



Fiscal Year 2024
Investment Performance (unaudited)

SOUTH DAKOTA RETIREMENT SYSTEM

SOUTH DAKOTA INVESTMENT COUNCIL

AUGUST 20, 2024

Capital Markets Benchmark Return and Market Index Components

		<u>1st qtr</u>	<u>2nd qtr</u>	<u>3rd qtr</u>	<u>4th qtr</u>	<u>FY 2024</u>
Capital Markets Benchmark		-3.3%	10.4%	4.7%	1.8%	13.8%
<u>Benchmark Components</u>	<u>Weights</u>					
<u>Public Equity</u>	56%					
Public Equity Benchmark (MSCI AC IMI 3/4 + MSCI IMI US 1/4)		-3.2%	11.3%	8.7%	2.9%	20.5%
<u>Real Estate</u>	12%					
MSCI REITS		-7.0%	16.0%	-0.3%	0.1%	7.6%
<u>High Yield Debt</u>	7%					
FTSE High Yield		0.7%	6.9%	1.5%	1.2%	10.6%
<u>Investment Grade Debt</u>	23%					
FTSE US Broad Investment Grade		-3.2%	6.8%	-0.8%	0.1%	2.7%
<u>Cash</u>	2%					
FTSE 3 mo Treasury bills		1.4%	1.4%	1.4%	1.4%	5.6%

Time weighted rate-of-return

Actual to Benchmark Allocation Comparison

June 30, 2024

	<u>Actual Asset Allocation</u>	<u>Benchmark Asset Allocation</u>	<u>Difference</u>	<u>Permissible Range</u>
Public Equity	21%	56%	-35%	20% to 75%
Real Estate - Core/REITS	0%	12%	-12%	0% to 20%
High Yield Corporate Debt	4%	7%	-3%	0% to 15%
Investment Grade Debt	13%	23%	-10%	13% to 60%
Cash	37%	2%	35%	0% to 45%
Private Equity	11%	0%	11%	0% to 12%
Opportunistic Real Estate	12%	0%	12%	0% to 15%
High Yield Real Estate Debt	0%	0%	0%	0% to 10%
Hedge Fund	1%	0%	1%	0% to 5%
Other Categories	0%	0%	0%	0% to 5%
Equity Like Risk	50.3%	70%	-19.7%	40% to 85%

SDRS Performance Attribution

Fiscal Year 2024

SDRS Total Fund Return	6.02%	Portfolio Added Value (Alpha)	
Capital Markets Benchmark Return	<u>13.81%</u>	Public Equity	-0.66%
Difference	<u>-7.79%</u>	Investment Grade Debt	0.01%
		Cash	-0.07%
Primary Asset Allocation		High Yield Debt	-0.19%
Equity-Like Risk	-3.74%	Real Estate	-2.06%
Bond-Like Risk	-0.33%	Private Equity	-1.42%
Cash-Like Risk	<u>1.64%</u>	Hedge Fund	-0.03%
Total Primary Asset Allocation	-2.43%	Short S&P 500 Futures	<u>-0.41%</u>
		Total Portfolio Added Value (Alpha)	-4.82%
Secondary Asset Allocation		Total Explained Difference	-7.59%
High Yield Debt	0.03%		
Real Estate	<u>-0.36%</u>	Other - interperiod trading/rounding	<u>-0.19%</u>
Total Secondary Asset Allocation	-0.34%		
		Total Difference	-7.79%
Total Asset Allocation	-2.77%		

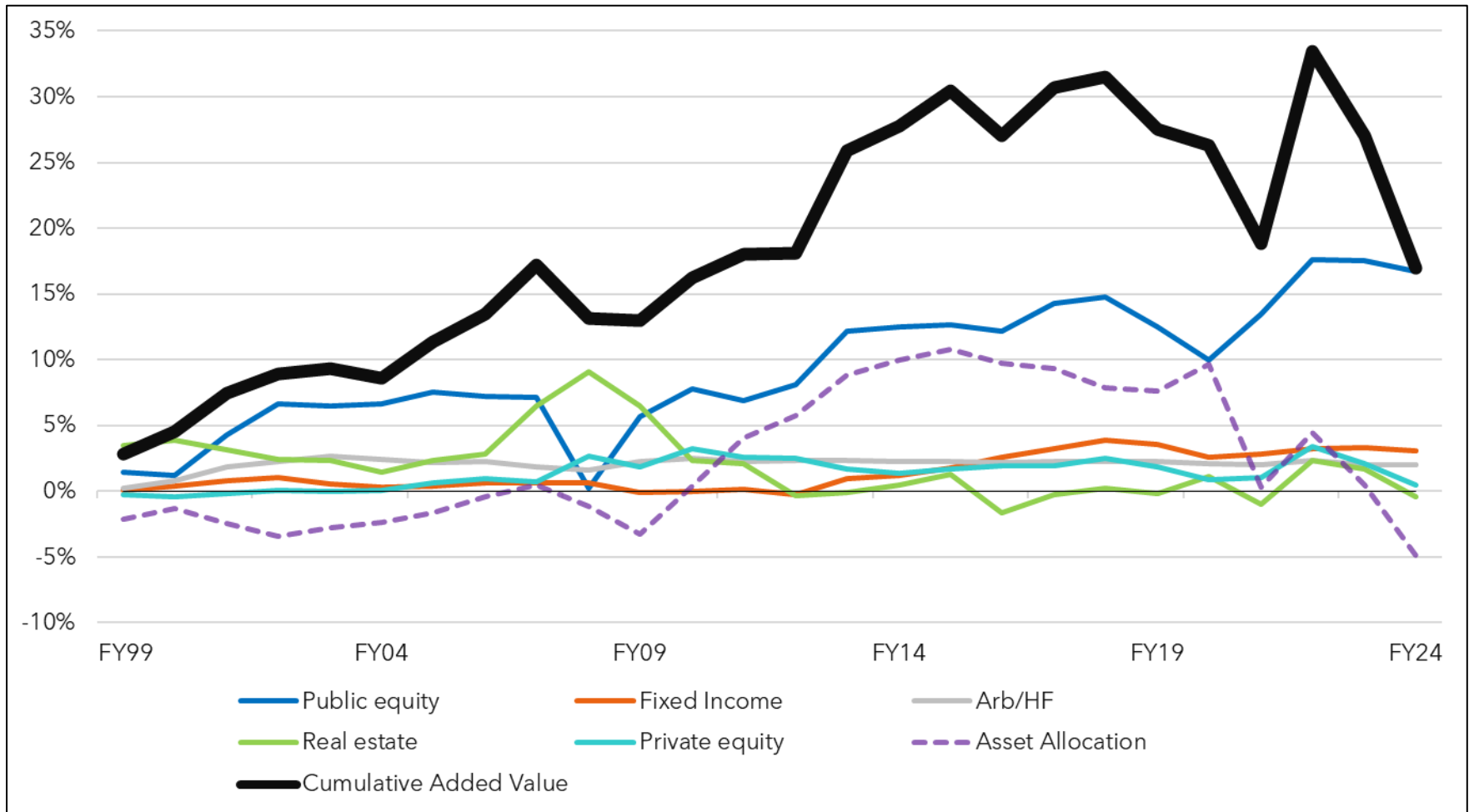
SDRS Performance Attribution History

	<u>FY 2024</u>	<u>FY 2023</u>	<u>FY 2022</u>	<u>FY 2021</u>	<u>FY 2020</u>	<u>5 yr Ann</u>	<u>10 yr Ann</u>	<u>20 yr Ann</u>	<u>26 yr Ann</u>
SDRS Total Return*	6.02%	5.84%	-0.69%	22.03%	1.59%	6.68%	6.40%	7.88%	7.49%
Capital Markets Return	13.81%	10.65%	-13.02%	27.97%	2.52%	7.52%	6.85%	7.16%	6.69%
Difference	-7.79%	-4.82%	12.33%	-5.94%	-0.93%	-0.85%	-0.45%	0.72%	0.80%
SDRS Total Return (Net)	6.02%	5.84%	-0.69%	22.03%	1.59%	6.68%	6.40%	7.67%	7.28%
Capital Markets Return**	13.81%	10.65%	-13.02%	27.97%	2.52%	7.52%	6.85%	7.17%	6.56%
Difference	-7.79%	-4.82%	12.33%	-5.94%	-0.93%	-0.85%	-0.45%	0.50%	0.72%
Primary Asset Allocation									
Equity Like Risk	-3.74%	-3.35%	2.52%	-6.90%	2.38%	-1.89%	-1.24%	-0.34%	-0.24%
Bond Like Risk	-0.33%	0.04%	1.19%	0.02%	-0.75%	0.03%	-0.10%	-0.18%	-0.17%
Cash Like Risk	1.64%	1.04%	0.05%	0.02%	0.37%	0.62%	0.41%	0.21%	0.15%
Total Primary Asset Alloc	-2.43%	-2.27%	3.76%	-6.86%	2.00%	-1.23%	-0.93%	-0.32%	-0.26%
Secondary Asset Allocation									
High Yield Debt	0.03%	0.00%	0.02%	-0.02%	-0.13%	-0.02%	0.03%	0.13%	0.11%
Real Estate	-0.36%	-0.62%	0.24%	-0.01%	-0.37%	-0.23%	-0.01%	-0.04%	-0.09%
Total Secondary Asset Alloc	-0.34%	-0.63%	0.26%	-0.03%	-0.50%	-0.26%	0.05%	0.11%	-0.01%
Total Asset Allocation	-2.77%	-2.90%	4.02%	-6.89%	1.50%	-1.49%	-0.88%	-0.21%	-0.27%
Portfolio Added Value									
Public Equity	-0.66%	-0.13%	3.68%	3.17%	-2.22%	0.74%	0.37%	0.45%	0.60%
Investment Grade Debt	0.01%	-0.08%	0.08%	-0.17%	0.06%	-0.02%	0.00%	0.05%	0.05%
Cash	-0.07%	0.10%	0.02%	-0.01%	-0.06%	0.00%	0.00%	0.00%	0.00%
High Yield Debt	-0.19%	0.00%	0.32%	0.42%	-0.90%	-0.07%	0.19%	0.08%	0.05%
Real Estate	-2.06%	-0.69%	3.35%	-2.02%	1.25%	-0.06%	-0.10%	-0.10%	-0.15%
Private Equity	-1.42%	-1.28%	2.32%	0.18%	-0.92%	-0.23%	-0.07%	0.03%	0.03%
Hedge Fund	-0.03%	-0.27%	0.29%	0.01%	-0.14%	-0.04%	-0.02%	0.00%	0.00%
Short S & P 500 Futures	-0.41%	-0.15%	-1.50%	0.16%	-0.60%	-0.50%	-0.47%	-0.25%	-0.22%
Total Portfolio Alpha difference	-4.82%	-2.49%	8.56%	1.68%	-3.53%	-0.18%	-0.10%	0.25%	0.45%
Other	-0.19%	0.57%	-0.25%	-0.73%	1.10%	0.83%	0.53%	0.46%	0.54%
Total Difference	-7.79%	-4.82%	12.33%	-5.94%	-0.93%	-0.85%	-0.45%	0.50%	0.72%

* Net FY 2014-24, Gross pre-FY 2014

** Net applies current benchmark methodology to pre-FY 2014

Many Pistons Contribute Cumulative Added Value by Source



Comparison to Peer Universes

Annualized Returns

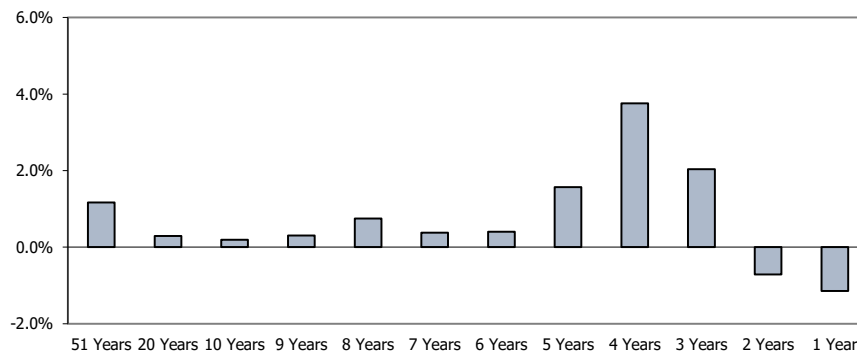
	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>30 Year</u>
SDRS (net)	6.02%	3.67%	6.68%	6.40%	8.60%
SDRS (gross)	6.47%	4.10%	7.10%	6.79%	8.96%
<hr/>					
State Fund (net) - PRELIMINARY	9.26%	3.98%	8.50%	7.60%	8.00%
Wilshire TUCS (gross)	10.50%	3.20%	7.57%	6.97%	n/a

Internal Public Global Equity Return Comparison

Annualized

	<u>SDRS Internal Public Gbl Eq</u>	<u>Benchmark</u>	<u>Over/Under Performance</u>
51 Years	11.68%	10.51%	1.17%
20 Years	9.51%	9.21%	0.29%
10 Years	10.75%	10.56%	0.20%
9 Years	11.66%	11.36%	0.31%
8 Years	13.63%	12.88%	0.75%
7 Years	12.41%	12.03%	0.38%
6 Years	12.36%	11.95%	0.40%
5 Years	14.31%	12.74%	1.57%
4 Years	19.02%	15.26%	3.76%
3 Years	10.27%	8.24%	2.04%
2 Years	19.75%	20.47%	-0.71%
1 Year	19.80%	20.95%	-1.15%

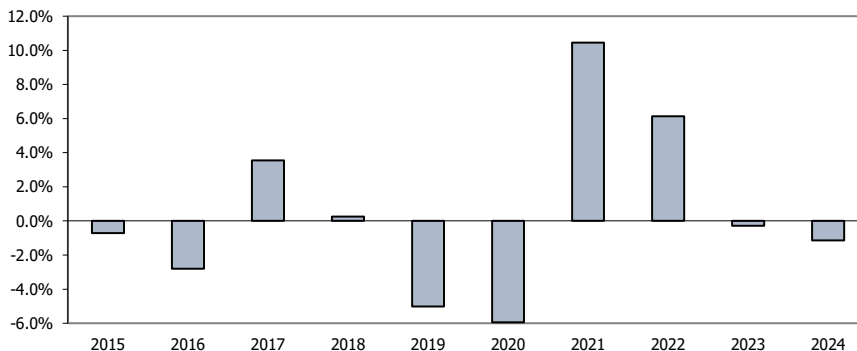
SDRS Internal Public Global Equity Over/Under Performance Chart



Annual Returns

	<u>SDRS Internal Public Gbl Eq</u>	<u>Benchmark</u>	<u>Over/Under Performance</u>
2015	2.89%	3.60%	-0.71%
2016	-2.89%	-0.08%	-2.81%
2017	22.50%	18.96%	3.54%
2018	12.75%	12.50%	0.25%
2019	3.10%	8.11%	-5.01%
2020	-2.76%	3.18%	-5.94%
2021	49.66%	39.21%	10.45%
2022	-6.50%	-12.63%	6.13%
2023	19.70%	19.98%	-0.28%
2024	19.80%	20.95%	-1.15%

SDRS Internal Public Global Equity Over/Under Performance Chart



* Equity - Composite History

1973 - 1991 is domestic equity only

1992 - 2004 is a combined domestic and international composite

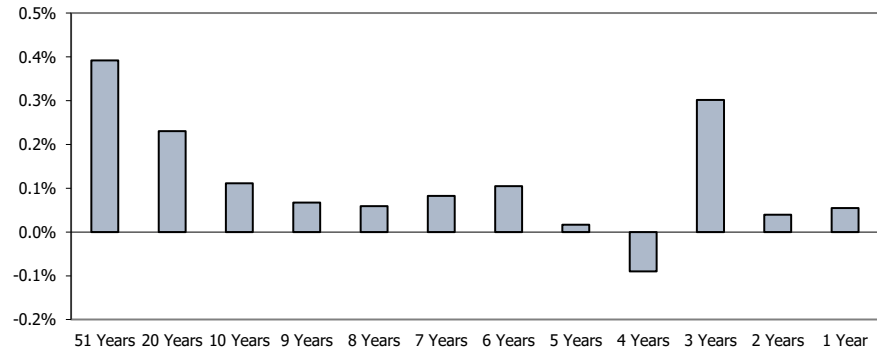
2005 - 2024 internal public global equity (small/mid, gem and high quality not included)

Internal Investment Grade Debt Return Comparison

Annualized

	<u>SDRS IG Debt</u>	<u>Benchmark</u>	<u>Over/Under Performance</u>
51 Years	7.03%	6.64%	0.39%
20 Years	3.54%	3.31%	0.23%
10 Years	1.46%	1.35%	0.11%
9 Years	1.36%	1.29%	0.07%
8 Years	0.78%	0.72%	0.06%
7 Years	0.95%	0.87%	0.08%
6 Years	1.19%	1.09%	0.10%
5 Years	-0.21%	-0.23%	0.02%
4 Years	-2.49%	-2.40%	-0.09%
3 Years	-2.82%	-3.12%	0.30%
2 Years	0.86%	0.83%	0.04%
1 Year	2.71%	2.66%	0.05%

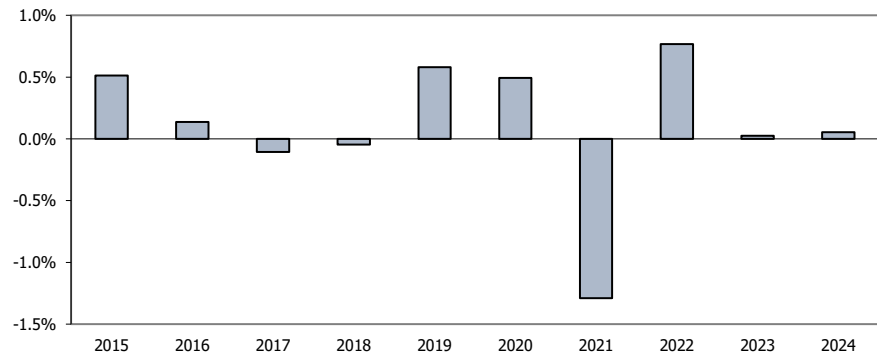
SDRS Investment Grade Debt Over/Under Performance Chart



Annual Returns

	<u>SDRS IG Debt</u>	<u>Benchmark</u>	<u>Over/Under Performance</u>
2015	2.38%	1.87%	0.51%
2016	6.12%	5.98%	0.14%
2017	-0.39%	-0.28%	-0.11%
2018	-0.49%	-0.45%	-0.05%
2019	8.49%	7.91%	0.58%
2020	9.46%	8.96%	0.49%
2021	-1.50%	-0.21%	-1.29%
2022	-9.78%	-10.55%	0.77%
2023	-0.95%	-0.97%	0.02%
2024	2.71%	2.66%	0.05%

SDRS Investment Grade Debt Over/Under Performance Chart



* Fixed Income - History

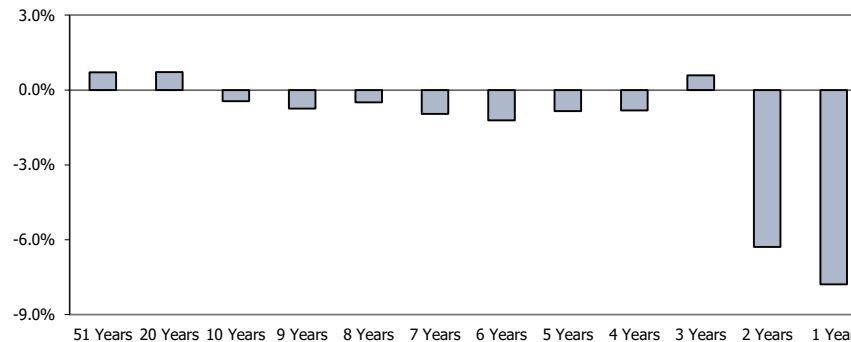
1973 - 2006 is investment grade & high yield managed together
 2007 - 2010 is 80% investment grade portfolio + 20% high yield portfolio
 2011 - 2024 is investment grade portfolio only

Total Fund Return Comparison

Annualized

	<u>SDRS Total Fund</u>	<u>SDRS Capital Markets Benchmark</u>	<u>Over/Under Performance</u>
51 Years	9.89%	9.17%	0.71%
20 Years	7.88%	7.16%	0.72%
10 Years	6.40%	6.85%	-0.45%
9 Years	6.65%	7.39%	-0.74%
8 Years	7.47%	7.97%	-0.50%
7 Years	6.60%	7.55%	-0.95%
6 Years	6.37%	7.59%	-1.21%
5 Years	6.68%	7.52%	-0.85%
4 Years	7.99%	8.81%	-0.82%
3 Years	3.67%	3.08%	0.59%
2 Years	5.93%	12.22%	-6.29%
1 Year	6.02%	13.81%	-7.79%

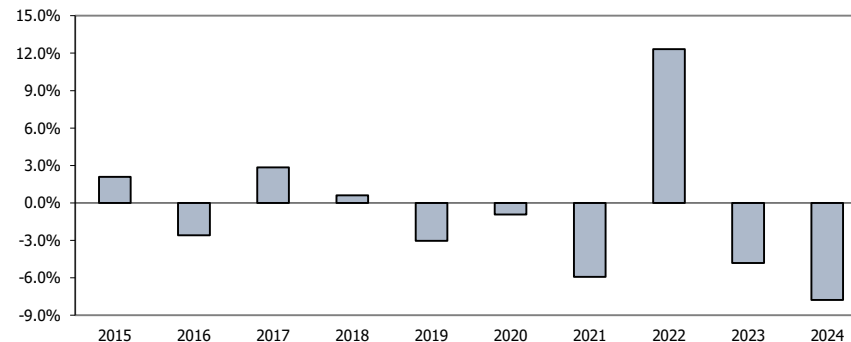
SDRS Total Fund Over/Under Performance Chart



Annual Returns

	<u>SDRS Total Fund</u>	<u>SDRS Capital Markets Benchmark</u>	<u>Over/Under Performance</u>
2015	4.18%	2.09%	2.09%
2016	0.30%	2.88%	-2.59%
2017	13.81%	10.96%	2.85%
2018	7.94%	7.33%	0.61%
2019	4.88%	7.91%	-3.03%
2020	1.59%	2.52%	-0.93%
2021	22.03%	27.97%	-5.94%
2022	-0.69%	-13.02%	12.33%
2023	5.84%	10.65%	-4.82%
2024	6.02%	13.81%	-7.79%

SDRS Total Fund Over/Under Performance Chart



* Total Fund Return History
 1973 - 2013 is gross-of-fee
 2014 - 2024 is net-of-fee.