Callan

February 25, 2025

Pennsylvania State Employees' Retirement System – 401(a) Plan

Fourth Quarter 2024

Executive Summary

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Important Disclosures regarding the use of this document are included at the end of this document. These disclosures are an integral part of this document and should be considered by the user.

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Market Environment

Equity Markets Up Sharply in 2024

Stocks have recovered losses of 2022; fixed income still lags

S&P 500 climbed 25% in 2024

 U.S. large cap substantially outperformed U.S. small cap, developed ex-U.S. markets, and emerging markets. Technology and Al drove the S&P 500.

Weak 4Q for core fixed income

- The Bloomberg Aggregate fell 3.1%.
 Long duration and non-U.S. bonds saw even greater declines.
- Interest rates remain volatile as the markets assess how the Fed will continue with easing.
- CPI-U came in at 2.9% (year-overyear) through December, up from 3Q, but with a welcome decline in the core figure, which rose 3.2%.

Solid growth through 2024

 3Q GDP came in at a surprisingly strong 3.1%, after another surprise in 2Q, and saw 2.3% growth in 4Q. Consumer spending continues to drive GDP growth.

Returns for Periods ended 12/31/24

	Quarter	1 Year	3 Years	5 Years	10 Years	25 Years
U.S. Equity						
Russell 3000	2.63	23.81	8.01	13.86	12.55	7.84
S&P 500	2.41	25.02	8.94	14.53	13.10	7.70
Russell 2000	0.33	11.54	1.24	7.40	7.82	7.55
Global ex-U.S. Equity						
MSCI World ex USA	-7.43	4.70	1.91	5.10	5.26	3.78
MSCI Emerging Markets	-8.01	7.50	-1.92	1.70	3.64	
MSCI ACWI ex USA Small Cap	-7.66	3.36	-1.47	4.30	5.66	6.23
Fixed Income						
Bloomberg Aggregate	-3.06	1.25	-2.41	-0.33	1.35	3.94
90-day T-Bill	1.17	5.25	3.89	2.46	1.77	1.91
Bloomberg Long Gov/Credit	-7.42	-4.15	-9.20	-3.26	0.99	5.36
Bloomberg Global Agg ex-US	-6.84	-4.22	-6.28	-3.37	-0.90	2.45
Real Estate						
NCREIF Property Index	0.90	0.43	-0.82	3.13	5.66	7.58
FTSE Nareit Equity	-6.21	8.73	-2.20	4.27	5.73	9.84
Alternatives						
Cambridge Private Equity*	2.68	7.93	2.75	14.27	13.40	12.39
Cambridge Senior Debt*	3.35	10.18	7.08	7.89	7.31	4.59
HFRI Fund Weighted	1.49	9.83	4.41	7.00	5.26	5.57
Bloomberg Commodity	-0.45	5.38	4.05	6.77	1.28	2.15
Gold Spot Price	-0.69	27.47	13.04	11.64	8.35	9.24
Inflation: CPI-U*	0.10	2.89	4.22	4.20	3.00	2.54

^{*}Cambridge Private Equity and Cambridge Senior Debt data as of 9/30/24. Returns greater than one year are annualized. Sources: Bloomberg, Callan, Cambridge, FTSE Russell, HFRI, MSCI, NCREIF, S&P Dow Jones Indices



Diversification Remains Key Risk Control

Periodic Table of Investment Returns

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Emerging	Emerging	Emerging	U.S. Fixed	Emerging	Small Cap	Real Estate	Emerging	Small Cap	Large Cap	Real Estate	Small Cap	Emerging	Real Estate	Large Cap	Small Cap	Large Cap	Real Estate	Large Cap	Large Cap
Markets				Markets		Funds	Markets			Funds		Markets	Funds				Funds		
34.00%	32.17%	39.38%	5.24%	78.51%	26.85%	14.96%	18.23%	38.82%	13.69%	13.95%	21.31%	37.28%	7.36%	31.49%	19.96%	28.71%	6.55%	26.29%	25.02%
Real Estate	Non-U.S.	Real Estate	Non-U.S.	High Yield	Emerging	U.S. Fixed	Non-U.S.	Large Cap	Real Estate	Large Cap	High Yield	Non-U.S.	Cash	Small Cap	Large Cap	Real Estate	Cash	Non-U.S.	Small Cap
Funds		Funds	Fixed		Markets		Equity		Funds			Equity	Equivalent			Funds	Equivalent	Equity	
20.15%	25.71%	14.84%	4.39%	58.21%	18.88%	7.84%	16.41%	32.39%	11.46%	1.38%	17.13%	24.21%	1.87%	25.52%	18.40%	21.02%	1.46%	17.94%	11.54%
Non-U.S.	Small Cap	Hedge	Cash	Non-U.S.	Real Estate	High Yield	Small Cap	Non-U.S.	U.S. Fixed	U.S. Fixed	Large Cap	Large Cap	U.S. Fixed	Non-U.S.	Emerging	Small Cap	Hedge	Small Cap	Hedge
Equity				Equity	Funds									Equity			Funds		Funds
14.47%	18.37%	12.56%	2.06%	33.67%	15.26%	4.98%	16.35%	21.02%	5.97%	0.55%	11.96%	21.83%	0.01%	22.49%	18.31%	14.82%	1.06%	16.93%	9.82%
Hedge	Large Cap	Non-U.S.	Real Estate	Small Cap	High Yield	Non-U.S.	Large Cap	Real Estate	Small Cap	Cash	Emerging	Small Cap	High Yield	Emerging	Non-U.S.	Non-U.S.	High Yield	High Yield	High Yield
Funds			Funds			Fixed		Funds			Markets			Markets		Equity			
7.61%	15.79%	12.44%	-10.70%	27.17%	15.12%	4.36%	16.00%	12.90%	4.89%	0.05%	11.19%	14.65%	-2.08%	18.44%	10.11%	12.62%	-11.19%	13.44%	8.19%
Large Cap	Real Estate	Non-U.S.	Hedge	Large Cap	Large Cap	Large Cap	High Yield	Hedge	Hedge		Real Estate	Non-U.S.	Non-U.S.	High Yield	Non-U.S.	Hedge	U.S. Fixed	Emerging	Emerging
	Funds		Funds					Funds	Funds		Funds	Fixed	Fixed		Equity	Funds		Markets	Markets
4.91%	15.27%	11.03%	-19.07%	26.47%	15.06%	2.11%	15.81%	9.73%	4.13%	-0.71%	7.79%	10.51%	-2.15%	14.32%	7.59%	8.23%	-13.01%	9.83%	7.50%
Small Cap	Hedge	U.S. Fixed	High Yield	Hedge	Hedge	Cash	Real Estate	High Yield	High Yield	Non-U.S.	Non-U.S.	High Yield	Hedge	Hedge	U.S. Fixed	High Yield	Non-U.S.	Hedge	Cash
				Funds	Funds	Equivalent	Funds				Equity		Funds	Funds				Funds	Equivalent
4.55%	13.86%	6.97%	-26.16%	18.57%	10.95%	0.10%	9.79%	7.44%	2.45%	-3.04%	2.75%	7.50%	-3.19%	9.31%	7.51%	5.28%	-14.29%	5.83%	5.25%
Cash	High Yield	Large Cap	Small Cap	Non-U.S.	Non-U.S.	Hedge	Hedge	Cash	Cash	Small Cap	U.S. Fixed	Hedge	Large Cap	U.S. Fixed	High Yield	Cash	Large Cap	Non-U.S.	Non-U.S.
Equivalent				Fixed	Equity	Funds	Funds		Equivalent			Funds				Equivalent		Fixed	Equity
3.06%	11.85%	5.49%	-33.79%	7.53%	8.95%	-2.52%	7.67%	0.07%	0.04%	-4.41%	2.65%	7.12%	-4.38%	8.72%	7.11%	0.05%	-18.11%	5.72%	4.70%
High Yield	Non-U.S.	Cash	Large Cap	U.S. Fixed	U.S. Fixed	Small Cap	U.S. Fixed	U.S. Fixed	Emerging	High Yield	Non-U.S.	Real Estate	Small Cap	Non-U.S.	Hedge	U.S. Fixed	Non-U.S.	U.S. Fixed	U.S. Fixed
									Markets		Fixed	Funds		Fixed			Fixed		
2.74%	8.16%	5.00%	-37.00%	5.93%	6.54%	-4.18%	4.21%	-2.02%	-2.19%	-4.47%	1.49%	6.66%	-11.01%	5.09%	6.36%	-1.54%	-18.70%	5.53%	1.25%
U.S. Fixed	Cash	High Yield	Non-U.S.	Cash	Non-U.S.	Non-U.S.	Non-U.S.	Emerging	Non-U.S.	Non-U.S.	Hedge	U.S. Fixed	Non-U.S.	Real Estate	Cash	Emerging	Emerging	Cash	Real Estate
				Equivalent	Fixed	Equity	Fixed	Markets	Fixed		Funds		Equity	Funds		Markets	Markets	Equivalent	Funds
2.43%	4.86%	1.87%	-43.56%	0.21%	4.95%	-12.21%	4.09%	-2.60%	-3.09%	-6.02%	1.25%	3.54%	-14.09%	4.39%	0.67%	-2.54%	-20.09%	5.01%	-2.27%
Non-U.S.	U.S. Fixed	Small Cap	Emerging	Real Estate	Cash	Emerging	Cash	Non-U.S.	Non-U.S.	Emerging	Cash	Cash	Emerging	Cash	Real Estate	Non-U.S.	Small Cap	Real Estate	Non-U.S.
Fixed			Markets	Funds	Equivalent	Markets	Equivalent	Fixed	Equity	Markets	Equivalent	Equivalent	Markets	Equivalent	Funds	Fixed		Funds	Fixed
-8.65%	4.33%	-1.57%	-53.33%	-30.40%	0.13%	-18.42%	0.11%	-3.08%	-4.32%	-14.92%	0.33%	0.86%	-14.57%	2.28%	0.34%	-7.05%	-20.44%	-12.73%	-4.22%

Bloomberg Barclays Corp High Yield
 Bloomberg Barclays Global Aggregate ex US
 Bloomberg Barclays US Aggregate



 [◆] Credit Suisse Hedge Fund
 ◆ ICE BofAML US 3-Month Treasury Bill
 ◆ MSCI Emerging Markets
 ◆ MSCI World ex USA

[●] NFI-ODCE (value-weighted net) ● Russell 2000 ● S&P 500

DC Industry Talking Points

4Q24

American Airlines ESG Class Action Case Update

- A Texas district court ruled that American Airlines violated its duty of loyalty in ESG-related 401(k) litigation, stating the company allowed corporate and ESG interests to influence plan management, but not the duty of prudence, ruling that the plan sponsor followed or exceeded industry standard processes.
- The complaint argued that core investments, including BlackRock index funds, prioritized ESG principles over financial returns through proxy voting, potentially harming plan participants. This complaint does not relate to the use of labeled "ESG funds" in the core lineup.
- Allegations of financial harm from proxy voting were novel, with no identified harm to participants yet.
- The court did not rule on damages or relief but requested further evidence on financial losses, the impact of ESG policies in proxy voting on investment performance, and the need for an injunction.
- The ruling emphasizes the importance of good governance and adherence to documented investment policies, without suggesting changes to the fiduciaries' decision-making process while exploring the potential for increased scrutiny of managers' proxy voting policies and practices in the future.
- Plan sponsors should review the plan documents, governance documents, and manager agreements, and consult legal counsel.

IRS Announces Updated Retirement Plan Limits for 2025

- The annual contribution limit will increase by \$500, from \$23,000 to \$23,500.
- The age 50 annual catch-up contribution limit will remain the same at \$7,500. However, the catch-up limit for those ages 60-63 is \$11,250.
- The annual compensation limit will increase from \$345,000 to \$350,000.
- The Section 415(c) limit will increase from \$69,000 to \$70,000.
- The highly compensated employee threshold will increase from \$155,000 to \$160,000. Visit the IRS publication to learn more.



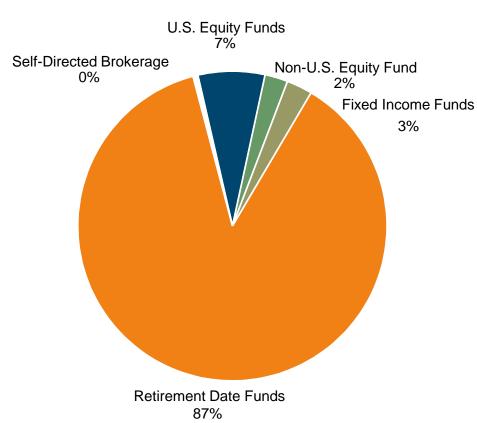
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PA SERS 401(a) Plan Performance Review

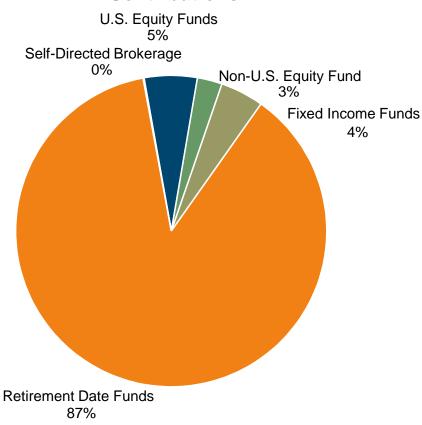
401(a) Plan Asset Allocation & Contributions

As of December 31, 2024

Asset Allocation

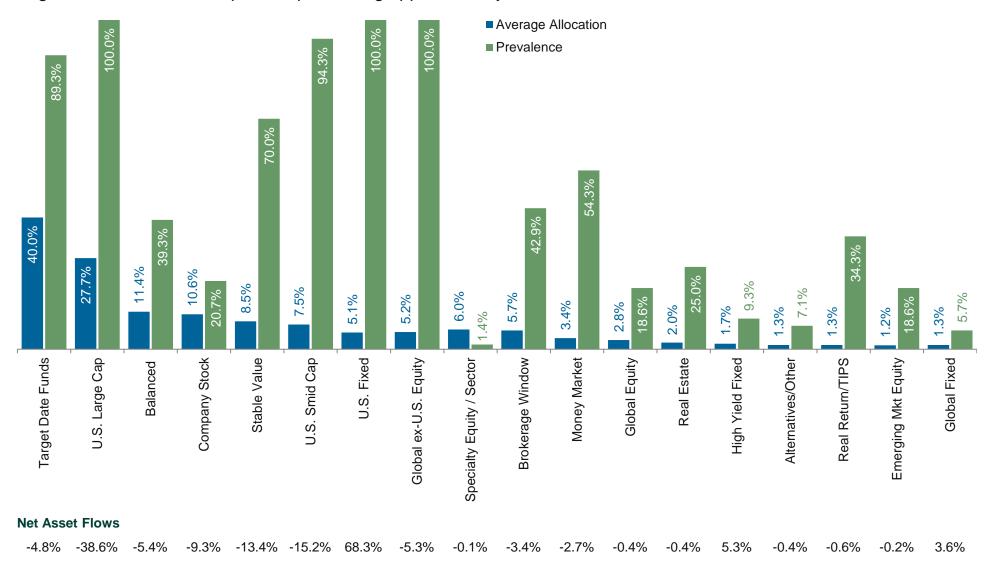


Contributions



Callan DC Index Asset Allocation as of 9/30/24

Callan DC Index™ tracks the underlying fund performance, asset allocation, and cash flows of more than 100 large defined contribution plans representing approximately \$400 billion in assets.





Asset Allocation

As of December 31, 2024

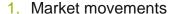
	December 3	1, 2024			September 3	0, 2024
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
SERS Retirement Date Funds	\$254,940,203	87.40%	\$27,572,999	\$(12,681,275)	\$240,048,478	87.73%
SERS Post Retirement Fund	12,129,311	4.16%	9,247,370	(207,924)	3,089,864	1.13%
SERS 2025 Retirement Fund	0	0.00%	(8, 366, 496)	(59,263)	8,425,759	3.08%
SERS 2030 Retirement Fund	20,992,783	7.20%	1,613,913	(466, 135)	19,845,005	7.25%
SERS 2035 Retirement Fund	25,274,151	8.66%	1,814,978	(531,351)	23,990,524	8.77%
SERS 2040 Retirement Fund	29,779,440	10.21%	2,294,311	(577,590)	28,062,719	10.26%
SERS 2045 Retirement Fund	31,647,585	10.85%	2,285,131	(567,336)	29,929,790	10.94%
SERS 2050 Retirement Fund	33,751,918	11.57%	2,295,399	(518, 186)	31,974,706	11.69%
SERS 2055 Retirement Fund	35,410,964	12.14%	2,193,629	(485,999)	33,703,334	12.32%
SERS 2060 Retirement Fund	33,826,105	11.60%	2,602,130	(463,747)	31,687,721	11.58%
SERS 2065 Retirement Fund	30,291,355	10.38%	1,389,300	(437,001)	29,339,055	10.72%
SERS 2070 Retirement Fund	1,836,592	0.63%	1,836,837	(245)	-	-
SERS U.S. Equity	\$20,448,814	7.01%	\$1,109,972	\$544,099	\$18,794,742	6.87%
SERS U.S. Large Company Index Fund	12,637,129	4.33%	822,852	274,135	11,540,141	4.22%
SERS U.S. All Company Index Fund	3,791,318	1.30%	124,548	93,604	3,573,167	1.31%
SERS U.S. SMID Company Index Fund	4,020,367	1.38%	162,572	176,361	3,681,434	1.35%
SERS Non-U.S. Equity	\$7,094,077	2.43%	\$838,985	\$(561,981)	\$6,817,073	2.49%
SERS Global Non-U.S. Index Fund	7,094,077	2.43%	838,985	(561,981)	6,817,073	2.49%
SERS Fixed Income	\$7,784,730	2.67%	\$1,223,490	\$(35,826)	\$6,597,066	2.41%
SERS Short Term Investment Fund	4,090,062	1.40%	787,291	50,270	3,252,501	1.19%
SERS U.S. Short Term Bond Index Fund	800,367	0.27%	105,682	(189)	694,873	0.25%
SERS U.S. TIPS Index Fund	650,360	0.22%	54,957	(18,758)	614,161	0.22%
SERS U.S. Bond Index Fund	2,243,942	0.77%	275,560	(67,149)	2,035,531	0.74%
SERS Self-Directed Brokerage	\$1,427,757	0.49%	\$56,116	\$3,845	\$1,367,796	0.50%
Total Fund	\$291,695,580	100.0%	\$30,801,563	\$(12,731,137)	\$273,625,155	100.0%



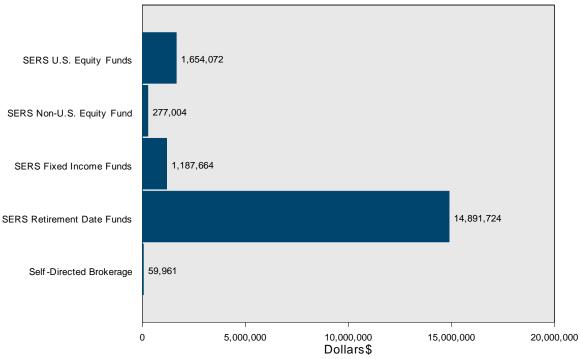
Changes in Market Values and Contributions

As of December 31, 2024

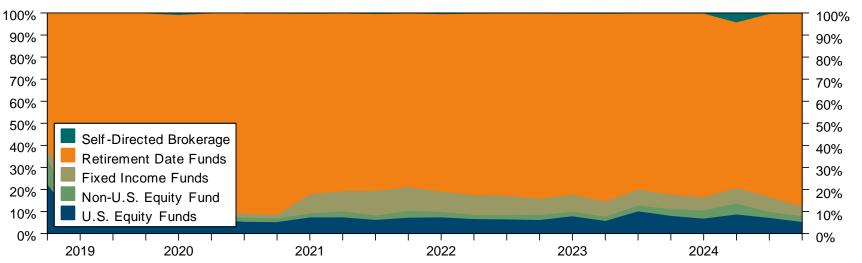
 The chart to the right shows the change in fund values across the various investment options for the quarter ended December 31, 2024. The change in value for each fund is the result of a combination of 3 factors:



- Contributions or disbursements into or out of the fund by the participants (and any matching done by the company)
- Transfers between funds by the participants



Historical Allocation of Contributions

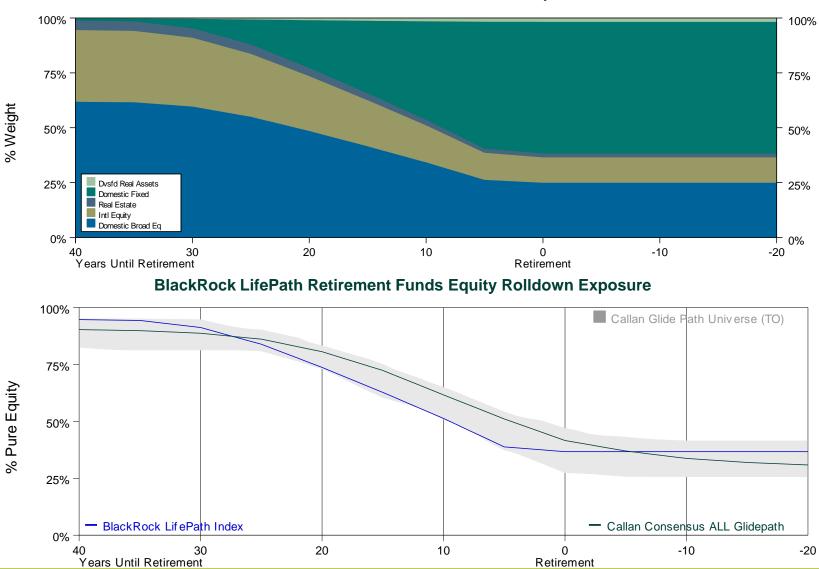




Blackrock LifePath Retirement Funds

Glidepath and Equity Rolldown Exposure as of December 31, 2024

BlackRock LifePath Retirement Funds Glidepath





BlackRock 2060 Index

BlackRock 2065 Index

BlackRock 2070 Index

Callan Target Date 2060

SERS 2065 Retirement Fund

Callan Target Date 2065

SERS 2070 Retirement Fund

Callan Target Date 2065

s of Decen	nber 31, 2024	Last	Last 1	Last 3	Last 5
		Quarter	Year	Years	Years
	Net Performance Target Date Funds				
	SERS Post Retirement Fund	(2.24%)	7.08%	0.53%	4.00%
	BlackRock Post Retirement Index	(2.23%)	7.08%	0.56%	4.00%
	Callan Tgt Date Ret Inc	(1.91%)	6.88%	0.87%	3.70%
	SERS 2030 Retirement Fund	(2.24%)	9.12%	1.56%	5.67%
	BlackRock 2030 Index	(2.24%)	9.12%	1.58%	5.67%
	Callan Target Date 2030	(1.86%)	9.77%	1.91%	6.17%
	SERS 2035 Retirement Fund	(2.11%)	10.88%	2.42%	6.79%
	BlackRock 2035 Index	(2.10%)	10.89%	2.43%	6.77%
	Callan Target Date 2035	(1.88%)	11.31%	2.52%	7.08%
	SERS 2040 Retirement Fund	(1.95%)	12.62%	3.26%	7.83%
	BlackRock 2040 Index	(1.94%)	12.63%	3.25%	7.79%
	Callan Target Date 2040	(1.76%)	12.80%	3.23%	7.95%
	SERS 2045 Retirement Fund	(1.79%)	14.26%	4.07%	8.78%
	BlackRock 2045 Index	(1.75%)	14.32%	4.05%	8.74%
	Callan Target Date 2045	(1.71%)	13.86%	3.76%	8.62%
	SERS 2050 Retirement Fund	(1.51%)	15.56%	4.65%	9.40%
	BlackRock 2050 Index	(1.45%)	15.66%	4.64%	9.35%
	Callan Target Date 2050	(1.60%)	14.27%	3.95%	8.83%
	SERS 2055 Retirement Fund	(1.36%)	16.21%	4.90%	9.61%
	BlackRock 2055 Index	(1.29%)	16.32%	4.89%	9.57%
	Callan Target Date 2055	(1.59%)	14.49%	4.05%	8.98%
	SERS 2060 Retirement Fund	(1.35%)	16.23%	4.91%	9.61%
		1	40.000/	4.0.4.07	

(1.26%)

(1.60%)

(1.34%)

(1.27%)

(1.62%)

(1.33%)

(1.27%)

(1.62%)

16.36%

14.40%

16.26%

16.37%

14.71%

14.71%



9.58%

9.01%

9.58%

9.58%

9.05%

9.05%

4.91%

4.03%

4.92%

4.91%

4.03%

4.03%



s of December 31, 2024	Last 7 Years	Last 10 Years	Last 15 Years	Last 20 Years
Net Performance				
Target Date Funds				
SERS Post Retirement Fund	4.47%	4.61%	5.43%	-
BlackRock Post Retirement Index	4.47%	4.60%	5.41%	5.08%
Callan Tgt Date Ret Inc	3.97%	4.10%	4.76%	4.20%
SERS 2030 Retirement Fund	5.97%	6.32%	7.27%	-
BlackRock 2030 Index	5.95%	6.25%	7.22%	6.07%
Callan Target Date 2030	6.21%	6.59%	7.84%	6.23%
SERS 2035 Retirement Fund	6.90%	7.18%	7.99%	-
BlackRock 2035 Index	6.86%	7.08%	7.92%	6.52%
Callan Target Date 2035	6.90%	7.31%	8.46%	6.76%
SERS 2040 Retirement Fund	7.75%	7.95%	8.64%	-
BlackRock 2040 Index	7.69%	7.83%	8.54%	6.91%
Callan Target Date 2040	7.58%	7.89%	8.99%	7.12%
SERS 2045 Retirement Fund	8.50%	8.58%	9.18%	-
BlackRock 2045 Index	8.42%	8.45%	9.08%	7.24%
Callan Target Date 2045	8.08%	8.34%	9.17%	7.22%
SERS 2050 Retirement Fund	8.95%	8.94%	9.53%	-
BlackRock 2050 Index	8.88%	8.81%	9.43%	7.59%
Callan Target Date 2050	8.26%	8.50%	9.31%	-
SERS 2055 Retirement Fund	9.11%	9.04%	-	-
BlackRock 2055 Index	9.05%	8.92%	_	-
Callan Target Date 2055	8.35%	8.56%	9.70%	-
SERS 2060 Retirement Fund	9.11%	9.04%	-	-
BlackRock 2060 Index	9.05%	8.94%	_	-
Callan Target Date 2060	8.44%	8.80%	-	-

Note: SERS Funds are the top fund in each grouping followed by each fund's respective benchmark and median peer. Funds not listed do not have longer term history.



As of December 31, 2024		Last	Last	Last	
,	Last	1	3	5	
	Quarter	Year	Years	Years	
Net Performance					
Domestic Equity					
SERS U.S. Large Company Index Fund	2.41%	25.00%	8.93%	14.53%	
S&P 500 Index	2.41%	25.02%	8.94%	14.53%	
Callan Lg Cap Broad MF	1.91%	23.41%	7.74%	13.59%	
SERS U.S. All Company Index Fund	2.59%	23.49%	7.90%	13.85%	
Russell 3000 Index	2.63%	23.81%	8.01%	13.86%	
Callan Multi Cap Brd MF	1.01%	18.18%	6.12%	11.22%	
SERS U.S. SMID Company ldx Fund	4.66%	17.10%	2.75%	10.09%	
Dow Jones US Completion	4.74%	16.89%	2.38%	9.77%	
Callan SMID Broad MFs	(0.35%)	11.71%	1.49%	8.68%	
International Equity					
SERS Global Non-U.S. Index Fund	(7.78%)	5.53%	0.99%	4.33%	
MSCI ACWI ex US	(7.60%)	5.53%	0.82%	4.10%	
Callan Non US Equity MFs	(7.92%)	4.41%	1.37%	4.50%	
Domestic Fixed Income					
SERS Short Term Investment Fund	1.17%	5.20%	3.92%	2.48%	
3-month Treasury Bill	1.17%	5.25%	3.89%	2.46%	
Callan Cash Database(1)	1.16%	5.40%	3.95%	2.60%	
SERS U.S. Short Term Bond Idx Fund	(0.00%)	4.39%	1.69%	1.57%	
Blmbg Gov/Cred 1-3 Yr	(0.02%)	4.36%	1.69%	1.58%	
Callan Short US Govt MFs	(0.24%)	4.09%	1.08%	1.11%	
SERS U.S. TIPS Index Fund	(2.87%)	1.84%	(2.26%)	1.87%	
Blmbg US TIPS	(2.88%)	1.84%	(2.30%)	1.87%	
Callan TIPS MFs	(2.93%)	2.01%	(2.35%)	1.81%	
SERS U.S. Bond Index Fund	(3.07%)	1.25%	(2.38%)	(0.32%)	
Blmbg Aggregate	(3.06%)	1.25%	(2.41%)	(0.33%)	
Callan Core Bond MFs	(3.00%)	1.79%	(2.30%)	0.07%	

⁽¹⁾ Callan Cash Database includes STIF, enhanced cash, and money market funds.



As of December 31, 2024

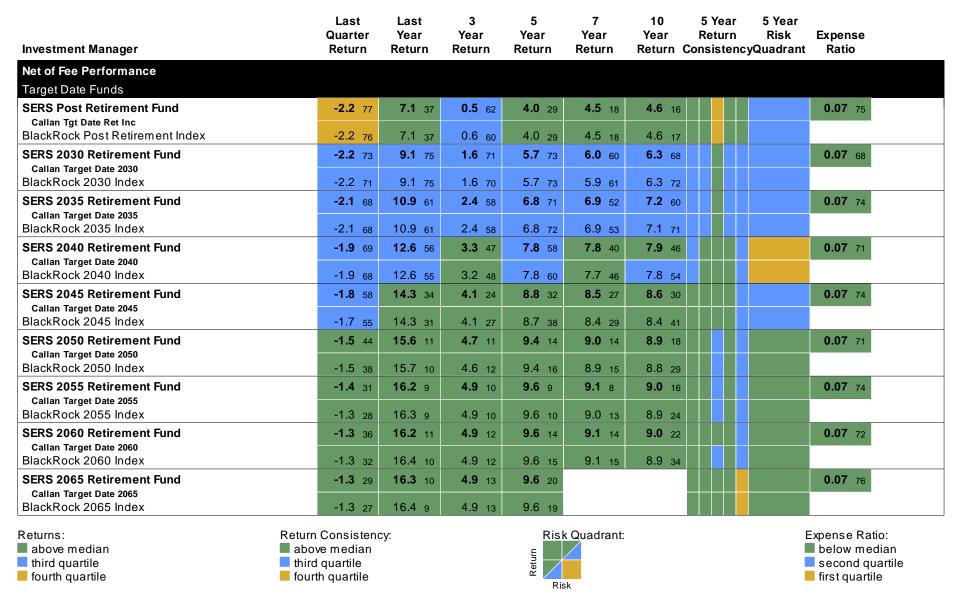
Last 7	Last 10	Last 15	Last 20	
Years	Years	Years	Years	
13.84%	13.11%	13.90%	10.39%	
13.83%	13.10%	13.88%	10.35%	
13.10%	12.19%	13.22%	10.02%	
13.08%	12.48%			
10.75%	10.36%	11.72%	9.12%	
9.43%	9.57%	11.98%	9.53%	
8.46%	9.00%	11.18%	9.04%	
			-	
3.92%	5.06%	5.46%	5.36%	
2.53%	2.03%	1.46%	2.00%	
1.92%	-	-	-	
1.93%	1.63%	1.55%	2.24%	
1.49%	1.27%	1.25%	2.06%	
2.32%	-	-	-	
2.32%	2.24%	2.86%	3.30%	
2.17%	2.15%	2.71%	3.11%	
0.97%	1.33%	2.34%	2.99%	
0.97%	1.35%	2.37%	3.01%	
1.21%	1.60%	2.75%	3.26%	
	7 Years 13.84% 13.83% 13.10% 13.08% 13.16% 10.75% 9.43% 9.13% 8.46% 3.78% 3.53% 3.92% 2.40% 2.35% 2.53% 1.92% 1.93% 1.49% 2.32% 2.17% 0.97% 0.97%	7	7 10 15 Years Years 13.84% 13.11% 13.90% 13.83% 13.10% 13.88% 13.10% 12.19% 13.22% 13.08% 12.48% - 13.16% 12.55% 13.56% 10.75% 10.36% 11.72% 9.43% 9.57% 11.98% 9.13% 9.30% 11.73% 8.46% 9.00% 11.18% 3.78% 5.08% 4.88% 3.53% 4.80% 4.68% 3.92% 5.06% 5.46% 2.40% 1.86% 1.31% 2.35% 1.77% 1.20% 2.53% 2.03% 1.46% 1.92% - - 1.93% 1.63% 1.55% 1.49% 1.27% 1.25% 2.32% 2.24% 2.86% 2.17% 2.15% 2.71% 0.97% 1.33% 2.34% 0.97% 1	7 Years 10 Years 15 Years 20 Years 13.84% 13.11% 13.90% 10.39% 13.83% 13.10% 13.88% 10.35% 13.10% 12.19% 13.22% 10.02% 13.08% 12.48% - - 13.16% 12.55% 13.56% 10.22% 10.75% 10.36% 11.72% 9.12% 9.43% 9.57% 11.98% 9.53% 9.13% 9.30% 11.73% 9.29% 8.46% 9.00% 11.18% 9.04% 3.78% 5.08% 4.88% - 3.53% 4.80% 4.68% 4.97% 3.92% 5.06% 5.46% 5.36% 2.40% 1.86% 1.31% 1.79% 2.35% 1.77% 1.20% 1.66% 2.53% 2.03% 1.46% 2.00% 1.92% - - - 1.93% 1.63% 1.55% 2.24% 1.49%

⁽¹⁾ Callan Cash Database includes STIF, enhanced cash, and money market funds.

^{*}Funds not listed do not have longer term history.



Performance Summary & Expense Ratios as of December 31, 2024



Note: For returns, each SERS Fund and corresponding benchmark return are shown with their respective peer group rankings. For returns, lower peer group rankings are more desirable (e.g. 25th percentile equates to top quartile performance). Expense Ratio: Higher peer group rankings are more desirable (e.g. 75th percentile equates to bottom quartile/cheapest fees).



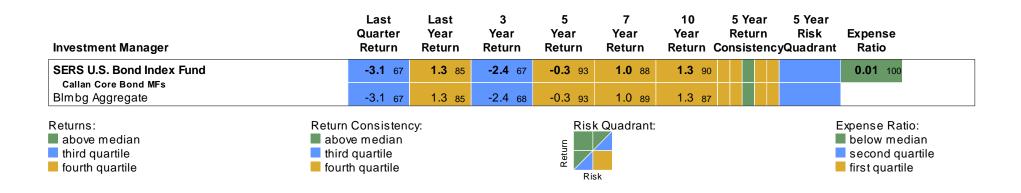
Performance Summary & Expense Ratios as of December 31, 2024

Investment Manager	Last Quarter Return	Last Year Return	3 Year Return	5 Year Return	7 Year Return	10 Year Return	5 Year Return Consisten	5 Year Risk cyQuadrant	Expense Ratio
SERS 2070 Retirement Fund Callan Target Date 2065	-1.3 29								0.07 76
BlackRock 2070 Index	-1.3 27								
Domestic Equity									
SERS U.S. Large Company Stock Index Fund	2.4 44	25.0 42	8.9 25	14.5 41	13.8 41	13.1 41			0.01 100
S&P 500 Index	2.4 44	25.0 42	8.9 25	14.5 41	13.8 41	13.1 41			
SERS U.S. All Company Index Fund Callan Multi Cap Brd MF	2.6 32	23.5 30	7.9 27	13.8 26	13.1 28	12.5 25			0.03 99
Russell 3000 Index	2.6 32	23.8 29	8.0 26	13.9 26	13.2 28	12.5 24			
U.S. Small/Mid Company Stock Index Fund Callan SMID Broad MFs	4.7 8	17.1 19	2.7 30	10.1 32	9.4 33	9.6 41			0.02 100
Dow Jones US Completion	4.7 8	16.9 19	2.4 34	9.8 34	9.1 43	9.3 45			
International Equity									
SERS Global Non-U.S. Index Fund Callan Non US Equity MFs	-7.8 48	5.5 37	1.0 57	4.3 52	3.8 54	5.1 50			0.04 99
MSCI ACWI ex US	-7.6 46	5.5 37	0.8 60	4.1 56	3.5 65	4.8 59			
Domestic Fixed income									
SERS Short Term Investment Fund Callan Cash Database	1.2 49	5.2 86	3.9 53	2.5 73	2.4 79	1.9 76			0.00 100
3-month Treasury Bill	1.2 49	5.3 83	3.9 54	2.5 75	2.4 83	1.8 87			
Comments: Callan Cash Database includes	STIF, enhanced cas		ney market f	unds.					
SERS U.S. Short Term Bond Idx Fund Callan Short US Govt MFs	-0.0 37	4.4 42	1.7 23	1.6 20	1.9 14				0.02 100
Blmbg Gov/Cred 1-3 Yr	-0.0 37	4.4 43	1.7 23	1.6 20	1.9 14	1.6 16			
SERS U.S. TIPS Index Fund Callan TIPS MFs	-2.9 32	1.8 72	-2.3 40	1.9 45	2.3 35				0.01 99
Blmbg US TIPS	-2.9 33	1.8 73	-2.3 41	1.9 46	2.3 36	2.2 33			
Returns: above median third quartile fourth quartile	Return Consistency above median third quartile fourth quartile	r.		Risk	Quadrant:				Expense Ratio: below median second quartile first quartile

Note: For returns, each SERS Fund and corresponding benchmark return are shown with their respective peer group rankings. For returns, lower peer group rankings are more desirable (e.g. 25th percentile equates to top quartile performance). Expense Ratio: Higher peer group rankings are more desirable (e.g. 75th percentile equates to bottom quartile/cheapest fees).



Performance Summary & Expense Ratios as of December 31, 2024



Note: For returns, each SERS Fund and corresponding benchmark return are shown with their respective peer group rankings. For returns, lower peer group rankings are more desirable (e.g. 25th percentile equates to top quartile performance). Expense Ratio: Higher peer group rankings are more desirable (e.g. 75th percentile equates to bottom quartile/cheapest fees).



401(a) Plan Investment Structure

Lineup Mapped to Callan's Clean Sheet

Conservative **Tier I: Asset Allocation Tier II: Passive Core Options Tier II: Active Core Options Tier III: Specialty Options Target Date Funds Capital Preservation** Short Term Investment Fund **Core Fixed Income** U.S. Short Term Bond Index Fund U.S. TIPS Index Fund U.S. Bond Index Fund **Large-Cap US Equity** U.S. Large Co. Stock Index Fund U.S. All Company Index Fund **Non-US Equity** Global Non-U.S. Stock Index Fund Small/Mid-Cap US Equity U.S. Small/Mid Co. Stock Index Fund Aggressive



Callan

Appendix – Callan Update

Published Research Highlights: 4Q24

2024 Real Assets Fees and Terms Study



2024 ESG Survey



3Q24 Market Intelligence Report (clients-only)



Coming Soon: 2025 Capital Markets Assumptions



Recent Blog Posts

IRS Guidance: How Reliable Is it?

Jana Steele

Public DB Plan Trends (and Some That Will Be)

Weston Lewis

Are Equity
Returns More
Volatile in an
Election Year?
It Depends!

Ric Ford and Drew Beiger

Additional Reading

Active vs. Passive quarterly charts

Capital Markets Review quarterly newsletter

Monthly Updates to the Periodic Table

Market Pulse Flipbook quarterly markets update

Market Intelligence (clients-only)

Real Estate Indicators market outlook



Callan Institute Events

Upcoming conferences, workshops, and webinars

2025 National Conference

Registration is now open for this event in Scottsdale on April 27-29, 2025!

Our annual conference will feature mainstage speakers and Callan-led workshops on a variety of topics.

This year we welcome Zanny Minton Beddoes, Ethan Mollick, Admiral James Stavridis, Barry Sternlicht, and Evy Poumpouras to the stage! We will be updating our website as we add additional information regarding this event!

Learn more about this event at: https://www.callan.com/events/2025nationalconference/



Mark Your Calendar

2025 Regional Workshops

June 3, 2025 - Denver

June 5, 2025 - New York

October 28, 2025 - Chicago

October 30, 2025 - San Francisco

Watch your email for further details and an invitation.

Upcoming Webinars

February 20, 2025

Research Café: ESG Interview Series

March 20, 2025

Research Café: Sector-Specific Strategies

March 28, 2025

STAR Webinar

April 25, 2025

Market Intelligence Report and Webinar



Introducing Callan On-Demand Education (CODE)

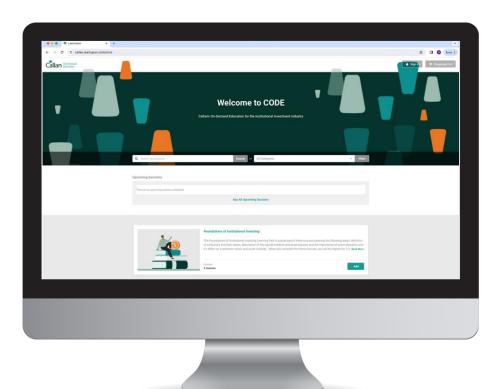


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- Showcase your skills and knowledge
- Learn from Callan's investment experts



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