CURTIS E. MEIER, JR.
WYOMING STATE TREASURER

DAWN A. WILLIAMS, DEPUTY STATE TREASURER

MEMORANDUM

TO: Joint Appropriations Committee
Select Committee on Capital Financing and Investments

FROM: Dawn Williams, Deputy State Treasurer

DATE: September 1, 2022

SUBJECT: Report of Internal Investment Management #1373

Pursuant to 2020 Wyoming Session Laws, Chapter 116, Section 2, I am pleased to provide a report of Internal Investment Management in the State Treasurer's Office.

Figure 1.

2020 Wyoming Session Laws, Chapter 116, Section 2

Section 2. [State Treasurer's Office-Internal Investing].

(a) Not later than September 1, 2021 and September 1, 2022, the state treasurer's office shall report to the joint appropriations committee and the select committee on capital financing and investments on the documented savings resulting from increased use of internal investment personnel and reduced payments for external investment managers. The reports shall include the following:

(i) The documented savings, which shall be limited to avoided or reduced expenditures from terminated or renegotiated contracts with external investment managers;

(ii) An explanation and accounting of all expenditures relating to the work performed by internal investment personnel;

(iii) A performance report for the internally invested funds, including benchmark comparisons, overall investment return on the funds and a comparative performance with the externally managed funds for similar timeframes.

Section 2(a)(i). SAVINGS

The Investment Division (Division) of the State Treasurer's Office (STO) generated management fee savings of over $17 million as of fiscal year 2022 (Appendix A and B). Due to changes in the asset allocation that require STO to invest in more private market asset allocations, which are recommended by the Investment Funds Committee and approved by the State Loan and Investment Board, fee savings will decline due to higher management fees associated with private market investments.

Section 2(a)(ii). EXPENDITURES

Figure 2.

State Treasurer's Office
Internal Investment Expenditures, Units 0901-0905
Fiscal Year 2022 (July 1, 2021 – June 30, 2022)

	Expenditures
Salary and Benefits	$2,195,091
Professional Development and Training	29,880
Travel	8,326
Computer Equipment and Software	56,324
IT Maintenance Agreements	73,158
Other Support Services	10,798
IT/Telecommunications (ETS)	9,927
Contracts (Legal, Technology)	687,529
	$3,071,033

Section 2(a)(iii). PERFORMANCE REPORT

The most recent report is found in Appendix C.

APPENDIX A

Projected Fee Savings: FY 2022

- The AUM adjusted management fee uses FY '22 AUM as the basis to calculate the FY '16 fees. This allows for an apples to apples comparison.

		AUM (in Billions)	Mgmt. Fee (in Millions)	Basis Points	AUM Adj. Mgmt. Fee (in Millions)
FY 2016	Actual	$19.2	$66.7	34.7	$85.6
FY 2022	Estimate	$24.7	$68.2	27.7	$68.2
Estimated Savings:					$17.3

APPENDIX B

TOTAL FUND - DIRECT (MGMT)

As of June 30, 2022 (Estimate)

	FY 2016 Mgmt Fee	FY 2022 Estimate Mgmt Fee	Difference Mgmt Fee
Wyoming State Total Fund	**$66,681,858**	**$68,212,071**	**$1,530,213**
% of Ending WSTO FY Value	*0.347%*	*0.277%*	*-0.07%*
US Equity*	**$5,173,961**	**$2,874,206**	**-$2,299,755**
State Street All Cap	$322,832	$628,157	
Internal Domestic Equity QM	$0	$268	
Internal Domestic Equity QT	$0	$271	
Van Berkom	$1,458,389	$1,708,395	
Internal Small Cap QM	$0	$2,142	
Internal Small Cap QT	$0	$754	
BlackRock Small Cap	$0	$534,219	
International Equity	**$6,004,408**	**$6,770,654**	**$766,245**
Northern Trust	$50,996	$344,161	
Harding Loevner	$267,647	$2,802,300	
Arrowstreet	$1,275,268	$3,624,192	
Private Equity	**$10,603,431**	**$14,145,232**	**$3,541,801**
Access Venture Partners II	$188,236	$11,404	
Cheyenne Capital Fund	$6,383,776	$4,635,235	
Hamilton Lane Nowood Fund	$2,161,419	$2,288,401	
BlackRock LTPC	$0	$3,003,304	
Valor Equity V	$0	$997,740	
GTCR XIII	$0	$1,169,149	
Neuberger Berman Sauger Fund	$1,870,000	$2,040,000	
Real Estate	**$8,015,045**	**$13,676,486**	**$5,661,441**
Clarion Lion Properties Fund	$2,187,070	$5,299,112	
UBS Trumbull Property Fund	$1,541,338	$1,583,952	
MS Prime	$0	$3,627,256	
M&G Real Estate Debt Fund II	$631,787	$274,232	
Northwood Real Estate Partners IV	$2,841,424	$1,398,781	
SC Capital Core Fund	$0	$785,296	
Realterm	$0	$634,560	
WestRiver Real Estate Finance Fund	$607,703	$73,297	
Hedge Funds	**$8,480,344**	**$13,347,676**	**$4,867,332**
PAAMCO	$8,480,344	$26,891	
Grosvenor Class B	$0	$5,813,846	
Grosvenor Class C	$0	$7,506,939	
Opportunistic	**$0**	**$430,033**	**$430,033**
Grosvenor D	$0	$430,033	
MLPs	**$0**	**$3,219,872**	**$3,219,872**
Harvest Passive	$0	$33,333	
Harvest	$0	$3,186,539	
Preferred Stock	**$0**	**$602,720**	**$602,720**
Cohen & Steers	$0	$602,720	
Fixed Income	**$24,564,366**	**$12,791,227**	**-$11,773,139**
PIMCO Core	$2,300,895	$2,111,796	
PIMCO Low	$0	$899,176	
JPM MBS	$2,312,281	$602,752	
Payden	$1,695,091	$1,252,056	
KKR	$0	$412,965	
Credit Suisse	$1,256,295	$1,271,517	
Octagon	$1,593,719	$2,299,228	
Grosvenor Silvery Lupine	$5,233,330	$734,181	
Global Evolution Local	$1,445,412	$143,113	
Global Evolution Hard	$0	$390,320	
Eaton Vance	$0	$587,123	
Finisterre	$0	$597,435	

TOTAL FUND - DIRECT (MGMT)

As of June 30, 2022 (Estimate)

	FY 2016 Mgmt Fee	FY 2022 Estimate Mgmt Fee	Difference Mgmt Fee
Goldman Sachs	$161,175	$414,540	
Wellington	$0	$237,616	
Ladder Portfolio	$0	$0	
Internal Long Duration	$0	$0	
Logan Circle	$0	$837,407	
Internal Low Duration	$0	$0	
Internal Fixed Income Portfolio	$0	$0	
Cash & Cash Equivalents	**$1,016,486**	**$353,965**	**-$662,520**
JP Morgan Cash Composite	$1,016,486	$353,965	

*Managers represent current managers and do not match FY 2016 managers.

APPENDIX C

Monthly Investment Performance Analysis

Wyoming State Treasurer's Office

Period Ended: June 30, 2022

Annual Asset Class Performance

As of June 30, 2022

	2014	2015	2016	2017	2018	2019	2020	2021	CYTD (As of 6/22)
Best	14.07	15.02	21.95	27.19	10.40	31.49	21.68	39.92	12.49
	13.69	6.01	21.31	21.83	8.35	25.53	19.96	39.33	11.68
	12.50	5.47	13.24	18.44	1.87	21.51	18.40	28.71	0.58
	11.40	1.38	11.96	15.21	0.44	17.64	10.88	22.17	0.15
	7.66	0.55	10.16	14.65	0.01	13.82	10.65	14.82	-5.48
	5.97	0.18	9.94	9.11	-4.02	13.47	7.97	7.82	-6.53
	4.89	-0.27	8.77	7.77	-4.25	8.72	7.51	6.17	-10.35
	3.37	-0.69	4.50	7.62	-4.38	8.64	3.12	5.71	-12.84
	1.60	-4.41	2.65	4.12	-6.21	8.39	1.50	4.66	-16.27
	0.18	-5.66	1.94	3.54	-11.01	7.55	1.19	0.05	-18.42
	-3.87	-14.92	0.51	0.84	-11.67	5.34	0.67	-1.55	-19.96
Worst	-5.72	-35.07	0.38	-5.58	-14.20	2.47	-25.60	-3.26	-23.43

Sharpe Ratio

Asset Class	Historical 10 Years Sharpe Ratio	Forecasted Sharpe Ratio
S&P 500 Index - US Large Cap	0.92	0.19
Russell 2000 Index - US Small Cap	0.55	0.16
International Equity Custom Index - International	0.37	0.28
Cambridge US PE Index - Private Equity	1.44	0.24
NCREIF ODCE Index - Real Estate	1.80	Core 0.30 / Non-Core 0.26
HFRI FOF Comp Index	0.64	0.33
Preferred Stock Custom Index	0.56	0.25
MLP Custom Index	0.19	0.21
Bloomberg US Agg Bond Index - Fixed Income	0.28	0.18
Bank Loans Custom Index	0.57	0.40
EMD Custom Index	-0.12	0.36
JP Morgan Cash Custom Index - Cash Equiv	0.67	0.00

Annualized Statistics (02/2006 - 06/2022)

	Return	Standard Deviation	Sharpe Ratio
S&P 500 Index - US Large Cap	9.14	15.13	0.58
Russell 2000 Index - US Small Cap	7.23	20.00	0.39
International Equity Custom Index - International	3.12	17.03	0.20
Cambridge US PE Index - Private Equity	13.91	11.03	1.14
NCREIF ODCE Index - Real Estate	7.88	7.97	0.86
HFRI FOF Comp Index	2.70	5.51	0.30
Preferred Stock Custom Index	4.48	15.89	0.29
MLP Custom Index	6.60	24.60	0.34
Bloomberg US Agg Bond Index - Fixed Income	3.29	3.48	0.63
Bank Loans Custom Index	4.12	7.44	0.43
EMD Custom Index	3.23	12.14	0.23
JP Morgan Cash Custom Index - Cash Equiv	1.39	0.53	1.14

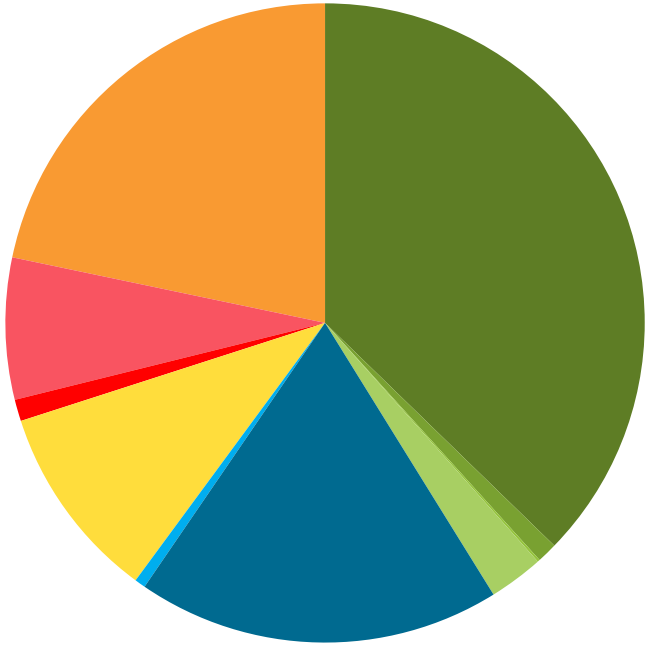
The International Equity Custom Index consists of the MSCI EAFE Index (USD) (Gross) through July 2010 and the MSCI ACW Ex US Index (USD) (Net) thereafter.
The Preferred Stock Custom Index consists of S&P U.S. Preferred Stock Index through 06/30/2021, and 60% ICE BofAML US IG Inst Capital Securities Index, 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 Midstream Energy Index thereafter.
The Bank Loans Custom Index consists of S&P LSTA Lvgd Loan Index through 06/30/2021, and the S&P LSTA US Lvgd Loan 100 Index thereafter.
The EMD Custom Index consists of the JPM GBI-EM Gbl Dvf'd Index through 02/29/2020, 70% JPM GBI-EM Gbl Dvf'd Index / 30% JPM CEMBI Brd Dvf'd Index thereafter through 11/30/2020, and 1/3 JPM GBI-EM Gbl Dvf'd Index, 1/3 JPM CEMBI Brd Dvf'd Index, and 1/3 JPM EMBI Gbl Dvf'd 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.

RVK

Wyoming State Treasurer's Office
Asset Allocation by Fund

As of June 30, 2022

June 30, 2022 : $23,774,656,342



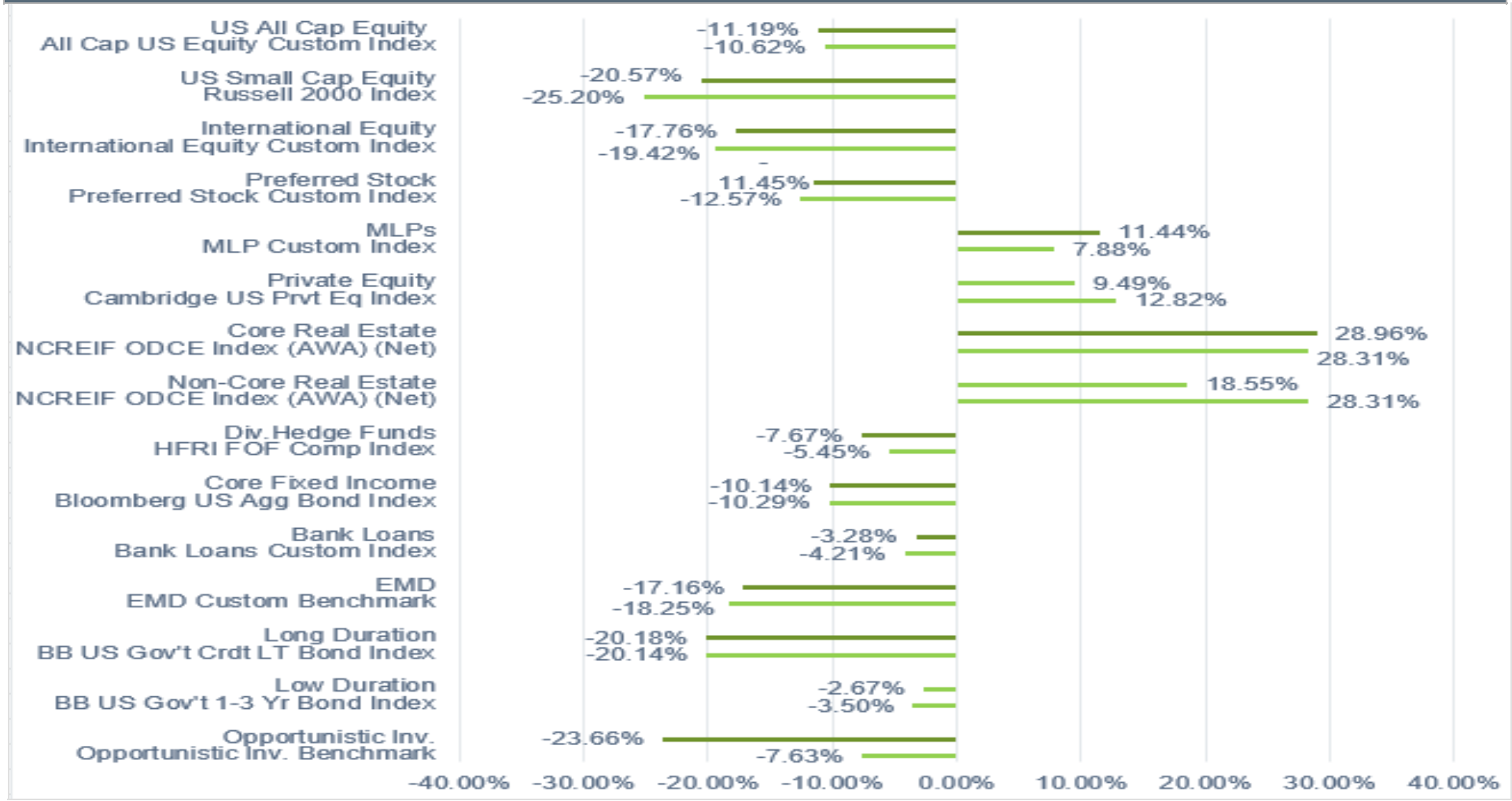
	Market Value ($)	Allocation (%)
Permanent Mineral Trust	8,860,764,633	37.27
Permanent Land Fund	244,119,814	1.03
University Permanent Land Fund	28,333,802	0.12
Hathaway Scholarship	653,647,426	2.75
Common School PLF	4,369,866,583	18.38
Higher Education	131,472,724	0.55
Workers Compensation Fund	2,362,410,092	9.94
Pool A	259,616,213	1.09
LSRA	1,703,295,208	7.16
State Agency Pool	5,161,129,847	21.71

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

RVK

Comparative Performance									
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years
Total Fund	**-5.3**	**-7.0**	**-4.6**	**-4.6**	**4.1**	**4.3**	**4.6**	**4.6**	**5.0**
Wyoming State Total Fund Index	-5.7	-7.5	-5.3	-5.3	3.7	4.1	4.4	4.3	4.7
Difference	0.4	0.5	0.7	0.7	0.4	0.2	0.2	0.3	0.3

FYTD Asset Class Returns



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 7/1/2021.

Wyoming State Treasurer's Office
Permanent Funds
Performance

As of June 30, 2022

Comparative Performance	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years
Permanent Mineral Trust	**-6.6**	**-8.1**	**-4.6**	**-4.6**	**6.3**	**5.8**	**6.1**	**5.1**	**6.1**
PMTF - Total Fund Index	-7.1	-8.5	-5.3	-5.3	5.7	5.6	5.9	4.7	5.5
Difference	0.5	0.4	0.7	0.7	0.6	0.2	0.2	0.4	0.6
All Endowment&Foundation > $1B-Total Fund Median	-8.5	-11.2	-7.7	-7.7	5.8	6.0	7.3	5.3	6.7
70% MSCI ACW/30% B US Agg	-12.4	-17.3	-14.0	-14.0	4.3	5.4	6.7	4.6	6.4
Permanent Land Fund	**-6.4**	**-7.9**	**-4.2**	**-4.2**	**6.3**	**5.8**	**6.0**	**5.0**	**N/A**
PLF - Total Fund Index	-7.1	-8.5	-5.3	-5.3	5.7	5.6	5.9	4.6	N/A
Difference	0.7	0.6	1.1	1.1	0.6	0.2	0.1	0.4	N/A
University PLF	**-6.6**	**-8.0**	**-3.8**	**-3.8**	**6.3**	**6.2**	**6.3**	**5.1**	**N/A**
University PLF - Total Fund Index	-7.1	-8.5	-5.3	-5.3	5.6	5.8	6.2	4.8	N/A
Difference	0.5	0.5	1.5	1.5	0.7	0.4	0.1	0.3	N/A
Hathaway Scholarship	**-6.0**	**-7.1**	**-3.1**	**-3.1**	**6.6**	**5.9**	**5.7**	**N/A**	**N/A**
Hathaway - Total Fund Index	-7.1	-8.5	-5.3	-5.3	5.6	5.4	5.5	N/A	N/A
Difference	1.1	1.4	2.2	2.2	1.0	0.5	0.2	N/A	N/A
Common School PLF	**-5.9**	**-6.7**	**-3.9**	**-3.9**	**4.5**	**4.7**	**5.6**	**4.9**	**6.0**
Common School - Total Fund Index	-6.4	-7.5	-5.0	-5.0	3.6	4.3	5.3	4.3	5.2
Difference	0.5	0.8	1.1	1.1	0.9	0.4	0.3	0.6	0.8
Higher Education	**-5.9**	**-6.8**	**-4.2**	**-4.2**	**4.1**	**4.4**	**5.0**	**N/A**	**N/A**
Higher Education - Total Fund Index	-6.4	-7.5	-5.0	-5.0	3.6	4.1	4.9	N/A	N/A
Difference	0.5	0.7	0.8	0.8	0.5	0.3	0.1	N/A	N/A
Workers Compensation Fund	**-7.4**	**-11.4**	**-9.4**	**-9.4**	**3.4**	**4.3**	**4.4**	**5.0**	**5.2**
Workers Comp - Total Fund Index	-7.5	-11.7	-9.9	-9.9	2.5	3.8	4.2	4.8	4.8
Difference	0.1	0.3	0.5	0.5	0.9	0.5	0.2	0.2	0.4

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 7/1/2021.

RVK

Wyoming State Treasurer's Office
Non-Permanent Funds
Performance

As of June 30, 2022

Comparative Performance									
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years
LSRA Total Fund	**-4.1**	**-6.9**	**-6.2**	**-6.2**	**1.8**	**N/A**	**N/A**	**N/A**	**N/A**
LSRA - Total Fund Index	-4.0	-6.9	-6.6	-6.6	1.7	N/A	N/A	N/A	N/A
Difference	-0.1	0.0	0.4	0.4	0.1	N/A	N/A	N/A	N/A
LSRA Long Term Reserve	**-10.7**	**-11.8**	**-9.2**	**-9.2**	**4.7**	**N/A**	**N/A**	**N/A**	**N/A**
LSRA LT Reserve - Total Fund Index	-10.8	-11.7	-9.9	-9.9	5.0	N/A	N/A	N/A	N/A
Difference	0.1	-0.1	0.7	0.7	-0.3	N/A	N/A	N/A	N/A
LSRA Int Term Reserve	**-5.3**	**-11.0**	**-11.2**	**-11.2**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
LSRA IT Reserve - Total Fund Index	-4.7	-10.3	-10.3	-10.3	N/A	N/A	N/A	N/A	N/A
Difference	-0.6	-0.7	-0.9	-0.9	N/A	N/A	N/A	N/A	N/A
LSRA Short Term Reserve	**-0.4**	**-2.6**	**-2.7**	**-2.7**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
LSRA ST Reserve - Total Fund Index	-0.5	-3.0	-3.5	-3.5	N/A	N/A	N/A	N/A	N/A
Difference	0.1	0.4	0.8	0.8	N/A	N/A	N/A	N/A	N/A
Pool A	**-5.6**	**-7.5**	**-5.6**	**-5.6**	**3.4**	**3.4**	**2.9**	**4.2**	**4.0**
Pool A - Total Fund Index	-5.5	-7.5	-5.7	-5.7	2.6	2.8	2.6	3.9	4.1
Difference	-0.1	0.0	0.1	0.1	0.8	0.6	0.3	0.3	-0.1
State Agency Pool	**-0.4**	**-2.3**	**-2.6**	**-2.6**	**0.4**	**1.4**	**1.7**	**3.1**	**3.3**
State Agency Pool - AA Index	-0.4	-2.4	-2.7	-2.7	0.3	1.2	1.6	3.0	3.2
Difference	0.0	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1

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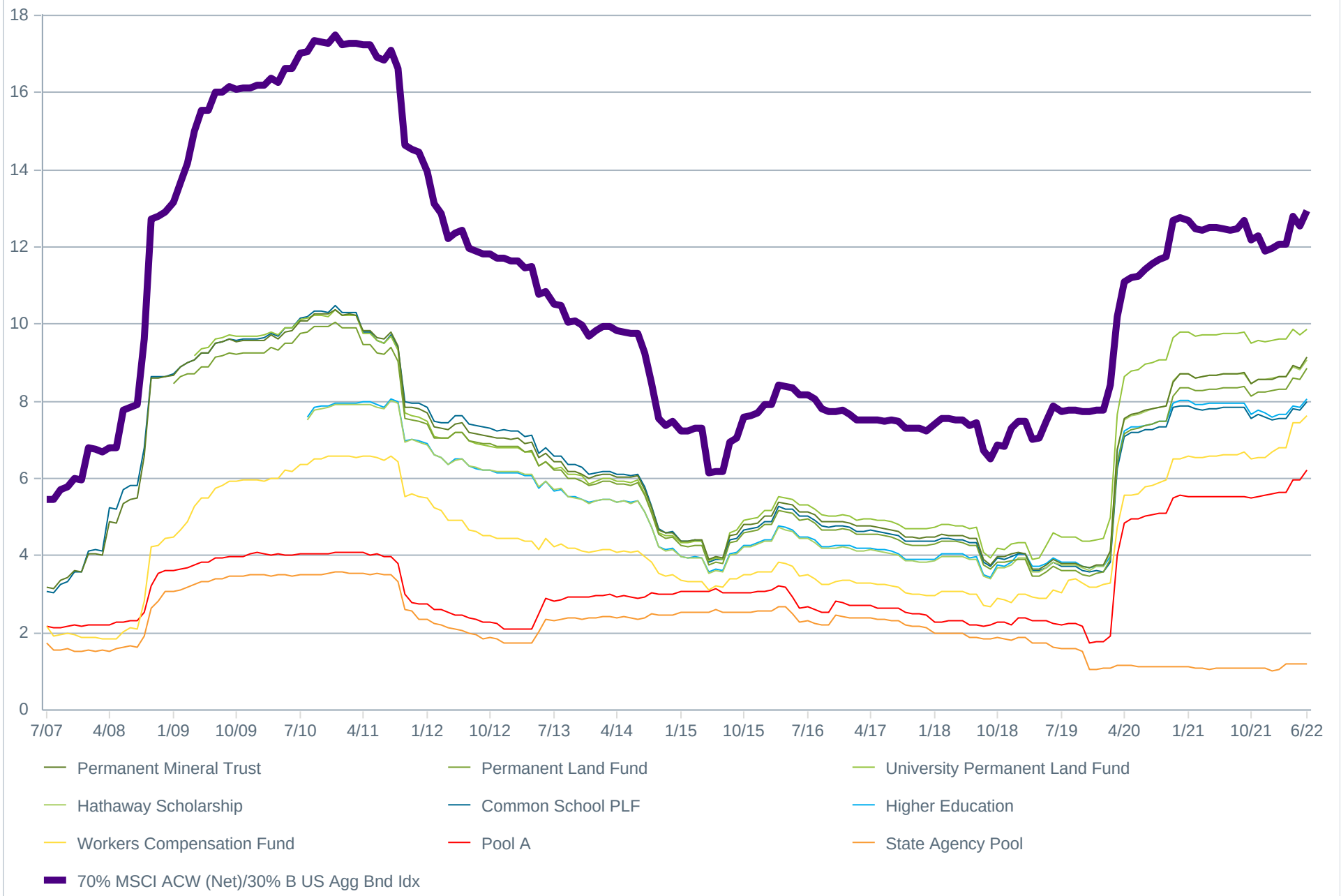
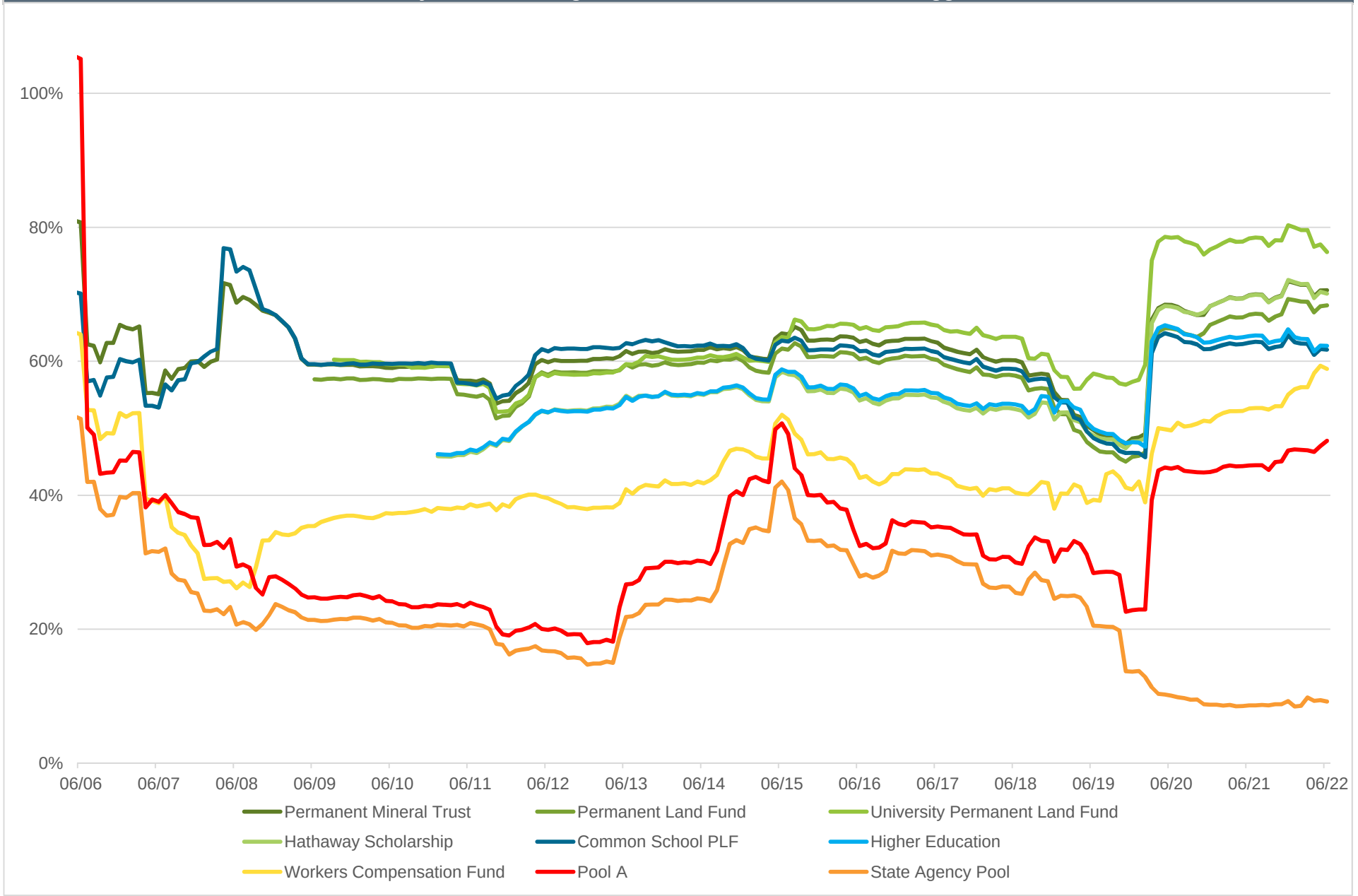
RVK

Standard Deviation



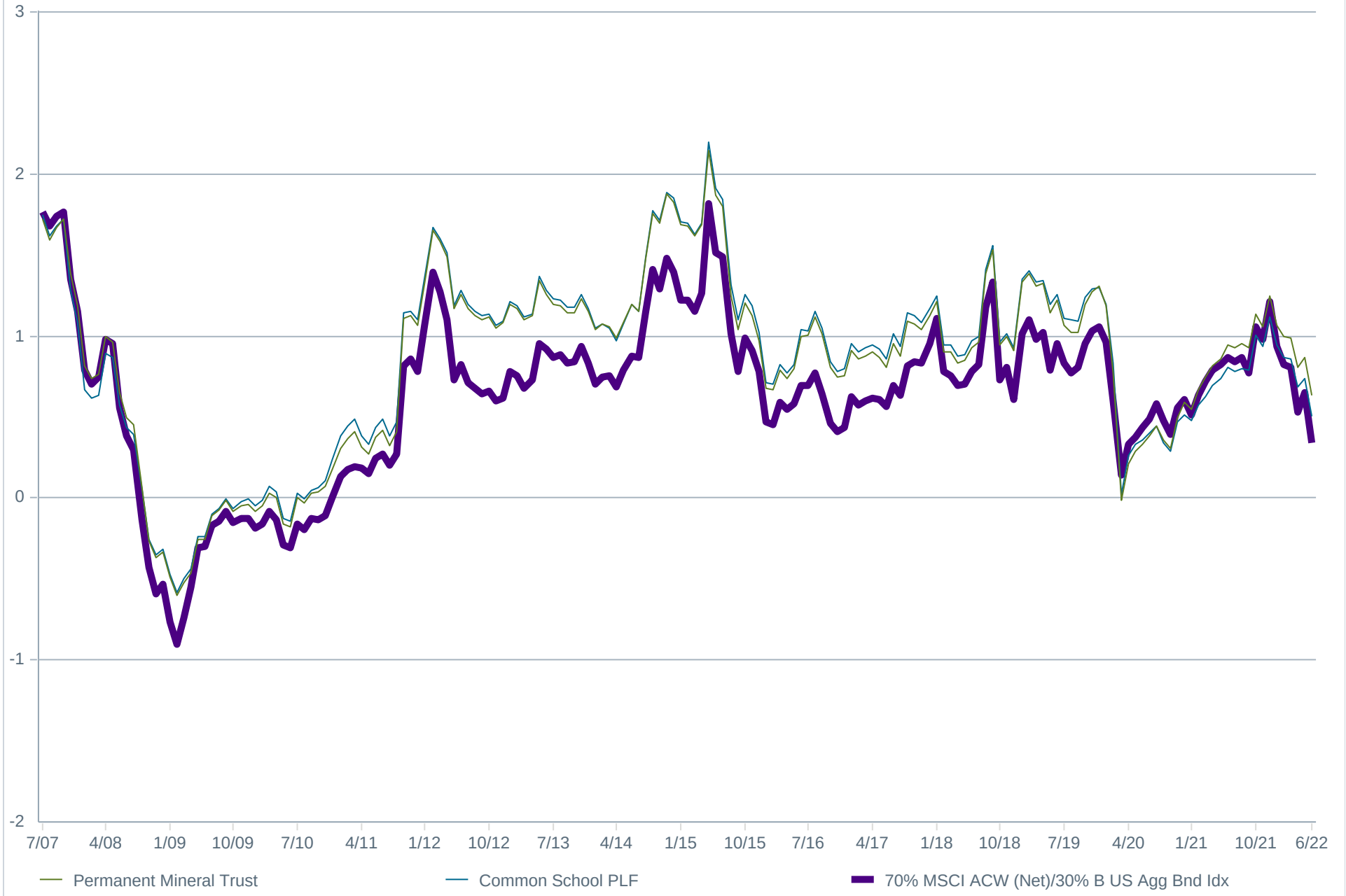
Performance shown is net of fees and excludes Public Purpose Investments (PPIs) and operational cash. Calculation is based on monthly periodicity.

Volatility as a Percentage of 70% MSCI ACW / 30% BB US Agg Index



Performance shown is net of fees and excludes PPIs and operational cash. Calculation is based on monthly periodicity.

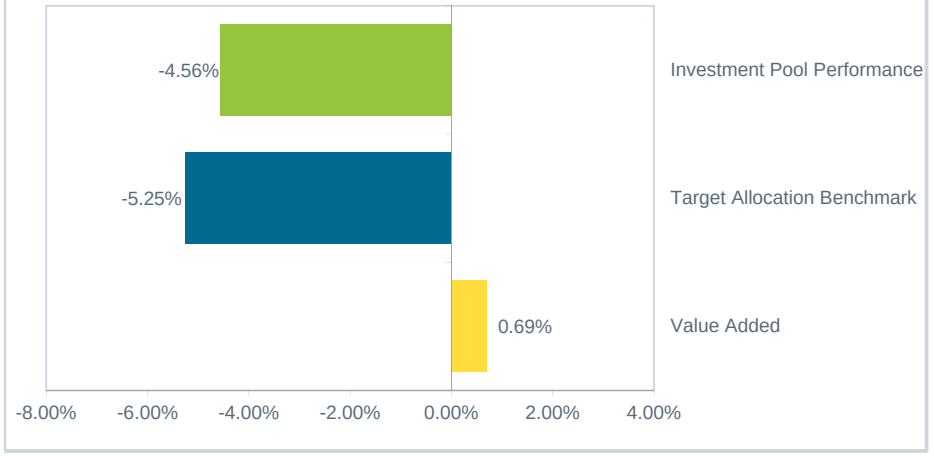
Sharpe Ratio



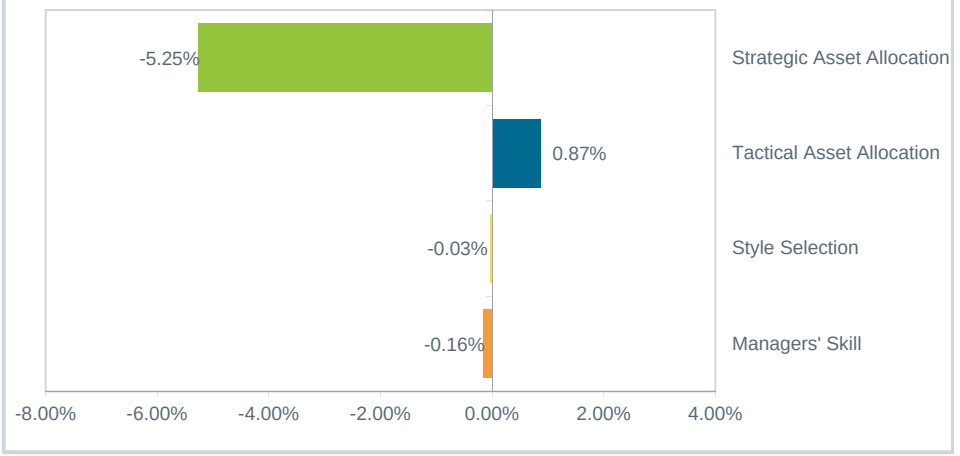
Performance shown is net of fees and excludes Public Purpose Investments (PPIs) and operational cash. Calculation is based on monthly periodicity.

Wyoming State Treasurer's Office
Pool Attribution - IDP Methodology
Permanent Mineral Trust Fund vs. Target Allocation Index
FYTD Ending June 30, 2022

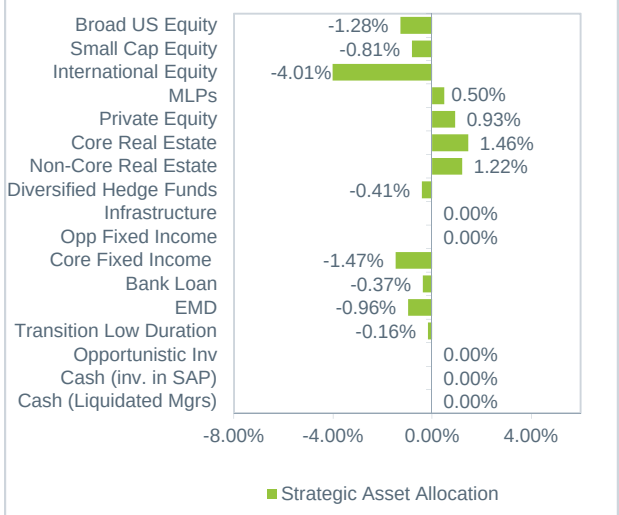
Investment Pool Performance



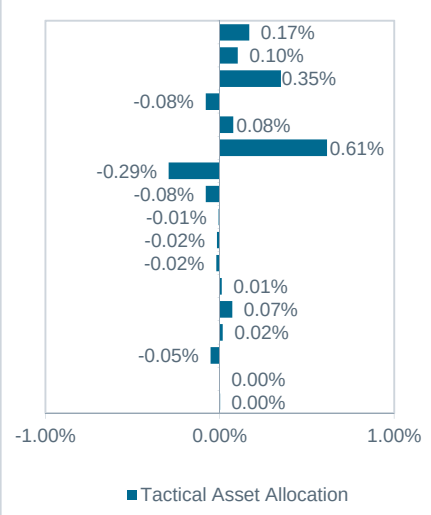
Performance Attribution



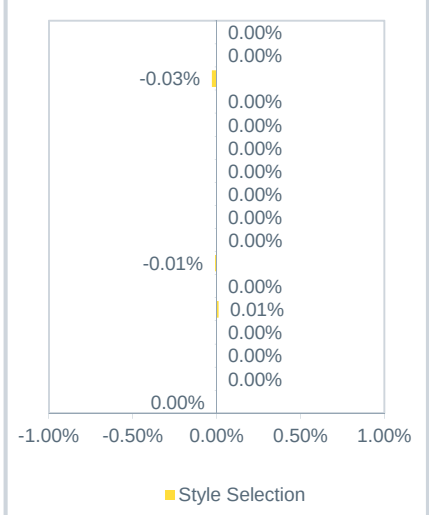
Strategic Asset Allocation: -5.25%



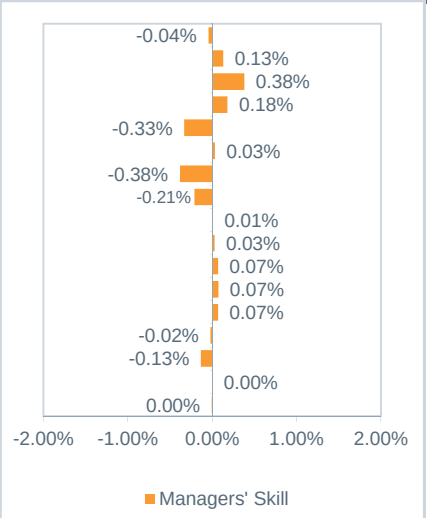
Tactical Asset Allocation: 0.87%



Style Selection: -0.03%



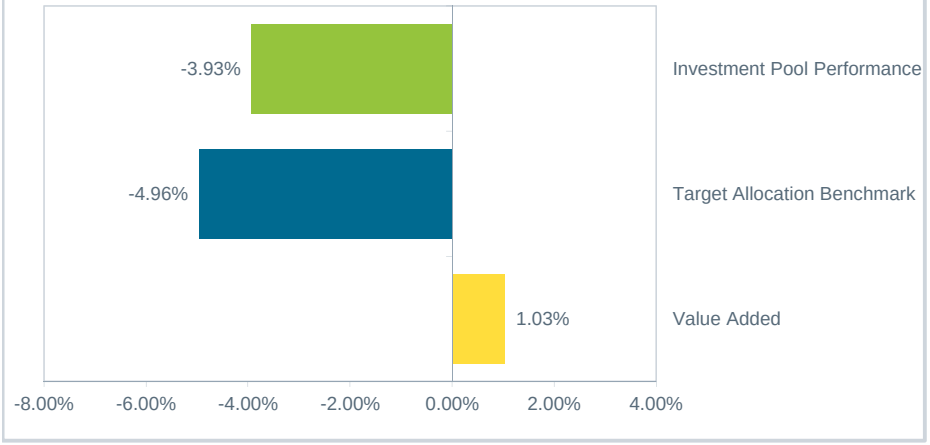
Managers' Skill: -0.16%



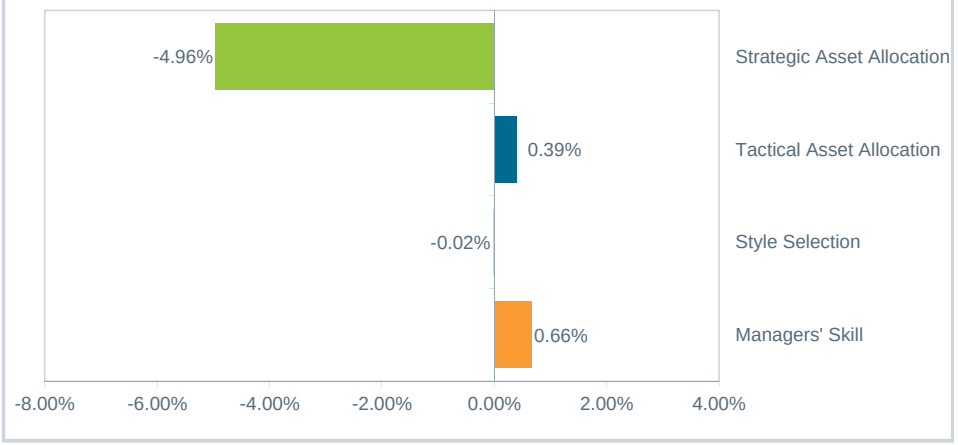
Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is net of fees. Calculation is based on monthly periodicity.
The benchmark utilized in this analysis is a passive target allocation index rather than an active actual allocation index.
Actual Allocation Index = Target Allocation Benchmark + Tactical Asset Allocation. The underlying parts may not exactly sum to the category totals due to rounding. FY begins 7/1/2021.

Wyoming State Treasurer's Office
Pool Attribution - IDP Methodology
Common School Permanent Land Fund vs. Target Allocation Index
FYTD Ending June 30, 2022

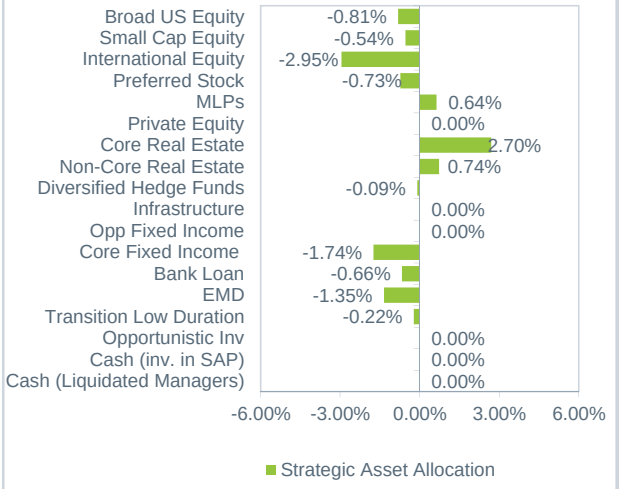
Investment Pool Performance



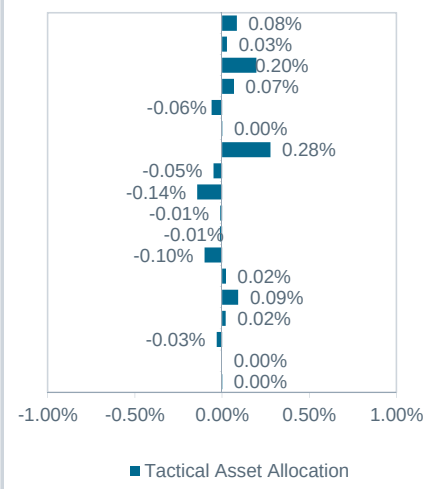
Performance Attribution



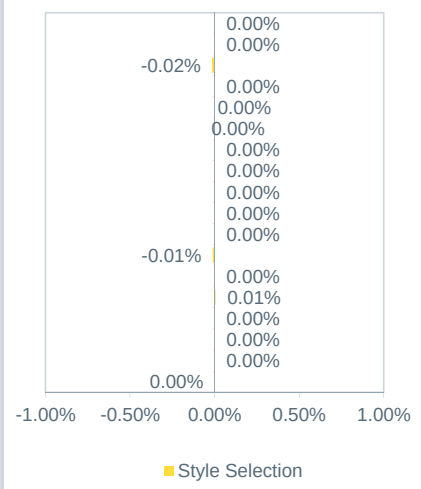
Strategic Asset Allocation: -4.96%



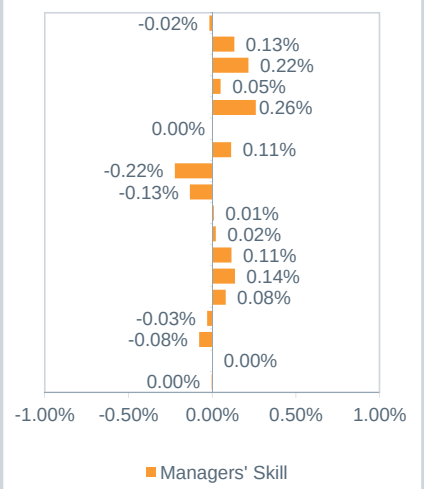
Tactical Asset Allocation: 0.39%



Style Selection: -0.02%



Managers' Skill: 0.66%

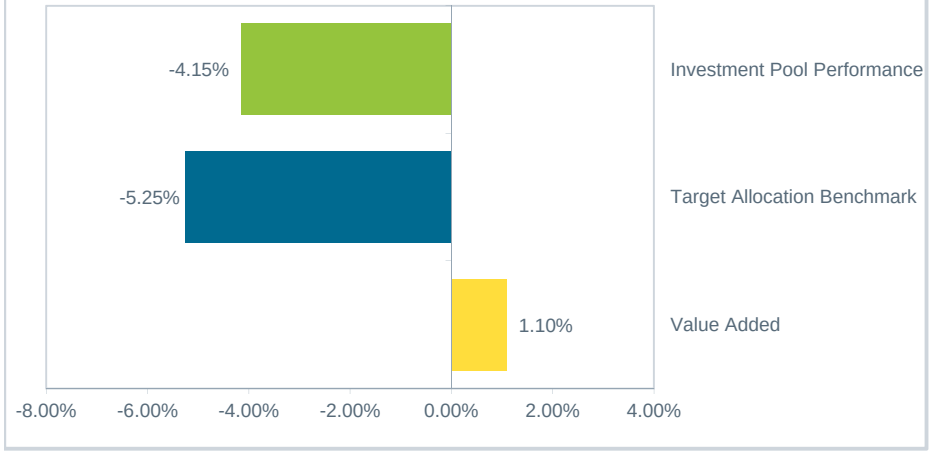


Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is net of fees. Calculation is based on monthly periodicity.
The benchmark utilized in this analysis is a passive target allocation index rather than an active actual allocation index.
Actual Allocation Index = Target Allocation Benchmark + Tactical Asset Allocation. The underlying parts may not exactly sum to the category totals due to rounding. FY begins 7/1/2021.

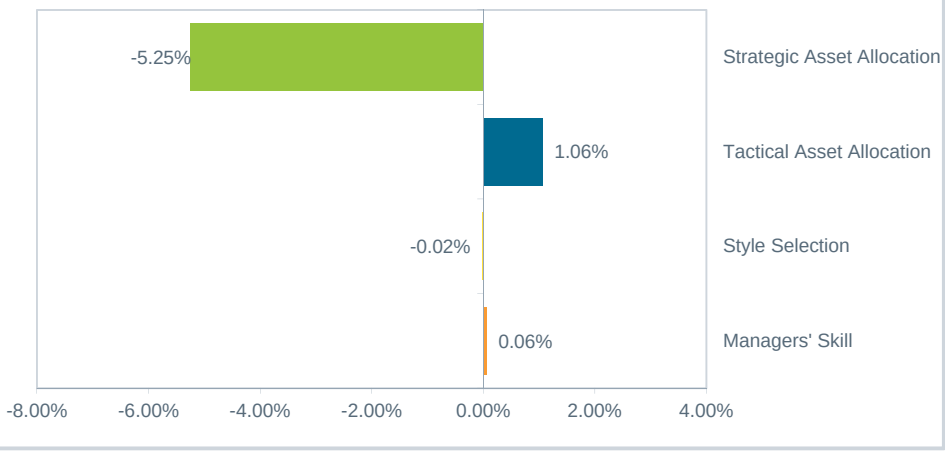
RVK

Wyoming State Treasurer's Office
Pool Attribution - IDP Methodology
Permanent Land Fund vs. Target Allocation Index
FYTD Ending June 30, 2022

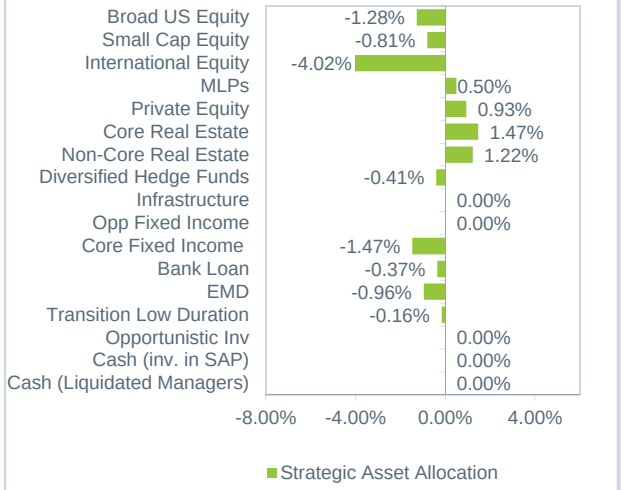
Investment Pool Performance



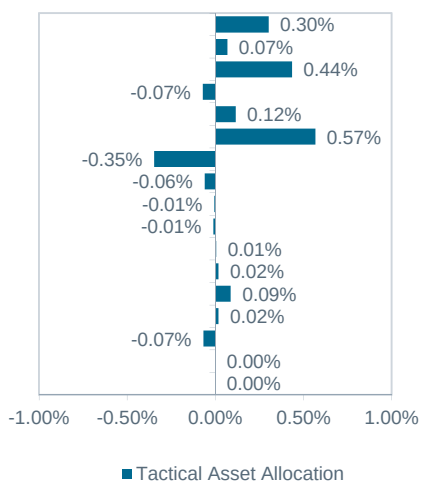
Performance Attribution



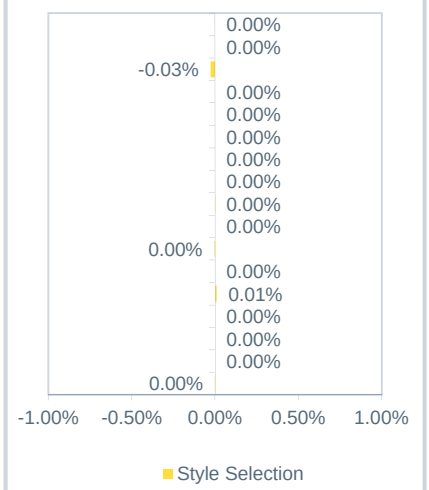
Strategic Asset Allocation: -5.25%



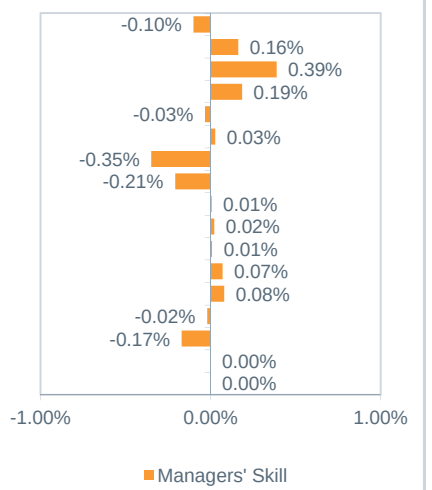
Tactical Asset Allocation: 1.06%



Style Selection: -0.02%



Managers' Skill: 0.06%

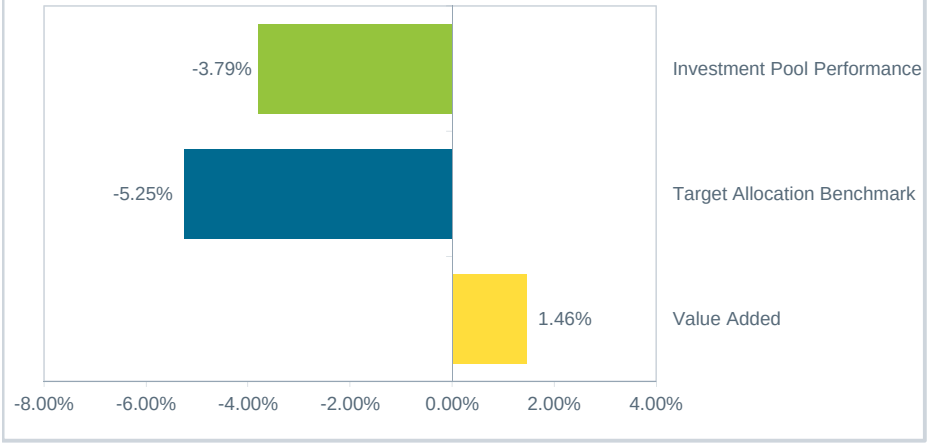


Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is net of fees. Calculation is based on monthly periodicity.
The benchmark utilized in this analysis is a passive target allocation index rather than an active actual allocation index.
Actual Allocation Index = Target Allocation Benchmark + Tactical Asset Allocation. The underlying parts may not exactly sum to the category totals due to rounding. FY begins 7/1/2021.

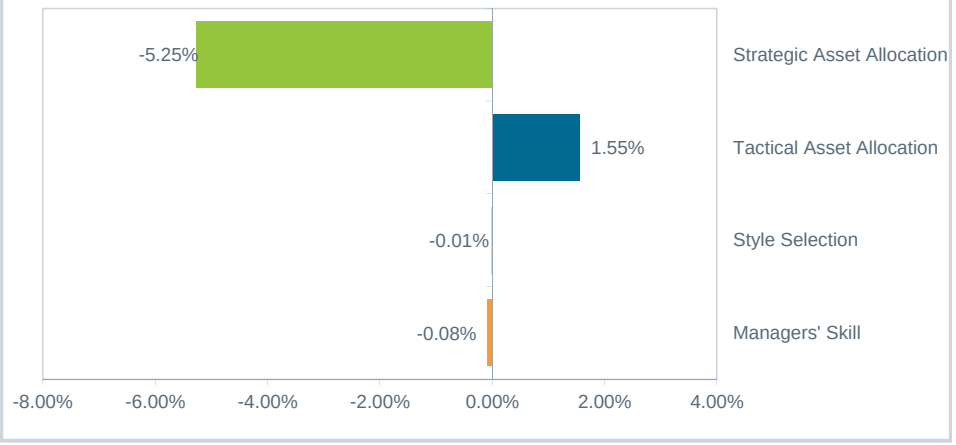
RVK

Wyoming State Treasurer's Office
Pool Attribution - IDP Methodology
University Permanent Land Fund vs. Target Allocation Index
FYTD Ending June 30, 2022

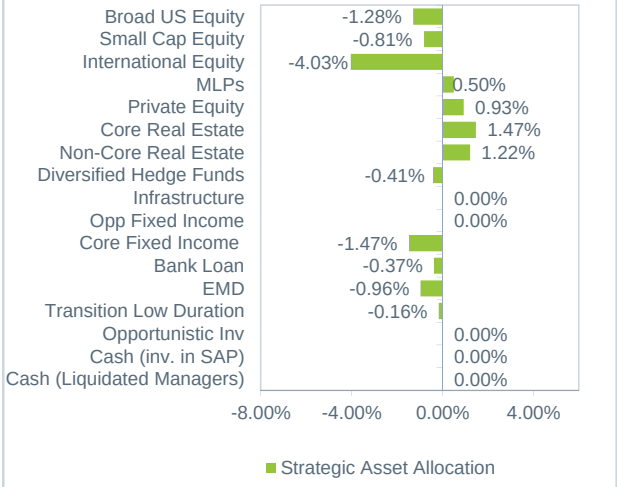
Investment Pool Performance



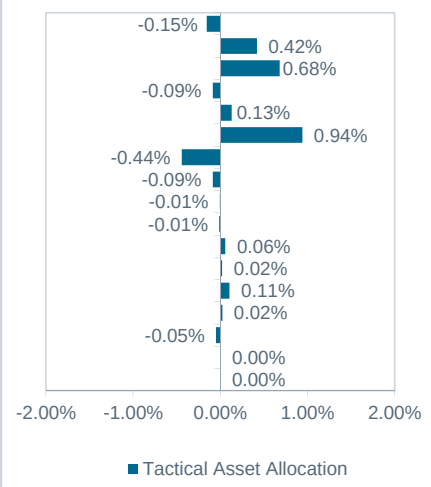
Performance Attribution



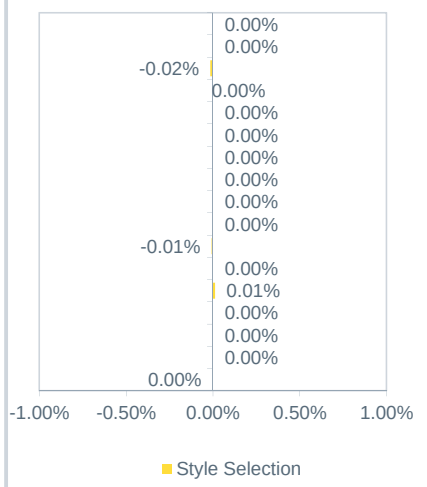
Strategic Asset Allocation: -5.25%



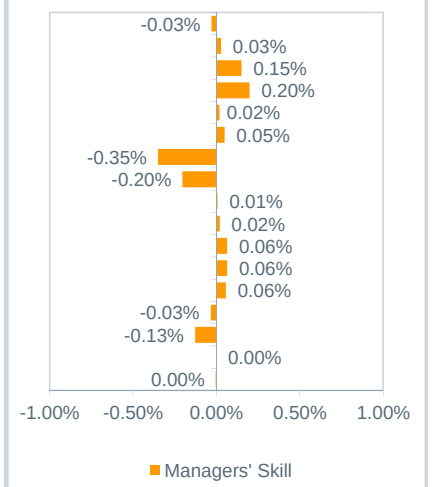
Tactical Asset Allocation: 1.55%



Style Selection: -0.01%



Managers' Skill: -0.08%



Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is net of fees. Calculation is based on monthly periodicity.
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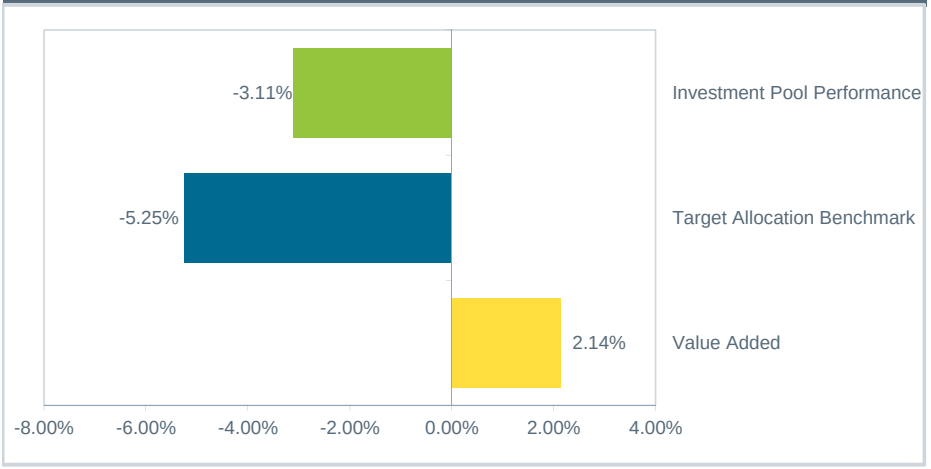
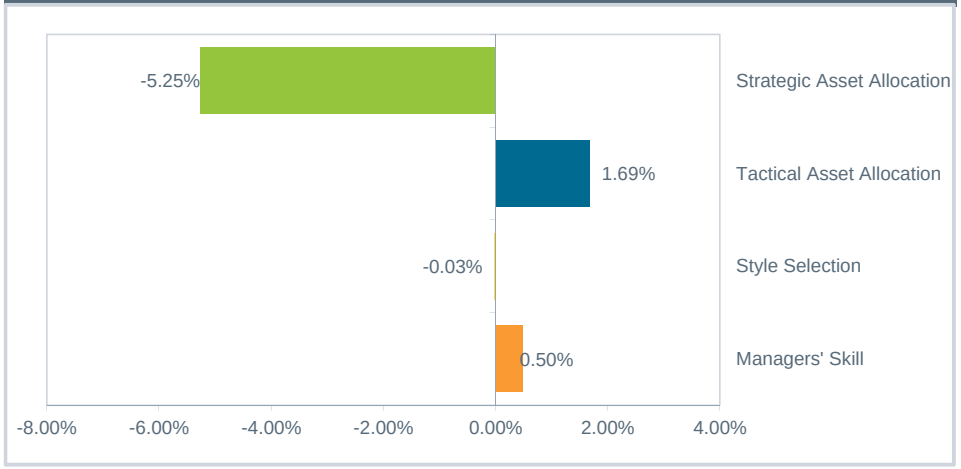
Actual Allocation Index = Target Allocation Benchmark + Tactical Asset Allocation. The underlying parts may not exactly sum to the category totals due to rounding. FY begins 7/1/2021.

Wyoming State Treasurer's Office
Pool Attribution - IDP Methodology
Hathaway Scholarship Endowment Fund vs. Target Allocation Index
FYTD Ending June 30, 2022

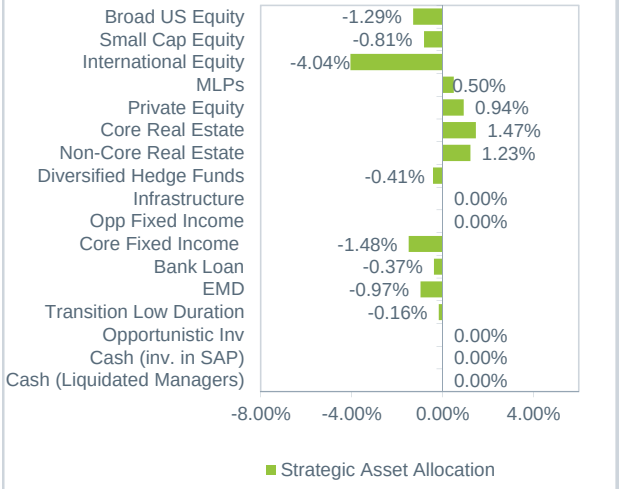
Investment Pool Performance



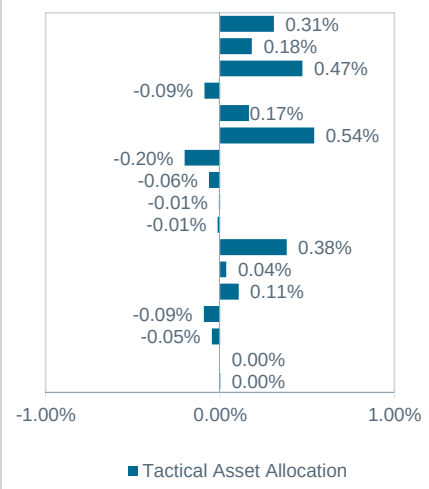
Performance Attribution



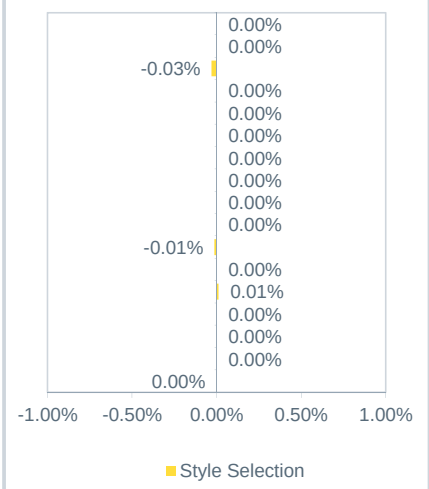
Strategic Asset Allocation: -5.25%



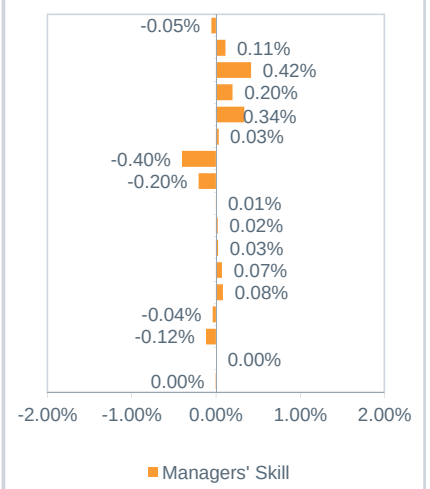
Tactical Asset Allocation: 1.69%



Style Selection: -0.03%



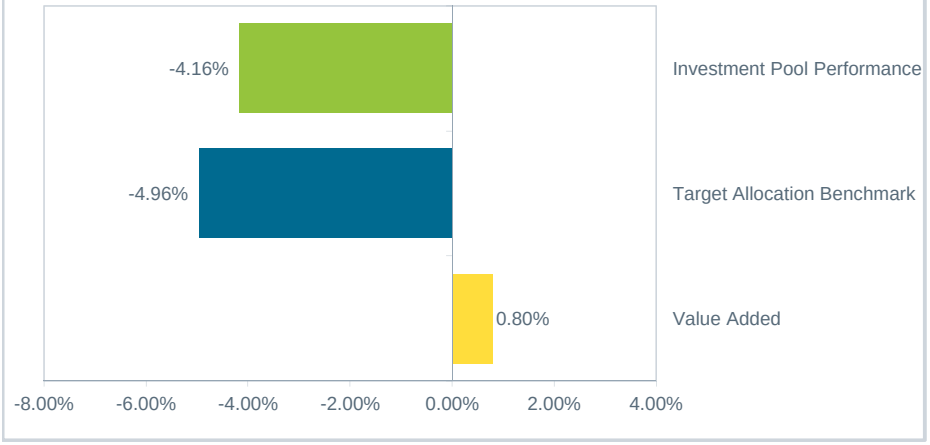
Managers' Skill: 0.50%



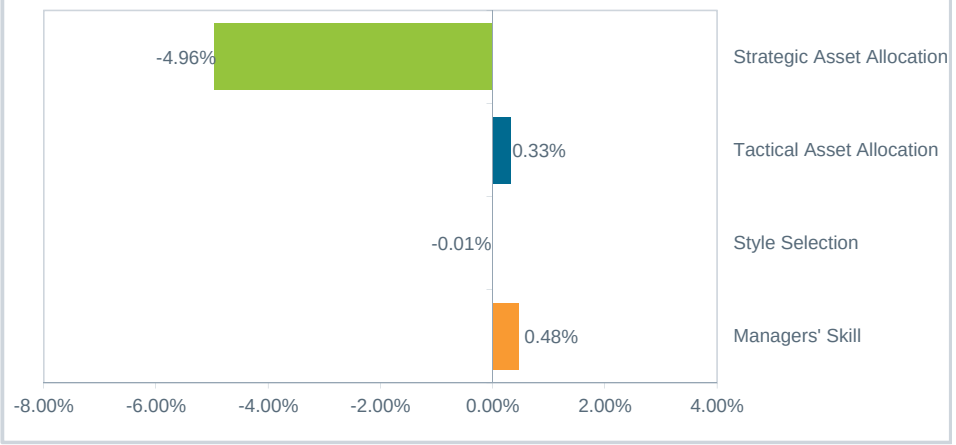
Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is net of fees. Calculation is based on monthly periodicity.
The benchmark utilized in this analysis is a passive target allocation index rather than an active actual allocation index.
Actual Allocation Index = Target Allocation Benchmark + Tactical Asset Allocation. The underlying parts may not exactly sum to the category totals due to rounding. FY begins 7/1/2021.

Wyoming State Treasurer's Office
Pool Attribution - IDP Methodology
Higher Education Endowment Fund vs. Target Allocation Index
FYTD Ending June 30, 2022

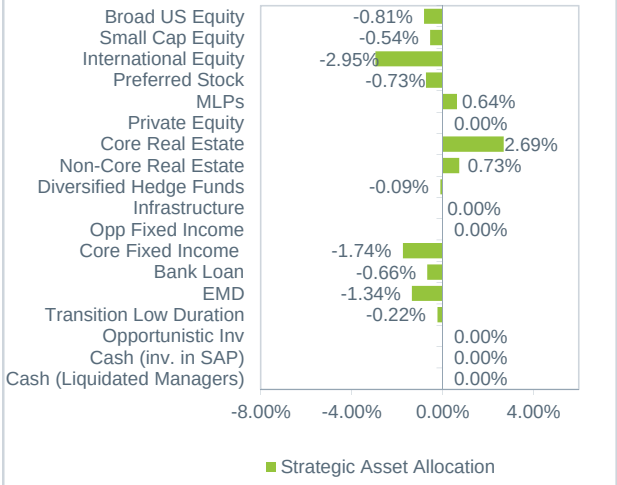
Investment Pool Performance



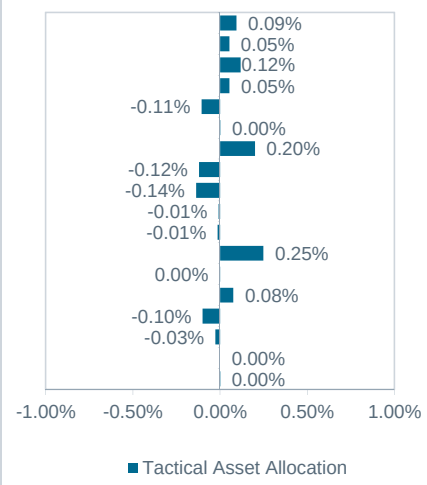
Performance Attribution



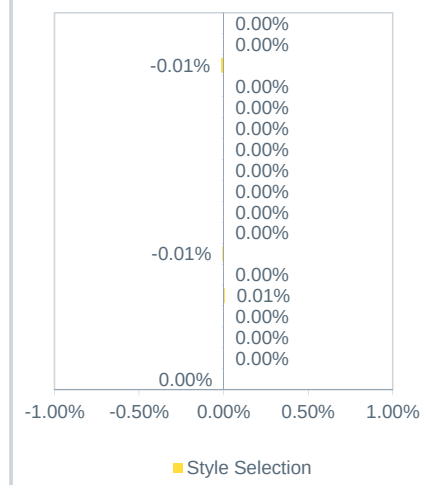
Strategic Asset Allocation: -4.96%



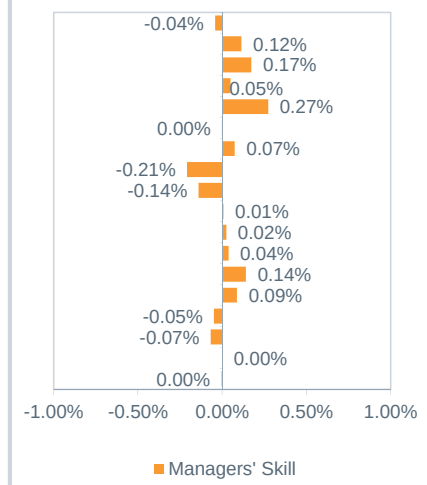
Tactical Asset Allocation: 0.33%



Style Selection: -0.01%



Managers' Skill: 0.48%



Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is net of fees. Calculation is based on monthly periodicity.
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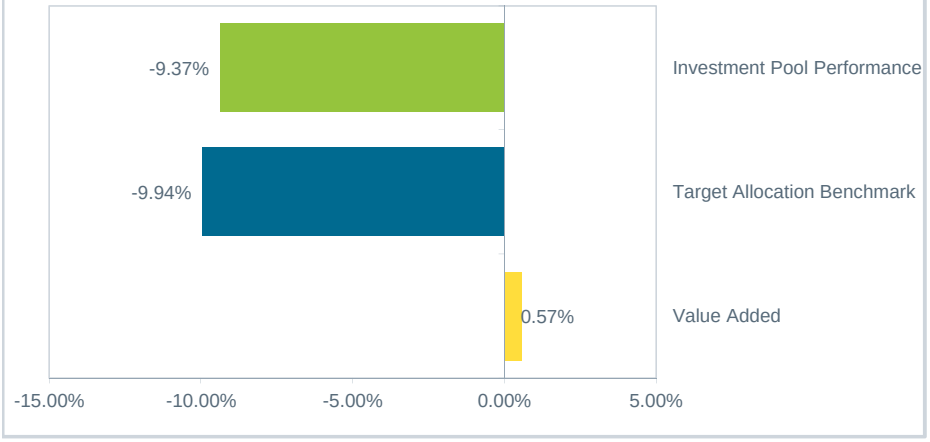
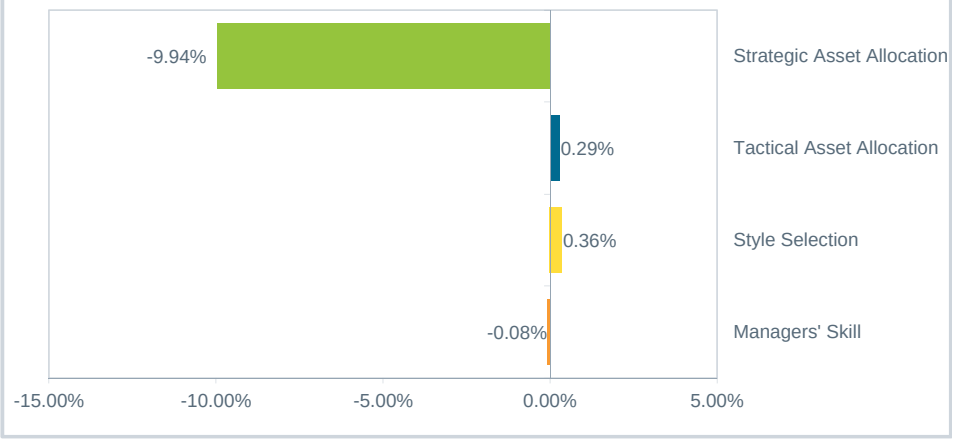
Actual Allocation Index = Target Allocation Benchmark + Tactical Asset Allocation. The underlying parts may not exactly sum to the category totals due to rounding. FY begins 7/1/2021.

Wyoming State Treasurer's Office
Pool Attribution - IDP Methodology
Workers Compensation Fund vs. Target Allocation Index
FYTD Ending June 30, 2022

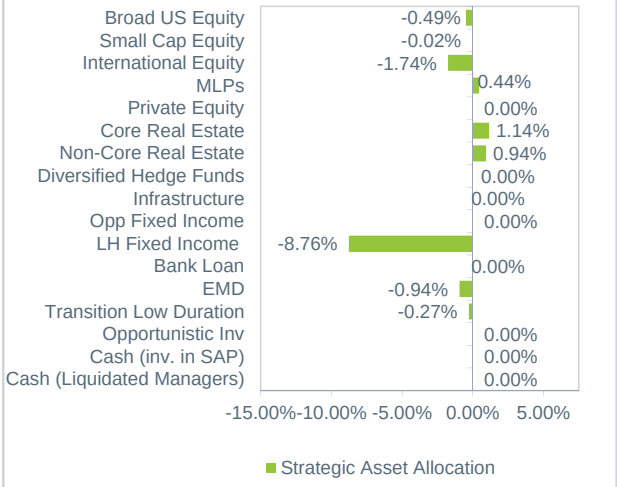
Investment Pool Performance



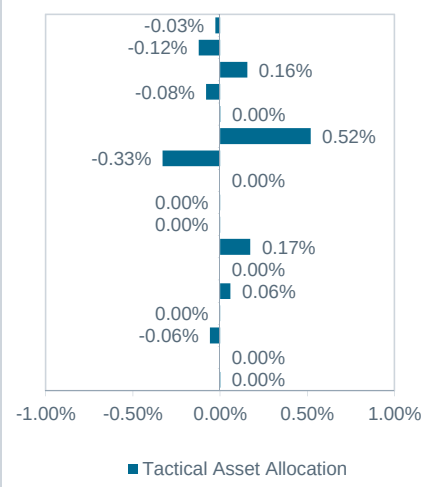
Performance Attribution



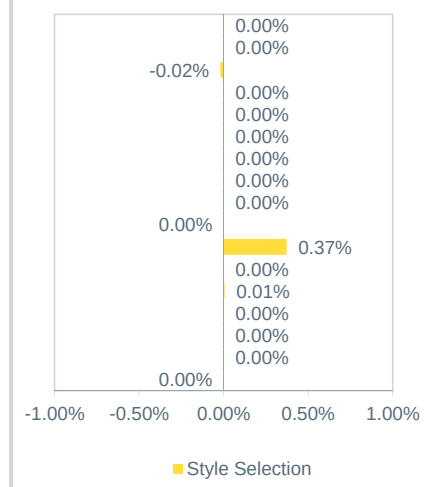
Strategic Asset Allocation: -9.94%



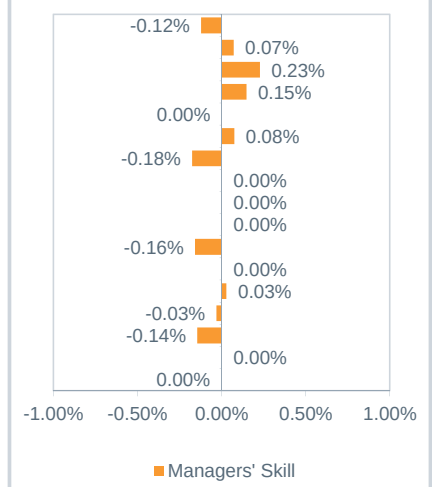
Tactical Asset Allocation: 0.29%



Style Selection: 0.36%



Managers' Skill: -0.08%



Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is net of fees. Calculation is based on monthly periodicity.
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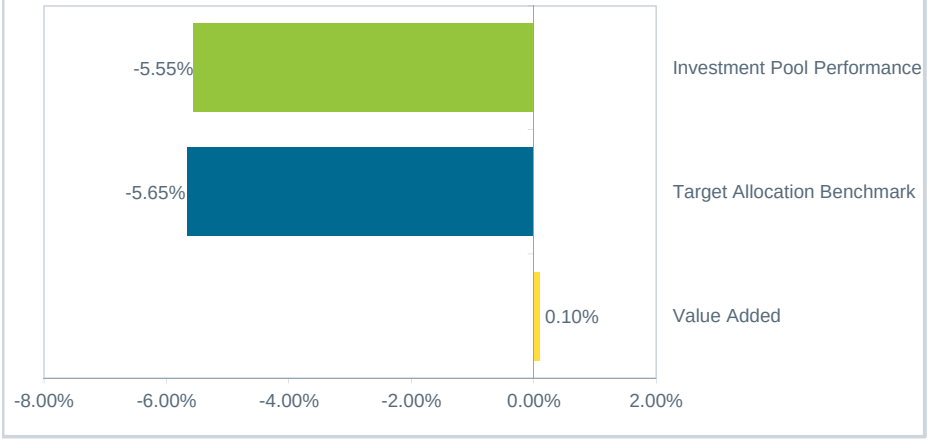
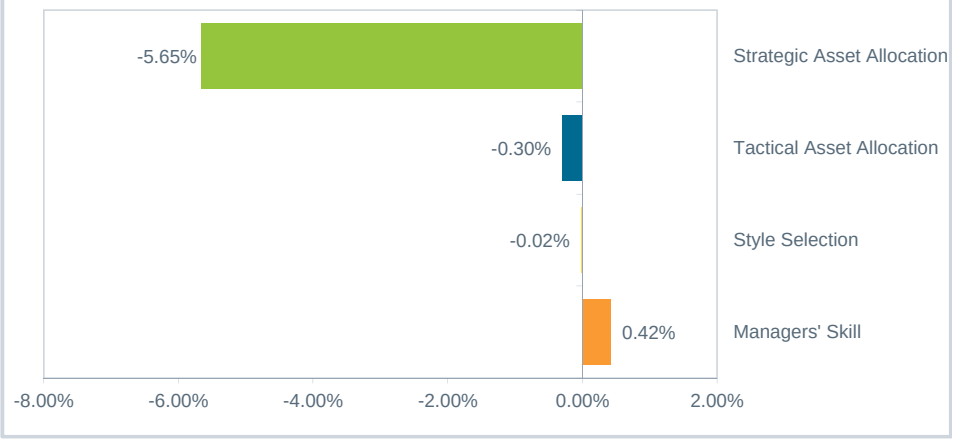
Actual Allocation Index = Target Allocation Benchmark + Tactical Asset Allocation. The underlying parts may not exactly sum to the category totals due to rounding. FY begins 7/1/2021.

Wyoming State Treasurer's Office
Pool Attribution - IDP Methodology
Pool A vs. Target Allocation Index
FYTD Ending June 30, 2022

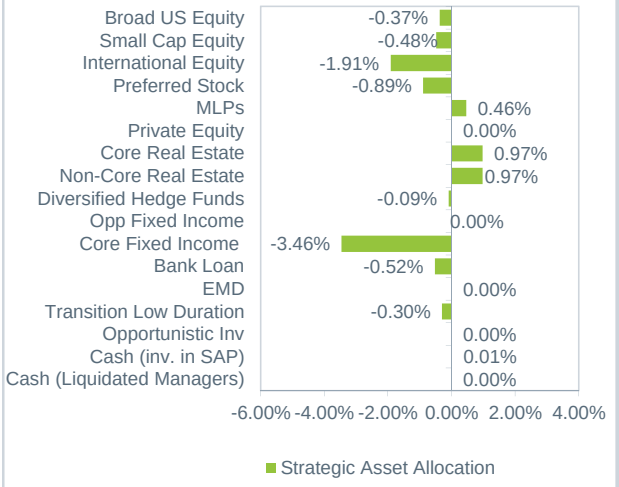
Investment Pool Performance



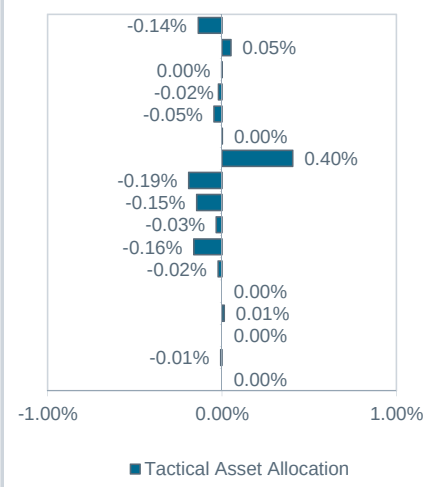
Performance Attribution



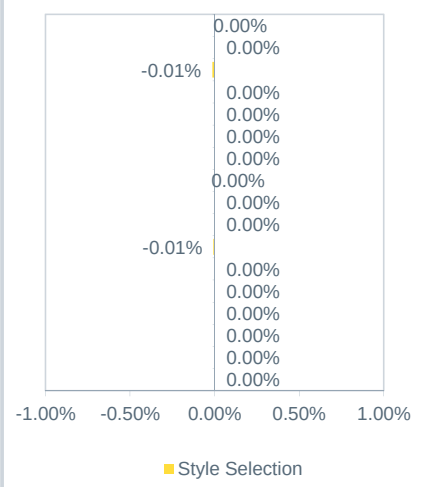
Strategic Asset Allocation: -5.65%



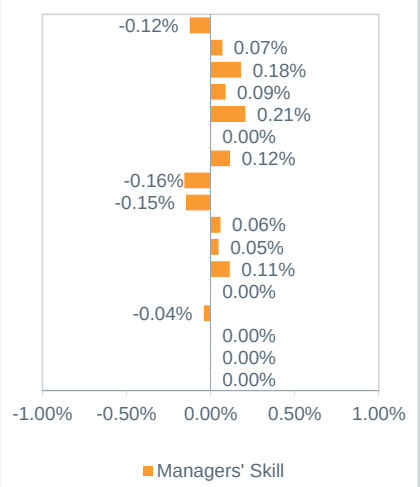
Tactical Asset Allocation: -0.30%



Style Selection: -0.02%



Managers' Skill: 0.42%



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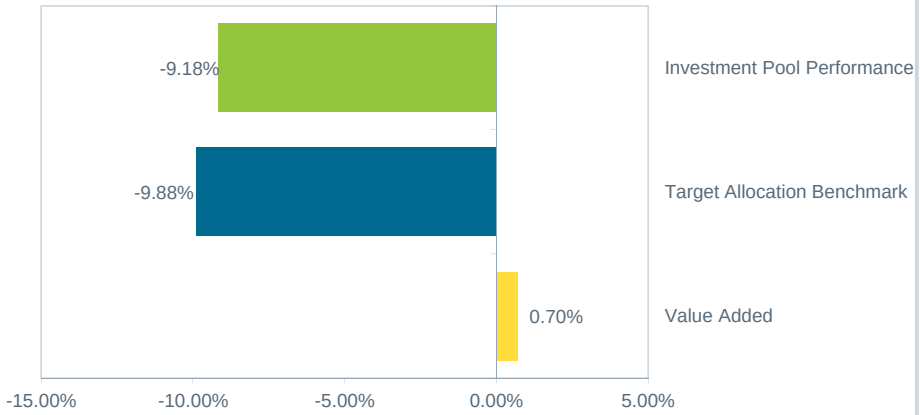
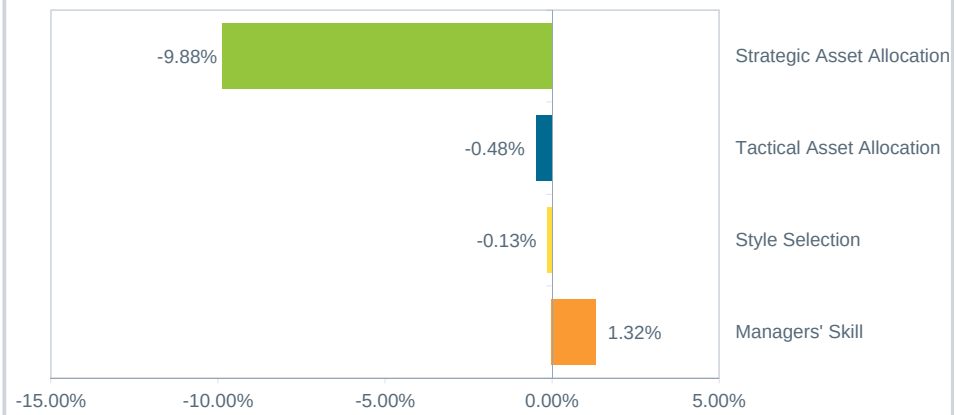
Actual Allocation Index = Target Allocation Benchmark + Tactical Asset Allocation. The underlying parts may not exactly sum to the category totals due to rounding. FY begins 7/1/2021.

Wyoming State Treasurer's Office
Pool Attribution - IDP Methodology
LSRA LT Reserve vs. Target Allocation Index
FYTD Ending June 30, 2022

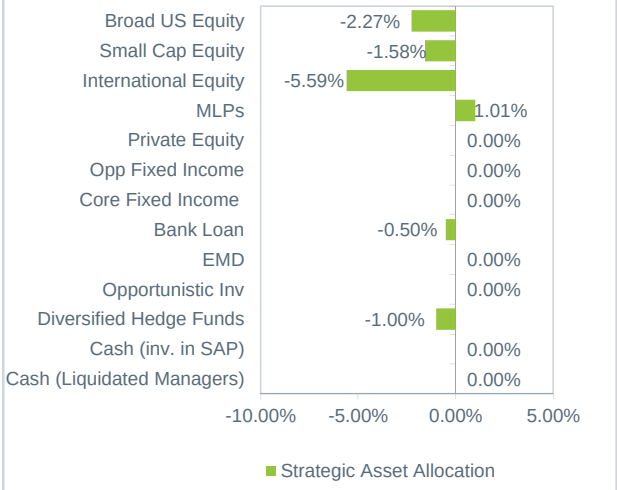
Investment Pool Performance



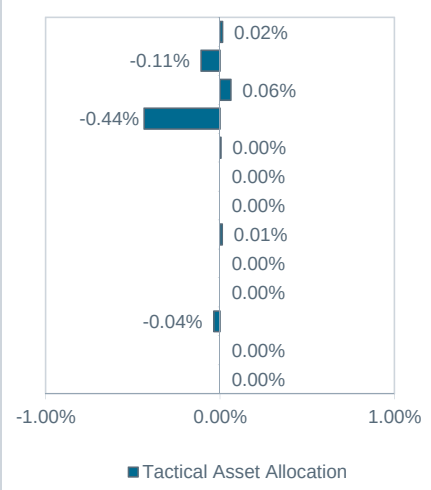
Performance Attribution



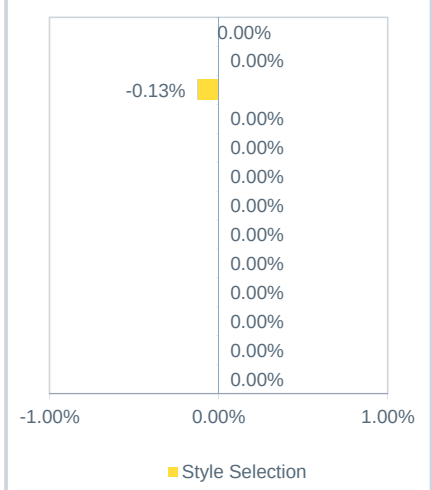
Strategic Asset Allocation: -9.88%



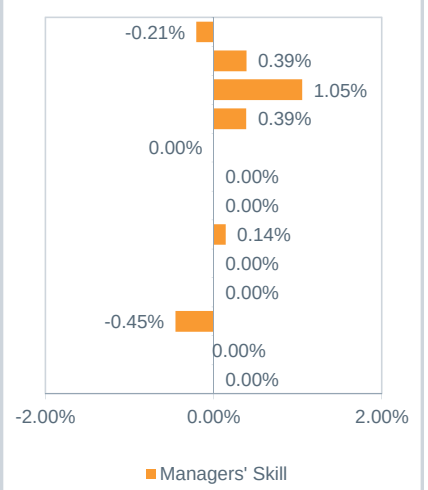
Tactical Asset Allocation: -0.48%



Style Selection: -0.13%



Managers' Skill: 1.32%



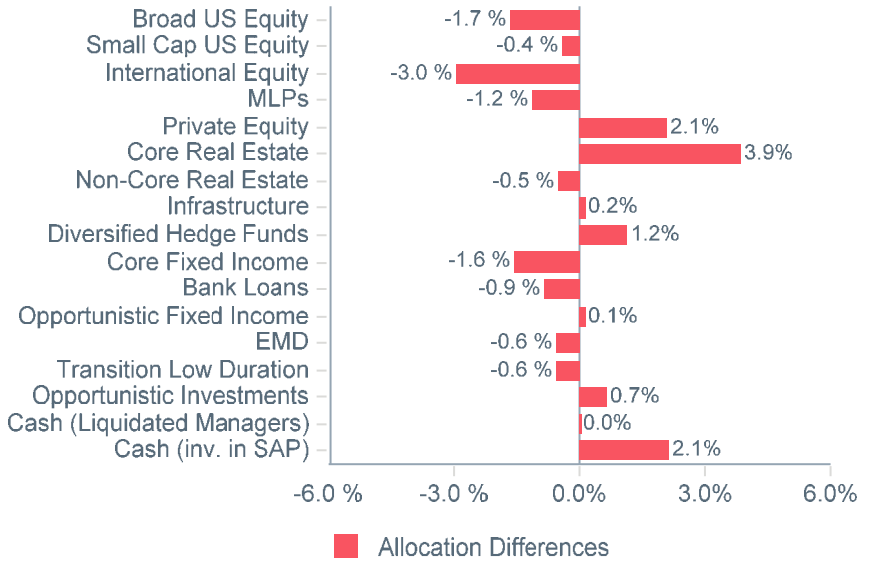
Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is net of fees. Calculation is based on monthly periodicity.
The benchmark utilized in this analysis is a passive target allocation index rather than an active actual allocation index.
Actual Allocation Index = Target Allocation Benchmark + Tactical Asset Allocation. The underlying parts may not exactly sum to the category totals due to rounding. FY begins 7/1/2021.

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

As of June 30, 2022

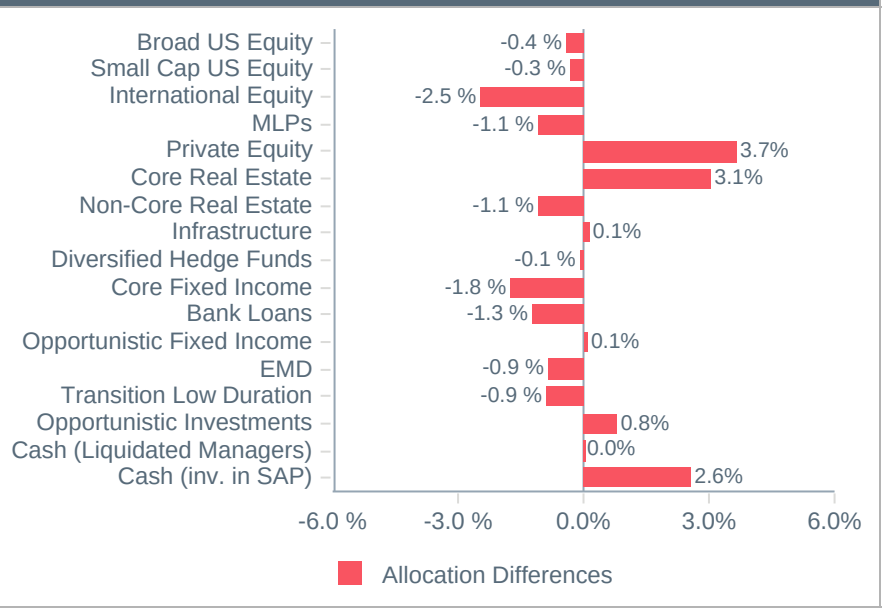
Permanent Mineral Trust Ex PPI

	Allocation ($000)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
Permanent Mineral Trust Ex. PPI	**8,732,846**	**100.0**	**-**	**100.0**	**-**
Broad US Equity	900,865	10.3	6.0	12.0	18.0
Small Cap US Equity	225,774	2.6	1.5	3.0	4.5
International Equity	1,488,637	17.0	10.0	20.0	30.0
MLPs	378,458	4.3	2.8	5.5	8.3
Private Equity	883,889	10.1	4.0	8.0	12.0
Core Real Estate	863,241	9.9	3.0	6.0	9.0
Non-Core Real Estate	389,602	4.5	2.5	5.0	7.5
Infrastructure	14,582	0.2	0.0	0.0	0.0
Diversified Hedge Funds	757,102	8.7	3.8	7.5	11.3
Core Fixed Income	1,042,401	11.9	6.8	13.5	20.3
Bank Loans	667,351	7.6	4.3	8.5	12.8
Opportunistic Fixed Income	11,293	0.1	0.0	0.0	5.0
EMD	388,237	4.4	2.5	5.0	7.5
Transition Low Duration	474,463	5.4	0.0	6.0	8.0
Opportunistic Investments	60,098	0.7	0.0	0.0	5.0
Cash (Liquidated Managers)	-	0.0	0.0	0.0	0.0
Cash (inv. in SAP)	186,854	2.1	0.0	0.0	5.0



Permanent Land Fund

	Allocation ($000)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
Permanent Land Fund	**244,120**	**100.0**	**-**	**100.0**	**-**
Broad US Equity	28,236	11.6	6.0	12.0	18.0
Small Cap US Equity	6,497	2.7	1.5	3.0	4.5
International Equity	42,729	17.5	10.0	20.0	30.0
MLPs	10,782	4.4	2.8	5.5	8.3
Private Equity	28,480	11.7	4.0	8.0	12.0
Core Real Estate	22,102	9.1	3.0	6.0	9.0
Non-Core Real Estate	9,524	3.9	2.5	5.0	7.5
Infrastructure	344	0.1	0.0	0.0	0.0
Diversified Hedge Funds	18,079	7.4	3.8	7.5	11.3
Core Fixed Income	28,623	11.7	6.8	13.5	20.3
Bank Loans	17,689	7.2	4.3	8.5	12.8
Opportunistic Fixed Income	213	0.1	0.0	0.0	5.0
EMD	10,059	4.1	2.5	5.0	7.5
Transition Low Duration	12,458	5.1	0.0	6.0	8.0
Opportunistic Investments	1,985	0.8	0.0	0.0	5.0
Cash (Liquidated Managers)	-	0.0	0.0	0.0	0.0
Cash (inv. in SAP)	6,319	2.6	0.0	0.0	5.0



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 3/1/2022 interim targets. Pool allocations shown are based on 6/30/2022 allocations.

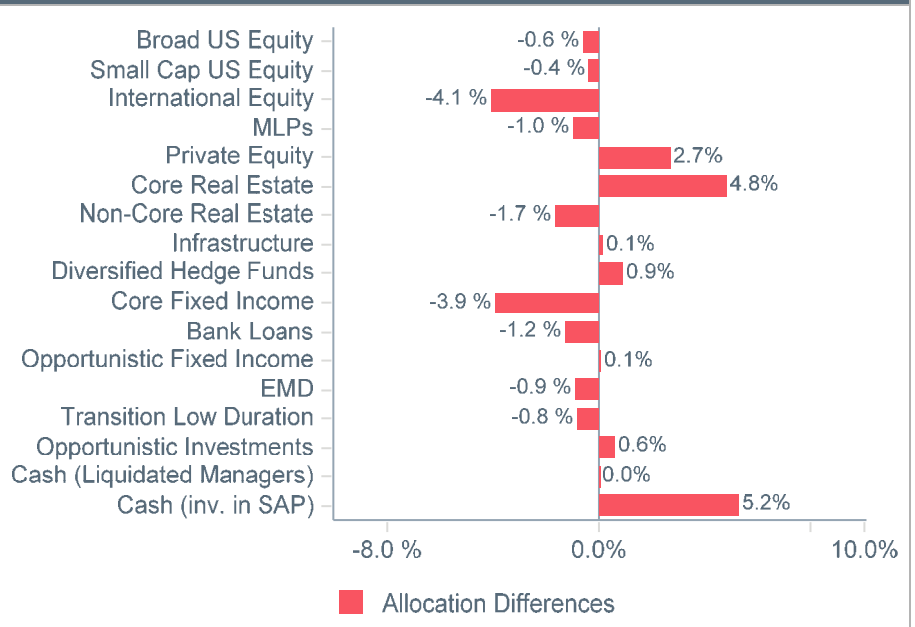
RVK

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

As of June 30, 2022

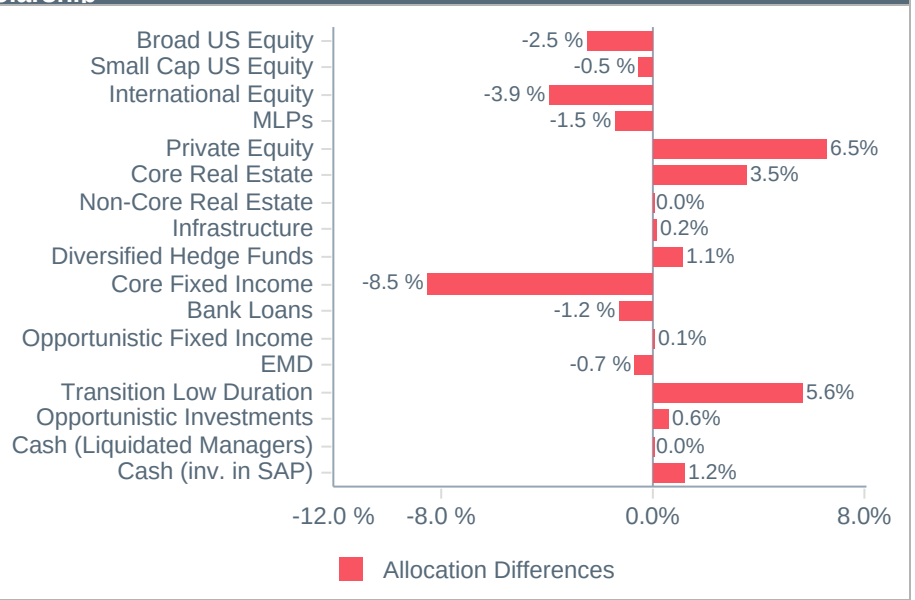
University Permanent Land Fund

	Allocation ($000)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
University Permanent Land Fund	**28,334**	**100.0**	**-**	**100.0**	**-**
Broad US Equity	3,238	11.4	6.0	12.0	18.0
Small Cap US Equity	747	2.6	1.5	3.0	4.5
International Equity	4,510	15.9	10.0	20.0	30.0
MLPs	1,272	4.5	2.8	5.5	8.3
Private Equity	3,042	10.7	4.0	8.0	12.0
Core Real Estate	3,065	10.8	3.0	6.0	9.0
Non-Core Real Estate	942	3.3	2.5	5.0	7.5
Infrastructure	40	0.1	0.0	0.0	0.0
Diversified Hedge Funds	2,386	8.4	3.8	7.5	11.3
Core Fixed Income	2,728	9.6	6.8	13.5	20.3
Bank Loans	2,057	7.3	4.3	8.5	12.8
Opportunistic Fixed Income	24	0.1	0.0	0.0	5.0
EMD	1,167	4.1	2.5	5.0	7.5
Transition Low Duration	1,466	5.2	0.0	6.0	8.0
Opportunistic Investments	172	0.6	0.0	0.0	5.0
Cash (Liquidated Managers)	-	0.0	0.0	0.0	0.0
Cash (inv. in SAP)	1,481	5.2	0.0	0.0	5.0



Hathaway Scholarship

	Allocation ($000)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
Hathaway Scholarship	**653,647**	**100.0**	**-**	**100.0**	**-**
Broad US Equity	62,297	9.5	6.0	12.0	18.0
Small Cap US Equity	16,118	2.5	1.5	3.0	4.5
International Equity	105,110	16.1	10.0	20.0	30.0
MLPs	26,383	4.0	2.8	5.5	8.3
Private Equity	94,886	14.5	4.0	8.0	12.0
Core Real Estate	62,133	9.5	3.0	6.0	9.0
Non-Core Real Estate	32,815	5.0	2.5	5.0	7.5
Infrastructure	1,061	0.2	0.0	0.0	0.0
Diversified Hedge Funds	56,451	8.6	3.8	7.5	11.3
Core Fixed Income	32,878	5.0	6.8	13.5	20.3
Bank Loans	47,425	7.3	4.3	8.5	12.8
Opportunistic Fixed Income	698	0.1	0.0	0.0	5.0
EMD	28,014	4.3	2.5	5.0	7.5
Transition Low Duration	75,837	11.6	0.0	6.0	8.0
Opportunistic Investments	3,915	0.6	0.0	0.0	5.0
Cash (Liquidated Managers)	-	0.0	0.0	0.0	0.0
Cash (inv. in SAP)	7,628	1.2	0.0	0.0	5.0



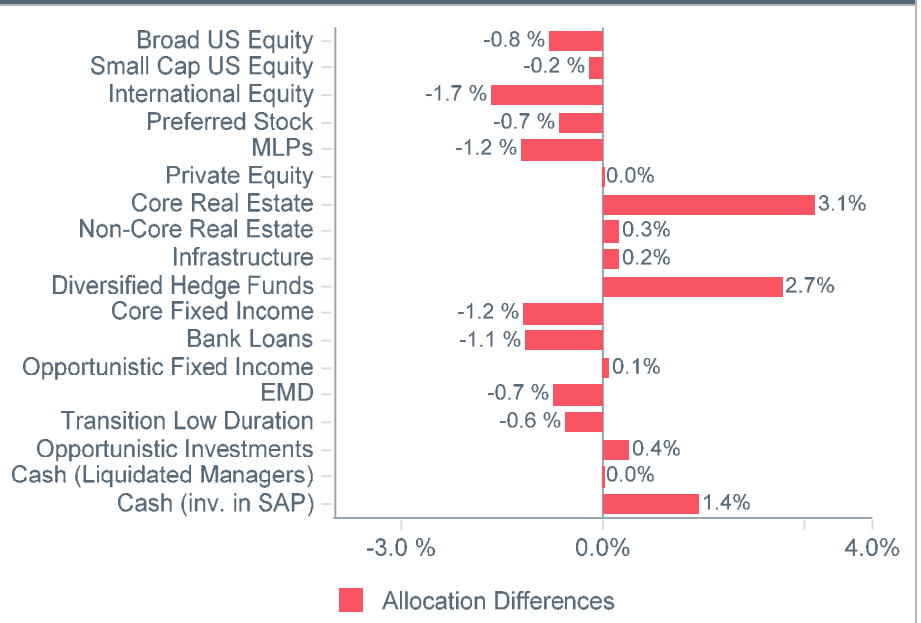
Allocations shown may not sum up to 100% exactly due to rounding. Asset class targets shown represent 3/1/2022 interim targets. Pool allocations shown are based on 6/30/2022 allocations.

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

As of June 30, 2022

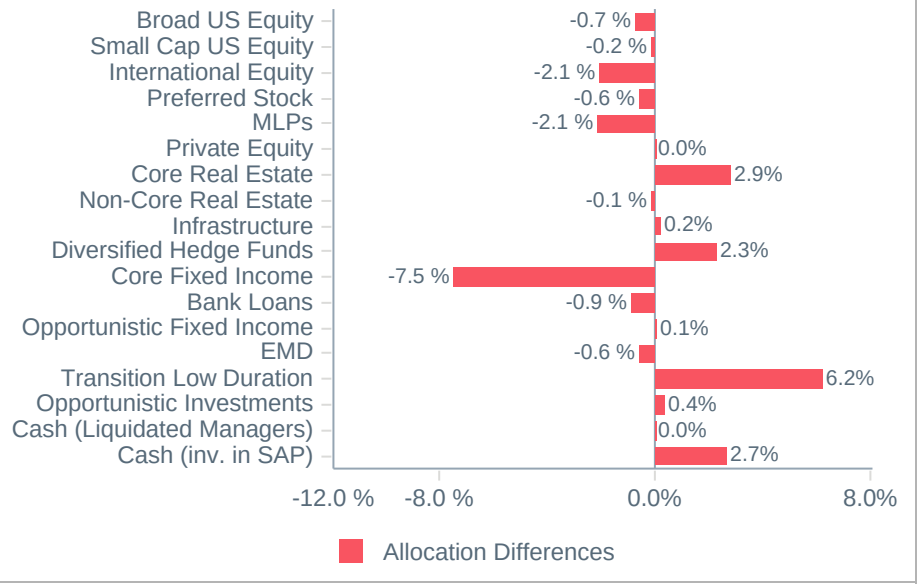
Common School PLF Ex. PPI

	Allocation ($000)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
Common School PLF Ex. PPI	**4,351,507**	**100.0**	**-**	**100.0**	**-**
Broad US Equity	313,481	7.2	4.0	8.0	12.0
Small Cap US Equity	78,485	1.8	1.0	2.0	3.0
International Equity	579,983	13.3	7.5	15.0	22.5
Preferred Stock	232,005	5.3	3.0	6.0	9.0
MLPs	250,983	5.8	3.5	7.0	10.5
Private Equity	72	0.0	0.0	0.0	0.0
Core Real Estate	615,607	14.1	5.5	11.0	16.5
Non-Core Real Estate	141,542	3.3	1.5	3.0	4.5
Infrastructure	10,633	0.2	0.0	0.0	0.0
Diversified Hedge Funds	181,116	4.2	0.8	1.5	2.3
Core Fixed Income	622,705	14.3	7.8	15.5	23.3
Bank Loans	624,497	14.4	7.8	15.5	23.3
Opportunistic Fixed Income	4,335	0.1	0.0	0.0	5.0
EMD	272,056	6.3	3.5	7.0	10.5
Transition Low Duration	345,367	7.9	0.0	8.5	12.8
Opportunistic Investments	16,811	0.4	0.0	0.0	5.0
Cash (Liquidated Managers)	-	0.0	0.0	0.0	0.0
Cash (inv. in SAP)	61,829	1.4	0.0	0.0	5.0



Higher Education

	Allocation ($000)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
Higher Education	**131,473**	**100.0**	**-**	**100.0**	**-**
Broad US Equity	9,532	7.3	4.0	8.0	12.0
Small Cap US Equity	2,417	1.8	1.0	2.0	3.0
International Equity	16,984	12.9	7.5	15.0	22.5
Preferred Stock	7,124	5.4	3.0	6.0	9.0
MLPs	6,395	4.9	3.5	7.0	10.5
Private Equity	3	0.0	0.0	0.0	0.0
Core Real Estate	18,218	13.9	5.5	11.0	16.5
Non-Core Real Estate	3,786	2.9	1.5	3.0	4.5
Infrastructure	280	0.2	0.0	0.0	0.0
Diversified Hedge Funds	5,050	3.8	0.8	1.5	2.3
Core Fixed Income	10,554	8.0	7.8	15.5	23.3
Bank Loans	19,192	14.6	7.8	15.5	23.3
Opportunistic Fixed Income	144	0.1	0.0	0.0	5.0
EMD	8,441	6.4	3.5	7.0	10.5
Transition Low Duration	19,344	14.7	0.0	8.5	12.8
Opportunistic Investments	460	0.4	0.0	0.0	5.0
Cash (Liquidated Managers)	-	0.0	0.0	0.0	0.0
Cash (inv. in SAP)	3,548	2.7	0.0	0.0	5.0



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 3/1/2022 interim targets. Pool allocations shown are based on 6/30/2022 allocations.

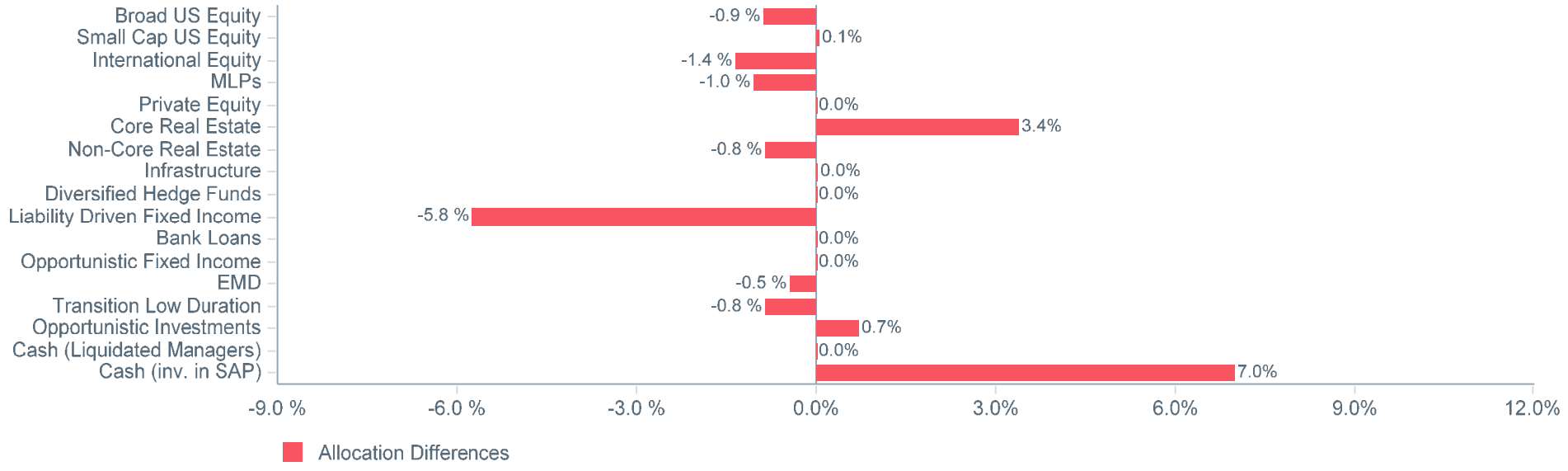
Wyoming State Treasurer's Office
Permanent Funds - Workers' Compensation Fund
Asset Allocation vs. Target

As of June 30, 2022

Asset Allocation vs. Target

	Allocation ($000)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
Workers Compensation Fund	**2,362,410**	**100.00**	**-**	**100.00**	**-**
Broad US Equity	121,223	5.13	3.00	6.00	9.00
Small Cap US Equity	1,305	0.06	0.00	0.00	0.00
International Equity	180,638	7.65	4.50	9.00	13.50
MLPs	93,408	3.95	2.50	5.00	7.50
Private Equity	47	0.00	0.00	0.00	0.00
Core Real Estate	198,085	8.38	2.50	5.00	7.50
Non-Core Real Estate	74,603	3.16	2.00	4.00	6.00
Infrastructure	501	0.02	0.00	0.00	0.00
Diversified Hedge Funds	-	0.00	0.00	0.00	0.00
Liability Driven Fixed Income	1,186,670	50.23	28.00	56.00	84.00
Bank Loans	-	0.00	0.00	0.00	0.00
Opportunistic Fixed Income	14	0.00	0.00	0.00	5.00
EMD	107,483	4.55	2.50	5.00	7.50
Transition Low Duration	216,203	9.15	0.00	10.00	12.00
Opportunistic Investments	16,745	0.71	0.00	0.00	5.00
Cash (Liquidated Managers)	-	0.00	0.00	0.00	0.00
Cash (inv. in SAP)	165,485	7.00	0.00	0.00	5.00

Asset Allocation vs. Target Differences



Allocations shown may not sum up to 100% exactly due to rounding. Asset class targets shown represent 3/1/2022 interim targets. Pool allocations shown are based on 6/30/2022 allocations.

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

As of June 30, 2022

Total LSRA

	Asset Allocation ($000)	Asset Allocation (%)
LSRA	**1,703,295**	**100.00**
Broad US Equity	50,593	2.97
Small Cap US Equity	13,946	0.82
International Equity	66,108	3.88
Core Fixed Income	237,700	13.96
Bank Loans	29,687	1.74
Low Duration Fixed Income	640,631	37.61
Private Equity	21	0.00
MLPs	26,314	1.54
Diversified Hedge Funds	47,455	2.79
Opportunistic Investments	-	0.00
Cash (inv. in SAP)	590,840	34.69

LSRA Long Term Reserve

	Asset Allocation ($000)	Asset Allocation (%)	Minimum Allocation (%)	Target Allocation (%)	Maximum Allocation (%)
LSRA Long Term Reserve	**824,964**	**100.00**	**-**	**100.00**	**-**
Broad US Equity	50,593	6.13	17.00	22.00	27.00
Small Cap US Equity	13,946	1.69	4.00	6.00	8.00
International Equity	66,108	8.01	21.00	28.00	35.00
Bank Loans	29,687	3.60	10.00	12.50	15.00
Private Equity	21	0.00	0.00	0.00	0.00
MLPs	26,314	3.19	10.00	12.50	15.00
Diversified Hedge Funds	47,455	5.75	15.00	19.00	23.00
Opportunistic Investments	-	0.00	0.00	0.00	0.00
Cash (inv. in SAP)	590,840	71.62	0.00	0.00	0.00

LSRA Intermediate Term Reserve

	Asset Allocation ($000)	Asset Allocation (%)	Minimum Allocation (%)	Target Allocation (%)	Maximum Allocation (%)
LSRA Intermediate Term Reserve	**237,700**	**100.00**	**-**	**100.00**	**-**
Core Fixed Income	237,700	100.00	100.00	100.00	100.00

LSRA Short Term Reserve

	Asset Allocation ($000)	Asset Allocation (%)	Minimum Allocation (%)	Target Allocation (%)	Maximum Allocation (%)
LSRA Short Term Reserve	**640,631**	**100.00**	**-**	**100.00**	**-**
Low Duration Fixed Income	640,631	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 6/30/2022 allocations.

RVK

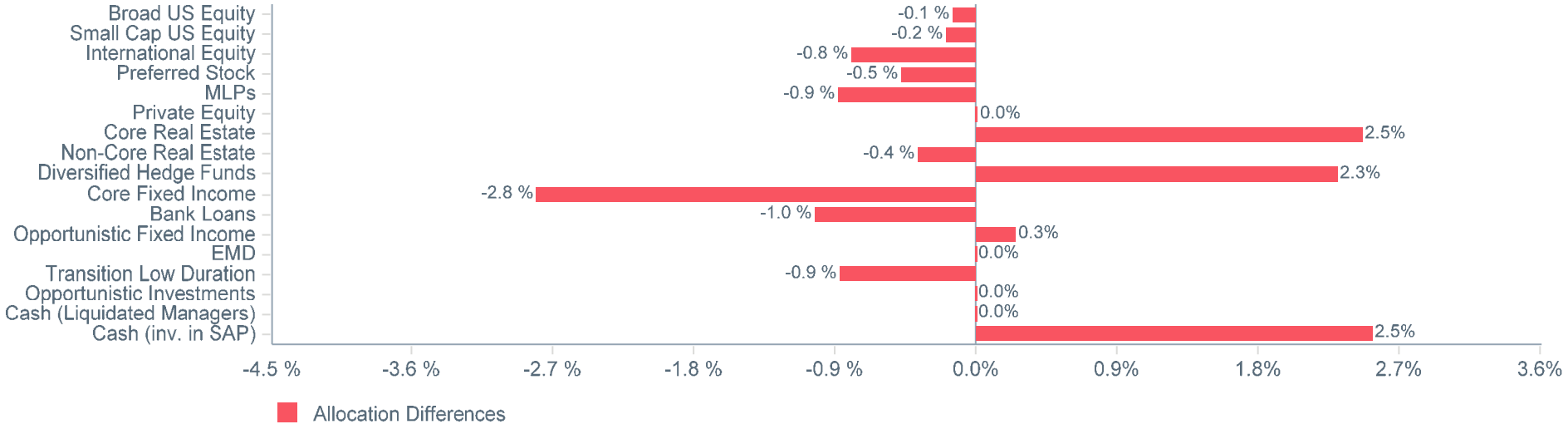
Wyoming State Treasurer's Office
Non-Permanent Funds - Pool A Investment Account
Asset Allocation vs. Target

As of June 30, 2022

Asset Allocation vs. Target

	Allocation ($000)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
Pool A	**259,616**	**100.00**	**-**	**100.00**	**-**
Broad US Equity	12,608	4.86	2.50	5.00	7.50
Small Cap US Equity	4,692	1.81	1.00	2.00	3.00
International Equity	23,886	9.20	5.00	10.00	15.00
Preferred Stock	16,930	6.52	3.50	7.00	10.50
MLPs	10,683	4.12	2.50	5.00	7.50
Private Equity	28	0.01	0.00	0.00	0.00
Core Real Estate	16,785	6.47	2.00	4.00	6.00
Non-Core Real Estate	9,430	3.63	2.00	4.00	6.00
Diversified Hedge Funds	9,889	3.81	0.75	1.50	2.25
Core Fixed Income	77,082	29.69	16.25	32.50	48.75
Bank Loans	29,782	11.47	6.25	12.50	18.25
Opportunistic Fixed Income	654	0.25	0.00	0.00	5.00
EMD	-	0.00	0.00	0.00	0.00
Transition Low Duration	27,606	10.63	0.00	11.50	15.00
Opportunistic Investments	-	0.00	0.00	0.00	5.00
Cash (Liquidated Managers)	-	0.00	0.00	0.00	0.00
Cash (inv. in SAP)	19,561	7.53	2.50	5.00	7.50

Asset Allocation vs. Target Differences



Allocations shown may not sum up to 100% exactly due to rounding. Asset class targets shown represent 3/1/2022 interim targets. Pool allocations shown are based on 6/30/2022 allocations.

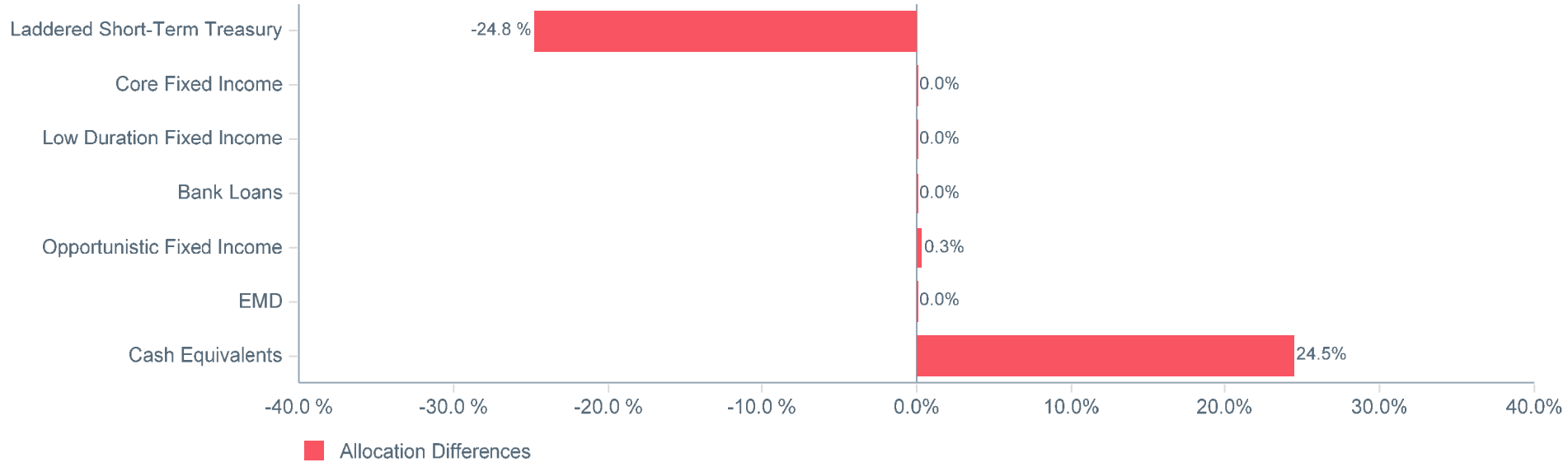
Wyoming State Treasurer's Office
Non-Permanent Funds - State Agency Pool
Asset Allocation vs. Target

As of June 30, 2022

Asset Allocation vs. Target

	Allocation ($000)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
State Agency Pool Excluding PPI	**5,101,830**	**100.00**	**-**	**100.00**	**-**
Laddered Short-Term Treasury	3,836,472	75.20	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	14,965	0.29	0.00	0.00	0.00
EMD	-	0.00	0.00	0.00	0.00
Cash Equivalents	1,250,393	24.51	0.00	0.00	0.00

Asset Allocation vs. Target Differences



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 6/30/2022 allocations.

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

As of June 30, 2022

Asset Allocation & Performance

	Allocation		Performance (%)
	Market Value ($)	%	FYTD
Total Fund	**23,774,656,342**	**100.00**	**-4.61**
All Cap US Equity Composite	**1,500,370,667**	**6.31**	**-11.19**
State Street All Cap	1,435,978,583	6.04	-10.66
Domestic Equity Quantamental	30,554,039	0.13	-26.30
Domestic Equity Quantitative	33,838,046	0.14	-10.98
UW Portfolio Mgmt Program	1,703,125	0.01	-10.93
Small Cap US Equity Composite	**349,980,303**	**1.47**	**-20.57**
Van Berkom	172,489,998	0.73	-17.09
BlackRock Small Cap	79,942,823	0.34	-24.97
Small Cap Equity Quantamental	46,660,831	0.20	-26.46
Small Cap Equity Quantitative	50,886,650	0.21	N/A
Int'l Equity Composite	**2,508,584,818**	**10.55**	**-17.76**
Northern Trust	1,103,096,420	4.64	-19.26
Arrowstreet	786,995,151	3.31	-14.04
Harding Loevner	618,493,247	2.60	-19.90
Preferred Stock Composite	**256,059,245**	**1.08**	**-11.45**
Cohen & Steers Preferred Stock	256,059,245	1.08	-11.45
MLPs Composite	**804,678,345**	**3.38**	**11.44**
Harvest Fund Advisors	407,468,142	1.71	15.49
Harvest Fund Advisors Passive	397,210,203	1.67	8.50
Private Equity Composite	**1,010,468,802**	**4.25**	**9.49**
Access Venture Partners II	1,496,701	0.01	N/A
Cheyenne Equity Capital Fund, L.P.	130,083,068	0.55	N/A
Hamilton Lane Nowood Fund, L.P.	141,740,225	0.60	N/A
Neuberger Berman Sauger Fund, L.P.	187,098,477	0.79	N/A
BlackRock LTPC, L.P.	417,960,847	1.76	N/A
Valor Equity Partners V LP	55,682,992	0.23	N/A
GTCR Fund XIII	32,439,310	0.14	N/A
Veritas Capital Vantage Fund	7,889,338	0.03	N/A
StepStone Fund V	21,556,083	0.09	N/A
Nautic Partners X	9,268,193	0.04	N/A
Dragoneer Opp Fund VI	4,168,001	0.02	N/A
Accel KKR Growth Partners IV	1,085,567	0.00	N/A
Core Real Estate Composite	**1,799,235,919**	**7.57**	**28.96**
Clarion Lion	1,085,599,837	4.57	30.69
UBS Trumbull	207,981,825	0.87	23.76
MS Prime	505,654,256	2.13	27.89
Non-Core Real Estate Composite	**662,243,029**	**2.79**	**18.55**
SC Capital	113,811,808	0.48	N/A
Realterm	327,290,638	1.38	N/A

Asset Allocation & Performance

	Allocation		Performance (%)
	Market Value ($)	%	FYTD
M&G	3,561,251	0.01	N/A
Northwood	209,071,734	0.88	N/A
WestRiver	8,507,598	0.04	N/A
Infrastructure Composite	**27,441,012**	**0.12**	**N/A**
Macquarie Infrastructure	27,441,012	0.12	N/A
Diversified Hedge Funds Composite	**1,077,526,095**	**4.53**	**-7.67**
PAAMCO - Jackalope Fund	2,808,094	0.01	N/A
Grosvenor Diversified Hedge Funds	456,771,328	1.92	-6.86
Internal Diversified Hedge Funds	617,946,673	2.60	-8.27
Core Fixed Income Composite	**2,666,394,794**	**11.22**	**-10.14**
Internal Intermediate Gov't Fixed Income	823,200,417	3.46	-8.46
Payden & Rygel IGC	440,628,759	1.85	-14.12
JP Morgan MBS	550,150,926	2.31	-7.17
PIMCO	852,414,692	3.59	-11.18
Laddered Treasury Composite	**3,836,471,599**	**16.14**	**-2.67**
Internal Ladder Portfolio	3,836,471,599	16.14	-2.67
Bank Loans Composite	**1,437,679,566**	**6.05**	**-3.28**
Credit Suisse	447,836,812	1.88	-2.54
Octagon	662,435,090	2.79	-3.98
KKR	327,407,664	1.38	N/A
Emerging Market Debt Composite	**815,456,145**	**3.43**	**-17.16**
Global Evolution	99,045,882	0.42	-15.99
Global Evolution Hard	129,876,631	0.55	-21.60
Goldman Sachs	189,128,747	0.80	-15.83
Eaton Vance	162,844,496	0.68	-15.79
Finisterre	149,340,216	0.63	-13.25
Wellington	85,220,173	0.36	N/A
Long Duration Fixed Income Composite	**574,946,787**	**2.42**	**-20.18**
Internal Long Duration Fixed Income	256,530,959	1.08	-18.73
Metlife	318,415,828	1.34	-21.15
Low Duration Fixed Income Composite	**640,631,003**	**2.69**	**-2.67**
Internal Low Duration Fixed Income	640,631,003	2.69	-2.67
Transition Low Duration Composite	**1,172,742,930**	**4.93**	**N/A**
PIMCO Transition Low Duration	1,172,742,930	4.93	N/A
Grosvenor Silvery Lupine Fund	**32,340,789**	**0.14**	**11.52**
Grosvenor Opportunistic Class D	**100,185,751**	**0.42**	**-23.66**
Cash Equivalents	**2,293,937,746**	**9.65**	**0.24**
Public Purpose Investments	**205,577,871**	**0.86**	**N/A**

Schedule of Investable Assets - Total Fund Composite Ex Public Purpose Investments

Periods Ending	Beginning Market Value ($)	Net Cash Flow ($)	Gain/Loss ($)	Ending Market Value ($)	Unit Value
FYTD	**24,784,672,429**	**-198,244,680**	**-1,017,349,278**	**23,569,078,471**	**95.82**

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 06/30/2022. Investment manager fees are accounted for on a quarterly basis. Wyoming State Treasurer's Office fiscal year ends on June 30th. Fiscal year begins 7/1/2021.

RVK

Wyoming State Treasurer's Office
Asset Allocation & Performance

As of June 30, 2022

	Allocation		Performance (%)										
	Market Value ($)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
All Cap US Equity Composite	**1,500,370,667**	**6.31**	**-8.37**	**-16.35**	**-20.31**	**-11.19**	**-11.19**	**9.87**	**10.19**	**9.95**	**-**	**10.50**	**11/01/2014**
All Cap US Equity Custom Index			-8.25	-16.10	-19.96	-10.62	-10.62	10.41	10.98	10.70	12.77	10.35	
Difference			-0.12	-0.25	-0.35	-0.57	-0.57	-0.54	-0.79	-0.75	-	0.15	
State Street All Cap	**1,435,978,583**	**6.04**	**-8.26**	**-16.11**	**-19.98**	**-10.66**	**-10.66**	**10.11**	**10.63**	**10.47**	**-**	**9.92**	**01/01/2015**
State Street All Cap Custom Index			-8.25	-16.10	-19.96	-10.62	-10.62	10.10	10.60	10.45	12.58	9.93	
Difference			-0.01	-0.01	-0.02	-0.04	-0.04	0.01	0.03	0.02	-	-0.01	
Domestic Equity Quantamental	**30,554,039**	**0.13**	**-9.71**	**-22.40**	**-29.96**	**-26.30**	**-26.30**	**-**	**-**	**-**	**-**	**-15.19**	**04/01/2021**
S&P 500 Index (Cap Wtd)			-8.25	-16.10	-19.96	-10.62	-10.62	10.60	11.31	11.14	12.96	-2.39	
Difference			-1.46	-6.30	-10.00	-15.68	-15.68	-	-	-	-	-12.80	
Domestic Equity Quantitative	**33,838,046**	**0.14**	**-10.01**	**-16.85**	**-19.51**	**-10.98**	**-10.98**	**-**	**-**	**-**	**-**	**-8.89**	**06/01/2021**
S&P 500 Index (Cap Wtd)			-8.25	-16.10	-19.96	-10.62	-10.62	10.60	11.31	11.14	12.96	-7.90	
Difference			-1.76	-0.75	0.45	-0.36	-0.36	-	-	-	-	-0.99	
UW Portfolio Mgmt Program	**1,703,125**	**0.01**	**-7.92**	**-16.11**	**-19.18**	**-10.93**	**-10.93**	**7.80**	**7.92**	**8.54**	**9.95**	**4.25**	**04/01/2006**
S&P 500 Index (Cap Wtd)			-8.25	-16.10	-19.96	-10.62	-10.62	10.60	11.31	11.14	12.96	9.01	
Difference			0.33	-0.01	0.78	-0.31	-0.31	-2.80	-3.39	-2.60	-3.01	-4.76	
Small Cap US Equity Composite	**349,980,303**	**1.47**	**-8.30**	**-14.97**	**-21.97**	**-20.57**	**-20.57**	**4.09**	**3.78**	**4.48**	**-**	**4.67**	**11/01/2014**
Russell 2000 Index			-8.22	-17.20	-23.43	-25.20	-25.20	4.21	5.17	5.91	9.35	6.43	
Difference			-0.08	2.23	1.46	4.63	4.63	-0.12	-1.39	-1.43	-	-1.76	
Van Berkom	**172,489,998**	**0.73**	**-7.07**	**-12.53**	**-20.55**	**-17.09**	**-17.09**	**-**	**-**	**-**	**-**	**5.59**	**03/01/2020**
Russell 2000 Index			-8.22	-17.20	-23.43	-25.20	-25.20	4.21	5.17	5.91	9.35	7.73	
Difference			1.15	4.67	2.88	8.11	8.11	-	-	-	-	-2.14	
BlackRock Small Cap	**79,942,823**	**0.34**	**-8.37**	**-17.29**	**-23.42**	**-24.97**	**-24.97**	**-**	**-**	**-**	**-**	**9.56**	**08/01/2020**
Russell 2000 Index			-8.22	-17.20	-23.43	-25.20	-25.20	4.21	5.17	5.91	9.35	8.99	
Difference			-0.15	-0.09	0.01	0.23	0.23	-	-	-	-	0.57	
Small Cap Equity Quantamental	**46,660,831**	**0.20**	**-10.33**	**-19.06**	**-27.39**	**-26.46**	**-26.46**	**-**	**-**	**-**	**-**	**-22.66**	**06/01/2021**
Russell 2000 Index			-8.22	-17.20	-23.43	-25.20	-25.20	4.21	5.17	5.91	9.35	-22.14	
Difference			-2.11	-1.86	-3.96	-1.26	-1.26	-	-	-	-	-0.52	
Small Cap Equity Quantitative	**50,886,650**	**0.21**	**-10.10**	**-15.41**	**-18.62**	**-**	**-**	**-**	**-**	**-**	**-**	**-18.11**	**11/01/2021**
Russell 2000 Index			-8.22	-17.20	-23.43	-25.20	-25.20	4.21	5.17	5.91	9.35	-24.98	
Difference			-1.88	1.79	4.81	-	-	-	-	-	-	6.87	

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Wyoming State Treasurer's Office
Asset Allocation & Performance

As of June 30, 2022

	Allocation		Performance (%)										
	Market Value ($)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Int'l Equity Composite	**2,508,584,818**	**10.55**	**-8.56**	**-13.66**	**-17.81**	**-17.76**	**-17.76**	**4.34**	**4.26**	**4.24**	**5.88**	**5.37**	**01/01/2004**
International Equity Custom Index			-8.60	-13.73	-18.42	-19.42	-19.42	1.35	2.50	2.92	4.83	4.56	
Difference			0.04	0.07	0.61	1.66	1.66	2.99	1.76	1.32	1.05	0.81	
Northern Trust	**1,103,096,420**	**4.64**	**-8.41**	**-13.52**	**-18.26**	**-19.26**	**-19.26**	**1.44**	**2.68**	**3.03**	**4.93**	**4.30**	**08/01/2010**
MSCI ACW Ex US Index (USD) (Net)			-8.60	-13.73	-18.42	-19.42	-19.42	1.35	2.50	2.92	4.83	4.18	
Difference			0.19	0.21	0.16	0.16	0.16	0.09	0.18	0.11	0.10	0.12	
Arrowstreet	**786,995,151**	**3.31**	**-9.03**	**-12.10**	**-14.08**	**-14.04**	**-14.04**	**9.24**	**-**	**-**	**-**	**5.00**	**03/01/2018**
MSCI ACW Ex US IM Index (USD) (Net)			-8.95	-14.28	-19.08	-19.86	-19.86	1.55	2.50	3.02	5.01	0.13	
Difference			-0.08	2.18	5.00	5.82	5.82	7.69	-	-	-	4.87	
Harding Loevner	**618,493,247**	**2.60**	**-7.94**	**-15.63**	**-21.71**	**-19.90**	**-19.90**	**-**	**-**	**-**	**-**	**0.76**	**01/01/2020**
MSCI ACW Ex US Index (USD) (Net)			-8.60	-13.73	-18.42	-19.42	-19.42	1.35	2.50	2.92	4.83	-1.08	
Difference			0.66	-1.90	-3.29	-0.48	-0.48	-	-	-	-	1.84	
Cohen & Steers Preferred Stock	**256,059,245**	**1.08**	**-3.93**	**-7.20**	**-12.35**	**-11.45**	**-11.45**	**1.70**	**-**	**-**	**-**	**3.55**	**07/01/2018**
Preferred Stock Custom Index			-4.05	-7.56	-12.84	-12.57	-12.57	1.80	2.49	3.67	4.70	2.56	
Difference			0.12	0.36	0.49	1.12	1.12	-0.10	-	-	-	0.99	
MLP Composite	**804,678,345**	**3.38**	**-12.42**	**-8.30**	**12.51**	**11.44**	**11.44**	**3.97**	**-**	**-**	**-**	**1.64**	**08/01/2018**
MLP Custom Index			-13.08	-8.00	11.68	7.88	7.88	1.79	1.36	-1.57	1.92	0.66	
Difference			0.66	-0.30	0.83	3.56	3.56	2.18	-	-	-	0.98	
Harvest Fund Advisors	**407,468,142**	**1.71**	**-11.77**	**-8.37**	**14.03**	**15.49**	**15.49**	**4.65**	**-**	**-**	**-**	**2.15**	**08/01/2018**
MLP Custom Index			-13.08	-8.00	11.68	7.88	7.88	1.79	1.36	-1.57	1.92	0.66	
Difference			1.31	-0.37	2.35	7.61	7.61	2.86	-	-	-	1.49	
Harvest Fund Advisors Passive	**397,210,203**	**1.67**	**-12.58**	**-7.86**	**11.96**	**8.50**	**8.50**	**-**	**-**	**-**	**-**	**8.78**	**02/01/2020**
MLP Custom Index			-13.08	-8.00	11.68	7.88	7.88	1.79	1.36	-1.57	1.92	8.20	
Difference			0.50	0.14	0.28	0.62	0.62	-	-	-	-	0.58	

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Wyoming State Treasurer's Office
Asset Allocation & Performance

As of June 30, 2022

	Allocation		Performance (%)										
	Market Value ($)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Private Equity Composite	**1,010,468,802**	**4.25**	**-0.17**	**-0.24**	**-1.76**	**9.49**	**9.49**	**-**	**-**	**-**	**-**	**9.49**	**07/01/2021**
Cambridge US Prvt Eq Index			0.00	0.00	0.58	12.82	12.82	21.72	18.85	16.28	16.16	12.82	
Difference			-0.17	-0.24	-2.34	-3.33	-3.33	-	-	-	-	-3.33	
Core Real Estate Composite	**1,799,235,919**	**7.57**	**5.60**	**5.60**	**12.95**	**28.96**	**28.96**	**12.27**	**9.63**	**9.29**	**9.92**	**6.82**	**01/01/2006**
NCREIF ODCE Index (AWA) (Net)			4.54	4.54	12.00	28.31	28.31	11.66	9.55	9.35	10.15	6.90	
Difference			1.06	1.06	0.95	0.65	0.65	0.61	0.08	-0.06	-0.23	-0.08	
Clarion Lion	**1,085,599,837**	**4.57**	**7.18**	**7.18**	**14.57**	**30.69**	**30.69**	**13.91**	**11.52**	**10.97**	**11.40**	**7.00**	**01/01/2006**
NCREIF ODCE Index (AWA) (Net)			4.54	4.54	12.00	28.31	28.31	11.66	9.55	9.35	10.15	6.90	
Difference			2.64	2.64	2.57	2.38	2.38	2.25	1.97	1.62	1.25	0.10	
UBS Trumbull	**207,981,825**	**0.87**	**3.84**	**3.84**	**11.32**	**23.76**	**23.76**	**7.17**	**5.49**	**5.95**	**7.10**	**5.48**	**07/01/2006**
NCREIF ODCE Index (AWA) (Net)			4.54	4.54	12.00	28.31	28.31	11.66	9.55	9.35	10.15	6.64	
Difference			-0.70	-0.70	-0.68	-4.55	-4.55	-4.49	-4.06	-3.40	-3.05	-1.16	
MS Prime	**505,654,256**	**2.13**	**3.04**	**3.04**	**10.27**	**27.89**	**27.89**	**-**	**-**	**-**	**-**	**19.17**	**10/01/2020**
NCREIF ODCE Index (AWA) (Net)			4.54	4.54	12.00	28.31	28.31	11.66	9.55	9.35	10.15	19.72	
Difference			-1.50	-1.50	-1.73	-0.42	-0.42	-	-	-	-	-0.55	
Non-Core Real Estate Composite	**662,243,029**	**2.79**	**-0.72**	**0.01**	**5.43**	**18.55**	**18.55**	**-**	**-**	**-**	**-**	**18.55**	**07/01/2021**
NCREIF ODCE Index (AWA) (Net)			4.54	4.54	12.00	28.31	28.31	11.66	9.55	9.35	10.15	28.31	
Difference			-5.26	-4.53	-6.57	-9.76	-9.76	-	-	-	-	-9.76	

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RVK

	Allocation		Performance (%)										
	Market Value ($)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Infrastructure Composite	**27,441,012**	**0.12**	**0.00**	**0.00**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**0.00**	**04/01/2022**
10 Year US Treasury Yield + 350 bps			0.51	1.51	-	-	-	-	-	-	-	1.51	
Difference			-0.51	-1.51	-	-	-	-	-	-	-	-1.51	
Macquarie Infrastructure	**27,441,012**	**0.12**	**0.00**	**0.00**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**0.00**	**04/01/2022**
10 Year US Treasury Yield + 350 bps			0.51	1.51	-	-	-	-	-	-	-	1.51	
Difference			-0.51	-1.51	-	-	-	-	-	-	-	-1.51	
Diversified Hedge Funds Composite	**1,077,526,095**	**4.53**	**-1.14**	**-5.76**	**-10.01**	**-7.67**	**-7.67**	**1.09**	**1.42**	**0.81**	**2.90**	**2.03**	**12/01/2007**
HFRI FOF Comp Index			-1.25	-3.88	-6.53	-5.45	-5.45	3.96	3.63	2.69	3.75	1.71	
Difference			0.11	-1.88	-3.48	-2.22	-2.22	-2.87	-2.21	-1.88	-0.85	0.32	
Grosvenor Diversified Hedge Funds	**456,771,328**	**1.92**	**0.18**	**-4.70**	**-9.26**	**-6.86**	**-6.86**	**2.59**	**-**	**-**	**-**	**1.75**	**07/01/2018**
HFRI FOF Comp Index			-1.25	-3.88	-6.53	-5.45	-5.45	3.96	3.63	2.69	3.75	3.25	
Difference			1.43	-0.82	-2.73	-1.41	-1.41	-1.37	-	-	-	-1.50	
Internal Diversified Hedge Funds	**617,946,673**	**2.60**	**-2.09**	**-6.55**	**-10.59**	**-8.27**	**-8.27**	**0.39**	**-**	**-**	**-**	**1.55**	**07/01/2018**
HFRI FOF Comp Index			-1.25	-3.88	-6.53	-5.45	-5.45	3.96	3.63	2.69	3.75	3.25	
Difference			-0.84	-2.67	-4.06	-2.82	-2.82	-3.57	-	-	-	-1.70	

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Wyoming State Treasurer's Office
Asset Allocation & Performance

As of June 30, 2022

	Allocation		Performance (%)										
	Market Value ($)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Core Fixed Income Composite	**2,666,394,794**	**11.22**	**-1.44**	**-4.60**	**-10.13**	**-10.14**	**-10.14**	**-0.56**	**1.10**	**1.55**	**-**	**1.51**	**01/01/2013**
Bloomberg US Agg Bond Index			-1.57	-4.69	-10.35	-10.29	-10.29	-0.94	0.88	1.42	1.54	1.43	
Difference			0.13	0.09	0.22	0.15	0.15	0.38	0.22	0.13	-	0.08	
Internal Aggregate Core Fixed Income	**1,813,980,102**	**7.63**	**-1.28**	**-4.30**	**-9.53**	**-9.59**	**-9.59**	**-**	**-**	**-**	**-**	**-1.43**	**11/01/2019**
Bloomberg US Agg Bond Index			-1.57	-4.69	-10.35	-10.29	-10.29	-0.94	0.88	1.42	1.54	-1.99	
Difference			0.29	0.39	0.82	0.70	0.70	-	-	-	-	0.56	
Internal Int Govt Fixed Income Portfolio	**823,200,417**	**3.46**	**-0.87**	**-3.79**	**-8.64**	**-8.46**	**-8.46**	**-0.98**	**0.50**	**0.87**	**1.04**	**3.96**	**10/01/1996**
Internal Int Govt Fixed Income Portfolio Index			-0.88	-3.78	-9.14	-8.90	-8.90	-1.17	0.34	0.62	0.70	3.94	
Difference			0.01	-0.01	0.50	0.44	0.44	0.19	0.16	0.25	0.34	0.02	
Payden & Rygel IGC	**440,628,759**	**1.85**	**-2.56**	**-7.19**	**-14.20**	**-14.12**	**-14.12**	**-**	**-**	**-**	**-**	**-2.35**	**11/01/2019**
Payden & Rygel Custom Index			-2.80	-7.26	-14.39	-14.19	-14.19	-1.27	1.11	2.23	2.53	-2.75	
Difference			0.24	0.07	0.19	0.07	0.07	-	-	-	-	0.40	
JP Morgan MBS	**550,150,926**	**2.31**	**-0.89**	**-2.62**	**-6.60**	**-7.17**	**-7.17**	**-**	**-**	**-**	**-**	**-0.70**	**11/01/2019**
Bloomberg US MBS Index (Unhgd)			-1.60	-4.01	-8.78	-9.03	-9.03	-1.44	0.36	0.86	1.18	-2.25	
Difference			0.71	1.39	2.18	1.86	1.86	-	-	-	-	1.55	
PIMCO	**852,414,692**	**3.59**	**-1.86**	**-5.31**	**-11.03**	**-11.18**	**-11.18**	**-0.84**	**0.91**	**1.43**	**-**	**1.39**	**01/01/2013**
PIMCO Custom Index			-1.57	-4.69	-10.35	-10.37	-10.37	-0.77	0.77	1.35	1.49	1.38	
Difference			-0.29	-0.62	-0.68	-0.81	-0.81	-0.07	0.14	0.08	-	0.01	
Bank Loans Composite	**1,437,679,566**	**6.05**	**-2.25**	**-4.72**	**-4.76**	**-3.28**	**-3.28**	**-**	**-**	**-**	**-**	**2.04**	**09/01/2019**
Bank Loans Custom Index			-2.76	-5.30	-5.48	-4.21	-4.21	1.58	2.61	3.04	3.59	1.49	
Difference			0.51	0.58	0.72	0.93	0.93	-	-	-	-	0.55	
Credit Suisse	**447,836,812**	**1.88**	**-2.07**	**-4.27**	**-4.11**	**-2.54**	**-2.54**	**-**	**-**	**-**	**-**	**2.00**	**09/01/2019**
Bank Loans Custom Index			-2.76	-5.30	-5.48	-4.21	-4.21	1.58	2.61	3.04	3.59	1.49	
Difference			0.69	1.03	1.37	1.67	1.67	-	-	-	-	0.51	
Octagon	**662,435,090**	**2.79**	**-2.45**	**-5.23**	**-5.49**	**-3.98**	**-3.98**	**-**	**-**	**-**	**-**	**1.70**	**09/01/2019**
Bank Loans Custom Index			-2.76	-5.30	-5.48	-4.21	-4.21	1.58	2.61	3.04	3.59	1.49	
Difference			0.31	0.07	-0.01	0.23	0.23	-	-	-	-	0.21	
KKR	**327,407,664**	**1.38**	**-2.20**	**-4.37**	**-4.21**	**-**	**-**	**-**	**-**	**-**	**-**	**-3.50**	**10/01/2021**
Bank Loans Custom Index			-2.76	-5.30	-5.48	-4.21	-4.21	1.58	2.61	3.04	3.59	-5.14	
Difference			0.56	0.93	1.27	-	-	-	-	-	-	1.64	

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Wyoming State Treasurer's Office
Asset Allocation & Performance

As of June 30, 2022

	Allocation		Performance (%)										
	Market Value ($)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Emerging Market Debt Fixed Income Composite	**815,456,145**	**3.43**	**-5.37**	**-8.56**	**-15.36**	**-17.16**	**-17.16**	**-4.01**	**-1.78**	**-0.47**	**-**	**-2.74**	**04/01/2013**
EMD Custom Benchmark			-4.58	-8.56	-16.27	-18.25	-18.25	-4.98	-1.80	-0.12	-1.24	-2.25	
Difference			-0.79	0.00	0.91	1.09	1.09	0.97	0.02	-0.35	-	-0.49	
Global Evolution	**99,045,882**	**0.42**	**-4.89**	**-7.84**	**-11.70**	**-15.99**	**-15.99**	**-**	**-**	**-**	**-**	**-6.66**	**02/01/2020**
JPM GBI-EM Gbl Dvf'd Index (USD) (TR) (Unhedged)			-4.45	-8.63	-14.53	-19.28	-19.28	-5.80	-2.31	-0.50	-1.49	-8.29	
Difference			-0.44	0.79	2.83	3.29	3.29	-	-	-	-	1.63	
Goldman Sachs	**189,128,747**	**0.80**	**-3.27**	**-6.34**	**-15.14**	**-15.83**	**-15.83**	**-**	**-**	**-**	**-**	**-4.54**	**03/01/2020**
Goldman Sachs Custom Index			-3.06	-5.62	-13.94	-14.25	-14.25	-1.07	1.28	2.62	3.40	-3.61	
Difference			-0.21	-0.72	-1.20	-1.58	-1.58	-	-	-	-	-0.93	
Eaton Vance	**162,844,496**	**0.68**	**-5.25**	**-6.46**	**-15.63**	**-15.79**	**-15.79**	**-**	**-**	**-**	**-**	**-9.07**	**01/01/2021**
JP Morgan EMB (JEMB) Hard /Local 50/50			-4.54	-8.58	-15.84	-18.50	-18.50	-4.45	-1.08	0.80	0.70	-13.64	
Difference			-0.71	2.12	0.21	2.71	2.71	-	-	-	-	4.57	
Global Evolution Hard	**129,876,631**	**0.55**	**-7.39**	**-13.25**	**-20.13**	**-21.60**	**-21.60**	**-**	**-**	**-**	**-**	**-14.09**	**12/01/2020**
JP Morgan EMBIG Div Ex CCC (USD) (TR) Index			-5.49	-10.51	-19.75	-20.60	-20.60	-4.69	-0.70	1.36	2.31	-13.14	
Difference			-1.90	-2.74	-0.38	-1.00	-1.00	-	-	-	-	-0.95	
Finisterre	**149,340,216**	**0.63**	**-6.55**	**-8.83**	**-10.80**	**-13.25**	**-13.25**	**-**	**-**	**-**	**-**	**-9.76**	**03/01/2021**
EMD Custom Benchmark (1/3 blend)			-4.58	-8.56	-16.27	-18.25	-18.25	-4.02	-0.70	1.20	1.41	-12.98	
Difference			-1.97	-0.27	5.47	5.00	5.00	-	-	-	-	3.22	
Wellington EMD	**85,220,173**	**0.36**	**-5.47**	**-9.77**	**-17.28**	**-**	**-**	**-**	**-**	**-**	**-**	**-20.87**	**09/01/2021**
50% JPM GBI-EM Glb Div / 50% JPM EMBI Glb Div			-5.33	-10.03	-17.45	-20.23	-20.23	-5.47	-1.70	0.47	0.40	-20.92	
Difference			-0.14	0.26	0.17	-	-	-	-	-	-	0.05	
Laddered Treasury Composite	**3,836,471,599**	**16.14**	**-0.44**	**-0.40**	**-2.31**	**-2.67**	**-2.67**	**-**	**-**	**-**	**-**	**0.31**	**10/01/2019**
Internal Ladder Portfolio	**3,836,471,599**	**16.14**	**-0.44**	**-0.40**	**-2.31**	**-2.67**	**-2.67**	**-**	**-**	**-**	**-**	**0.31**	**10/01/2019**

Performance shown is net of fees and excludes Public Purpose Investments (PPIs) and operational cash. Investment manager fees are accounted for on a quarterly basis. Performance and market values shown are preliminary and subject to change. Performance is annualized for periods greater than one year. Fiscal year begins 7/1/2021.

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Wyoming State Treasurer's Office
Asset Allocation & Performance

As of June 30, 2022

	Allocation		Performance (%)										
	Market Value ($)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Long Duration Fixed Income Composite	**574,946,787**	**2.42**	**-2.92**	**-12.21**	**-21.53**	**-20.18**	**-20.18**	**-2.01**	**-**	**-**	**-**	**1.89**	**01/01/2019**
Bloomberg US Gov't Crdt Lng Trm Bond Index			-2.98	-12.27	-21.88	-20.14	-20.14	-2.32	1.03	2.70	2.63	1.61	
Difference			0.06	0.06	0.35	-0.04	-0.04	0.31	-	-	-	0.28	
Internal Long Duration Fixed Income Portfolio	**256,530,959**	**1.08**	**-1.44**	**-11.77**	**-20.76**	**-18.73**	**-18.73**	**-3.27**	**-**	**-**	**-**	**0.14**	**01/01/2019**
Bloomberg US Gov't Lng Trm Bond Index			-1.48	-11.89	-21.20	-18.42	-18.42	-2.94	0.50	1.83	1.65	0.41	
Difference			0.04	0.12	0.44	-0.31	-0.31	-0.33	-	-	-	-0.27	
Metlife	**318,415,828**	**1.34**	**-4.07**	**-12.59**	**-22.27**	**-21.15**	**-21.15**	**-1.63**	**-**	**-**	**-**	**3.20**	**11/01/2018**
Bloomberg US Lng Crdt Index			-4.15	-12.59	-22.40	-21.36	-21.36	-2.44	1.05	3.05	3.17	2.48	
Difference			0.08	0.00	0.13	0.21	0.21	0.81	-	-	-	0.72	
Low Duration Fixed Income Composite	**640,631,003**	**2.69**	**-0.55**	**-0.42**	**-2.55**	**-2.67**	**-2.67**	**0.63**	**-**	**-**	**-**	**1.41**	**12/01/2018**
Low Duration Fixed Income Custom Index			-0.63	-0.52	-3.01	-3.50	-3.50	0.18	0.99	0.98	0.97	1.12	
Difference			0.08	0.10	0.46	0.83	0.83	0.45	-	-	-	0.29	
Internal Low Duration Fixed Income Portfolio	**640,631,003**	**2.69**	**-0.55**	**-0.42**	**-2.55**	**-2.67**	**-2.67**	**0.63**	**-**	**-**	**-**	**1.41**	**03/01/2018**
Bloomberg US Gov't 1-3 Yr Bond Index			-0.63	-0.52	-3.01	-3.50	-3.50	0.18	0.91	0.82	0.78	1.13	
Difference			0.08	0.10	0.46	0.83	0.83	0.45	-	-	-	0.28	
Transition Low Duration Fixed Income Composite	**1,172,742,930**	**4.93**	**-1.11**	**-2.08**	**-3.44**	**-**	**-**	**-**	**-**	**-**	**-**	**-3.28**	**11/01/2021**
Transition Fixed Income Custom Index			-0.85	-1.78	-2.99	-2.69	-2.69	1.01	1.83	2.02	-	-2.96	
Difference			-0.26	-0.30	-0.45	-	-	-	-	-	-	-0.32	
PIMCO Transition Low Duration	**1,172,742,930**	**4.93**	**-1.11**	**-2.08**	**-3.44**	**-**	**-**	**-**	**-**	**-**	**-**	**-3.28**	**11/01/2021**
PIMCO Low Duration Custom Index			-0.85	-1.78	-2.74	-2.30	-2.30	1.14	1.91	2.08	-	-2.57	
Difference			-0.26	-0.30	-0.70	-	-	-	-	-	-	-0.71	
Grosvenor Silvery Lupine Fund	**32,340,789**	**0.14**	**0.18**	**10.56**	**11.14**	**11.52**	**11.52**	**2.18**	**3.84**	**4.78**	**-**	**4.67**	**07/01/2014**
CS Western Euro Hi Yld Index			-6.05	-9.37	-14.07	-13.02	-13.02	-0.77	1.75	3.41	5.23	3.22	
Difference			6.23	19.93	25.21	24.54	24.54	2.95	2.09	1.37	-	1.45	
Grosvenor Opportunistic Class D	**100,185,751**	**0.42**	**-6.73**	**-10.05**	**-24.69**	**-23.66**	**-23.66**	**-**	**-**	**-**	**-**	**12.71**	**07/01/2020**
Grosvenor Opportunistic Class D Custom Benchmark			-4.19	-7.80	-9.83	-7.63	-7.63	-	-	-	-	4.79	
Difference			-2.54	-2.25	-14.86	-16.03	-16.03	-	-	-	-	7.92	

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Wyoming State Treasurer's Office
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As of June 30, 2022

	Allocation		Performance (%)										
	Market Value ($)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
JP Morgan Cash Composite	**2,293,937,746**	**9.65**	**0.09**	**0.20**	**0.23**	**0.24**	**0.24**	**0.58**	**1.08**	**0.89**	**0.67**	**1.36**	**01/01/2006**
JP Morgan Cash Custom Index			0.02	0.11	0.15	0.17	0.17	0.63	1.14	0.92	0.70	1.39	
Difference			0.07	0.09	0.08	0.07	0.07	-0.05	-0.06	-0.03	-0.03	-0.03	
Wyo-Star Cash Composite	**815,374,860**	**3.43**	**-0.08**	**-0.04**	**-0.60**	**-0.69**	**-0.69**	**0.47**	**1.02**	**0.84**	**0.66**	**2.92**	**10/01/1996**
Wyo-Star Cash Custom Index			-0.07	-0.05	-0.71	-0.83	-0.83	0.50	1.08	0.89	0.70	2.41	
Difference			-0.01	0.01	0.11	0.14	0.14	-0.03	-0.06	-0.05	-0.04	0.51	
WYO STAR II Total Fund	**249,599,501**	**1.05**	**-0.86**	**-0.96**	**-3.32**	**-3.66**	**-3.66**	**0.46**	**-**	**-**	**-**	**1.31**	**01/01/2019**
Bloomberg US Corp 1-3 Yr Index			-0.98	-1.02	-3.47	-3.82	-3.82	0.63	1.48	1.60	1.70	1.51	
Difference			0.12	0.06	0.15	0.16	0.16	-0.17	-	-	-	-0.20	

- 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, 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 Gbl Dvf'd Index through 02/29/2020, 70% JPM GBI-EM Gbl Dvf'd Index / 30% JPM CEMBI Brd Dvf'd Index thereafter through 11/30/2020, and 1/3 JPM GBI-EM Gbl Dvf'd Index, 1/3 JPM CEMBI Brd Dvf'd Index, and 1/3 JPM EMBI Gbl Dvf'd Index thereafter.
- The JP Morgan EMB (JEMB) Hard Currency/Local Currency 50/50 consists of 50% JPM GBI-EM Gbl Dvf'd Index, 25% JPM CEMBI Brd Dvf'd Index, and 25% JPM EMBI Gbl Dvf'd Index.

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- 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, and the S&P LSTA US Lvgd Loan 100 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.

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Wyoming State Treasurer's Office
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As of June 30, 2022

	Allocation		Performance (%)										
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Internal Equity Composite	**161,939,566**	**0.68**	**-10.08**	**-18.41**	**-23.95**	**-20.19**	**-20.19**	**N/A**	**N/A**	**N/A**	**N/A**	**-10.49**	**04/01/2021**
Internal Equity Composite Actual Allocation Index			-8.24	-16.62	-21.63	-16.98	-16.98	N/A	N/A	N/A	N/A	-8.63	
Difference			-1.84	-1.79	-2.32	-3.21	-3.21	N/A	N/A	N/A	N/A	-1.86	
Domestic Equity Quantamental	**30,554,039**	**0.13**	**-9.71**	**-22.40**	**-29.96**	**-26.30**	**-26.30**	**N/A**	**N/A**	**N/A**	**N/A**	**-15.19**	**04/01/2021**
S&P 500 Index (Cap Wtd)			-8.25	-16.10	-19.96	-10.62	-10.62	10.60	11.31	11.14	12.96	-2.39	
Difference			-1.46	-6.30	-10.00	-15.68	-15.68	N/A	N/A	N/A	N/A	-12.80	
Domestic Equity Quantitative	**33,838,046**	**0.14**	**-10.01**	**-16.85**	**-19.51**	**-10.98**	**-10.98**	**N/A**	**N/A**	**N/A**	**N/A**	**-8.89**	**06/01/2021**
S&P 500 Index (Cap Wtd)			-8.25	-16.10	-19.96	-10.62	-10.62	10.60	11.31	11.14	12.96	-7.90	
Difference			-1.76	-0.75	0.45	-0.36	-0.36	N/A	N/A	N/A	N/A	-0.99	
Small Cap Equity Quantamental	**46,660,831**	**0.20**	**-10.33**	**-19.06**	**-27.39**	**-26.46**	**-26.46**	**N/A**	**N/A**	**N/A**	**N/A**	**-22.66**	**06/01/2021**
Russell 2000 Index			-8.22	-17.20	-23.43	-25.20	-25.20	4.21	5.17	5.91	9.35	-22.14	
Difference			-2.11	-1.86	-3.96	-1.26	-1.26	N/A	N/A	N/A	N/A	-0.52	
Small Cap Equity Quantitative	**50,886,650**	**0.21**	**-10.10**	**-15.41**	**-18.62**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-18.11**	**11/01/2021**
Russell 2000 Index			-8.22	-17.20	-23.43	-25.20	-25.20	4.21	5.17	5.91	9.35	-24.98	
Difference			-1.88	1.79	4.81	N/A	N/A	N/A	N/A	N/A	N/A	6.87	
Internal Diversified Hedge Funds	**617,946,673**	**2.60**	**-2.09**	**-6.55**	**-10.59**	**-8.27**	**-8.27**	**0.39**	**N/A**	**N/A**	**N/A**	**1.55**	**07/01/2018**
HFRI FOF Comp Index			-1.25	-3.88	-6.53	-5.45	-5.45	3.96	3.63	2.69	3.75	3.25	
Difference			-0.84	-2.67	-4.06	-2.82	-2.82	-3.57	N/A	N/A	N/A	-1.70	
Internal Fixed Income Composite	**5,556,833,979**	**23.37**	**-0.56**	**-1.49**	**-4.37**	**-4.41**	**-4.41**	**0.51**	**1.43**	**1.54**	**1.51**	**4.15**	**10/01/1996**
Internal Fixed Income Actual Allocation Index			-0.58	-1.51	-4.56	-4.58	-4.58	0.39	1.34	1.33	1.20	4.14	
Difference			0.02	0.02	0.19	0.17	0.17	0.12	0.09	0.21	0.31	0.01	
Internal Intermediate Govt Fixed Income Portfolio	**823,200,417**	**3.46**	**-0.87**	**-3.79**	**-8.64**	**-8.46**	**-8.46**	**-0.98**	**0.50**	**0.87**	**1.04**	**3.96**	**10/01/1996**
Internal Intermediate Govt Fixed Income Portfolio Index			-0.88	-3.78	-9.14	-8.90	-8.90	-1.17	0.34	0.62	0.70	3.94	
Difference			0.01	-0.01	0.50	0.44	0.44	0.19	0.16	0.25	0.34	0.02	
Internal Ladder Portfolio	**3,836,471,599**	**16.14**	**-0.44**	**-0.40**	**-2.31**	**-2.67**	**-2.67**	**N/A**	**N/A**	**N/A**	**N/A**	**0.31**	**10/01/2019**
Internal Long Duration Fixed Income Portfolio	**256,530,959**	**1.08**	**-1.44**	**-11.77**	**-20.76**	**-18.73**	**-18.73**	**-3.27**	**N/A**	**N/A**	**N/A**	**0.14**	**01/01/2019**
Bloomberg US Gov't Lng Trm Bond Index			-1.48	-11.89	-21.20	-18.42	-18.42	-2.94	0.50	1.83	1.65	0.41	
Difference			0.04	0.12	0.44	-0.31	-0.31	-0.33	N/A	N/A	N/A	-0.27	

Performance shown is net of fees and excludes Public Purpose Investments (PPIs) and operational cash. Investment manager fees are accounted for on a quarterly basis. Performance and market values shown are preliminary and subject to change. Performance is annualized for periods greater than one year. Fiscal year begins 7/1/2021.

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	Allocation		Performance (%)										
	Market Value ($)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Internal Low Duration Fixed Income Portfolio	**640,631,003**	**2.69**	**-0.55**	**-0.42**	**-2.55**	**-2.67**	**-2.67**	**0.63**	**N/A**	**N/A**	**N/A**	**1.41**	**03/01/2018**
Bloomberg US Gov't 1-3 Yr Bond Index			-0.63	-0.52	-3.01	-3.50	-3.50	0.18	0.91	0.82	0.78	1.13	
Difference			0.08	0.10	0.46	0.83	0.83	0.45	N/A	N/A	N/A	0.28	
Grosvenor Opportunistic Class D	**100,185,751**	**0.42**	**-6.73**	**-10.05**	**-24.69**	**-23.66**	**-23.66**	**N/A**	**N/A**	**N/A**	**N/A**	**12.71**	**07/01/2020**
Grosvenor Opportunistic Class D Custom Benchmark			-4.19	-7.80	-9.83	-7.63	-7.63	N/A	N/A	N/A	N/A	4.79	
Difference			-2.54	-2.25	-14.86	-16.03	-16.03	N/A	N/A	N/A	N/A	7.92	

Performance shown is net of fees and excludes Public Purpose Investments (PPIs) and operational cash. Investment manager fees are accounted for on a quarterly basis. Performance and market values shown are preliminary and subject to change. Performance is annualized for periods greater than one year. Fiscal year begins 7/1/2021.

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