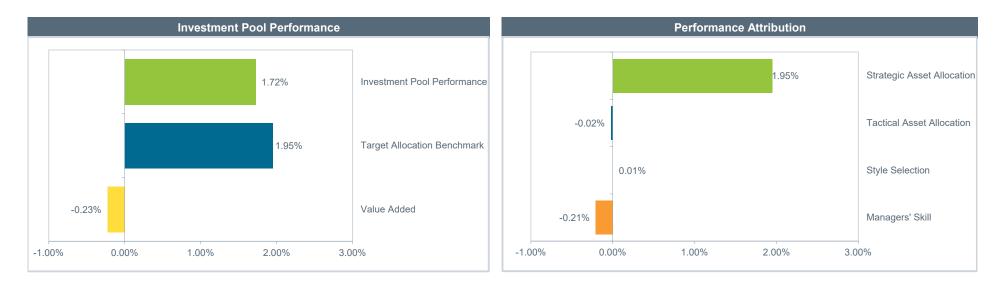
Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is net of fees. Calculation is based on monthly periodicity.

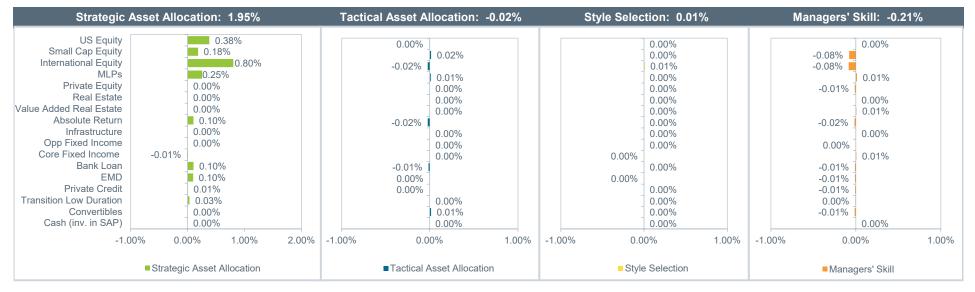
The benchmark utilized in this analysis is a passive target allocation index rather than an active actual allocation index.

Actual Allocation Index = Target Allocation Benchmark + Tactical Asset Allocation. The underlying parts may not exactly sum to the category totals due to rounding. FY begins 7/1/2023.



Wyoming State Treasurer's Office Pool Attribution - IDP Methodology Permanent Land Fund vs. Target Allocation Index FYTD Ending July 31, 2023





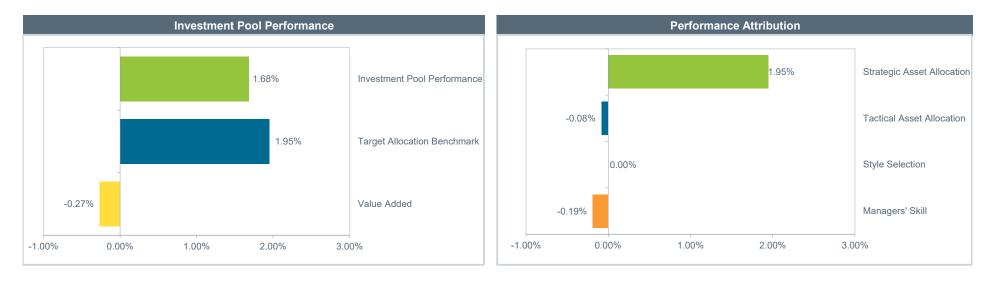
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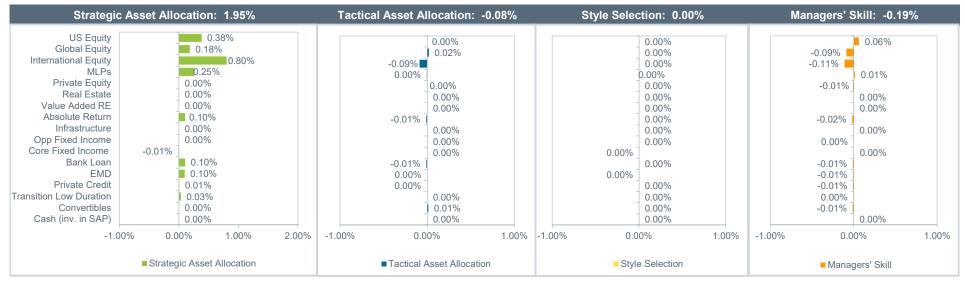
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Wyoming State Treasurer's Office Pool Attribution - IDP Methodology University Permanent Land Fund vs. Target Allocation Index FYTD Ending July 31, 2023

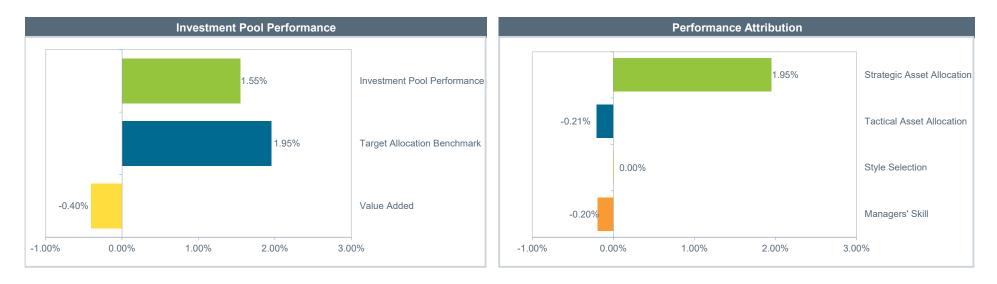


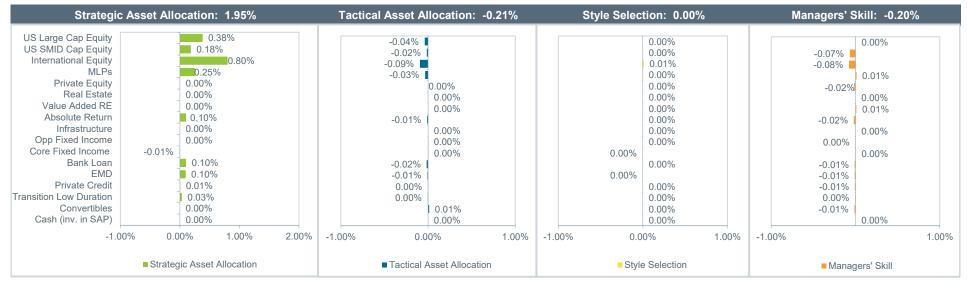


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Wyoming State Treasurer's Office Pool Attribution - IDP Methodology Hathaway Scholarship Endowment Fund vs. Target Allocation Index FYTD Ending July 31, 2023

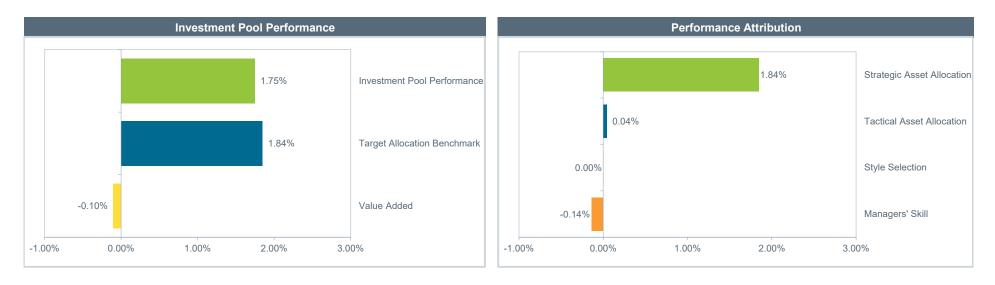


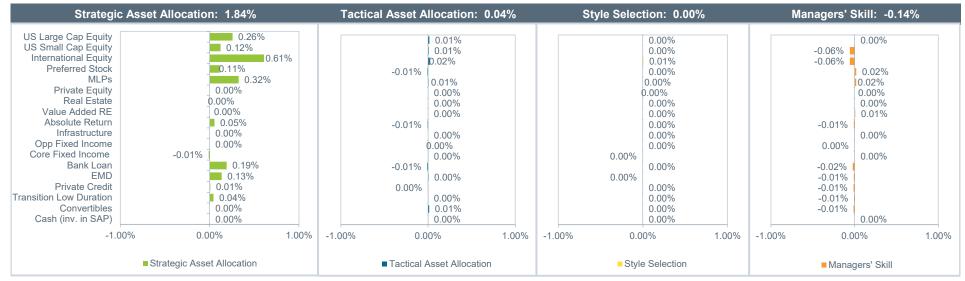


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Wyoming State Treasurer's Office Pool Attribution - IDP Methodology Common School Permanent Land Fund vs. Target Allocation Index FYTD Ending July 31, 2023

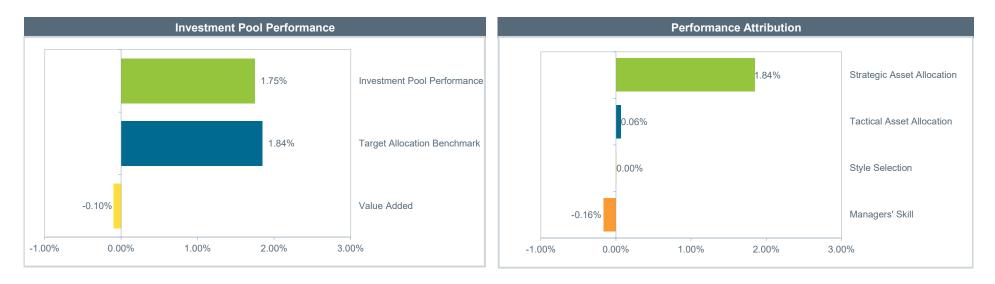


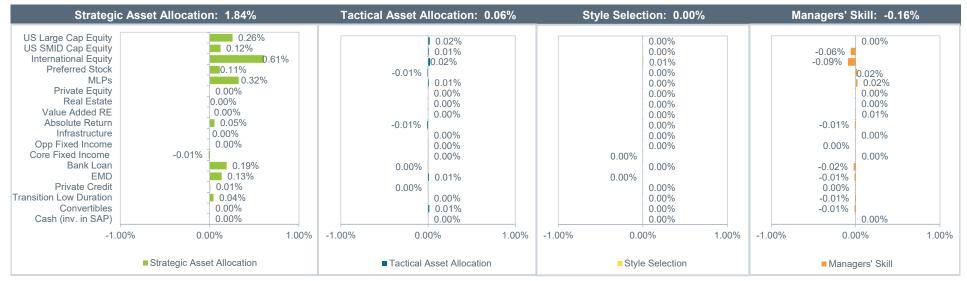


Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is net of fees. Calculation is based on monthly periodicity. The benchmark utilized in this analysis is a passive target allocation index rather than an active actual allocation index. Actual Allocation Index = Target Allocation Benchmark + Tactical Asset Allocation. The underlying parts may not exactly sum to the category totals due to rounding. FY begins 7/1/2023.



Wyoming State Treasurer's Office Pool Attribution - IDP Methodology Higher Education Endowment Fund vs. Target Allocation Index FYTD Ending July 31, 2023

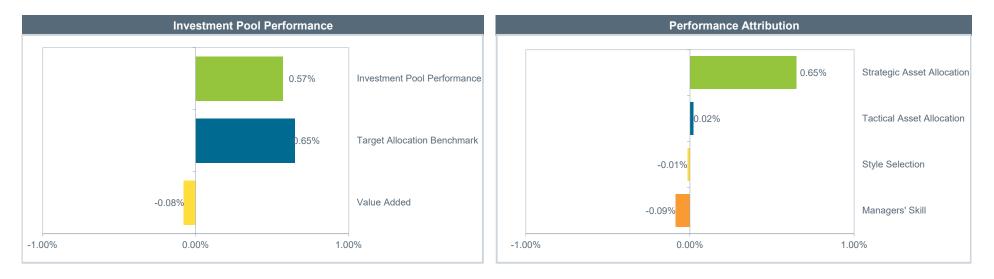


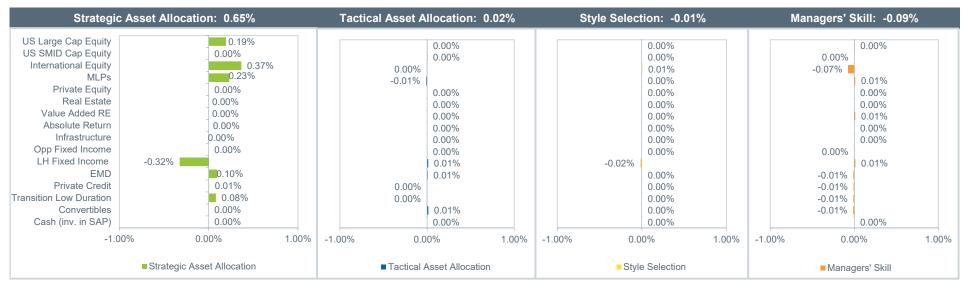


Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is net of fees. Calculation is based on monthly periodicity. The benchmark utilized in this analysis is a passive target allocation index rather than an active actual allocation index. Actual Allocation Index = Target Allocation Benchmark + Tactical Asset Allocation. The underlying parts may not exactly sum to the category totals due to rounding. FY begins 7/1/2023.



Wyoming State Treasurer's Office Pool Attribution - IDP Methodology Workers Compensation Fund vs. Target Allocation Index FYTD Ending July 31, 2023

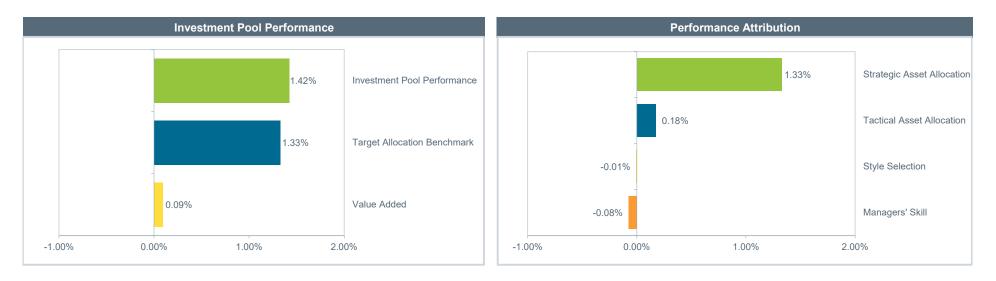


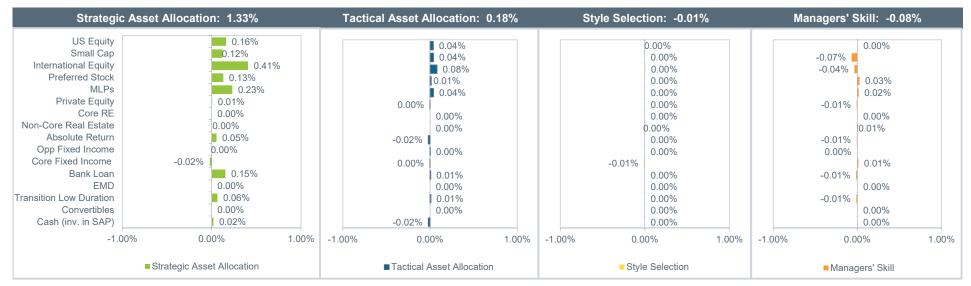


Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is net of fees. Calculation is based on monthly periodicity. The benchmark utilized in this analysis is a passive target allocation index rather than an active actual allocation index. Actual Allocation Index = Target Allocation Benchmark + Tactical Asset Allocation. The underlying parts may not exactly sum to the category totals due to rounding. FY begins 7/1/2023.



Wyoming State Treasurer's Office Pool Attribution - IDP Methodology Pool A vs. Target Allocation Index FYTD Ending July 31, 2023

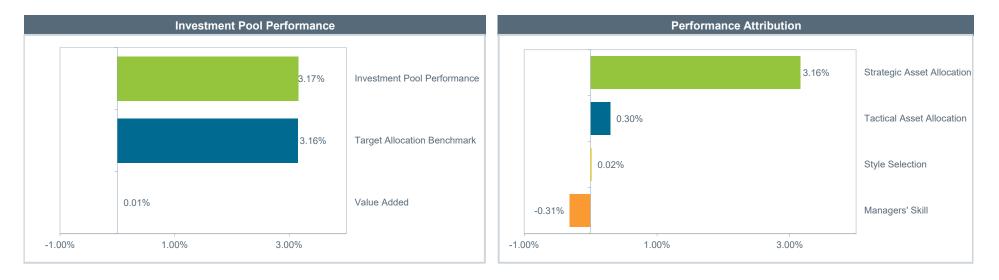


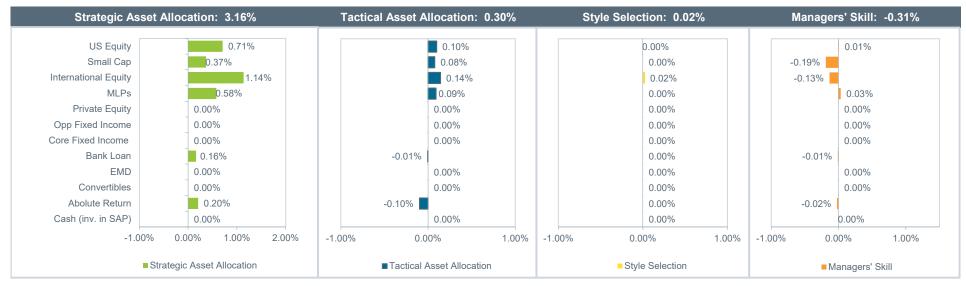


Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is net of fees. Calculation is based on monthly periodicity. The benchmark utilized in this analysis is a passive target allocation index rather than an active actual allocation index. Actual Allocation Index = Target Allocation Benchmark + Tactical Asset Allocation. The underlying parts may not exactly sum to the category totals due to rounding. FY begins 7/1/2023.



Wyoming State Treasurer's Office Pool Attribution - IDP Methodology LSRA LT Reserve vs. Target Allocation Index FYTD Ending July 31, 2023





Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is net of fees. Calculation is based on monthly periodicity. The benchmark utilized in this analysis is a passive target allocation index rather than an active actual allocation index. Actual Allocation Index = Target Allocation Benchmark + Tactical Asset Allocation. The underlying parts may not exactly sum to the category totals due to rounding. FY begins 7/1/2023.



Wyoming State Treasurer's Office Permanent Funds - Total Return Focus Asset Allocation vs. Target

International Equity 1,837,229 18.0 9.9 19.7 29.6 Core Real Estate 0.8% MLPs 530,556 5.2 2.8 5.5 8.3 Non-Core Real Estate -1.9 % 0.4% Private Equity 1,079,625 10.6 4.2 8.4 12.6 Infrastructure -1.9 % 0.4% Core Real Estate 687,813 6.8 3.0 6.0 9.0 Diversified Hedge Funds -1.5 % -1.3 % Infrastructure 86,934 0.9 0.3 0.5 0.8 Opportunistic Fixed Income -1.3 %				P	ermanent	Mineral Tr	rust Ex PPI				
Permanent Mineral Prost Ex. PP1 10,183,071 100.0 - 100.0 - International Equity -1.7 % -0.3 % Broad US Equity 30,1723 3.0 1.5 3.0 4.5 Private Equity -0.3 % -0.3 % International Equity 1,837,229 18.0 9.9 19.7 29.6 Core Real Estate - -0.8% MLPs 530,556 5.2 2.8 5.5 8.3 Non-Core Real Estate - -1.5 % - Ore Real Estate 687,813 6.8 3.0 6.0 9.0 Diversified Hedge Funds -1.3 % - - -1.3 % - <th></th> <th></th> <th></th> <th></th> <th>Target (%)</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>					Target (%)						
Broad US Equity 1,191,196 11.7 5.9 11.9 17.8 MLPs -0.3 % Small Cap US Equity 301,723 3.0 1.5 3.0 4.5 Private Equity -0.3 % International Equity 1,87,229 18.0 9.9 19.7 29.6 Core Real Estate -0.3 % MLPs 530,556 5.2 2.8 5.5 8.3 Non-Core Real Estate -1.9 % -1.9 % Ore Real Estate 687,813 6.8 3.0 6.0 9.0 Diversified Hedge Funds -1.5 % -1.3 % Diversified Hedge Funds 812,291 8.0 4.8 9.5 14.3 Opportunistic Fixed Income -1.3 % 0.0% Bank Loans 672,247 6.6 3.9 7.9 11.8 Opportunistic Investments -0.3 % -0.3 % -1.3 % 0.0% Private Credit 10,0205 1.1.5 6.4 12.9 19.3 Transition Low Duration -0.3 % -1.3 % 0.0% Private Credit 0.07% 2.5 5.0 7.5 Cash (inv. in SAP) -0.2 % 0.0% <td< th=""><th>Permanent Mineral Trust Ex. PPI</th><th>10,183,071</th><th>100.0</th><th>-</th><th>100.0</th><th>-</th><th></th><th></th><th></th><th></th><th></th></td<>	Permanent Mineral Trust Ex. PPI	10,183,071	100.0	-	100.0	-					
Small Cap US Equity 301,723 3.0 1.5 3.0 4.5 Private Equity Diversified Hedge Funds Diversified Hedge Funds Diversified Hedge Funds 0.4% MLPs 66,2247 6.6 3.9 7.9 11.8 0.9 0.0% 0.1% Murder Core Real Estate 66,24 0.7 0.0 0.0 0.0% 0.1% Private Equity 1,079,625 10.6 4.2 8.4 12.6 Non-Core Real Estate 0.4% -1.9% -1.9% -1.9% -1.9% -1.9% -1.3% <t< td=""><td>Broad US Equity</td><td>1,191,196</td><td>11.7</td><td>5.9</td><td>11.9</td><td>17.8</td><td></td><td></td><td></td><td></td><td></td></t<>	Broad US Equity	1,191,196	11.7	5.9	11.9	17.8					
International Equity 1,837,229 18.0 9.9 19.7 29.6 Core Real Estate Non-Core Real Estate Non-Cor	Small Cap US Equity	301,723	3.0	1.5	3.0	4.5		0.0 /0	2.2%		
Private Equity 1,079,625 10.6 4.2 8.4 12.6 Infrastructure Core Real Estate 687,813 6.8 3.0 6.0 9.0 Diversified Hedge Funds -1.5 % Non-Core Real Estate 368,608 3.6 2.8 5.5 8.3 Core Fixed Income -1.3 % -1.3 % Infrastructure 86,934 0.9 0.3 0.5 0.8 Opportunistic Fixed Income -1.3 %	International Equity	1,837,229	18.0	9.9	19.7	29.6					
Introduction Introduction <thintroduction< th=""> Introduction <thi< td=""><td>MLPs</td><td>530,556</td><td>5.2</td><td>2.8</td><td>5.5</td><td>8.3</td><td></td><td>-1.9 %</td><td></td><td></td><td></td></thi<></thintroduction<>	MLPs	530,556	5.2	2.8	5.5	8.3		-1.9 %			
On-Core Real Estate 368,608 3.6 2.8 5.5 8.3 Infrastructure 86,934 0.9 0.3 0.5 0.8 Diversified Hedge Funds 812,291 8.0 4.8 9.5 14.3 Core Fixed Income 1,173,620 11.5 6.4 12.9 19.3 Bank Loans 672,247 6.6 3.9 7.9 11.8 Opportunistic Fixed Income 3,776 0.0 0.0 5.0 EMD 517,149 5.1 2.5 5.0 7.5 Transition Low Duration 277,670 2.7 1.5 3.0 4.5 Private Credit 110,205 1.1 0.6 1.3 1.9 Opportunistic Investments 66,524 0.7 0.0 0.0 5.0 Private Credit 110,205 1.1 0.6 1.3 1.9 Opportunistic Investments 66,524 0.7 0.0 0.0 5.0 Allocation Differences Allocation Differences Allocation Differences	Private Equity	1,079,625	10.6	4.2	8.4	12.6			.4%		
Non-Oriented Educe 360,000 0.0 2.0 0.0% 0	Core Real Estate	687,813	6.8	3.0	6.0	9.0					
Infrastructure 86,934 0.9 0.3 0.5 0.8 Diversified Hedge Funds 812,291 8.0 4.8 9.5 14.3 Core Fixed Income 1,173,620 11.5 6.4 12.9 19.3 Bank Loans 672,247 6.6 3.9 7.9 11.8 Opportunistic Fixed Income - Fixed Income - Co.3 % -0.3 % Copportunistic Fixed Income 3,776 0.0 0.0 5.0 7.5 Opportunistic Investments - Cash (inv. in SAP) -0.7% EMD 277,670 2.7 1.5 3.0 4.5 -6.0 % -3.0 % 0.0% 9.0% Private Credit 110,205 1.1 0.6 1.3 1.9 -6.0 % -3.0 % 0.0% 9.0% Opportunistic Investments 66,524 0.7 0.0 0.0 5.0 Allocation Differences	Non-Core Real Estate	368,608	3.6	2.8	5.5	8.3					
Diversified Hedge Funds 612,291 8.0 4.6 9.5 14.3 EMD Core Fixed Income 1,173,620 11.5 6.4 12.9 19.3 Transition Low Duration -0.3 % -0.3 % Bank Loans 672,247 6.6 3.9 7.9 11.8 Opportunistic Fixed Income -0.7 % Opportunistic Fixed Income 3,776 0.0 0.0 5.0 7.5 Opportunistic Investments - Cash (inv. in SAP) - -0.7 % EMD 517,149 5.1 2.5 5.0 7.5 Cash (inv. in SAP) - - 4.6 % Transition Low Duration 277,670 2.7 1.5 3.0 4.5 -6.0 % -3.0 % 0.0% 3.0% 6.0% 9.0% Opportunistic Investments 66,524 0.7 0.0 0.0 5.0 5.0 - - - - - 0.7% Opportunistic Investments 66,524 0.7 0.0 0.0 5.0 - - - - 0.0% 3.0% 6.0% 9.0% - - - - <td>Infrastructure</td> <td>86,934</td> <td>0.9</td> <td>0.3</td> <td>0.5</td> <td>0.8</td> <td></td> <td></td> <td>0/</td> <td></td> <td></td>	Infrastructure	86,934	0.9	0.3	0.5	0.8			0/		
Core Fixed Income 1,173,620 11.5 6.4 12.9 19.3 Bank Loans 672,247 6.6 3.9 7.9 11.8 Opportunistic Fixed Income 3,776 0.0 0.0 0.0 5.0 EMD 517,149 5.1 2.5 5.0 7.5 Transition Low Duration 277,670 2.7 1.5 3.0 4.5 Private Credit 110,205 1.1 0.6 1.3 1.9 Opportunistic Investments 66,524 0.7 0.0 5.0 5.0 Opportunistic Investments 66,524 0.7 0.0 5.0 7.5 Allocation Differences 4.6% 4.6% 4.6% 4.6%	Diversified Hedge Funds	812,291	8.0	4.8	9.5	14.3					
Bank Loans 672,247 6.6 3.9 7.9 11.8 Private Credit -0.2 % Opportunistic Fixed Income 3,776 0.0 0.0 0.0 5.0 7.5 Opportunistic Investments -0.2 % 0.7% EMD 517,149 5.1 2.5 5.0 7.5 Cash (inv. in SAP) 0.7% Transition Low Duration 277,670 2.7 1.5 3.0 4.5 -6.0 % -3.0 % 0.0% 3.0% 6.0% 9.0% Opportunistic Investments 66,524 0.7 0.0 0.0 5.0 5.0 5.0 5.0 -6.0 % -3.0 % 0.0% 9.0%	Core Fixed Income	1,173,620	11.5	6.4	12.9	19.3			70		
EMD 517,149 5.1 2.5 5.0 7.5 Transition Low Duration 277,670 2.7 1.5 3.0 4.5 Private Credit 110,205 1.1 0.6 1.3 1.9 Opportunistic Investments 66,524 0.7 0.0 0.0 5.0 Transition Involution Allocation Differences	Bank Loans	672,247	6.6	3.9	7.9	11.8					
Transition Low Duration 277,670 2.7 1.5 3.0 4.5 Private Credit 110,205 1.1 0.6 1.3 1.9 Opportunistic Investments 66,524 0.7 0.0 0.0 5.0	Opportunistic Fixed Income	3,776	0.0	0.0	0.0	5.0	Opportunistic Investments –).7%		
Private Credit 110,205 1.1 0.6 1.3 1.9 -6.0 % -3.0 % 0.0% 3.0% 6.0% 9.0% Opportunistic Investments 66,524 0.7 0.0 0.0 5.0 Allocation Differences	EMD	517,149	5.1	2.5	5.0	7.5	Cash (inv. in SAP) –			4.6%	
Opportunistic Investments 66,524 0.7 0.0 0.0 5.0	Transition Low Duration	277,670	2.7	1.5	3.0	4.5	6.0.%	200/ 000/	2 00/	6.0%	0.09/
Allocation Differences	Private Credit	110,205	1.1	0.6	1.3	1.9	-0.0 %	-3.0 /0 0.0 %	5.0%	0.0%	9.0%
	Opportunistic Investments	66,524	0.7	0.0	0.0	5.0		Allocation Differen	nces		
Cash (III v. III SAF) 403,900 4.0 0.0 0.0 5.0	Cash (inv. in SAP)	465,906	4.6	0.0	0.0	5.0					

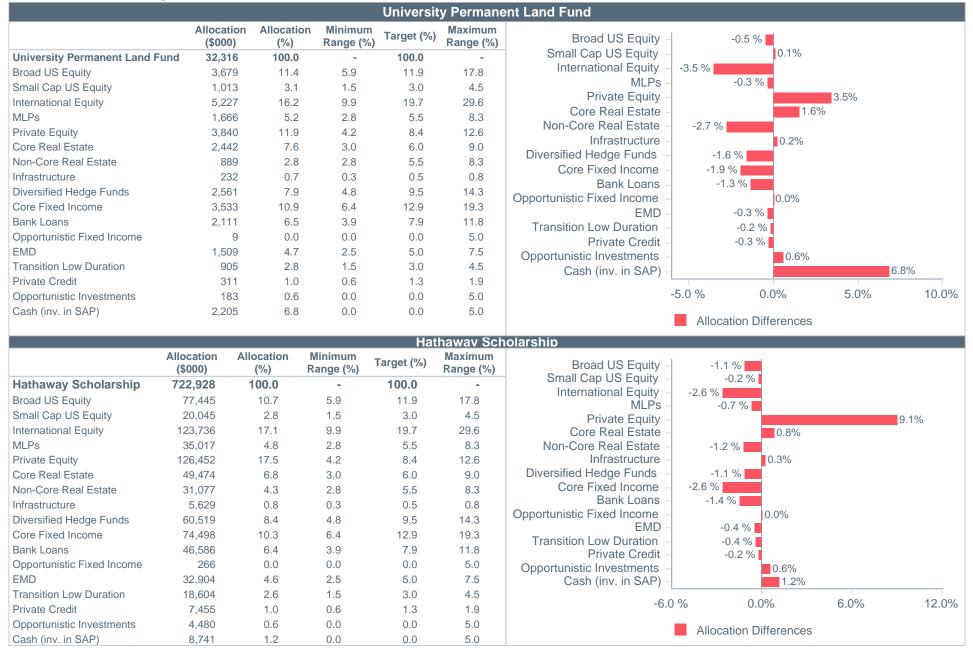
Permanent Land Fund

	Allocation (\$000)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)	Broad US Equity0.5 %
Permanent Land Fund	287,588	100.0	-	100.0	-	Small Cap US Equity – 0.2%
Broad US Equity	32,556	11.3	5.9	11.9	17.8	International Equity – -1.8 %
Small Cap US Equity	9,074	3.2	1.5	3.0	4.5	Private Equity – 4.6%
International Equity	51,490	17.9	9.9	19.7	29.6	Core Real Estate –
MLPs	16,042	5.6	2.8	5.5	8.3	Non-Core Real Estate –-2.4 %
Private Equity	37,403	13.0	4.2	8.4	12.6	Infrastructure – 0.2%
Core Real Estate	17,620	6.1	3.0	6.0	9.0	Diversified Hedge Funds -2.5 %
Non-Core Real Estate	9,012	3.1	2.8	5.5	8.3	Core Fixed Income – -1.9 %
Infrastructure	2,044	0.7	0.3	0.5	0.8	Bank Loans – -1.5 %
Diversified Hedge Funds	20,130	7.0	4.8	9.5	14.3	Private Credit – -0.3 %
Core Fixed Income	31,423	10.9	6.4	12.9	19.3	Opportunistic Fixed Income – 0.0%
Bank Loans	18,384	6.4	3.9	7.9	11.8	EMD0.4 %
Private Credit	2,870	1.0	0.6	1.3	1.9	Opportunistic Investments – 0.7%
Opportunistic Fixed Income	81	0.0	0.0	0.0	5.0	Cash (inv. in SAP) – 5.6%
EMD	13,320	4.6	2.5	5.0	7.5	
Transition Low Duration	8,274	2.9	1.5	3.0	4.5	-4.0 % 0.0% 4.0% 8.0%
Opportunistic Investments	1,897	0.7	0.0	0.0	5.0	Allocation Differences
Cash (inv. in SAP)	15,969	5.6	0.0	0.0	5.0	Allocation Differences

Allocations shown may not sum up to 100% exactly due to rounding. Market value shown for PMTF excludes Public Purpose Investments (PPIs). Asset class targets shown represent 9/1/2022 interim targets. Pool allocations shown are based on 6/30/2023 allocations.



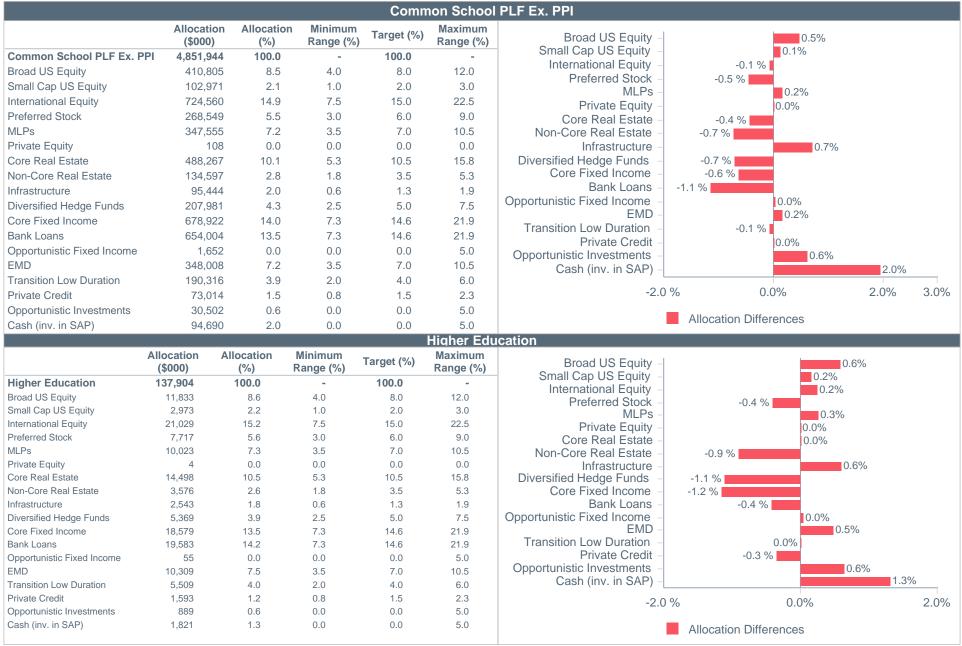
Wyoming State Treasurer's Office Permanent Funds - Total Return Focus Asset Allocation vs. Target



Allocations shown may not sum up to 100% exactly due to rounding. Asset class targets shown represent 9/1/2022 interim targets. Pool allocations shown are based on 6/30/2023 allocations.



Wyoming State Treasurer's Office Permanent Funds - Income Focus Asset Allocation vs. Target

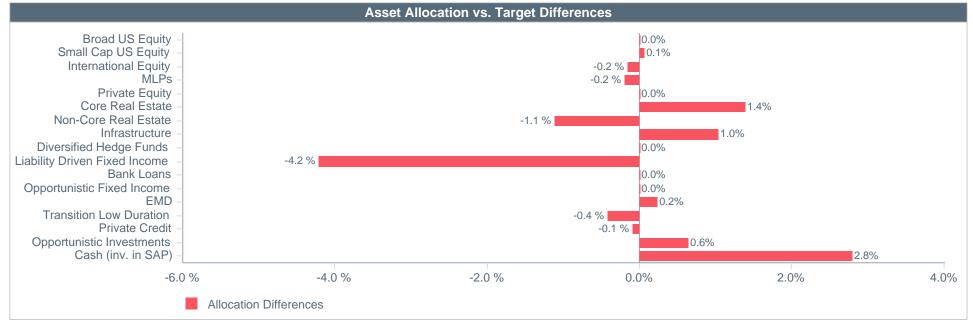


Allocations shown may not sum up to 100% exactly due to rounding. Market value shown for CSPLF excludes Public Purpose Investments (PPIs). Asset class targets shown represent 9/1/2022 interim targets. Pool allocations shown are based on 6/30/2023 allocations.



Wyoming State Treasurer's Office Permanent Funds - Workers' Compensation Fund Asset Allocation vs. Target

Asset Allocation vs. Target									
	Allocation (\$000)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)				
Workers Compensation Fund	2,455,953	100.00	-	100.00	-				
Broad US Equity	147,479	6.00	3.00	6.00	9.00				
Small Cap US Equity	1,473	0.06	0.00	0.00	0.00				
International Equity	217,075	8.84	4.50	9.00	13.50				
MLPs	118,008	4.80	2.50	5.00	7.50				
Private Equity	70	0.00	0.00	0.00	0.00				
Core Real Estate	157,067	6.40	2.50	5.00	7.50				
Non-Core Real Estate	70,936	2.89	2.00	4.00	6.00				
Infrastructure	56,178	2.29	0.63	1.25	1.88				
Diversified Hedge Funds	-	0.00	0.00	0.00	0.00				
Liability Driven Fixed Income	1,271,989	51.79	28.00	56.00	84.00				
Bank Loans	-	0.00	0.00	0.00	0.00				
Opportunistic Fixed Income	12	0.00	0.00	0.00	5.00				
EMD	128,475	5.23	2.50	5.00	7.50				
Transition Low Duration	174,042	7.09	3.75	7.50	11.25				
Private Credit	28,445	1.16	0.63	1.25	1.88				
Opportunistic Investments	15,908	0.65	0.00	0.00	5.00				
Cash (inv. in SAP)	68,794	2.80	0.00	0.00	5.00				



Allocations shown may not sum up to 100% exactly due to rounding. Asset class targets shown represent 9/1/2022 interim targets. Pool allocations shown are based on 6/30/2023 allocations.



		Total LSRA			
		Alloc	set ation 000)	As Alloc (%	
LSRA			2,902).00
Broad US Equity		16	6,472	3	3.61
Small Cap US Equity			8,238		2.50
nternational Equity			4,919).60
Core Fixed Income			7,528		1.95
Bank Loans			7,474		4.01
ow Duration Fixed Income			6,909		3.47
		04			
Private Equity		<u>_</u>	31		0.00
			6,691		5.00
Diversified Hedge Funds		6	3,403		3.28
Opportunistic Investments			-).00
Cash (inv. in SAP)			1,237	().58
		LSRA Long Term R	eserve		
	Asset Allocation (\$000)	Asset Allocation (%)	Minimum Allocation (%)	Target Allocation (%)	Maximum Allocation (%)
SRA Long Term Reserve	668,466	100.00	=	100.00	
road US Equity	166,472	24.90	17.00	22.00	27.00
mall Cap US Equity	48,238	7.22	4.00	6.00	8.00
ternational Equity	204,919	30.66	21.00	28.00	35.00
ank Loans	77,474	11.59	10.00	12.50	15.00
rivate Equity	31	0.00	0.00	0.00	0.00
ILPs	96,691	14.46	10.00	12.50	15.00
iversified Hedge Funds pportunistic Investments	63,403	9.48 0.00	15.00 0.00	19.00 0.00	23.00 0.00
ash (inv. in SAP)	- 11,237	1.68	0.00	0.00	0.00
		LSRA Intermediate Teri		0.00	0.00
	Asset Allocation (\$000)	Asset Allocation (%)	Minimum Allocation (%)	Target Allocation (%)	Maximum Allocation (%)
SRA Intermediate Term Reserve	617,528	100.00	-	100.00	-
Core Fixed Income	617,528	100.00	100.00	100.00	100.00
		LSRA Short Term R	eserve		
	Asset Allocation (\$000)	Asset Allocation (%)	Minimum Allocation (%)	Target Allocation (%)	Maximum Allocation (%)
SRA Short Term Reserve	646,909	100.00	-	100.00	-
ow Duration Fixed Income	646,909	100.00	100.00	100.00	100.00

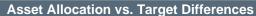
Allocations shown may not sum up to 100% exactly due to rounding. The Total LSRA pool has no target allocation. Pool allocations shown are based on 6/30/2023 allocations.

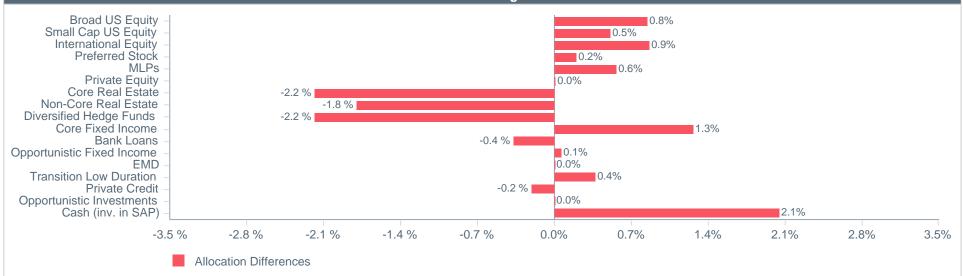


Wyoming State Treasurer's Office Non-Permanent Funds - Pool A Investment Account

Asset Allocation vs. Target

		Asset Allocation vs. T	arget		
	Allocation (\$000)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
Pool A	398,574	100.00	-	100.00	-
Broad US Equity	23,311	5.85	2.50	5.00	7.50
Small Cap US Equity	9,993	2.51	1.00	2.00	3.00
International Equity	43,321	10.87	5.00	10.00	15.00
Preferred Stock	28,708	7.20	3.50	7.00	10.50
MLPs	22,171	5.56	2.50	5.00	7.50
Private Equity	42	0.01	0.00	0.00	0.00
Core Real Estate	13,212	3.31	2.75	5.50	8.25
Non-Core Real Estate	10,745	2.70	2.25	4.50	6.75
Diversified Hedge Funds	11,232	2.82	2.50	5.00	7.50
Core Fixed Income	132,087	33.14	15.94	31.88	47.81
Bank Loans	45,850	11.50	5.94	11.88	17.81
Opportunistic Fixed Income	249	0.06	0.00	0.00	5.00
EMD	-	0.00	0.00	0.00	0.00
Transition Low Duration	25,394	6.37	3.00	6.00	9.00
Private Credit	4,147	1.04	0.63	1.25	1.88
Opportunistic Investments	-	0.00	0.00	0.00	5.00
Cash (inv. in SAP)	28,110	7.05	2.50	5.00	7.50





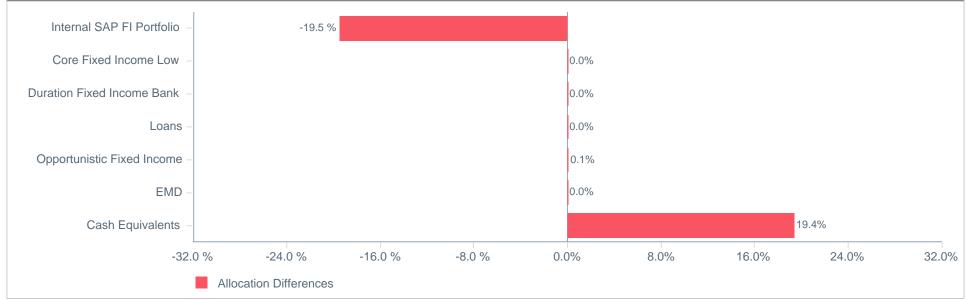
Allocations shown may not sum up to 100% exactly due to rounding. Asset class targets shown represent 9/1/2022 interim targets. Pool allocations shown are based on 6/30/2023 allocations.



Wyoming State Treasurer's Office Non-Permanent Funds - State Agency Pool Asset Allocation vs. Target

Asset Allocation vs. Target									
	Allocation (\$000)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)				
State Agency Pool Excluding PPI	5,664,356	100.00	-	100.00	-				
Internal SAP Fixed Income Portfolio	4,560,218	80.51	100.00	100.00	100.00				
Core Fixed Income	-	0.00	0.00	0.00	0.00				
Low Duration Fixed Income	-	0.00	0.00	0.00	0.00				
Bank Loans	-	0.00	0.00	0.00	0.00				
Opportunistic Fixed Income	5,703	0.10	0.00	0.00	0.00				
EMD	-	0.00	0.00	0.00	0.00				
Cash Equivalents	1,098,434	19.39	0.00	0.00	0.00				





Allocations shown may not sum up to 100% exactly due to rounding. Market value shown excludes Public Purpose Investments (PPIs). Pool allocations shown are based on 6/30/2023 allocations.



	Allocation	า						Perform	ance (%)			
	Market Value (\$) (\$)	%	MTD	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
All Cap US Equity Composite	2,062,796,702	7.66	3.23	3.23	3.23	20.59	13.16	13.50	11.48	12.29	-	11.82	11/01/2014
All Cap US Equity Custom Index			3.21	3.21	3.21	20.65	13.02	13.72	11.87	13.11	12.35	11.67	
Difference			0.02	0.02	0.02	-0.06	0.14	-0.22	-0.39	-0.82	-	0.15	
State Street All Cap	1,940,935,534	7.21	3.21	3.21	3.21	20.62	12.98	13.67	11.70	12.73	-	11.31	01/01/2015
State Street All Cap Custom Index			3.21	3.21	3.21	20.65	13.02	13.72	11.67	12.73	12.09	11.32	
Difference			0.00	0.00	0.00	-0.03	-0.04	-0.05	0.03	0.00	-	-0.01	
Internal Domestic Equity Quantitative	94,027,437	0.35	3.59	3.59	3.59	18.07	11.80	-	-	-	-	4.98	06/01/2021
S&P 500 Index (Cap Wtd)			3.21	3.21	3.21	20.65	13.02	13.72	12.20	13.31	12.66	5.76	
Difference			0.38	0.38	0.38	-2.58	-1.22	-	-	-	-	-0.78	
SPDR S&P 500 ETF Trust	27,802,497	0.10	3.26	3.26	3.26	20.52	-	-	-	-	-	13.13	12/01/2022
S&P 500 Index (Cap Wtd)			3.21	3.21	3.21	20.65	13.02	13.72	12.20	13.31	12.66	13.70	
Difference			0.05	0.05	0.05	-0.13	-	-	-	-	-	-0.57	
UW Portfolio Mgmt Program	1,979,917	0.01	4.18	4.18	4.18	17.57	9.91	10.67	8.32	10.15	10.34	5.02	04/01/2006
S&P 500 Index (Cap Wtd)			3.21	3.21	3.21	20.65	13.02	13.72	12.20	13.31	12.66	9.75	
Difference			0.97	0.97	0.97	-3.08	-3.11	-3.05	-3.88	-3.16	-2.32	-4.73	
Small Cap US Equity Composite	497,503,405	1.85	3.64	3.64	3.64	16.20	14.72	13.88	6.06	7.99	-	6.83	11/01/2014
Russell 2000 Index			6.12	6.12	6.12	14.70	7.91	12.01	5.09	8.78	8.17	7.75	
Difference			-2.48	-2.48	-2.48	1.50	6.81	1.87	0.97	-0.79	-	-0.92	
Van Berkom	267,940,437	1.00	2.41	2.41	2.41	16.77	18.08	12.92	-	-	-	11.65	03/01/2020
Russell 2000 Index			6.12	6.12	6.12	14.70	7.91	12.01	5.09	8.78	8.17	10.76	
Difference			-3.71	-3.71	-3.71	2.07	10.17	0.91	-	-	-	0.89	
BlackRock Small Cap	58,112,079	0.22	5.63	5.63	5.63	12.45	7.71	12.36	-	-	-	12.36	08/01/2020
Russell 2000 Index			6.12	6.12	6.12	14.70	7.91	12.01	5.09	8.78	8.17	12.01	
Difference			-0.49	-0.49	-0.49	-2.25	-0.20	0.35	-	-	-	0.35	
Internal Small Cap Equity Quantamental	77,220,150	0.29	4.34	4.34	4.34	19.86	18.75	-	-	-	-	-0.65	06/01/2021
Russell 2000 Index			6.12	6.12	6.12	14.70	7.91	12.01	5.09	8.78	8.17	-4.32	
Difference			-1.78	-1.78	-1.78	5.16	10.84	-	-	-	-	3.67	
Internal Small Cap Equity Quantitative	94,230,739	0.35	5.41	5.41	5.41	14.69	8.41	-	-	-	-	-1.23	11/01/2021
Russell 2000 Index			6.12	6.12	6.12	14.70	7.91	12.01	5.09	8.78	8.17	-6.20	
Difference			-0.71	-0.71	-0.71	-0.01	0.50	-	-	-	-	4.97	



	Allocatio	n					I	Perform	ance (%)			
	Market Value (\$) (\$)	%	MTD	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Int'l Equity	3,229,297,296	12.00	3.56	3.56	3.56	15.04	15.40	9.42	6.22	7.85	5.85	6.04	01/01/2004
International Equity Custom Index			4.07	4.07	4.07	13.92	13.42	7.09	3.85	6.19	4.72	5.16	
Difference			-0.51	-0.51	-0.51	1.12	1.98	2.33	2.37	1.66	1.13	0.88	
Northern Trust	1,402,665,379	5.21	4.05	4.05	4.05	14.29	13.67	7.23	4.01	6.36	4.86	5.24	08/01/2010
MSCI ACW Ex US Index (USD) (Net)			4.07	4.07	4.07	13.92	13.42	7.09	3.85	6.19	4.72	5.11	
Difference			-0.02	-0.02	-0.02	0.37	0.25	0.14	0.16	0.17	0.14	0.13	
Arrowstreet	1,081,563,983	4.02	3.87	3.87	3.87	16.93	19.46	14.52	9.41		-	7.84	03/01/2018
MSCI ACW Ex US IM Index (USD) (Net)			4.20	4.20	4.20	13.69	12.96	7.22	3.80	6.17	4.85	3.08	
Difference			-0.33	-0.33	-0.33	3.24	6.50	7.30	5.61	-	-	4.76	
Harding Loevner	681,312,515	2.53	2.48	2.48	2.48	14.46	14.25	6.82	-		-	6.00	01/01/2020
MSCI ACW Ex US Index (USD) (Net)			4.07	4.07	4.07	13.92	13.42	7.09	3.85	6.19	4.72	3.77	
Difference			-1.59	-1.59	-1.59	0.54	0.83	-0.27	-	-	-	2.23	
Vanguard FTSE All World Ex US ETF	63,755,419	0.24	3.73	3.73	3.73	14.12	-	-	-	-	-	28.28	10/01/2022
MSCI ACW Ex US Index (USD) (Net)			4.07	4.07	4.07	13.92	13.42	7.09	3.85	6.19	4.72	30.19	
Difference			-0.34	-0.34	-0.34	0.20	-	-	-	-	-	-1.91	
Cohen & Steers Preferred Stock	304,974,355	1.13	2.22	2.22	2.22	1.65	-1.72	0.21	3.13	-	-	3.27	07/01/2018
Preferred Stock Custom Index			1.88	1.88	1.88	3.63	-0.11	1.52	2.87	2.91	4.49	2.92	
Difference			0.34	0.34	0.34	-1.98	-1.61	-1.31	0.26	-	-	0.35	
MLP	1,177,728,890	4.38	4.88	4.88	4.88	11.16	13.26	30.98	6.16		-	6.16	08/01/2018
MLP Custom Index			4.63	4.63	4.63	12.09	13.93	30.44	5.39	4.69	1.67	5.39	
Difference			0.25	0.25	0.25	-0.93	-0.67	0.54	0.77	-	-	0.77	
Harvest Fund Advisors	632,966,157	2.35	5.16	5.16	5.16	11.36	13.72	31.87	6.73	-	-	6.73	08/01/2018
MLP Custom Index			4.63	4.63	4.63	12.09	13.93	30.44	5.39	4.69	1.67	5.39	
Difference			0.53	0.53	0.53	-0.73	-0.21	1.43	1.34	-	-	1.34	
Harvest Fund Advisors Passive	544,762,733	2.02	4.55	4.55	4.55	11.19	13.13	30.60	-	-	-	13.19	02/01/2020
MLP Custom Index			4.63	4.63	4.63	12.09	13.93	30.44	5.39	4.69	1.67	12.99	
Difference			-0.08	-0.08	-0.08	-0.90	-0.80	0.16	-	-	-	0.20	
Private Equity Composite	1,247,575,104	4.64	-0.07	-0.07	-0.07	11.85	19.60				-	12.46	07/01/2021
Cambridge US Prvt Eq Index			0.00	0.00	0.00	2.49	3.80	20.83	14.97	15.89	14.53	6.09	
Difference			-0.07	-0.07	-0.07	9.36	15.80	-	-	-	-	6.37	



	Allocation	ı					I	Performa	ance (%)			
	Market Value (\$) (\$)	%	MTD	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Private Credit Composite	228,040,251	0.85	-0.54	-0.54	-0.54	3.85	-	-	-	-	-	8.39	11/01/2022
BB US Intermediate Agg + 400 bps			0.48	0.48	0.48	4.13	1.33	0.86	4.90	4.52	5.38	7.47	
Difference			-1.02	-1.02	-1.02	-0.28	-	-	-	-	-	0.92	
Core Real Estate	1,430,391,748	5.31	0.00	0.00	0.00	-8.88	-13.09	6.64	4.96	5.58	7.36	5.54	01/01/2006
NCREIF ODCE Index (AWA) (Net)			0.00	0.00	0.00	-6.16	-10.73	7.04	5.56	6.02	7.77	5.78	
Difference			0.00	0.00	0.00	-2.72	-2.36	-0.40	-0.60	-0.44	-0.41	-0.24	
Clarion Lion Properties LP	856,987,508	3.18	0.00	0.00	0.00	-10.97	-15.28	6.86	6.04	6.68	8.44	5.55	01/01/2006
NCREIF ODCE Index (AWA) (Net)			0.00	0.00	0.00	-6.16	-10.73	7.04	5.56	6.02	7.77	5.78	
Difference			0.00	0.00	0.00	-4.81	-4.55	-0.18	0.48	0.66	0.67	-0.23	
UBS Trumbull	162,934,267	0.61	0.00	0.00	0.00	-10.42	-15.37	1.99	0.69	2.11	4.46	4.10	07/01/2006
NCREIF ODCE Index (AWA) (Net)			0.00	0.00	0.00	-6.16	-10.73	7.04	5.56	6.02	7.77	5.51	
Difference			0.00	0.00	0.00	-4.26	-4.64	-5.05	-4.87	-3.91	-3.31	-1.41	
MS Prime	410,469,973	1.52	0.00	0.00	0.00	-3.45	-7.06	-	-	-	-	8.60	10/01/2020
NCREIF ODCE Index (AWA) (Net)			0.00	0.00	0.00	-6.16	-10.73	7.04	5.56	6.02	7.77	7.37	
Difference			0.00	0.00	0.00	2.71	3.67	-	-	-	-	1.23	
Non-Core Real Estate Composite	629,440,152	2.34	0.25	0.25	0.25	-1.70	-2.61	-	-	-	-	8.25	07/01/2021
NCREIF ODCE Index (AWA) (Net)			0.00	0.00	0.00	-6.16	-10.73	7.04	5.56	6.02	7.77	6.73	
Difference			0.25	0.25	0.25	4.46	8.12	-	-	-	-	1.52	



	Allocation	n					I	Performa	ance (%)			
	Market Value (\$) (\$)	%	MTD	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Infrastructure Composite	249,005,167	0.93	0.00	0.00	0.00	3.87	4.73	-	-	-	-	0.88	04/01/2022
10 Year US Treasury Yield + 350 bps			0.00	0.00	0.00	3.51	6.46	-	-	-	-	6.41	
Difference			0.00	0.00	0.00	0.36	-1.73	-	-	-	-	-5.53	
Macquarie Infrastructure	182,370,490	0.68	0.01	0.01	0.01	4.52	7.12	-	-	-	-	2.60	04/01/2022
10 Year US Treasury Yield + 350 bps			0.00	0.00	0.00	3.51	6.46	-	-	-	-	6.41	
Difference			0.01	0.01	0.01	1.01	0.66	-	-	-	-	-3.81	
MGIF Co-Investment 3	26,400,302	0.10	0.00	0.00	0.00	6.54	-	-	-	-	-	5.60	10/01/2022
10 Year US Treasury Yield + 350 bps			0.00	0.00	0.00	3.51	6.46	-	-	-	-	5.37	
Difference			0.00	0.00	0.00	3.03	-	-	-	-	-	0.23	
Grosvenor Silvery Lupine Fund Class E	40,234,375	0.15	-0.02	-0.02	-0.02	-	-	-		-	-	-0.62	03/01/2023
10 Year US Treasury Yield + 350 bps			0.00	0.00	0.00	3.51	6.46	-	-	-	-	2.32	
Difference			-0.02	-0.02	-0.02	-	-	-	-	-	-	-2.94	
Diversified Hedge Funds Composite	1,183,487,247	4.40	0.85	0.85	0.85	6.13	5.73	3.32	2.02	2.68	2.40	2.34	12/01/2007
HFRI FOF Comp Index			1.08	1.08	1.08	3.35	3.98	4.63	3.50	3.97	3.40	1.89	
Difference			-0.23	-0.23	-0.23	2.78	1.75	-1.31	-1.48	-1.29	-1.00	0.45	
Grosvenor Diversified Hedge Funds	474,863,192	1.76	0.83	0.83	0.83	6.22	7.48	4.15	2.91	-	-	3.02	07/01/2018
HFRI FOF Comp Index			1.08	1.08	1.08	3.35	3.98	4.63	3.50	3.97	3.40	3.48	
Difference			-0.25	-0.25	-0.25	2.87	3.50	-0.48	-0.59	-	-	-0.46	
Internal Diversified Hedge Funds	708,554,860	2.63	0.87	0.87	0.87	6.08	4.56	2.79	2.40	-	-	2.44	07/01/2018
HFRI FOF Comp Index			1.08	1.08	1.08	3.35	3.98	4.63	3.50	3.97	3.40	3.48	
Difference			-0.21	-0.21	-0.21	2.73	0.58	-1.84	-1.10	-	-	-1.04	



	Allocatio	n					l	Perform	ance (%)			
	Market Value (\$) (\$)	%	MTD	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Core Fixed Income	3,352,140,427	12.45	-0.03	-0.03	-0.03	2.34	-2.90	-4.22	0.88	0.53	1.61	1.27	01/01/2013
Bloomberg US Agg Bond Index			-0.07	-0.07	-0.07	2.02	-3.37	-4.46	0.75	0.34	1.50	1.19	
Difference			0.04	0.04	0.04	0.32	0.47	0.24	0.13	0.19	0.11	0.08	
Internal Aggregate Core Fixed Income	2,475,892,171	9.20	-0.09	-0.09	-0.09	2.22	-2.94	-4.13	-			-1.29	11/01/2019
Bloomberg US Agg Bond Index			-0.07	-0.07	-0.07	2.02	-3.37	-4.46	0.75	0.34	1.50	-1.69	
Difference			-0.02	-0.02	-0.02	0.20	0.43	0.33	-	-	-	0.40	
Internal Int Govt Fixed Income Portfolio	1,137,434,461	4.23	-0.31	-0.31	-0.31	1.62	-3.37	-4.90	0.15	0.16	0.96	3.73	10/01/1996
Wyoming Internal Fixed Income Custom Index			-0.35	-0.35	-0.35	1.23	-4.01	-5.27	0.03	-0.30	0.50	3.68	
Difference			0.04	0.04	0.04	0.39	0.64	0.37	0.12	0.46	0.46	0.05	
Payden & Rygel IGC	595,984,770	2.21	0.32	0.32	0.32	3.57	-1.57	-4.46	-	-	-	-1.31	11/01/2019
Payden & Rygel Custom Index			0.34	0.34	0.34	3.56	-1.30	-4.36	1.49	1.18	2.50	-1.47	
Difference			-0.02	-0.02	-0.02	0.01	-0.27	-0.10	-	-	-	0.16	
JP Morgan MBS	742,463,146	2.76	-0.06	-0.06	-0.06	2.08	-2.71	-2.49	-	-	-	-0.77	11/01/2019
Bloomberg US MBS Index (Unhgd)			-0.07	-0.07	-0.07	1.79	-4.66	-3.81	0.03	-0.01	1.14	-2.03	
Difference			0.01	0.01	0.01	0.29	1.95	1.32	-	-	-	1.26	
IShares Core US Agg Bond ETF	9,794	0.00	-0.01	-0.01	-0.01	2.24	-	-	-	-	-	-0.43	09/01/2022
Bloomberg US Agg Bond Index			-0.07	-0.07	-0.07	2.02	-3.37	-4.46	0.75	0.34	1.50	-0.56	
Difference			0.06	0.06	0.06	0.22	-	-	-	-	-	0.13	
PIMCO	876,248,256	3.26	0.06	0.06	0.06	2.58	-2.78	-4.40	0.72	0.50	1.56	1.21	01/01/2013
PIMCO Custom Index			-0.07	-0.07	-0.07	2.02	-3.37	-4.50	0.64	0.27	1.44	1.14	
Difference			0.13	0.13	0.13	0.56	0.59	0.10	0.08	0.23	0.12	0.07	
Bank Loans Composite	1,536,239,248	5.71	1.16	1.16	1.16	7.96	9.97	5.65			-	4.51	09/01/2019
Bank Loans Custom Index			1.30	1.30	1.30	7.76	9.83	5.90	4.14	4.53	4.04	4.33	
Difference			-0.14	-0.14	-0.14	0.20	0.14	-0.25	-	-	-	0.18	
Credit Suisse SMA	397,026,631	1.48	1.19	1.19	1.19	-	-	-	-	-	-	4.49	04/01/2023
Bank Loans Custom Index			1.30	1.30	1.30	7.76	9.83	5.90	4.14	4.53	4.04	4.68	
Difference			-0.11	-0.11	-0.11	-	-	-	-	-	-	-0.19	
Octagon SMA	651,895,249	2.42	1.05	1.05	1.05	6.84	-	-	-	-	-	6.95	12/01/2022
Bank Loans Custom Index			1.30	1.30	1.30	7.76	9.83	5.90	4.14	4.53	4.04	8.31	
Difference			-0.25	-0.25	-0.25	-0.92	-	-	-	-	-	-1.36	



	Allocatio	n						Performa	ance (%)			
	Market Value (\$) (\$)	%	MTD	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
KKR	487,292,624	1.81	1.27	1.27	1.27	8.55	10.32	-	-	-	-	4.58	10/01/202
Bank Loans Custom Index			1.30	1.30	1.30	7.76	9.83	5.90	4.14	4.53	4.04	3.97	
Difference			-0.03	-0.03	-0.03	0.79	0.49	-	-	-	-	0.61	
Emerging Market Debt Fixed Income	1,051,674,240	3.91	1.70	1.70	1.70	7.47	11.60	-0.18	0.77	1.24	-0.56	-1.32	04/01/2013
EMD Custom Benchmark			1.92	1.92	1.92	7.20	8.71	-1.88	0.23	0.91	-0.34	-1.09	
Difference			-0.22	-0.22	-0.22	0.27	2.89	1.70	0.54	0.33	-0.22	-0.23	
Global Evolution	124,868,223	0.46	2.98	2.98	2.98	13.32	17.85	1.24		-	-	0.09	02/01/2020
JPM GBI-EM GbI Dvfd Index (USD) (TR) (Unhedged)			2.88	2.88	2.88	10.89	14.25	-1.46	0.49	1.09	-0.22	-2.06	
Difference			0.10	0.10	0.10	2.43	3.60	2.70	-	-	-	2.15	
Goldman Sachs	204,822,325	0.76	1.22	1.22	1.22	4.74	7.55	-0.56	-	-	-	-0.60	03/01/2020
Goldman Sachs Custom Index			0.98	0.98	0.98	4.66	5.59	-0.90	2.34	2.58	3.59	-0.61	
Difference			0.24	0.24	0.24	0.08	1.96	0.34	-	-	-	0.01	
Eaton Vance	243,015,481	0.90	1.66	1.66	1.66	7.82	17.88	-	-	-	-	0.20	01/01/2021
JP Morgan EMB (JEMB) Hard /Local 50/50			2.16	2.16	2.16	8.12	10.08	-1.85	0.98	1.50	1.56	-4.27	
Difference			-0.50	-0.50	-0.50	-0.30	7.80	-	-	-	-	4.47	
Global Evolution Hard	141,418,275	0.53	2.06	2.06	2.06	5.80	7.60	-	-	-	-	-4.76	12/01/2020
JP Morgan EMBIG Div Ex CCC (USD) (TR) Index			1.50	1.50	1.50	4.47	4.46	-3.96	0.51	1.09	2.88	-5.42	
Difference			0.56	0.56	0.56	1.33	3.14	-	-	-	-	0.66	
Finisterre	246,567,059	0.92	1.08	1.08	1.08	6.75	9.45	-	-	-	-	-1.69	03/01/2021
EMD Custom Benchmark (1/3 blend)			1.92	1.92	1.92	7.20	8.71	-1.99	1.13	1.61	2.14	-3.57	
Difference			-0.84	-0.84	-0.84	-0.45	0.74	-	-	-	-	1.88	
Wellington EMD	90,982,878	0.34	2.30	2.30	2.30	9.33	11.44	-	-	-	-	-5.38	09/01/2021
50% JPM GBI-EM Glb Div / 50% JPM EMBI Glb Div			2.39	2.39	2.39	8.48	10.27	-2.54	0.50	1.10	1.39	-6.13	
Difference			-0.09	-0.09	-0.09	0.85	1.17	-	-	-	-	0.75	
SAP Fixed Income Composite	4,560,218,393	16.94	0.35	0.35	0.35	1.92	1.47	-0.28			-	0.71	10/01/2019
75% BB US Trsry 0-1 yr / 25% BB Gov't 1-3 yr Bond Ix			0.37	0.37	0.37	-	-	-	-	-	-	-	
Difference			-0.02	-0.02	-0.02	-	-	-	-	-	-	-	
Internal SAP Fixed Income Portfolio	4,560,218,393	16.94	0.35	0.35	0.35	1.88	1.42	-0.29	-	-	-	0.68	09/01/2019
75% BB US Trsry 0-1 yr / 25% BB Gov't 1-3 yr Bond Ix			0.37	0.37	0.37	-	-	-	-	-	-	-	
Difference			-0.02	-0.02	-0.02	-	-	-	-	-	-	-	



	Allocation	۱						Perform	ance (%)			
	Market Value (\$) (\$)	%	MTD	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Long Duration Fixed Income Composite	650,037,899	2.42	-1.17	-1.17	-1.17	3.30	-7.42	-10.78	-	-	-	0.55	01/01/2019
Bloomberg US Govt Crdt Lng Trm Bond Index			-1.08	-1.08	-1.08	3.26	-7.11	-10.48	0.39	-0.31	2.76	0.41	
Difference			-0.09	-0.09	-0.09	0.04	-0.31	-0.30	-	-	-	0.14	
Internal Long Duration Fixed Income Portfolio	313,630,729	1.17	-2.15	-2.15	-2.15	1.70	-10.65	-13.75	-	-	-	-1.74	01/01/2019
Bloomberg US Govt Lng Trm Bond Index			-2.16	-2.16	-2.16	1.49	-11.18	-13.84	-1.02	-2.28	1.77	-1.69	
Difference			0.01	0.01	0.01	0.21	0.53	0.09	-	-	-	-0.05	
Metlife	336,407,171	1.25	-0.24	-0.24	-0.24	4.84	-3.89	-8.22	-	-	-	2.57	11/01/2018
Bloomberg US Lng Crdt Index			-0.15	-0.15	-0.15	4.82	-3.57	-7.93	1.20	0.91	3.38	2.10	
Difference			-0.09	-0.09	-0.09	0.02	-0.32	-0.29	-	-	-	0.47	
Low Duration Fixed Income	646,909,139	2.40	0.40	0.40	0.40	1.60	0.86	-0.44			-	1.35	12/01/2018
Low Duration Fixed Income Custom Index			0.35	0.35	0.35	1.35	0.10	-1.02	1.04	0.83	0.92	0.97	
Difference			0.05	0.05	0.05	0.25	0.76	0.58	-	-	-	0.38	
Internal Low Duration Fixed Income Portfolio	646,909,139	2.40	0.40	0.40	0.40	1.60	0.87	-0.44	1.38	-	-	1.36	03/01/2018
Bloomberg US Govt 1-3 Yr Bond Index			0.35	0.35	0.35	1.35	0.10	-1.02	1.00	0.72	0.78	1.00	
Difference			0.05	0.05	0.05	0.25	0.77	0.58	0.38	-	-	0.36	
Transition Low Duration Fixed Income Composite	700,713,624	2.60	0.92	0.92	0.92	4.22	5.42	-			-	1.66	11/01/2021
Transition Fixed Income Custom Index			1.08	1.08	1.08	4.27	5.24	2.00	2.58	2.52	2.41	1.67	
Difference			-0.16	-0.16	-0.16	-0.05	0.18	-	-	-	-	-0.01	
PIMCO Transition Low Duration	700,713,624	2.60	0.92	0.92	0.92	4.21	5.40	-	-	-	-	1.65	11/01/2021
PIMCO Low Duration Custom Index			1.08	1.08	1.08	4.27	5.24	2.14	2.66	2.58	2.45	1.90	
Difference			-0.16	-0.16	-0.16	-0.06	0.16	-	-	-	-	-0.25	
Greevener Silvery Luning Fund	11 000 000	0.04	0.04	0.04	0.04	-0.40	-12.64	0.50	-0.59	2.19		2.59	07/01/2014
Grosvenor Silvery Lupine Fund Credit Suisse Western Euro Hi Yld Index	11,803,369	0.04	1.31	1.31	1.31	-0.40 7.67	-1 2.04 8.53	2.98	-0.59 3.38	4.46	- 4.95	2.39 4.27	07/01/2014
Difference				-1.27	-1.27	-8.07	-21.17	-2.48	-3.97	-2.27	4.90	4.27	
Difference			-1.27	-1.27	-1.27	-0.07	-21.17	-2.40	-3.97	-2.21	-	-1.00	



	Allocation	1					I	Performa	ance (%))			
	Market Value (\$) (\$)	%	MTD	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Opportunistic Investments Composite	120,383,830	0.45	-0.01	-0.01	-0.01	0.67	4.58	10.52	-	-	-	9.43	07/01/2020
Opportunistic Custom Benchmark			2.04	2.04	2.04	7.42	4.91	5.36	-	-	-	6.03	
Difference			-2.05	-2.05	-2.05	-6.75	-0.33	5.16	-	-	-	3.40	
Grosvenor Opportunistic Class D	120,337,887	0.45	-0.01	-0.01	-0.01	0.67	4.58	10.52	-	-	-	9.43	07/01/2020
Opportunistic Custom Benchmark			2.04	2.04	2.04	7.42	4.91	5.36	-	-	-	6.03	
Difference			-2.05	-2.05	-2.05	-6.75	-0.33	5.16	-	-	-	3.40	
Internal Opportunistic	45,943	0.00	3.26	3.26	3.26	20.55	-	-	-	-	-	17.66	09/01/2022
Opportunistic Custom Benchmark			2.04	2.04	2.04	7.42	4.91	5.36	-	-	-	6.54	
Difference			1.22	1.22	1.22	13.13	-	-	-	-	-	11.12	



	Allocation	ו					I	Performa	ance (%))			
	Market Value (\$) (\$)	%	MTD	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
JP Morgan Cash Composite	1,795,907,338	6.67	0.44	0.44	0.44	2.81	4.09	1.48	1.65	1.44	1.08	1.52	01/01/2006
JP Morgan Cash Custom Index			0.40	0.40	0.40	2.66	3.95	1.40	1.65	1.43	1.08	1.53	
Difference			0.04	0.04	0.04	0.15	0.14	0.08	0.00	0.01	0.00	-0.01	
Wyo-Star Cash Composite	710,395,697	2.64	0.40	0.40	0.40	2.43	2.94	0.84	1.44	1.23	0.97	2.92	10/01/1996
Wyo-Star Cash Custom Index			0.39	0.39	0.39	2.30	2.76	0.70	1.44	1.23	0.98	2.42	
Difference			0.01	0.01	0.01	0.13	0.18	0.14	0.00	0.00	-0.01	0.50	
WYO STAR II Total Fund	111,311,647	0.41	0.65	0.65	0.65	2.67	1.98	-0.13	-		-	1.63	01/01/2019
Bloomberg US Corp 1-3 Yr Index			0.64	0.64	0.64	2.17	1.42	-0.18	1.77	1.56	1.65	1.66	
Difference			0.01	0.01	0.01	0.50	0.56	0.05	-	-	-	-0.03	

• Wyoming State Treasurer's Office fiscal year ends on June 30th.

- Since Inception date shown represents the first full month following initial funding.
- The Wyoming State Total Fund Index is calculated using beginning month asset class weights applied to the appropriate asset class benchmark return through 12/31/2019. As of 01/01/2020, the Index is calculated using the weighted average of the respective Investment Funds' Target Allocation Indices.
- Pool Total Fund Indices consist of the actual allocation index through 12/31/2019, and the target allocation index thereafter.
- The All Cap US Equity Custom Index consists of the Russell 3000 Index through 02/29/2020, and the S&P 500 Index thereafter.
- The MLP Custom Index consists of the S&P MLP Index (TR) through 06/30/2019, the Alerian MLP Index through 12/31/2019, and 50% Alerian MLP Index / 50% Alerian Midstream Energy Index thereafter.
- The International Equity Custom Index consists of the MSCI EAFE Index (USD) (Gross) through July 2010 and the MSCI ACW Ex US Index (USD) (Net) thereafter.
- The Preferred Stock Custom Index consists of S&P U.S. Preferred Stock Index through 06/30/2021, and 60% ICE BofAML US IG Inst Capital Securities Index, 20% ICE BofAML Core Fixed Rate Preferred Securities Index, and 20% Bloomberg Barclays Developed Market USD Contingent Capital Index thereafter.
- The Internal Intermediate Govt Fixed Income Portfolio Index currently consists of the Bloomberg US Treasury Index. November 2019 performance consists of the Internal Intermediate Govt Fixed Income Portfolio. Prior to November 2019, the index consists of Bloomberg US Gov't Int Term Bond Index. Prior to December 2009, the index consisted of the Bloomberg US Gov't Crdt Bond Index.
- The PIMCO Custom Index consists of the Bloomberg US Agg Bond Index through February 2018, the Bloomberg US Agg Int Index through June 2019, the Bloomberg US Agg Bond Index through 03/26/2020, account performance from 03/27/2020 through 04/03/2020, the BB US Agg Index through 11/29/21, account performance from 11/29/21 through 12/07/21, the Bloomberg US Agg Bond Index thereafter through 06/30/2022, account performance on 7/1/2022, and the Bloomberg US Agg Bond Index thereafter.
- The Low Duration Fixed Income Custom Index consists of the Bloomberg US Gov't Crdt 1-3 Yr Bond Index through 06/30/2019 and the Bloomberg US Gov't 1-3 Yr Bond Index thereafter.
- Transition Fixed Income Custom Index consists of 50% JPM CLOIE IG Idx, 40% BB 1 3 Yr Crdt, and 10% ICE BofA 0-2 Yr Dur BB-B Index.
- The PIMCO Low Duration Custom Index consists of 50% JPM CLOIE IG Idx, 40% BB 1 3 Yr Crdt, and 10% ICE BofA 0-2 Yr Dur BB-B Index through 11/30/2021, account performance on 12/1/2021-12/13/2021, 50% JPM CLOIE IG Idx, 40% BB 1 3 Yr Crdt, and 10% ICE BofA 0-2 Yr Dur BB-B Index thereafter through 3/6/2022, account performance from 3/7/2022-3/18/2022, and 50% JPM CLOIE IG Idx, 40% BB 1 3 Yr Crdt, and 10% ICE BofA 0-2 Yr Dur BB-B Index thereafter.
- The State Street All Cap Custom Index consists of 69% Russell 3000 Index, 24% FTSE RAFI US 1000 Index, and 7% MSCI US Min Vol Index (USD) (Gross) through 02/27/2020, State Street All Cap account performance on 02/28/2020, and the S&P 500 Index thereafter.
- The EMD Custom Index consists of the JPM GBI-EM GbI Dvf'd Index through 02/29/2020, 70% JPM GBI-EM GbI Dvf'd Index / 30% JPM CEMBI Brd Dvf'd Index thereafter through 11/30/2020, and 1/3 JPM GBI-EM GbI Dvf'd Index, 1/3 JPM CEMBI Brd Dvf'd Index, and 1/3 JPM EMBI GbI Dvf'd Index thereafter.
- The JP Morgan EMB (JEMB) Hard Currency/Local Currency 50/50 consists of 50% JPM GBI-EM GbI Dvf'd Index, 25% JPM CEMBI Brd Dvf'd Index, and 25%



JPM EMBI Gbl Dvf'd Index.

- The Goldman Sachs Index consists of JPM CEMBI Brd Dvf'd Index through 11/22/2020, account performance from 11/23/2020 through 11/30/2020, and the JPM CEMBI Brd Dvf'd Index thereafter.
- The Bank Loans Custom Index consists of S&P LSTA Lvgd Loan Index through 06/30/2021, the S&P LSTA US Lvgd Loan 100 Index through 6/30/2023, and the Credit Suisse Leveraged Loan Index thereafter.
- The Payden & Rygel Custom Index consists of the Bloomberg US Corp Inv Grade Index through 03/25/2020, account performance from 03/26/2020 through 03/31/2020, and Bloomberg US Corp Inv Grade Index thereafter.
- Performance shown for the JP Morgan Cash Composite and the Wyo-Star Cash Composite consists of the respective operating and extended cash accounts.
- The JP Morgan Cash Custom Index is calculated monthly using beginning of the month investment weights applied to each corresponding primary benchmark return. The primary benchmark for JP Morgan Cash is the ICE BofAML 3 Mo US T-Bill Index and for JP Morgan Extd is the JP Morgan Blended Index through 06/30/2019, and the ICE BofAML 3 Mo US T-Bill Index thereafter.
- The Wyo-Star Cash Custom Index is calculated monthly using beginning of the month investment weights applied to each corresponding primary benchmark return. Currently, the primary benchmark for Wyo-Star Cash is the ICE BofAML 3 Mo US T-Bill Index and for Wyo-Star Extd is the JP Morgan Blended Index.



	Allocatio	n						Perform	ance (%)			
	Market Value (\$) (\$)	%	MTD	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Internal Equity	357,067,477	1.33	4.23	4.23	4.23	16.96	13.73	N/A	N/A	N/A	N/A	3.63	04/01/2021
Internal Equity Composite Actual Allocation Index			4.75	4.75	4.75	16.65	11.70	N/A	N/A	N/A	N/A	4.06	
Difference			-0.52	-0.52	-0.52	0.31	2.03	N/A	N/A	N/A	N/A	-0.43	
Internal Domestic Equity Quantitative	94,027,437	0.35	3.59	3.59	3.59	18.07	11.80	N/A	N/A	N/A	N/A	4.98	06/01/2021
S&P 500 Index (Cap Wtd)			3.21	3.21	3.21	20.65	13.02	13.72	12.20	13.31	12.66	5.76	
Difference			0.38	0.38	0.38	-2.58	-1.22	N/A	N/A	N/A	N/A	-0.78	
Internal Small Cap Equity Quantamental	77,220,150	0.29	4.34	4.34	4.34	19.86	18.75	N/A	N/A	N/A	N/A	-0.65	06/01/2021
Russell 2000 Index			6.12	6.12	6.12	14.70	7.91	12.01	5.09	8.78	8.17	-4.32	
Difference			-1.78	-1.78	-1.78	5.16	10.84	N/A	N/A	N/A	N/A	3.67	
Internal Small Cap Equity Quantitative	94,230,739	0.35	5.41	5.41	5.41	14.69	8.41	N/A	N/A	N/A	N/A	-1.23	11/01/2021
Russell 2000 Index			6.12	6.12	6.12	14.70	7.91	12.01	5.09	8.78	8.17	-6.20	
Difference			-0.71	-0.71	-0.71	-0.01	0.50	N/A	N/A	N/A	N/A	4.97	
SPDR S&P 500 ETF Trust	27,802,497	0.10	3.26	3.26	3.26	20.52	N/A	N/A	N/A	N/A	N/A	13.13	12/01/2022
S&P 500 Index (Cap Wtd)			3.21	3.21	3.21	20.65	13.02	13.72	12.20	13.31	12.66	13.70	
Difference			0.05	0.05	0.05	-0.13	N/A	N/A	N/A	N/A	N/A	-0.57	
Vanguard FTSE All World Ex US ETF	63,755,419	0.24	3.73	3.73	3.73	14.12	N/A	N/A	N/A	N/A	N/A	28.28	10/01/2022
MSCI ACW Ex US Index (USD) (Net)			4.07	4.07	4.07	13.92	13.42	7.09	3.85	6.19	4.72	30.19	
Difference			-0.34	-0.34	-0.34	0.20	N/A	N/A	N/A	N/A	N/A	-1.91	
Internal Diversified Hedge Funds	708,554,860	2.63	0.87	0.87	0.87	6.08	4.56	2.79	2.40	N/A	N/A	2.44	07/01/2018
HFRI FOF Comp Index			1.08	1.08	1.08	3.35	3.98	4.63	3.50	3.97	3.40	3.48	
Difference			-0.21	-0.21	-0.21	2.73	0.58	-1.84	-1.10	N/A	N/A	-1.04	
Internal Fixed Income	6,658,202,516	24.74	0.12	0.12	0.12	1.84	-0.10	-1.80	1.60	1.17	1.67	4.00	10/01/1996
Internal Fixed Income Actual Allocation Index			0.11	0.11	0.11	1.74	-0.17	-1.88	1.61	0.84	1.30	3.99	
Difference			0.01	0.01	0.01	0.10	0.07	0.08	-0.01	0.33	0.37	0.01	
Internal Int Govt Fixed Income Portfolio	1,137,434,461	4.23	-0.31	-0.31	-0.31	1.62	-3.37	-4.90	0.15	0.16	0.96	3.73	10/01/1996
Internal Int Govt Fixed Income Portfolio Index			-0.35	-0.35	-0.35	1.23	-4.01	-5.27	0.03	-0.30	0.50	3.68	
Difference			0.04	0.04	0.04	0.39	0.64	0.37	0.12	0.46	0.46	0.05	
IShares Core US Agg Bond ETF	9,794	0.00	-0.01	-0.01	-0.01	2.24	N/A	N/A	N/A	N/A	N/A	-0.43	09/01/2022
Bloomberg US Agg Bond Index			-0.07	-0.07	-0.07	2.02	-3.37	-4.46	0.75	0.34	1.50	-0.56	
Difference			0.06	0.06	0.06	0.22	N/A	N/A	N/A	N/A	N/A	0.13	



	Allocatio	n						Performa	ance (%)			
	Market Value (\$) (\$)	%	MTD	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Internal SAP Fixed Income Portfolio	4,560,218,393	16.94	0.35	0.35	0.35	1.88	1.42	-0.29	N/A	N/A	N/A	0.68	09/01/2019
75% BB US Trsry 0-1 Yr / 25% BB US Gov't 1-3 Yr Ix			0.37	0.37	0.37	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Difference			-0.02	-0.02	-0.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Internal Long Duration Fixed Income Portfolio	313,630,729	1.17	-2.15	-2.15	-2.15	1.70	-10.65	-13.75	N/A	N/A	N/A	-1.74	01/01/2019
Bloomberg US Govt Lng Trm Bond Index			-2.16	-2.16	-2.16	1.49	-11.18	-13.84	-1.02	-2.28	1.77	-1.69	
Difference			0.01	0.01	0.01	0.21	0.53	0.09	N/A	N/A	N/A	-0.05	
Internal Low Duration Fixed Income Portfolio	646,909,139	2.40	0.40	0.40	0.40	1.60	0.87	-0.44	1.38	N/A	N/A	1.36	03/01/2018
Bloomberg US Govt 1-3 Yr Bond Index			0.35	0.35	0.35	1.35	0.10	-1.02	1.00	0.72	0.78	1.00	
Difference			0.05	0.05	0.05	0.25	0.77	0.58	0.38	N/A	N/A	0.36	
Opportunistic Investments Composite	120,383,830	0.45	-0.01	-0.01	-0.01	0.67	4.58	10.52	N/A	N/A	N/A	9.43	07/01/2020
Opportunistic Custom Benchmark			2.04	2.04	2.04	7.42	4.91	5.36	N/A	N/A	N/A	6.03	
Difference			-2.05	-2.05	-2.05	-6.75	-0.33	5.16	N/A	N/A	N/A	3.40	
Grosvenor Opportunistic Class D	120,337,887	0.45	-0.01	-0.01	-0.01	0.67	4.58	10.52	N/A	N/A	N/A	9.43	07/01/2020
Opportunistic Custom Benchmark			2.04	2.04	2.04	7.42	4.91	5.36	N/A	N/A	N/A	6.03	
Difference			-2.05	-2.05	-2.05	-6.75	-0.33	5.16	N/A	N/A	N/A	3.40	
Internal Opportunistic	45,943	0.00	3.26	3.26	3.26	20.55	N/A	N/A	N/A	N/A	N/A	17.66	09/01/2022
Opportunistic Custom Benchmark			2.04	2.04	2.04	7.42	4.91	5.36	N/A	N/A	N/A	6.54	
Difference			1.22	1.22	1.22	13.13	N/A	N/A	N/A	N/A	N/A	11.12	



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