Callan

June 11, 2024

Pennsylvania State Employees' Retirement System – 457(b) Plan

First Quarter 2024

Executive Summary

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Market Environment

Equity Markets Climb in 1Q, Bonds Falter

Stocks have recovered losses of 2022; bonds still have ground to make up

S&P Index 500 climbed 10.6% in 1Q24

- Stocks continued their momentum from the end of last year when the index surged 11.7% in 4Q23.
- The S&P 500 has fully recovered after falling 18.1% in 2022.

Fixed income faltered in 1Q24

- The Bloomberg Aggregate fell 0.8% amid rising rates in 1Q24.
- Interest rates have been volatile as the markets assess when and how swiftly the Fed will begin easing.
- CPI-U declined during 2023 but remains stalled at 3.5% in 1Q (year-over-year); the inflation index is 13% higher than it was at the start of 2022.
- Grinding out the last bit of stubborn inflation to get to the Fed's broad 2% goal may take longer than expected.

First signs of cooling for economy

- The initial estimate for 1Q24 GDP growth came in at 1.6%, failing to meet consensus expectations of 2.5% to 3%.

Returns for Periods ended 3/31/24

	Quarter	1 Year	1/1/22 - Current	5 Years	10 Years	25 Years
U.S. Equity						
Russell 3000	10.02	29.29	5.15	14.34	12.33	8.01
S&P 500	10.56	29.88	6.13	15.05	12.96	7.78
Russell 2000	5.18	19.71	-0.96	8.10	7.58	8.37
Global ex-U.S. Equity						
MSCI World ex USA	5.59	15.29	2.94	7.48	4.81	4.78
MSCI Emerging Markets	2.37	8.15	-4.65	2.22	2.95	--
MSCI ACWI ex USA Small Cap	2.11	12.80	-2.48	6.24	4.74	7.20
Fixed Income						
Bloomberg Aggregate	-0.78	1.70	-4.06	0.36	1.54	3.84
90-day T-Bill	1.29	5.24	3.45	2.02	1.38	1.91
Bloomberg Long Gov/Credit	-2.41	-1.15	-11.36	-0.62	2.32	5.25
Bloomberg Global Agg ex-US	-3.21	-0.71	-7.85	-2.49	-1.38	2.34
Real Estate						
NCREIF Property	-0.98	-7.16	-1.71	3.76	6.41	7.88
FTSE Nareit Equity	-0.20	10.54	-6.56	4.15	6.61	9.48
Alternatives						
HFRI Fund Weighted	4.52	11.68	3.62	6.92	4.93	6.35
Cambridge Private Equity*	-0.42	4.17	2.69	14.59	14.27	13.87
Bloomberg Commodity	2.19	-0.56	4.01	6.38	-1.56	2.70
Gold Spot Price	8.04	12.70	9.40	11.51	5.72	8.64
CPI-U	1.82	3.48	5.18	4.20	2.83	2.58

*Cambridge PE data as of 9/30/23.

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	1 Qtr. 2024
Emerging Markets 34.00%	Emerging Markets 32.17%	Emerging Markets 39.38%	U.S. Fixed 5.24%	Emerging Markets 78.51%	Small Cap 26.85%	Real Estate Funds 14.96%	Emerging Markets 18.23%	Small Cap 38.82%	Large Cap 13.69%	Real Estate Funds 13.95%	Small Cap 21.31%	Emerging Markets 37.28%	Real Estate Funds 7.36%	Large Cap 31.49%	Small Cap 19.96%	Large Cap 28.71%	Real Estate Funds 6.55%	Large Cap 26.29%	Large Cap 10.56%
Real Estate Funds 20.15%	Non-U.S. Equity 25.71%	Real Estate Funds 14.84%	Non-U.S. Fixed 4.39%	High Yield 58.21%	Emerging Markets 18.88%	U.S. Fixed 7.84%	Non-U.S. Equity 16.41%	Large Cap 32.39%	Real Estate Funds 11.46%	Large Cap 1.38%	High Yield 17.13%	Non-U.S. Equity 24.21%	Cash Equivalent 1.87%	Small Cap 25.52%	Large Cap 18.40%	Real Estate Funds 21.02%	Cash Equivalent 1.46%	Non-U.S. Equity 17.94%	Non-U.S. Equity 5.59%
Non-U.S. Equity 14.47%	Small Cap 18.37%	Hedge Funds 12.56%	Cash Equivalent 2.06%	Non-U.S. Equity 33.67%	Real Estate Funds 15.26%	High Yield 4.98%	Small Cap 16.35%	Non-U.S. Equity 21.02%	U.S. Fixed 5.97%	U.S. Fixed 0.55%	Large Cap 11.96%	Large Cap 21.83%	U.S. Fixed 0.01%	Non-U.S. Equity 22.49%	Emerging Markets 18.31%	Small Cap 14.82%	Hedge Funds 1.06%	Small Cap 16.93%	Hedge Funds 5.30%
Hedge Funds 7.61%	Large Cap 15.79%	Non-U.S. Equity 12.44%	Real Estate Funds -10.70%	Small Cap 27.17%	High Yield 15.12%	Non-U.S. Fixed 4.36%	Large Cap 16.00%	Real Estate Funds 12.90%	Small Cap 4.89%	Cash Equivalent 0.05%	Emerging Markets 11.19%	Small Cap 14.65%	High Yield -2.08%	Emerging Markets 18.44%	Non-U.S. Fixed 10.11%	Non-U.S. Equity 12.62%	High Yield -11.19%	High Yield 13.44%	Small Cap 5.18%
Large Cap 4.91%	Real Estate Funds 15.27%	Non-U.S. Fixed 11.03%	Hedge Funds -19.07%	Large Cap 26.47%	Large Cap 15.06%	Large Cap 2.11%	High Yield 15.81%	Hedge Funds 9.73%	Hedge Funds 4.13%	Hedge Funds -0.71%	Real Estate Funds 7.79%	Non-U.S. Fixed 10.51%	Non-U.S. Fixed -2.15%	High Yield 14.32%	Non-U.S. Equity 7.59%	Hedge Funds 8.23%	U.S. Fixed -13.01%	Emerging Markets 9.83%	Emerging Markets 2.37%
Small Cap 4.55%	Hedge Funds 13.86%	U.S. Fixed 6.97%	High Yield -26.16%	Hedge Funds 18.57%	Hedge Funds 10.95%	Cash Equivalent 0.10%	Real Estate Funds 9.79%	High Yield 7.44%	High Yield 2.45%	Non-U.S. Equity -3.04%	Non-U.S. Equity 2.75%	High Yield 7.50%	Hedge Funds -3.19%	Hedge Funds 9.31%	U.S. Fixed 7.51%	High Yield 5.28%	Non-U.S. Equity -14.29%	Hedge Funds 5.83%	High Yield 1.47%
Cash Equivalent 3.06%	High Yield 11.85%	Large Cap 5.49%	Small Cap -33.79%	Non-U.S. Fixed 7.53%	Non-U.S. Equity 8.95%	Hedge Funds -2.52%	Hedge Funds 7.67%	Cash Equivalent 0.07%	Cash Equivalent 0.04%	Small Cap -4.41%	U.S. Fixed 2.65%	Hedge Funds 7.12%	Large Cap -4.38%	U.S. Fixed 8.72%	High Yield 7.11%	Cash Equivalent 0.05%	Large Cap -18.11%	Non-U.S. Fixed 5.72%	Cash Equivalent 1.29%
High Yield 2.74%	Non-U.S. Fixed 8.16%	Cash Equivalent 5.00%	Large Cap -37.00%	U.S. Fixed 5.93%	U.S. Fixed 6.54%	Small Cap -4.18%	U.S. Fixed 4.21%	U.S. Fixed -2.02%	Emerging Markets -2.19%	High Yield -4.47%	Non-U.S. Fixed 1.49%	Real Estate Funds 6.66%	Small Cap -11.01%	Non-U.S. Fixed 5.09%	Hedge Funds 6.36%	U.S. Fixed -1.54%	Non-U.S. Fixed -18.70%	U.S. Fixed 5.53%	U.S. Fixed -0.78%
U.S. Fixed 2.43%	Cash Equivalent 4.86%	High Yield 1.87%	Non-U.S. Equity -43.56%	Cash Equivalent 0.21%	Non-U.S. Fixed 4.95%	Non-U.S. Equity -12.21%	Non-U.S. Fixed 4.09%	Emerging Markets -2.60%	Non-U.S. Fixed -3.09%	Non-U.S. Fixed -6.02%	Hedge Funds 1.25%	U.S. Fixed 3.54%	Non-U.S. Equity -14.09%	Real Estate Funds 4.39%	Cash Equivalent 0.67%	Emerging Markets -2.54%	Emerging Markets -20.09%	Cash Equivalent 5.01%	Real Estate Funds -2.58%
Non-U.S. Fixed -8.65%	U.S. Fixed 4.33%	Small Cap -1.57%	Emerging Markets -53.33%	Real Estate Funds -30.40%	Cash Equivalent 0.13%	Emerging Markets -18.42%	Cash Equivalent 0.11%	Non-U.S. Equity -3.08%	Non-U.S. Equity -4.32%	Emerging Markets -14.92%	Cash Equivalent 0.33%	Cash Equivalent 0.86%	Emerging Markets -14.57%	Cash Equivalent 2.28%	Real Estate Funds 0.34%	Non-U.S. Fixed -7.05%	Small Cap -20.44%	Real Estate Funds -12.73%	Non-U.S. Fixed -3.21%

- 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 Trends Survey Summary

This year's annual DC Trends Survey included responses from 132 plan sponsors, both Callan clients and other organizations. Respondents spanned a wide range of industries, with financial services and government being the most prevalent. Of all respondents, 64% were "mega plans" with more than $1 billion in assets, and 58% had more than 10,000 participants. Responses were collected in the fall/winter of 2023. Highlights from this year's survey:

AREAS OF FOCUS: Plan governance and process have consistently ranked as one of the top priorities for plan sponsors and was so again in 2023. Investment management fees and administration fees rounded out the top three.

FIDUCIARY INITIATIVES: Plans cited the following as main areas of focus for 2024:

- Review Plan Fees
- Update or Review the IPS
- Review the Investment Structure

INVESTMENT MENU: 91% of DC plans had a mix of active and passive investment funds. Purely passive and purely active lineups remained a rarity.

INVESTMENT VEHICLES: Collective investment trusts (82%) and mutual funds (80%) continued to be the most prevalent investment vehicles. Brokerage windows are offered by 53% of plan sponsors.

TARGET DATE FUNDS: Nearly all plans offered a target date fund (TDF), with 90% using it as the default. Among those that offer TDFs, 79% used an implementation that was at least partially indexed. In 2023, over 75% of plans took at least one action around their TDF. The most common were to evaluate the suitability of the underlying funds (76%) and the suitability of the glidepath (67%).

MANAGED ACCOUNTS: 58% of respondents offer managed account services. Larger plans (> $1 billion) were more likely to offer managed account services. 84% monitor or benchmark their managed account service.

FEES: 59% of respondents reviewed their all-in administrative fees within the last year and 80% reviewed investment management fees over that same time period. More than half of plans evaluate sources of indirect revenues when conducting all-in administrative fee reviews.

RETAINING ASSETS: Of plans with a policy regarding retaining the assets of terminated or retired participants, 81% sought to retain retiree assets while 61% sought to retain terminated assets. This is a notable increase from 2015 when only 44% sought to retain the assets of these types of participants.

RETIREMENT INCOME: Over 80% of plans offered some sort of retirement income solution in 2023. Installment payments (78%) and partial distributions (76%) were the most common solutions. Only 5% of plan sponsors offered qualified longevity annuity contracts (QLACs) or longevity insurance.

ROLLOVERS IN: Most plan sponsors reported they offer participants the opportunity to roll in qualified assets from their previous employer. Of these, only 22% actively promote this plan feature. Further, 56% of plan sponsors indicated that less than 10% of participants actually rolled in assets from their previous employers' qualified plan.

DOL Fiduciary Rule: April 2024 Update to Original Rule Proposed in October 2023

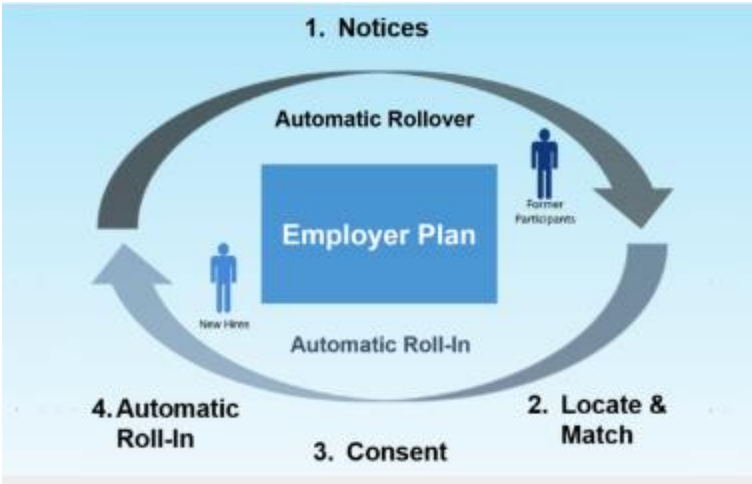
- The new rule contrasts with the existing ~50-year-old rule, where a provider is a fiduciary only if, among other things, the advice is provided on a “regular basis” to a specific individual and there is a “a mutual agreement, arrangement, or understanding” that the advice will serve as “a primary basis for investment decisions”
  - The current rule (c. 1975) utilizes a 5-part test to determine “investment advice fiduciary” status under ERISA
- Under the new rule, those who meet any of the following would qualify as fiduciary for investment advice:
  - The person either directly or indirectly makes professional investment recommendations to investors on a regular basis as part of their business (but need not provide regular advice to that specific investor) and the recommendation is made under circumstances that would indicate to a reasonable investor-that the recommendation:
    - *is based on review of the retirement investor's particular needs or individual circumstances,*
    - *reflects the application of professional or expert judgment to the retirement investor's particular needs or individual circumstances, and*
    - *may be relied upon by the retirement investor as intended to advance the retirement investor's best interest; or*
  - The person represents or acknowledges that they are acting as a fiduciary under Title I of ERISA, Title II of ERISA, or both with respect to the recommendation. The recommendation also must be provided “for a fee or other compensation, direct or indirect” as defined in the final rule
- Notably, the new regulation would extend ERISA’s fiduciary requirements to one-time advice, including rollovers to individual retirement accounts (IRAs) and annuity purchases
- The DOL further clarified that HR and other employees of the plan sponsor who are not investment professionals but interact with plan participants would not be considered an investment advice fiduciary
- The rule is set to go into effect on Sept. 23, 2024, and the industry would have another year to fully comply
- The investment advice fiduciaries will be required to satisfy a technical exemption and ensure they are not engaging in a prohibited transaction (i.e., earning compensation), including meeting various disclosure requirements, adhering to impartial conduct standards, which are substantially identical to ERISA’s duties of care and loyalty, and charging no more than reasonable compensation

DC Legal & Regulatory Updates

Automatic Portability to Prevent Small Balance Plan Leakage

Automatic Portability

- SECURE 2.0 (section 120) added a statutory exemption from prohibited transaction rules to allow compensation from an "automatic portability provider" (APP). Congress' intention for including this was to reduce leakage from retirement plans preserving an estimated trillion dollars in the U.S. retirement system
  - Section 120 allows (no requirement) plan sponsors to offer automatic portability
- Under automatic portability, workers with small balances ($7,000 or less, as of 12/31/23) in their defined contribution plans will be forced out of the plan into a Safe Harbor IRA (assuming plan documents allow). The Safe Harbor IRA is then rolled over into to a worker's new active retirement savings account once established, if that plan also participates in in the APP network
- Fidelity is one of the seven recordkeepers listed as "owner members" in the portability services network



DC Legal & Regulatory Updates

Forfeiture Usage for Plan Fees

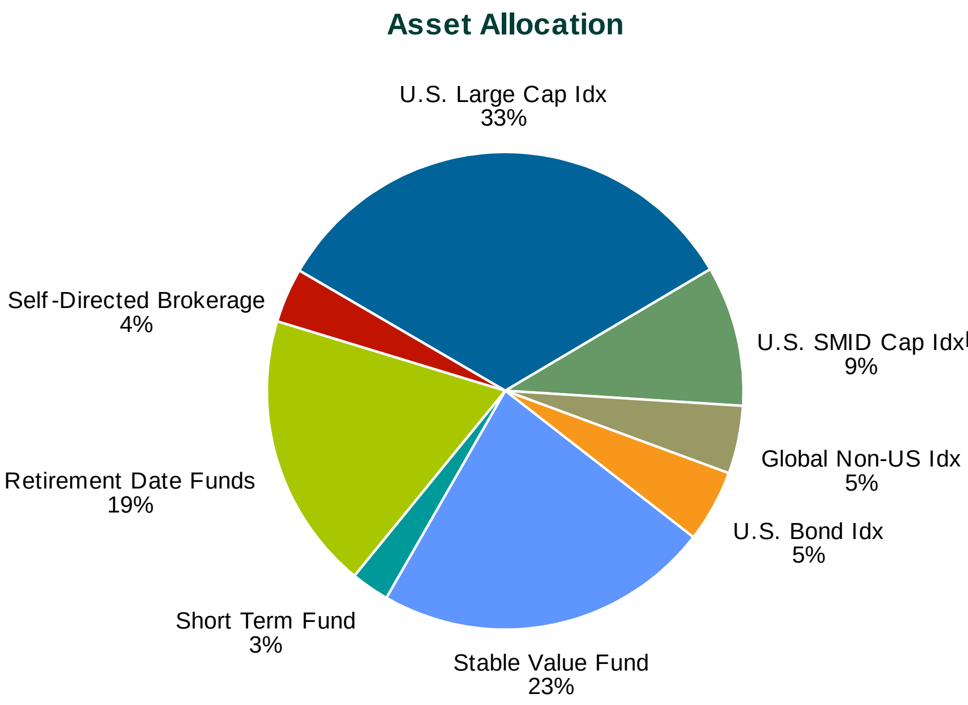
- Forfeitures are generated when a participant terminates service with an unvested benefit
  - Unvested benefits are considered "forfeited" by the participant and plan documents govern how forfeitures can be used
- New litigation in 2023 attacks forfeiture usage and alleges that plan sponsors failed to adhere to the ERISA fiduciary standards
  - Lawsuits have been filed largely against jumbo plan fiduciaries
  - Litigation alleges that forfeitures used to reduce employer contributions were essentially "self-dealing" thereby violating the ERISA fiduciary duties of prudence and loyalty, and that participants were harmed when plan fiduciaries did not reduce the expenses paid by participants
    - *Prudence: allegations that fiduciaries failed to engage in reasoned and impartial decision-making regarding usage*
    - *Loyalty: allegations that fiduciaries did not act "solely in the best interest of participants and beneficiaries" to provide benefits and pay reasonable expenses*
- IRS proposed regulations (beg. in 2024) give formal guidance on how to comply with the law:
  - <u>Current rule</u>: requires forfeitures be used or allocated in the plan year generated for the benefit of participants in that plan
  - <u>Proposed rule</u>: plans must generally use/allocate forfeitures no later than 12 months after the close of the plan year in which the forfeitures are created
    - *New rule also provides one-time relief where forfeitures incurred during any plan year prior to 1/1/24 are treated as having been incurred in the plan year beginning 1/1/24*

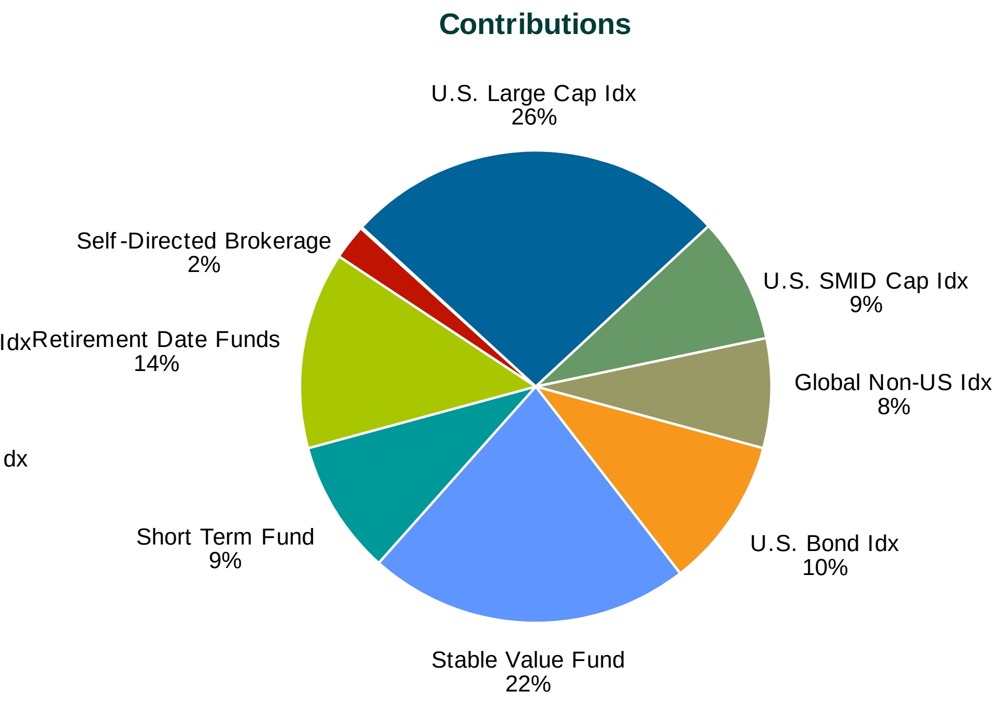
Callan

PA SERS 457(b) Plan Performance Review

457(b) Plan Asset Allocation & Contributions

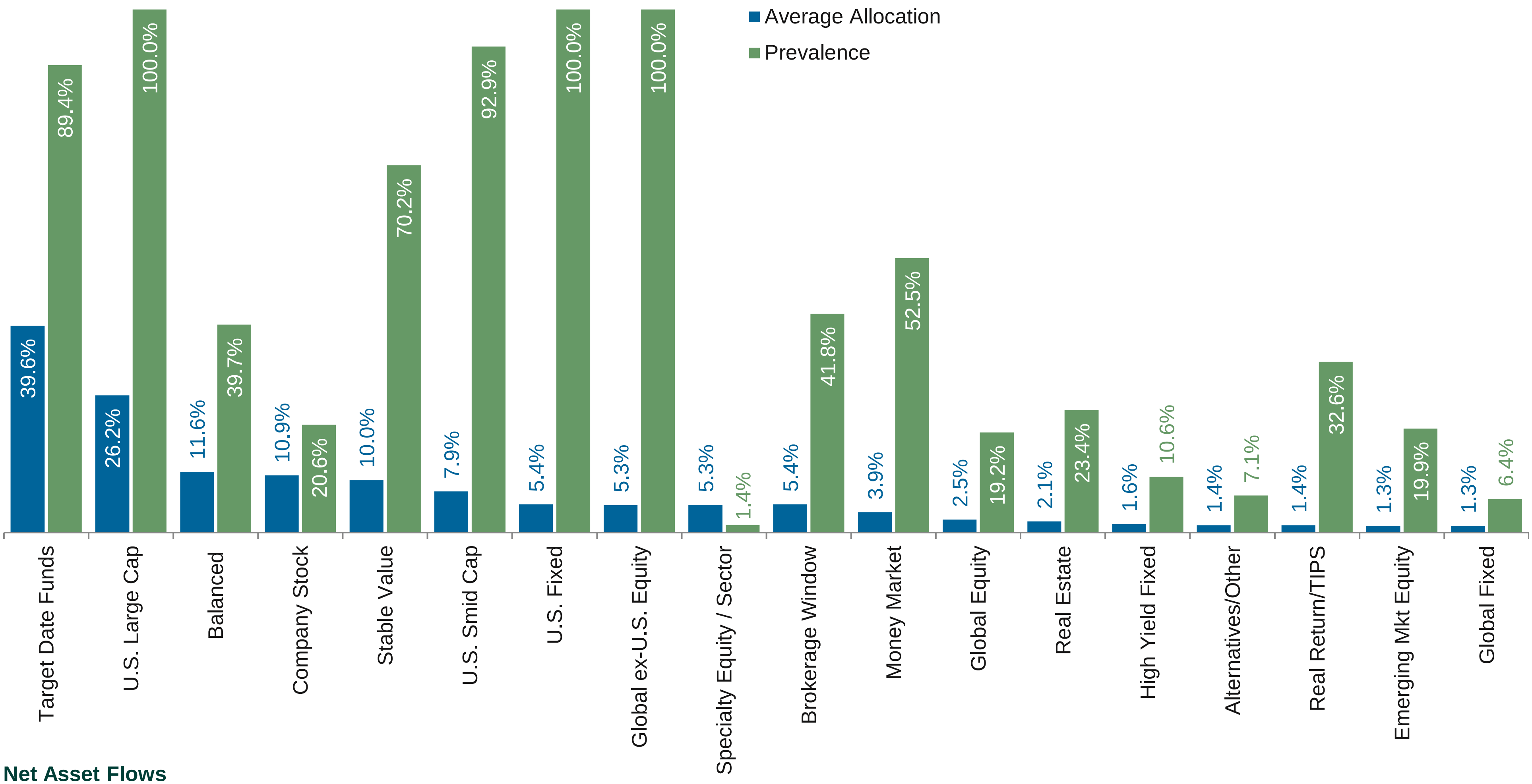
As of March 31, 2024





Callan DC Index Asset Allocation as of 12/31/23

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.



Net Asset Flows

90.7%	-11.8%	-9.3%	-5.9%	-45.1%	-16.9%	-0.6%	6.9%	0.3%	-2.1%	-2.3%	-0.6%	-0.5%	0.5%	-0.3%	-4.6%	-0.2%	0.2%

Asset Allocation

As of March 31, 2024

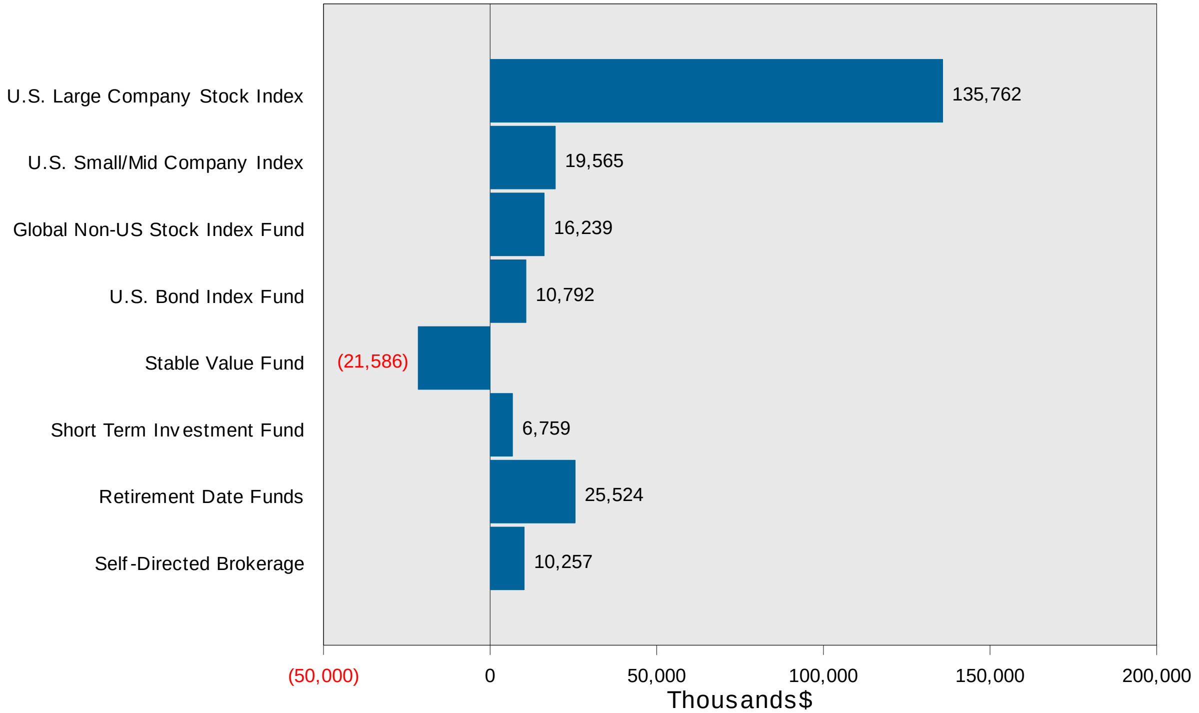
	March 31, 2024				December 31, 2023	
	Market Value	**Weight**	**Net New Inv.**	**Inv. Return**	**Market Value**	**Weight**
SERS Retirement Date Funds	**$892,959,524**	**18.80%**	**$(10,336,498)**	**$35,860,829**	**$867,435,193**	**19.08%**
SERS Post Retirement Fund	212,431,646	4.47%	(3,487,954)	5,118,241	210,801,358	4.64%
SERS 2025 Retirement Fund	135,315,105	2.85%	(5,362,677)	3,573,445	137,104,337	3.02%
SERS 2030 Retirement Fund	144,691,407	3.05%	(3,572,786)	5,133,550	143,130,644	3.15%
SERS 2035 Retirement Fund	137,216,958	2.89%	(1,125,871)	6,150,783	132,192,046	2.91%
SERS 2040 Retirement Fund	92,226,390	1.94%	(640,837)	4,948,511	87,918,716	1.93%
SERS 2045 Retirement Fund	80,095,945	1.69%	1,293,293	4,855,081	73,947,572	1.63%
SERS 2050 Retirement Fund	54,640,793	1.15%	792,673	3,623,334	50,224,786	1.10%
SERS 2055 Retirement Fund	21,134,479	0.44%	586,158	1,444,157	19,104,164	0.42%
SERS 2060 Retirement Fund	9,392,411	0.20%	690,961	623,352	8,078,098	0.18%
SERS 2065 Retirement Fund	5,814,390	0.12%	490,542	390,375	4,933,472	0.11%
SERS U.S. Equity	**$2,024,239,902**	**42.61%**	**$(24,579,554)**	**$179,905,801**	**$1,868,913,655**	**41.10%**
SERS U.S. Large Company Index Fund	1,573,411,714	33.12%	(14,427,158)	150,188,818	1,437,650,055	31.62%
SERS U.S. SMID Company Index Fund	450,828,188	9.49%	(10,152,395)	29,716,983	431,263,600	9.48%
SERS Non-U.S. Equity	**$216,559,628**	**4.56%**	**$6,840,232**	**$9,398,941**	**$200,320,456**	**4.41%**
SERS Global Non-US Index Fund	216,559,628	4.56%	6,840,232	9,398,941	200,320,456	4.41%
SERS Fixed Income	**$1,441,017,396**	**30.33%**	**$(10,732,517)**	**$6,697,471**	**$1,445,052,441**	**31.78%**
SERS Short Term Investment Fund	125,678,879	2.65%	5,268,333	1,490,818	118,919,728	2.62%
SERS Stable Value Fund	1,081,704,406	22.77%	(28,631,661)	7,045,210	1,103,290,857	24.26%
SERS U.S. Bond Index Fund	233,634,111	4.92%	12,630,811	(1,838,556)	222,841,856	4.90%
Self-Directed Brokerage Account	**$175,815,239**	**3.70%**	**$(1,675,656)**	**$11,932,256**	**$165,558,638**	**3.64%**
Total Fund	**$4,750,591,689**	**100.0%**	**$(40,483,992)**	**$243,795,298**	**$4,547,280,383**	**100.0%**

Changes in Market Values and Contributions

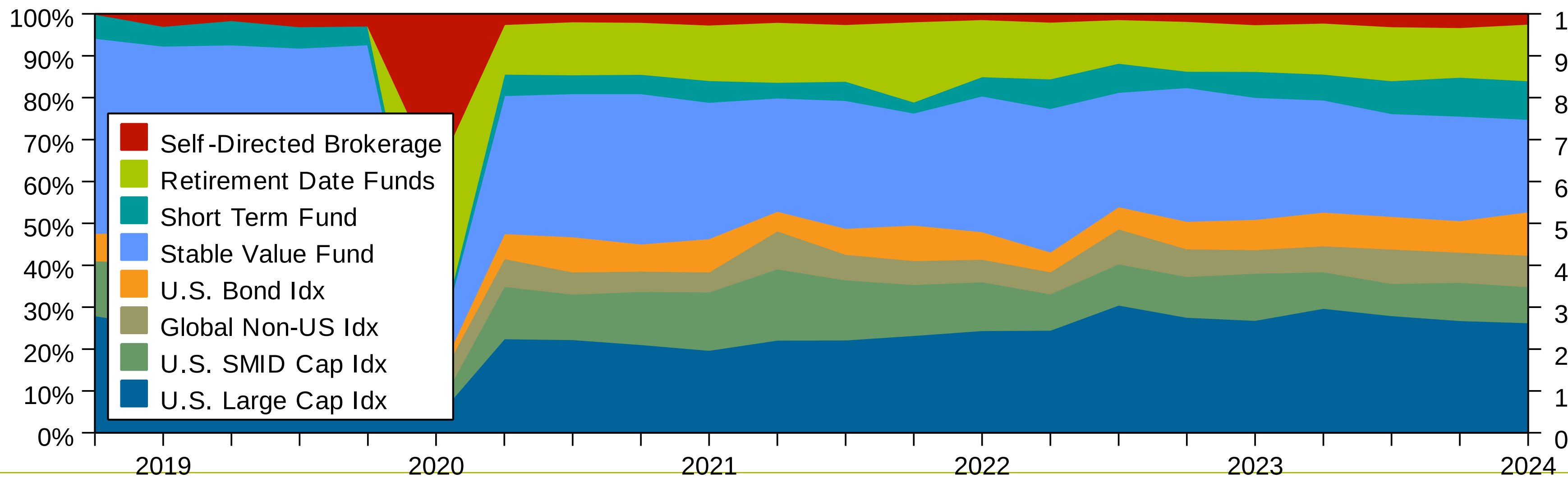
As of March 31, 2024

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

1. Market movements
2. Contributions or disbursements into or out of the fund by the participants (and any matching done by the company)
3. Transfers between funds by the participants.

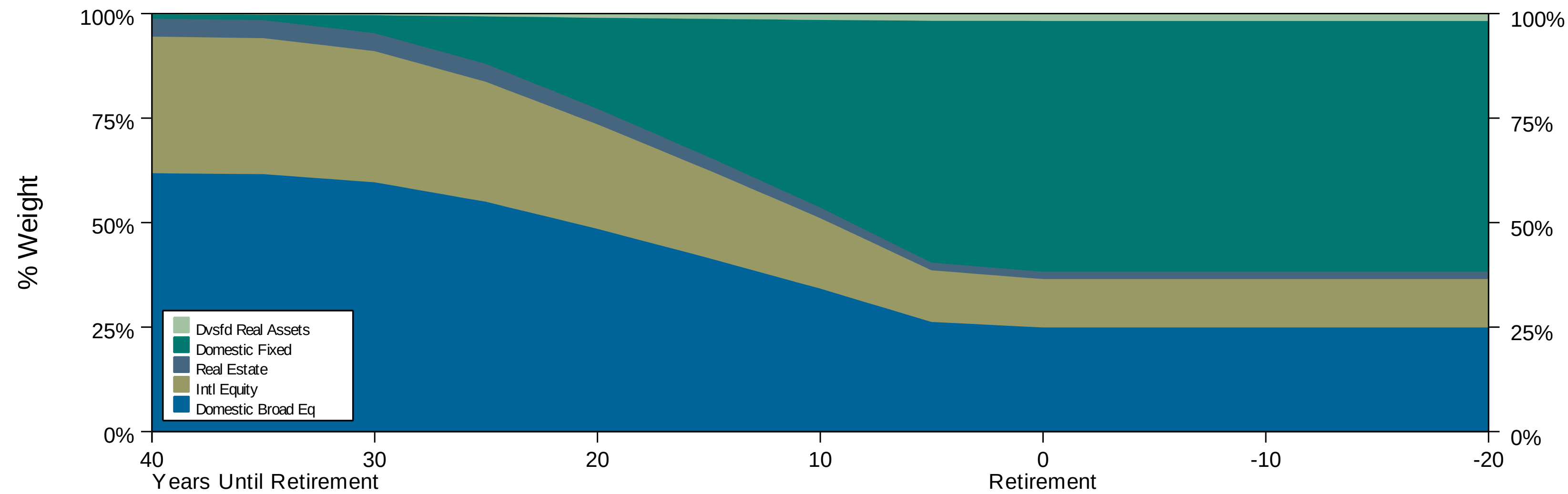


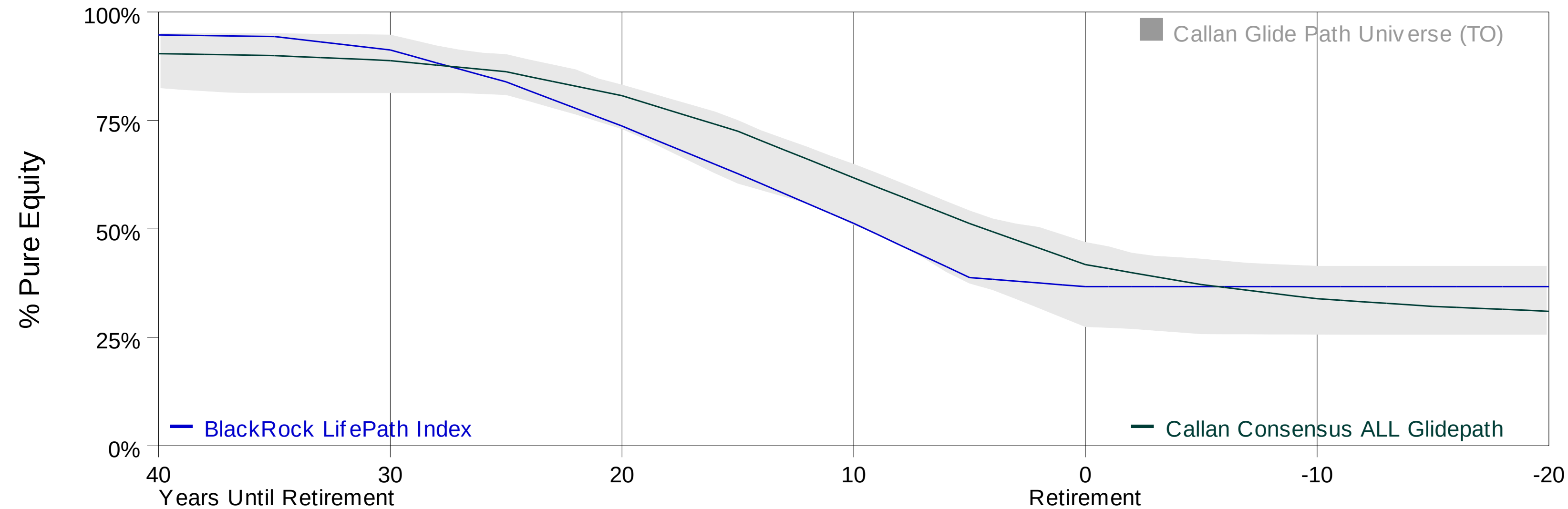
Historical Allocation of Contributions



Blackrock LifePath Retirement Funds

Glidepath and Equity Rolldown Exposure as of March 31, 2024





Cumulative Performance - Net of Fees

As of March 31, 2024

	Last Quarter	Last 1 Year	Last 3 Years	Last 5 Years
Net Performance				
Retirement Date Funds				
SERS Post Retirement Fund	2.50%	9.09%	1.20%	4.76%
BlackRock Post Retirement Index	2.47%	9.19%	1.24%	4.76%
Callan Tgt Date Ret Inc	2.62%	8.98%	1.35%	4.21%
SERS 2025 Retirement Fund	2.71%	9.86%	1.64%	5.46%
BlackRock 2025 Index	2.69%	9.93%	1.65%	5.44%
Callan Target Date 2025	3.70%	11.89%	2.43%	6.15%
SERS 2030 Retirement Fund	3.73%	12.58%	2.78%	6.68%
BlackRock 2030 Index	3.72%	12.70%	2.81%	6.66%
Callan Target Date 2030	4.55%	14.14%	3.14%	7.11%
SERS 2035 Retirement Fund	4.71%	15.16%	3.84%	7.82%
BlackRock 2035 Index	4.70%	15.28%	3.85%	7.80%
Callan Target Date 2035	5.47%	16.24%	3.94%	8.14%
SERS 2040 Retirement Fund	5.67%	17.70%	4.84%	8.87%
BlackRock 2040 Index	5.66%	17.80%	4.82%	8.82%
Callan Target Date 2040	6.45%	18.53%	4.78%	8.95%
SERS 2045 Retirement Fund	6.56%	20.10%	5.74%	9.80%
BlackRock 2045 Index	6.55%	20.18%	5.70%	9.72%
Callan Target Date 2045	6.96%	19.92%	5.37%	9.63%
SERS 2050 Retirement Fund	7.21%	21.71%	6.30%	10.34%
BlackRock 2050 Index	7.19%	21.79%	6.25%	10.26%
Callan Target Date 2050	7.26%	20.54%	5.60%	9.84%
SERS 2055 Retirement Fund	7.51%	22.30%	6.49%	10.50%
BlackRock 2055 Index	7.49%	22.40%	6.44%	10.42%
Callan Target Date 2055	7.48%	20.96%	5.77%	9.97%
SERS 2060 Retirement Fund	7.51%	22.31%	6.49%	10.49%
BlackRock 2060 Index	7.49%	22.41%	6.44%	10.42%
Callan Target Date 2060	7.50%	21.00%	5.70%	9.94%
SERS 2065 Retirement Fund	7.51%	22.33%	6.49%	-
BlackRock 2065 Index	7.49%	22.42%	6.44%	-
Callan Target Date 2065	7.62%	21.31%	5.68%	10.09%

Note: SERS Funds are the top fund in each grouping followed by each fund’s respective benchmark and median peer.
*Target Date funds replaced risk-based funds in 1Q20.

Cumulative Performance - Net of Fees

As of March 31, 2024

	Last 7 Years	Last 10 Years	Last 15 Years	Last 20 Years
Net Performance				
Retirement Date Funds				
SERS Post Retirement Fund	4.86%	4.49%	6.48%	-
BlackRock Post Retirement Index	4.85%	4.47%	6.47%	5.10%
Callan Tgt Date Ret Inc	4.28%	3.97%	5.84%	4.19%
SERS 2025 Retirement Fund	5.72%	5.32%	8.36%	-
BlackRock 2025 Index	5.68%	5.27%	8.33%	5.76%
Callan Target Date 2025	6.21%	5.79%	9.10%	6.34%
SERS 2030 Retirement Fund	6.79%	6.17%	9.28%	-
BlackRock 2030 Index	6.75%	6.11%	9.24%	6.26%
Callan Target Date 2030	7.09%	6.54%	9.96%	6.27%
SERS 2035 Retirement Fund	7.79%	6.97%	10.15%	-
BlackRock 2035 Index	7.74%	6.88%	10.08%	6.69%
Callan Target Date 2035	7.92%	7.17%	10.61%	7.15%
SERS 2040 Retirement Fund	8.71%	7.68%	10.92%	-
BlackRock 2040 Index	8.63%	7.57%	10.83%	7.07%
Callan Target Date 2040	8.62%	7.74%	11.17%	6.91%
SERS 2045 Retirement Fund	9.46%	8.26%	11.58%	-
BlackRock 2045 Index	9.36%	8.13%	11.48%	7.39%
Callan Target Date 2045	9.10%	8.13%	11.34%	-
SERS 2050 Retirement Fund	9.88%	8.56%	12.02%	-
BlackRock 2050 Index	9.77%	8.44%	11.93%	7.71%
Callan Target Date 2050	9.28%	8.31%	11.51%	-
SERS 2055 Retirement Fund	9.99%	8.64%	-	-
BlackRock 2055 Index	9.89%	8.52%	-	-
Callan Target Date 2055	9.42%	8.40%	11.92%	-
SERS 2060 Retirement Fund	9.98%	-	-	-
BlackRock 2060 Index	9.89%	-	-	-
Callan Target Date 2060	9.49%	8.52%	-	-

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.
**Target Date funds replaced risk-based funds in 1Q20.

Cumulative Performance - Net of Fees

As of March 31, 2024

	Last Quarter	Last 1 Year	Last 3 Years	Last 5 Years
Net Performance				
Domestic Equity				
SERS U.S. Large Company Index	10.55%	29.88%	11.49%	15.05%
S&P 500 Index	10.56%	29.88%	11.49%	15.05%
Callan Lg Cap Broad MF	11.25%	31.41%	9.95%	14.09%
SERS U.S. SMID Company Index	7.09%	26.87%	1.23%	10.31%
Dow Jones US Completion	6.95%	26.33%	0.79%	9.97%
Callan SMID Broad MFs	7.60%	21.45%	3.27%	10.02%
International Equity				
SERS Global Non-US Index	4.66%	13.15%	2.10%	6.19%
MSCI ACWI ex US	4.69%	13.26%	1.94%	5.97%
Callan Non US Equity MFs	5.29%	13.33%	3.34%	6.95%
Domestic Fixed Income				
SERS Short Term Investment Fund	1.29%	5.20%	2.63%	2.05%
3-month Treasury Bill	1.29%	5.24%	2.58%	2.02%
Callan Cash Database(1)	1.34%	5.47%	2.66%	2.19%
SERS Stable Value Fund	0.73%	2.78%	2.10%	2.21%
3-month Treasury Bill	1.29%	5.24%	2.58%	2.02%
Callan Stable Value SA	0.72%	2.78%	2.24%	2.29%
SERS U.S. Bond Index Fund	(0.78%)	1.68%	(2.46%)	0.36%
Blmbg Aggregate	(0.78%)	1.70%	(2.46%)	0.36%
Callan Core Bond MFs	(0.48%)	2.25%	(2.42%)	0.70%

(1) Callan Cash Database includes STIF, enhanced cash, and money market funds.
*The Global Non-U.S. Stock Index Fund replaced the International Company Stock Index Fund in 1Q20.

Cumulative Performance - Net of Fees

As of March 31, 2024

	Last 7 Years	Last 10 Years	Last 15 Years	Last 20 Years
Net Performance				
Domestic Equity				
SERS U.S. Large Company Index	14.09%	12.97%	15.65%	10.19%
S&P 500 Index	14.09%	12.96%	15.63%	10.15%
Callan Lg Cap Broad MF	13.72%	12.12%	15.01%	10.08%
SERS U.S. SMID Company Index	9.95%	9.11%	14.47%	9.65%
Dow Jones US Completion	9.65%	8.83%	14.19%	9.40%
Callan SMID Broad MFs	9.56%	8.64%	14.03%	9.43%
International Equity				
SERS Global Non-US Index	6.14%	4.48%	8.06%	-
MSCI ACWI ex US	5.88%	4.25%	7.88%	5.68%
Callan Non US Equity MFs	6.50%	4.65%	8.47%	6.07%
Domestic Fixed Income				
SERS Short Term Investment Fund	1.97%	1.49%	1.08%	1.65%
3-month Treasury Bill	1.90%	1.38%	0.96%	1.52%
Callan Cash Database(1)	2.11%	1.64%	1.24%	1.87%
SERS Stable Value Fund	2.20%	2.18%	2.55%	3.09%
3-month Treasury Bill	1.90%	1.38%	0.96%	1.52%
Callan Stable Value SA	2.32%	2.24%	2.48%	3.05%
SERS U.S. Bond Index Fund	1.06%	1.54%	2.55%	2.96%
Blmbg Aggregate	1.06%	1.54%	2.62%	2.99%
Callan Core Bond MFs	1.32%	1.73%	3.29%	3.22%

(1) Callan Cash Database includes STIF, enhanced cash, and money market funds.
*Funds not listed do not have longer term history.
*The Global Non-U.S. Stock Index Fund replaced the International Company Stock Index Fund in 1Q20.

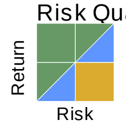
Performance Summary & Expense Ratios as of March 31, 2024

Investment Manager	Last Quarter Return	Last Year Return	3 Year Return	5 Year Return	7 Year Return	10 Year Return	5 Year Return Consistency	5 Year Risk Quadrant	Expense Ratio
Net of Fee Performance									
Retirement Date Funds									
SERS Post Retirement Fund	**2.5** 54	**9.1** 46	**1.2** 59	**4.8** 22	**4.9** 18	**4.5** 18			**0.08** 68
Callan Tgt Date Ret Inc									
BlackRock Post Retirement Index	2.5 55	9.2 44	1.2 57	4.8 22	4.8 18	4.5 18			
SERS 2025 Retirement Fund	**2.7** 90	**9.9** 84	**1.6** 85	**5.5** 75	**5.7** 73	**5.3** 74			**0.08** 68
Callan Target Date 2025									
BlackRock 2025 Index	2.7 91	9.9 83	1.7 84	5.4 75	5.7 75	5.3 77			
SERS 2030 Retirement Fund	**3.7** 91	**12.6** 80	**2.8** 70	**6.7** 73	**6.8** 67	**6.2** 73			**0.08** 61
Callan Target Date 2030									
BlackRock 2030 Index	3.7 91	12.7 79	2.8 68	6.7 73	6.7 69	6.1 75			
SERS 2035 Retirement Fund	**4.7** 85	**15.2** 77	**3.8** 57	**7.8** 69	**7.8** 56	**7.0** 68			**0.08** 68
Callan Target Date 2035									
BlackRock 2035 Index	4.7 85	15.3 74	3.9 56	7.8 70	7.7 63	6.9 76			
SERS 2040 Retirement Fund	**5.7** 79	**17.7** 68	**4.8** 47	**8.9** 58	**8.7** 43	**7.7** 55			**0.08** 64
Callan Target Date 2040									
BlackRock 2040 Index	5.7 79	17.8 65	4.8 48	8.8 59	8.6 50	7.6 64			
SERS 2045 Retirement Fund	**6.6** 63	**20.1** 45	**5.7** 25	**9.8** 35	**9.5** 29	**8.3** 39			**0.08** 68
Callan Target Date 2045									
BlackRock 2045 Index	6.5 64	20.2 44	5.7 28	9.7 42	9.4 36	8.1 51			
SERS 2050 Retirement Fund	**7.2** 51	**21.7** 29	**6.3** 14	**10.3** 24	**9.9** 18	**8.6** 28			**0.08** 64
Callan Target Date 2050									
BlackRock 2050 Index	7.2 53	21.8 29	6.2 17	10.3 27	9.8 24	8.4 40			
SERS 2055 Retirement Fund	**7.5** 43	**22.3** 23	**6.5** 9	**10.5** 17	**10.0** 14	**8.6** 31			**0.08** 68
Callan Target Date 2055									
BlackRock 2055 Index	7.5 47	22.4 22	6.4 10	10.4 21	9.9 22	8.5 38			
SERS 2060 Retirement Fund	**7.5** 49	**22.3** 25	**6.5** 12	**10.5** 23	**10.0** 17				**0.08** 70
Callan Target Date 2060									
BlackRock 2060 Index	7.5 51	22.4 24	6.4 13	10.4 29	9.9 27				

Returns:
- above median
- third quartile
- fourth quartile

Return Consistency:
- above median
- third quartile
- fourth quartile

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).

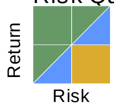
Performance Summary & Expense Ratios as of March 31, 2024

Investment Manager	Last Quarter Return	Last Year Return	3 Year Return	5 Year Return	7 Year Return	10 Year Return	5 Year Return Consistency	5 Year Risk Quadrant	Expense Ratio
SERS 2065 Retirement Fund	**7.5** 59	**22.3** 32	**6.5** 14						**0.08** 47
Callan Target Date 2065									
BlackRock 2065 Index	7.5 62	22.4 30	6.4 17						
Domestic Equity									
SERS U.S. Large Company Index	**10.6** 60	**29.9** 54	**11.5** 26	**15.1** 40	**14.1** 46	**13.0** 40			**0.02** 100
Callan Lg Cap Broad MF									
S&P 500 Index	10.6 60	29.9 54	11.5 26	15.0 40	14.1 46	13.0 41			
SERS U.S. Small/Mid Company Index	**7.1** 59	**26.9** 8	**1.2** 63	**10.3** 43	**9.9** 48	**9.1** 40			**0.03** 100
Callan SMID Broad MFs									
Dow Jones US Completion	7.0 67	26.3 8	0.8 65	10.0 50	9.6 50	8.8 45			
International Equity									
SERS Global Non-U.S. Index Fund	**4.7** 67	**13.1** 56	**2.1** 67	**6.2** 70	**6.1** 57	**4.5** 55			**0.05** 99
Callan Non US Equity MFs									
MSCI ACWI ex US	4.7 64	13.3 55	1.9 69	6.0 73	5.9 61	4.3 61			
Domestic Fixed Income									
SERS Short Term Investment Fund	**1.3** 59	**5.2** 72	**2.6** 53	**2.1** 79	**2.0** 71	**1.5** 73			**0.00** 100
Callan Cash Database									
3-month Treasury Bill	1.3 58	5.2 71	2.6 55	2.0 80	1.9 84	1.4 89			
Comments: Callan Cash Database includes STIF, enhanced cash, and money market funds.									
SERS Stable Value Fund	**0.7** 39	**2.8** 50	**2.1** 67	**2.2** 64	**2.2** 62	**2.2** 67			**0.25** 70
Callan Stable Value SA									
3-month Treasury Bill	1.3 2	5.2 2	2.6 15	2.0 87	1.9 90	1.4 95			
SERS U.S. Bond Index Fund	**-0.8** 89	**1.7** 75	**-2.5** 59	**0.4** 90	**1.1** 83	**1.5** 80			**0.02** 100
Callan Core Bond MFs									
Blmbg Aggregate	-0.8 88	1.7 75	-2.5 58	0.4 89	1.1 82	1.5 79			

Returns:
- above median
- third quartile
- fourth quartile

Return Consistency:
- above median
- third quartile
- fourth quartile

Risk Quadrant:

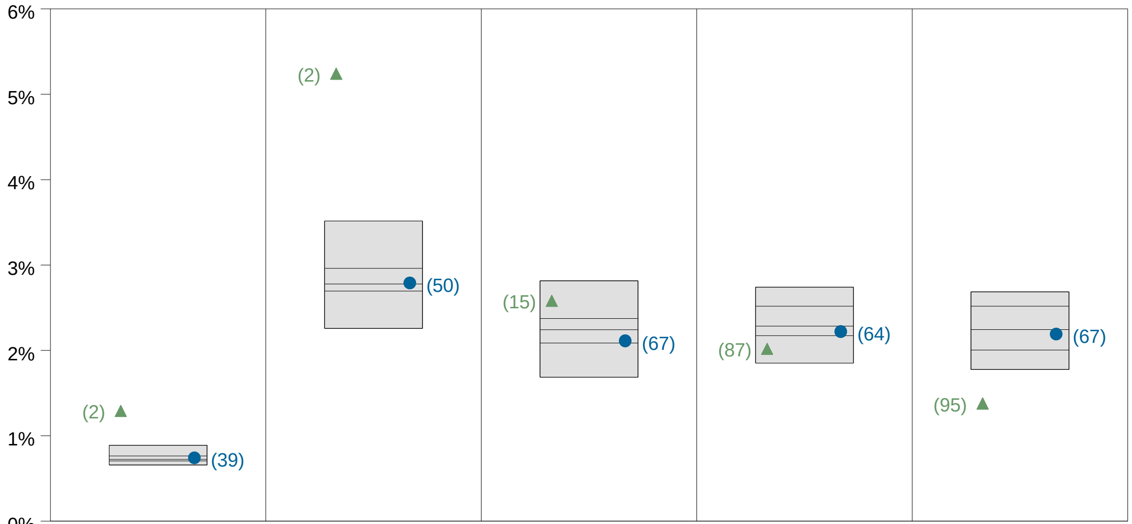


Expense Ratio:
- below median
- second quartile
- first quartile

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).

Stable Value Fund as of March 31, 2024

Performance vs Callan Stable Value SA (Gross)



	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	0.89	3.52	2.82	2.74	2.69
25th Percentile	0.76	2.96	2.37	2.52	2.52
Median	0.72	2.78	2.24	2.29	2.24
75th Percentile	0.71	2.70	2.09	2.17	2.00
90th Percentile	0.66	2.26	1.69	1.85	1.78
SERS Stable Value Fund ●	0.73	2.78	2.10	2.21	2.18
3-month Treasury Bill ▲	1.29	5.24	2.58	2.02	1.38

Manager Diversification*	
Manager	**Portfolio**
Jennison	2.8%
Dodge & Cox	4.1%
Invesco	61.7%
Loomis Sayles	9.7%
PFM	9.2%
Ramirez (DWDO Manager)	9.3%
STIF	3.1%
Total	100%

Wrap Provider Exposure*					
Contract Issuer	**Portfolio**	**Average Fee**	**Moody's Rating**	**S&P Rating**	**Fitch Rating**
Nationwide Life Insurance	20.44%	0.14%	A1	A+	NR
Transamerica	20.34%	0.15%	A1	A+	WD
RGA	15.38%	0.15%	A1	AA-	A+
Prudential Insurance Co.	15.36%	0.15%	Aa3	AA-	AA-
Pacific Life Insurance	12.84%	0.15%	Aa3	AA-	AA-
State Street Bank	12.72%	0.15%	Aa2	AA-	AA
	97.09%	0.14%			

*Source: Invesco

457(b) 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 Stable Value Fund	
	Core Fixed Income U.S. Bond Index Fund		
	Large-Cap US Equity U.S. Large Co. Stock 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		Self-Directed Brokerage Window

Aggressive

Appendix – Callan Update

Published Research Highlights: 1Q24

STAR Report Executive Summary: Year-End 2023

A Primer on Investable Types of Rental Housing

The Callan Periodic Table Collection: Year-End 2023

Callan 2024-2033 Capital Markets Assumptions

Recent Blog Posts

SEC Releases Final Climate Disclosure Rule

Kristin Bradbury

A Strong Finish to 2023 Bodes Well for Hedge Funds in 2024

Joe McGuane

The Magnificent Seven and Large Cap Portfolios

Nicole Wubbena

Additional Reading

Alternatives Focus quarterly newsletter

Active vs. Passive quarterly charts

Capital Markets Review quarterly newsletter

Monthly Updates to the Periodic Table

Market Pulse Flipbook quarterly markets update

Real Estate Indicators market outlook

Callan Institute Events

Upcoming conferences, workshops, and webinars

Callan College

Intro to Investments—Learn the Fundamentals

This course is for institutional investors, including trustees and staff members of public plans, corporate plans, and nonprofits. This session familiarizes trustees and staff with basic investment theory, terminology, and practices.

– June 18-19, 2024 – In-Person Session in Chicago

– September 24-26, 2024 – Virtual Session via Zoom

Intro to Alternatives

This course is for institutional investors, including trustees and staff members of public plans, corporate plans, and nonprofits. This session familiarizes trustees and staff with alternative investments like private equity, hedge funds, and real estate, and how they can play a key role in any portfolio. You will learn about the importance of allocations to alternatives and how to consider integrating, evaluating, and monitoring them.

– August 21-22, 2024 – Virtual Session via Zoom

Please visit our website at callan.com/events-education as we add dates to our 2024 calendar!

Mark Your Calendar

2024 Regional Workshops

June 25, 2024 – Atlanta

June 27, 2024 – San Francisco

October 22, 2024 – Denver

October 23, 2024 – Chicago

Watch your email for further details and an invitation.

Webinars & Research Café Sessions

Webinar: Market Intelligence

April 26, 2024 – Virtual Session via Zoom

Webinar: Fee Study Results (National Conference)

May 16, 2024 – Virtual Session via Zoom

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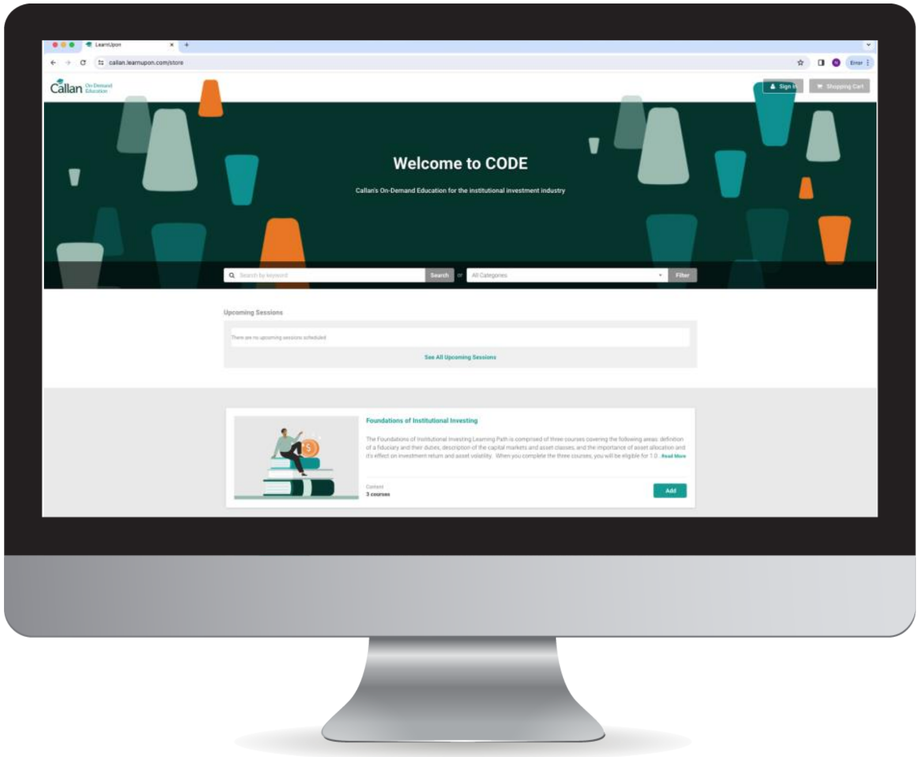

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2. Showcase your skills and knowledge
3. Learn from Callan's investment experts

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