

February 23, 2021



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

Fourth Quarter 2020

Executive Summary

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**Thomas H. Shingler**  
Senior Vice President

**Bud Pellecchia**  
Senior Vice President

**Britton M. Murdoch**  
Vice President

Callan

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**Market Environment**

# Stunning Recovery in Global Equity Markets in 4Q20

V-shaped rebound, ahead of the global economy

- Rebound since March bottom lifted the S&P 500 by 70% through December. However, the strong recovery was concentrated in a few stocks: mega cap and IT.
- Fed cut rates to zero, commenced QE, instituted multiple facilities to backstop money markets, credit markets, and the economy.
  - Fed expects to get paid back.
  - Further fiscal stimulus added at year-end
- Economic recovery will be uncertain in 2021.
- Release of vaccines a huge positive development. Distribution challenges may keep widespread inoculation from being achieved until mid-year.
- As COVID-19 infections surge anew, re-openings may be reversed in many states and localities.

## Returns for Periods ended 12/31/20

|                                     | 1 Quarter | 1 Year | 5 Years | 10 Years | 25 Years |
|-------------------------------------|-----------|--------|---------|----------|----------|
| <b>U.S. Equity</b>                  |           |        |         |          |          |
| Russell 3000                        | 14.68     | 20.89  | 15.43   | 13.79    | 9.67     |
| S&P 500                             | 12.15     | 18.40  | 15.22   | 13.88    | 9.56     |
| Russell 2000                        | 31.37     | 19.96  | 13.26   | 11.20    | 9.05     |
| <b>Global ex-U.S. Equity</b>        |           |        |         |          |          |
| MSCI World ex USA                   | 15.85     | 7.59   | 7.64    | 5.19     | 5.17     |
| MSCI Emerging Markets               | 19.70     | 18.31  | 12.81   | 3.63     | --       |
| MSCI ACWI ex USA Small Cap          | 18.56     | 14.24  | 9.37    | 5.95     | 6.49     |
| <b>Fixed Income</b>                 |           |        |         |          |          |
| Bloomberg Barclays Aggregate        | 0.67      | 7.51   | 4.44    | 3.84     | 5.16     |
| 90-day T-Bill                       | 0.03      | 0.67   | 1.20    | 0.64     | 2.27     |
| Bloomberg Barclays Long Gov/Credit  | 1.68      | 16.12  | 9.35    | 8.16     | 7.42     |
| Bloomberg Barclays Global Agg ex-US | 5.09      | 10.11  | 4.89    | 1.99     | 3.97     |
| <b>Real Estate</b>                  |           |        |         |          |          |
| NCREIF Property                     | 1.15      | 1.60   | 5.91    | 9.00     | 9.09     |
| FTSE Nareit Equity                  | 11.57     | -8.00  | 4.77    | 8.31     | 9.64     |
| <b>Alternatives</b>                 |           |        |         |          |          |
| CS Hedge Fund                       | 6.39      | 6.36   | 4.07    | 3.81     | 7.26     |
| Cambridge Private Equity*           | 10.38     | 17.87  | 13.87   | 13.82    | 15.05    |
| Bloomberg Commodity                 | 10.19     | -3.12  | 1.03    | -6.50    | 1.00     |
| Gold Spot Price                     | -0.02     | 24.42  | 12.32   | 2.92     | 6.55     |
| <b>Inflation - CPI-U</b>            | 0.07      | 1.36   | 1.95    | 1.74     | 2.13     |

\*Cambridge PE data through 09/30/20

Sources: Bloomberg, Bloomberg Barclays, Callan, Cambridge, Credit Suisse, FTSE Russell, MSCI, NCREIF, S&P Dow Jones Indices

## Market Environment: 4Q20

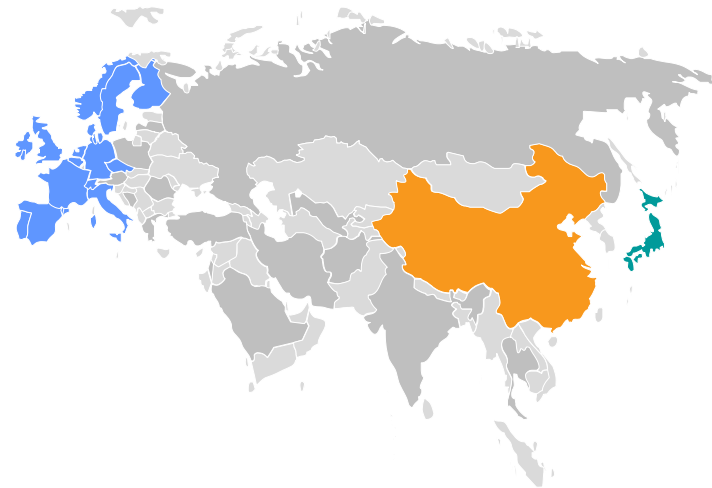
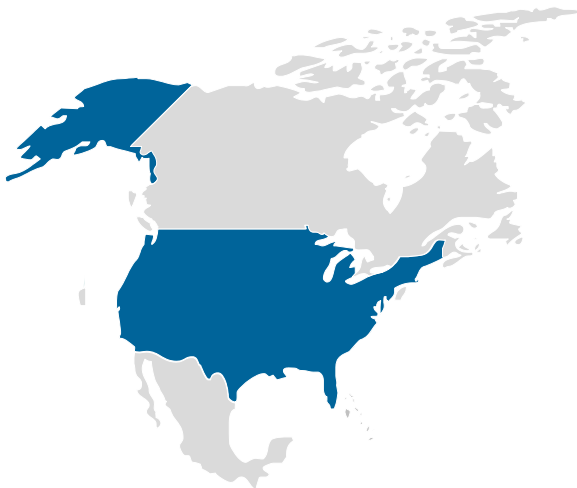
High degree of uncertainty

### U.S.

- 2Q GDP -31.4%, largest decline on record; 3Q gain of 33%, solid growth of 4% in 4Q
- Retail sales, durable goods, and personal spending rebounded in 2Q and 3Q, but growth slowed in August and September as stimulus waned.
- Unemployment dropped to 6.7% in November from 14.7% April peak.
  - Jobless claims decelerated to less than 1 million per week but are still elevated relative to prior recession peaks.
- Housing benefiting from relatively low mortgage rates
- Fed left rates close to 0% and expects to be on hold until at least 2023.

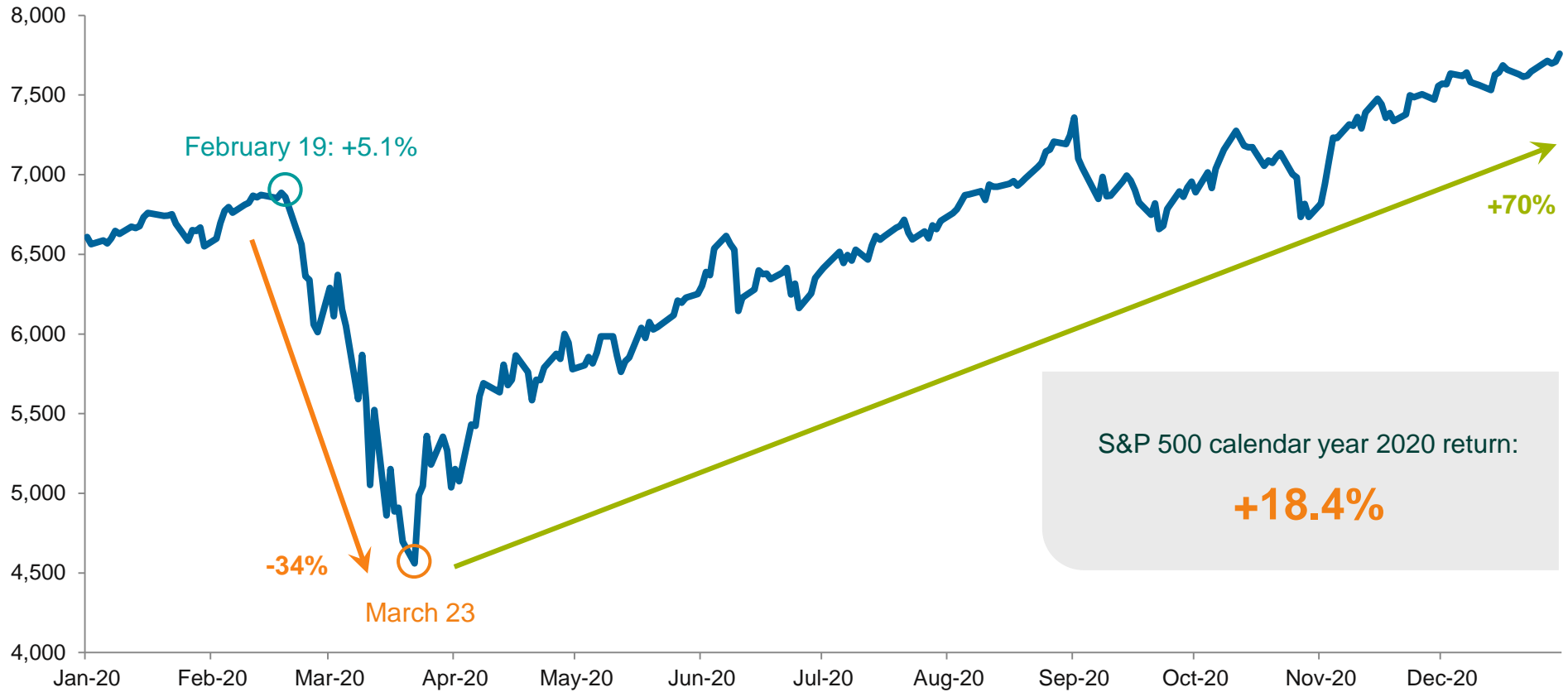
### Global

- Euro zone 1Q GDP contracted 3.7% (-14% annualized), followed by 11.7% drop (-39.2% annualized) in 2Q, largest Q drop on record; 12.5% jump (60% annualized!) in 3Q
- U.K. GDP sank 18.8% in 2Q (-57% annualized)—most ever, rebounded 16% (81% annualized) in 3Q
- Japan's economy shrank 8.3% (-29% annualized) in 2Q; third straight quarterly drop, dating back to 2019; 5.3% growth (22.9% annualized) in 3Q
- China's GDP fell 10% (-34% annualized) in 1Q, but rebounded 11.7% (56% annualized) in 2Q and is up 2.7% (11.3% annualized) in 3Q; only country expected to grow in 2020



# U.S. Equity Markets Rebound Over 70%

## S&P 500 Total Return Price Index Calendar Year 2020



- Substantial price appreciation in spite of poor earnings
- Low Treasury yields helping to support valuations

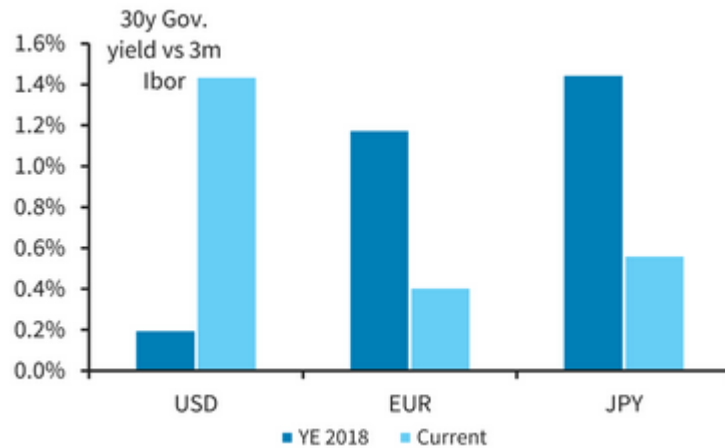
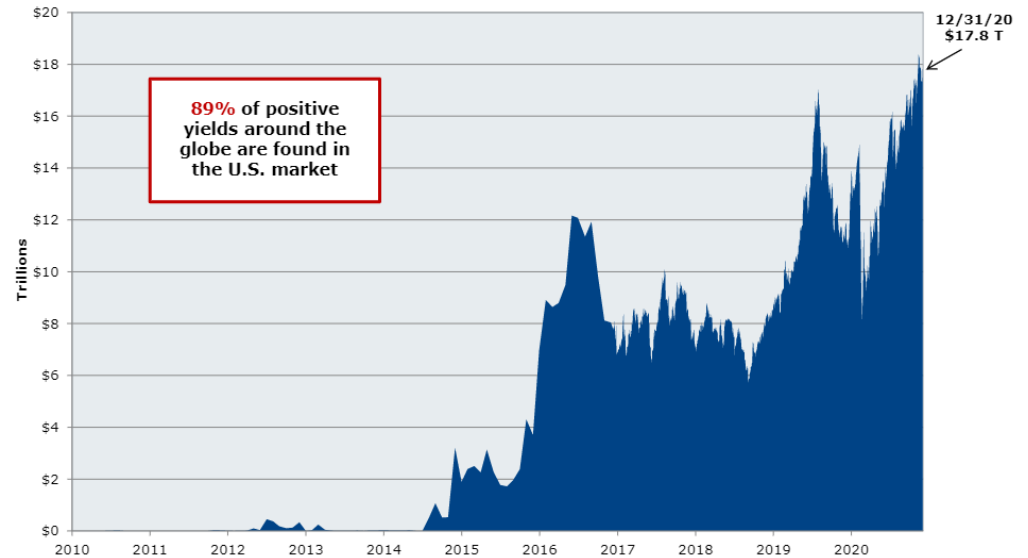
Source: S&P Dow Jones Indices  
Data as of 12/31/20

# Low and Negative Yields Fuel Demand for Credit

## U.S. credit attractive to international investors

- Central banks globally are adopting a “lower for longer” mindset toward rates.
- 89% of positive yields globally are in the U.S., spurring demand for U.S. corporate credit.
- Lower LIBOR rates have decreased currency hedging costs; combined with a steep Treasury curve, that makes U.S. credit attractive to non-U.S. investors.

Bloomberg Barclays Global Aggregate Negative-Yielding Debt Index



ICE BofA U.S. Corporate Index Option-Adjusted Spread



Sources: Baird, Bloomberg, Barclays Research, ICE BofA

# Diversification Remains Key Risk Control

## Periodic Table of Investment Returns

| 2001              | 2002              | 2003              | 2004              | 2005              | 2006              | 2007              | 2008              | 2009              | 2010              | 2011              | 2012              | 2013              | 2014              | 2015              | 2016              | 2017              | 2018              | 2019              | 2020              |
|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| U.S. Fixed        | Non-U.S. Fixed    | Emerging Markets  | Emerging Markets  | Emerging Markets  | Emerging Markets  | Emerging Markets  | U.S. Fixed        | Emerging Markets  | Small Cap         | Real Estate Funds | Emerging Markets  | Small Cap         | Large Cap         | Real Estate Funds | Small Cap         | Emerging Markets  | Real Estate Funds | Large Cap         | Small Cap         |
| 8.43%             | 22.37%            | 55.82%            | 25.55%            | 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%            |
| High Yield        | U.S. Fixed        | Small Cap         | Non-U.S. Equity   | Real Estate Funds | Non-U.S. Equity   | Real Estate Funds | Non-U.S. Fixed    | High Yield        | Emerging Markets  | U.S. Fixed        | Non-U.S. Equity   | Large Cap         | Real Estate Funds | Large Cap         | High Yield        | Non-U.S. Equity   | Cash Equivalent   | Small Cap         | Large Cap         |
| 5.28%             | 10.26%            | 47.25%            | 20.38%            | 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%            |
| Real Estate Funds | Real Estate Funds | Non-U.S. Equity   | Small Cap         | Non-U.S. Equity   | Small Cap         | Hedge Funds       | Cash Equivalent   | Non-U.S. Equity   | Real Estate Funds | High Yield        | Small Cap         | Non-U.S. Equity   | U.S. Fixed        | U.S. Fixed        | Large Cap         | Large Cap         | U.S. Fixed        | Non-U.S. Equity   | Emerging Markets  |
| 4.64%             | 4.57%             | 39.42%            | 18.33%            | 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%            |
| Cash Equivalent   | Hedge Funds       | High Yield        | Non-U.S. Fixed    | Hedge Funds       | Large Cap         | Non-U.S. Equity   | Real Estate Funds | Small Cap         | High Yield        | Non-U.S. Fixed    | Large Cap         | Real Estate Funds | Small Cap         | Cash Equivalent   | Emerging Markets  | Small Cap         | High Yield        | Emerging Markets  | Non-U.S. Fixed    |
| 4.42%             | 3.04%             | 28.97%            | 12.54%            | 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%            |
| Hedge Funds       | Cash Equivalent   | Large Cap         | Real Estate Funds | Large Cap         | Real Estate Funds | Non-U.S. Fixed    | Hedge Funds       | Large Cap         | Large Cap         | Large Cap         | High Yield        | Hedge Funds       | Hedge Funds       | Hedge Funds       | Real Estate Funds | Non-U.S. Fixed    | Non-U.S. Fixed    | High Yield        | Non-U.S. Equity   |
| 4.42%             | 1.78%             | 28.68%            | 12.00%            | 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%             |
| Small Cap         | High Yield        | Non-U.S. Fixed    | High Yield        | Small Cap         | Hedge Funds       | U.S. Fixed        | High Yield        | Hedge Funds       | Hedge Funds       | Cash Equivalent   | Real Estate Funds | High Yield        | High Yield        | Non-U.S. Equity   | Non-U.S. Equity   | High Yield        | Hedge Funds       | Hedge Funds       | U.S. Fixed        |
| 2.49%             | -1.37%            | 19.36%            | 11.13%            | 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%             |
| Emerging Markets  | Emerging Markets  | Hedge Funds       | Large Cap         | Cash Equivalent   | High Yield        | Large Cap         | Small Cap         | Non-U.S. Fixed    | Non-U.S. Equity   | Hedge Funds       | Hedge Funds       | Cash Equivalent   | Cash Equivalent   | Small Cap         | U.S. Fixed        | Hedge Funds       | Large Cap         | U.S. Fixed        | High Yield        |
| -2.61%            | -6.16%            | 15.44%            | 10.88%            | 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%             |
| Non-U.S. Fixed    | Non-U.S. Equity   | Real Estate Funds | Hedge Funds       | High Yield        | Non-U.S. Fixed    | Cash Equivalent   | Large Cap         | U.S. Fixed        | U.S. Fixed        | Small Cap         | U.S. Fixed        | U.S. Fixed        | Emerging Markets  | High Yield        | Non-U.S. Fixed    | Real Estate Funds | Small Cap         | Non-U.S. Fixed    | Hedge Funds       |
| -3.75%            | -15.80%           | 8.28%             | 9.64%             | 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%             |
| Large Cap         | Small Cap         | U.S. Fixed        | U.S. Fixed        | U.S. Fixed        | Cash Equivalent   | High Yield        | Non-U.S. Equity   | Cash Equivalent   | Non-U.S. Fixed    | Non-U.S. Equity   | Non-U.S. Fixed    | Emerging Markets  | Non-U.S. Fixed    | Non-U.S. Fixed    | Hedge Funds       | U.S. Fixed        | Non-U.S. Equity   | Real Estate Funds | Cash Equivalent   |
| -11.89%           | -20.48%           | 4.10%             | 4.34%             | 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%             |
|                   |                   | Cash Equivalent   | Cash Equivalent   | Non-U.S. Fixed    | U.S. Fixed        | Small Cap         | Emerging Markets  | Real Estate Funds | Cash Equivalent   | Emerging Markets  | Cash Equivalent   | Non-U.S. Fixed    | Non-U.S. Equity   | Emerging Markets  | Cash Equivalent   | Cash Equivalent   | Emerging Markets  | Cash Equivalent   | Real Estate Funds |
|                   |                   | 1.15%             | 1.33%             | -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%             |

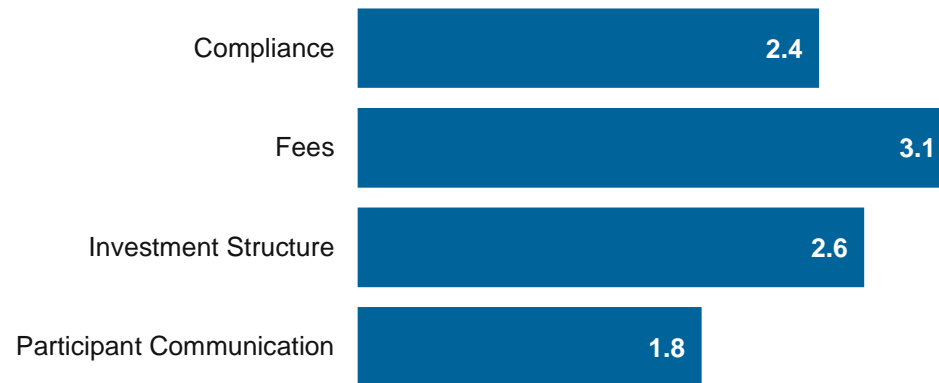
- Bloomberg Barclays Corp High Yield ● Bloomberg Barclays Global Aggregate ex US ● Bloomberg Barclays US Aggregate
- Credit Suisse Hedge Fund ● ICE BofAML US 3-Month Treasury Bill ● MSCI Emerging Markets ● MSCI World ex USA
- NFI-ODCE (value-weighted net) ● Russell 2000 ● S&P 500

# 4Q20 Consultant Survey: Key Issues for DC Plans

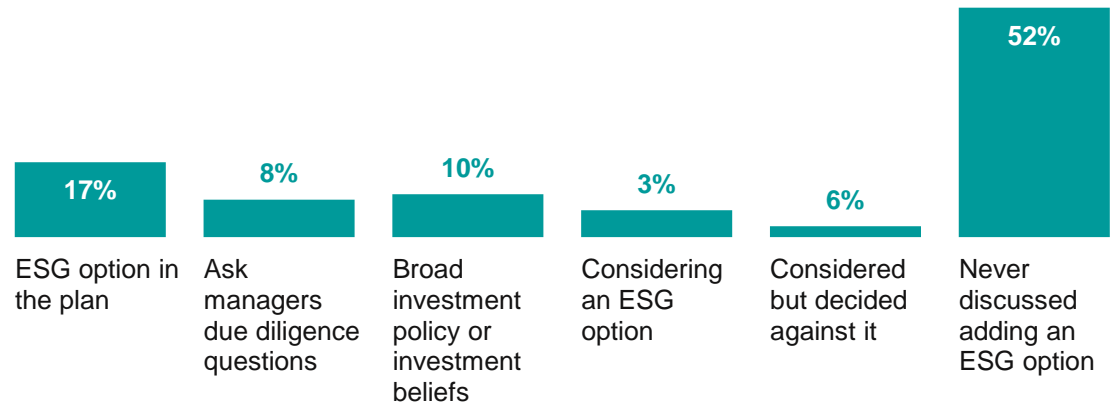
## Fees still top concern but new focus on investment structure

- Plan fees the top concern for sponsors for the last five years
- This reflects, as one consultant put it, “ongoing fee containment” by clients.
- Investment structure the second-ranked issue, nudging aside compliance
- One client is “moving from core menu options with single investment managers to a white-labeled multi-manager approach.”
- Another consultant noted that “the fear of being sued is an underlying force to evaluate” investment structures.
- No discussion of ESG by roughly half of DC clients
- ESG option in roughly one-fifth of plans
- A new issue, noted one consultant: “The new DOL rule on financial factors (ESG rule) and what it means for plan sponsors.”

### Ranking of Issues by DC Clients (4 = most important)



### Discussions About ESG





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# Defined Contribution Industry Developments

## Record-keeper consolidation continues

- Vanguard announced a partnership with InfoSys in July to provide DC recordkeeping services.
  - Infosys will assume day-to-day operations supporting Vanguard's DC recordkeeping business, including software platforms, administration, and associated processes.
- Empower announced its acquisition of MassMutual's retirement plan business and Fifth Third's recordkeeping business.

## Updated retirement plan limits for 2021 announced by IRS

- The annual contribution limit will remain the same at \$19,500.
- The age 50 annual catch-up contribution limit will remain the same at \$6,500.
- The annual compensation limit will increase from \$285,000 to \$290,000.
- The Section 415(c) limit will increase from \$57,000 to \$58,000.
- The highly compensated employee threshold will remain the same at \$130,000.

## Final rule on 'Financial Factors'

- The letters "ESG" were not included in the final rule issued by the Department of Labor on Oct. 30, 2020.
- Focus was on requirement of fiduciaries to evaluate only pecuniary factors.
- In the very rare event of a tie-breaker, non-pecuniary factors may be considered except in the case of selecting the QDIA.
- The Biden administration may take steps to review this new rule through the Congressional Review Act or new rulemaking.

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# Defined Contribution Industry Developments

## Key Themes

### Proxy Voting Rule

- The DOL issued a final rule on Dec. 16, 2020, for fiduciary duties in voting proxies held by ERISA plans.
- The key takeaway is that the plan fiduciary must consider the financial significance in voting or not voting the proxy.
- Plan sponsors should consult legal counsel to confirm compliance when evaluating proxy voting and establishing any proxy voting guidelines.
- The Biden administration may take steps to review this new rule through the Congressional Review Act or new rulemaking.

### SECURE Act 2.0

- New retirement legislation, SECURE 2.0, has built off of the SECURE Act. While still pending, below we highlight some of the key proposed changes:
  - Allows collective trust investment vehicles in 403(b) plans
  - Allows for matching contributions for employees who are repaying student loans
  - Increases the catch-up amount to \$10,000 for those age 60 or over
  - Changes the required minimum distributions (RMD) starting age to 75, exempts those with balances under \$100,000 from the RMD rules, and reduces the penalty for failing to take RMDs.

### Callan's 14th Annual DC Trends Survey Results

- Published in February 2021 and a webinar on Feb. 25, 2021
- Covers a wide variety of topics including:
  - Governance, Plan design features, Investment trends, Secure Act adoption, Cares Act adoption, Financial wellness, HSA usage

Callan

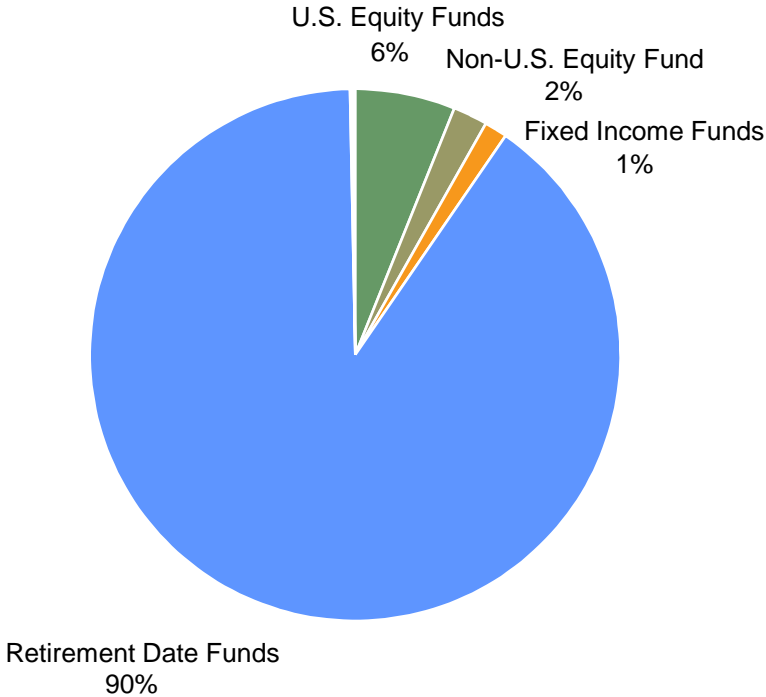
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**PA SERS 401(a) Plan Performance Review**

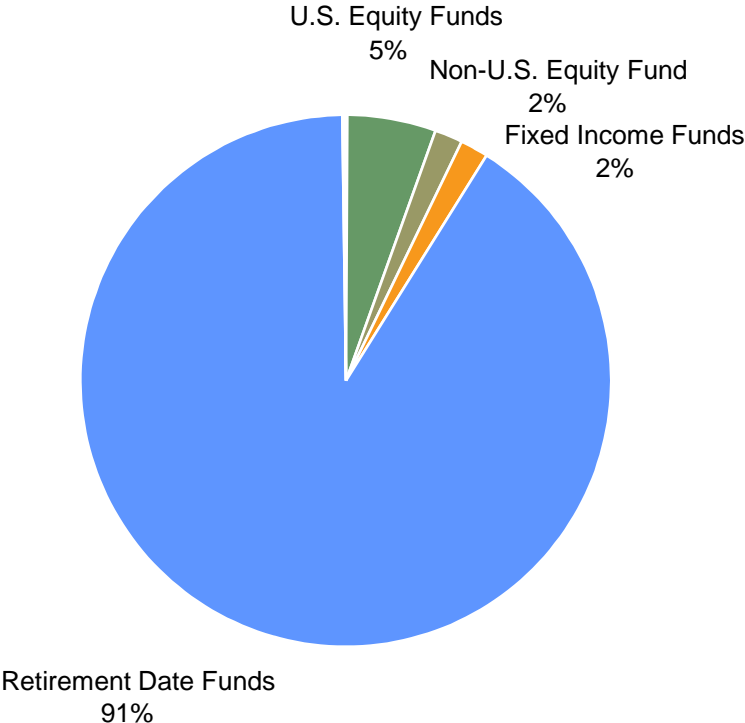
# 401(a) Plan Asset Allocation & Contributions

As of December 31, 2020

### Asset Allocation



### Contributions



# Asset Allocation

As of December 31, 2020

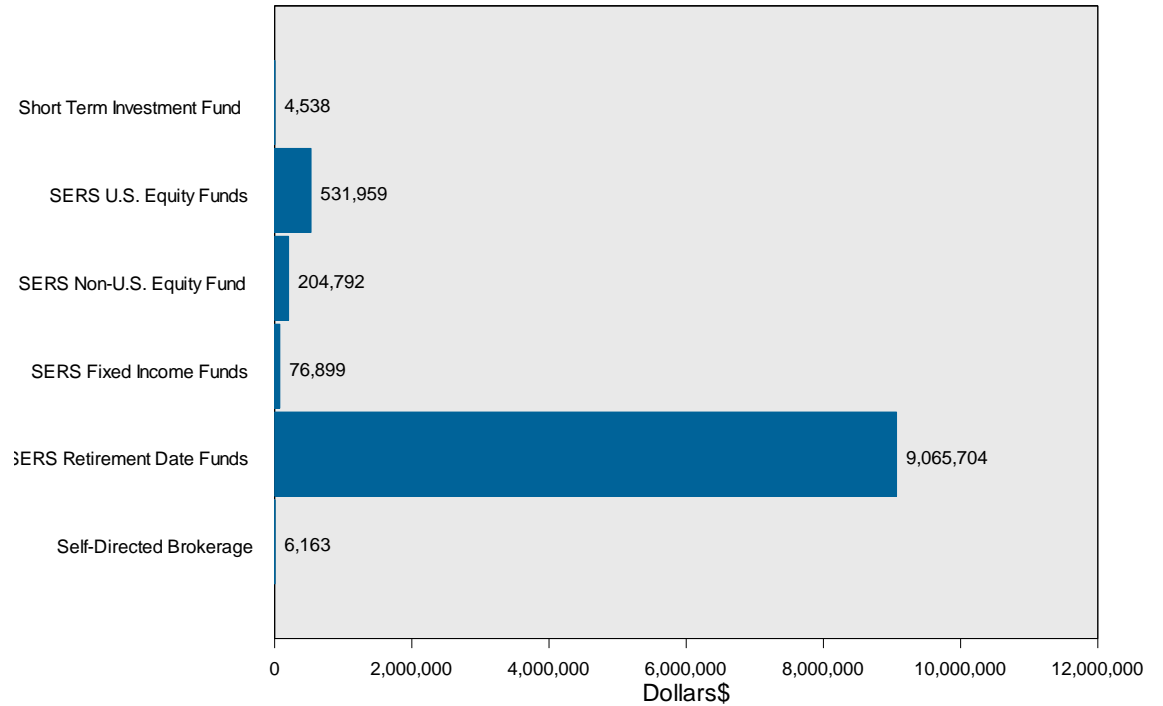
|                                    | December 31, 2020   |               |                    | September 30, 2020 |                     |               |
|------------------------------------|---------------------|---------------|--------------------|--------------------|---------------------|---------------|
|                                    | Market Value        | % of Total    | Net New Inv.       | Inv. Return        | Market Value        | % of Total    |
| <b>SERS Retirement Date Funds</b>  | <b>\$31,444,881</b> | <b>90.28%</b> | <b>\$5,677,339</b> | <b>\$3,388,365</b> | <b>\$22,379,177</b> | <b>89.71%</b> |
| SERS Post Retirement Fund          | 563,163             | 1.62%         | 105,903            | 32,505             | 424,755             | 1.70%         |
| SERS 2025 Retirement Fund          | 1,458,663           | 4.19%         | 271,599            | 102,666            | 1,084,398           | 4.35%         |
| SERS 2030 Retirement Fund          | 3,399,905           | 9.76%         | 625,654            | 284,334            | 2,489,918           | 9.98%         |
| SERS 2035 Retirement Fund          | 3,259,859           | 9.36%         | 778,468            | 308,792            | 2,172,599           | 8.71%         |
| SERS 2040 Retirement Fund          | 3,183,599           | 9.14%         | 566,169            | 339,701            | 2,277,729           | 9.13%         |
| SERS 2045 Retirement Fund          | 4,345,437           | 12.48%        | 729,690            | 497,789            | 3,117,958           | 12.50%        |
| SERS 2050 Retirement Fund          | 4,439,865           | 12.75%        | 675,106            | 534,957            | 3,229,802           | 12.95%        |
| SERS 2055 Retirement Fund          | 4,184,167           | 12.01%        | 738,069            | 501,947            | 2,944,151           | 11.80%        |
| SERS 2060 Retirement Fund          | 4,250,866           | 12.20%        | 738,757            | 508,264            | 3,003,844           | 12.04%        |
| SERS 2065 Retirement Fund          | 2,359,357           | 6.77%         | 447,924            | 277,409            | 1,634,024           | 6.55%         |
| <b>SERS U.S. Equity</b>            | <b>\$2,126,584</b>  | <b>6.11%</b>  | <b>\$281,668</b>   | <b>\$250,291</b>   | <b>\$1,594,625</b>  | <b>6.39%</b>  |
| SERS U.S. Large Company Idx Fund   | 1,371,187           | 3.94%         | 149,576            | 140,714            | 1,080,898           | 4.33%         |
| SERS U.S. All Company Idx Fund     | 456,557             | 1.31%         | 81,098             | 51,935             | 323,525             | 1.30%         |
| SERS U.S. SMID Company Idx Fund    | 298,840             | 0.86%         | 50,994             | 57,643             | 190,203             | 0.76%         |
| <b>SERS Non-U.S. Equity</b>        |                     |               |                    |                    |                     |               |
| SERS Global Non-U.S. Index Fund    | 717,483             | 2.06%         | 109,132            | 95,660             | 512,691             | 2.06%         |
| <b>SERS Fixed Income</b>           | <b>\$500,712</b>    | <b>1.44%</b>  | <b>\$73,851</b>    | <b>\$3,048</b>     | <b>\$423,813</b>    | <b>1.70%</b>  |
| SERS Short Term Investment Fund    | 51,068              | 0.15%         | 4,519              | 18                 | 46,530              | 0.19%         |
| SERS U.S. Short Term Bond Idx Fund | 52,576              | 0.15%         | 7,653              | 65                 | 44,858              | 0.18%         |
| SERS U.S. TIPS Index Fund          | 79,488              | 0.23%         | 18,151             | 1,183              | 60,154              | 0.24%         |
| SERS U.S. Bond Index Fund          | 317,580             | 0.91%         | 43,527             | 1,782              | 272,271             | 1.09%         |
| <b>Self-Directed Brokerage</b>     |                     |               |                    |                    |                     |               |
| SERS Self-Directed Brokerage       | 40,741              | 0.12%         | 2,326              | 3,837              | 34,577              | 0.14%         |
| <b>Total Fund</b>                  | <b>\$34,830,401</b> | <b>100.0%</b> | <b>\$6,144,315</b> | <b>\$3,741,201</b> | <b>\$24,944,884</b> | <b>100.0%</b> |

# Changes in Market Values and Contributions

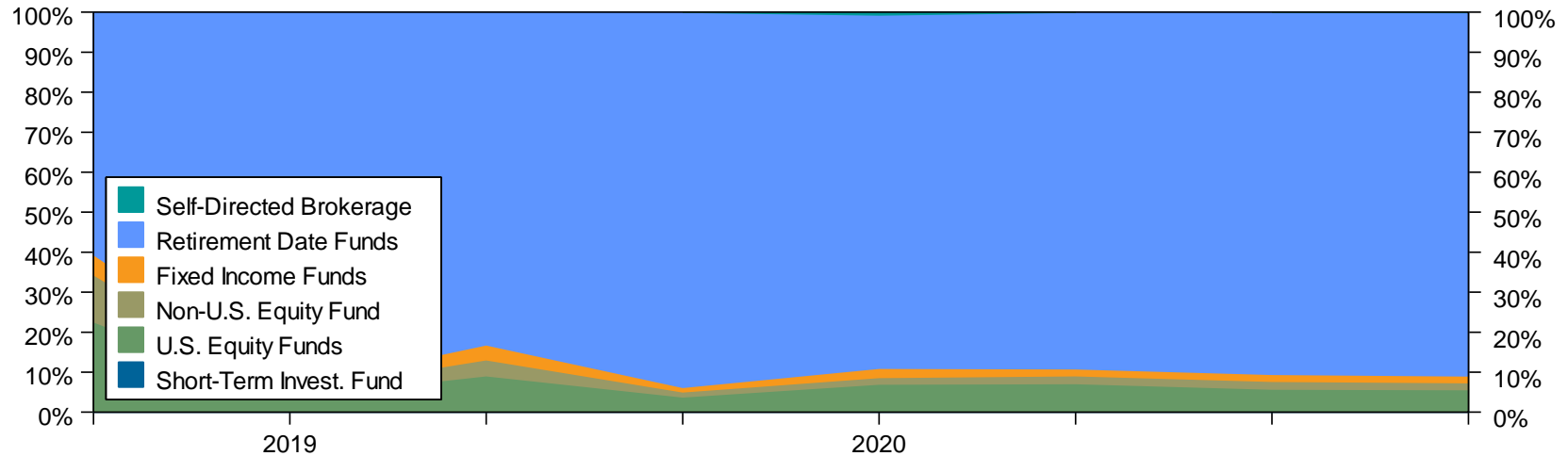
As of December 31, 2020

The chart to the right shows the net change in fund values across the various investment options for the quarter. The change in value for each fund is the result of:

1. Investment returns;
2. Participant contributions, employer match, distributions, withdrawals; and
3. Transfers between funds by participants.

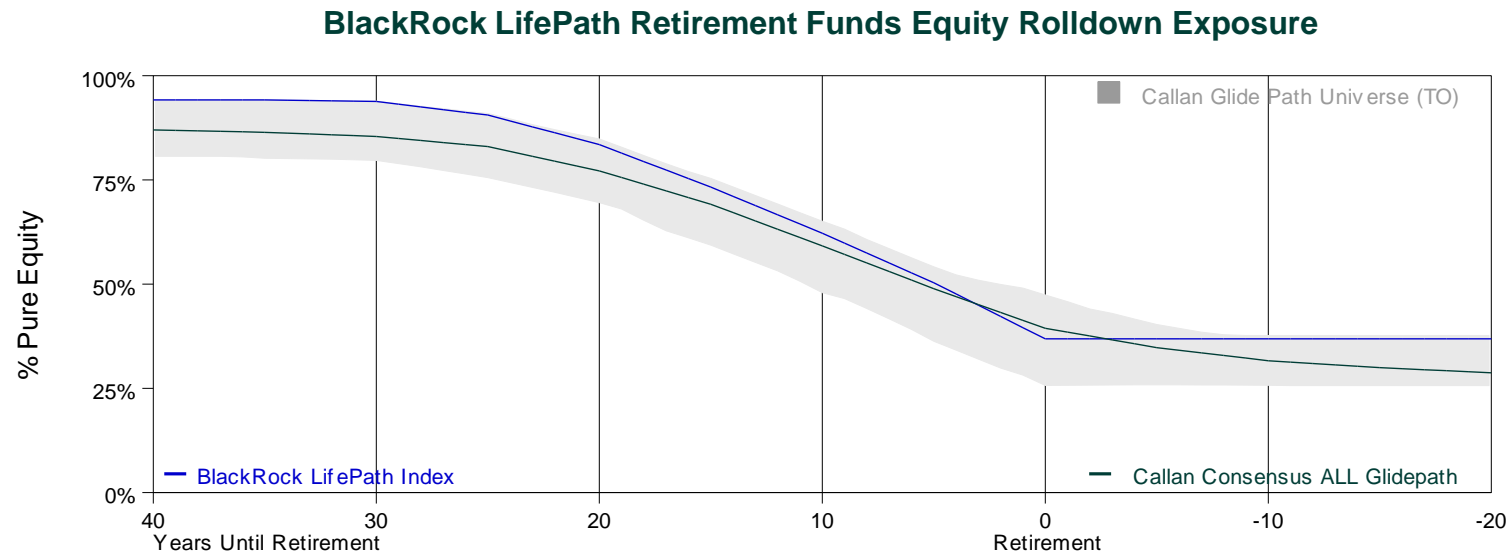
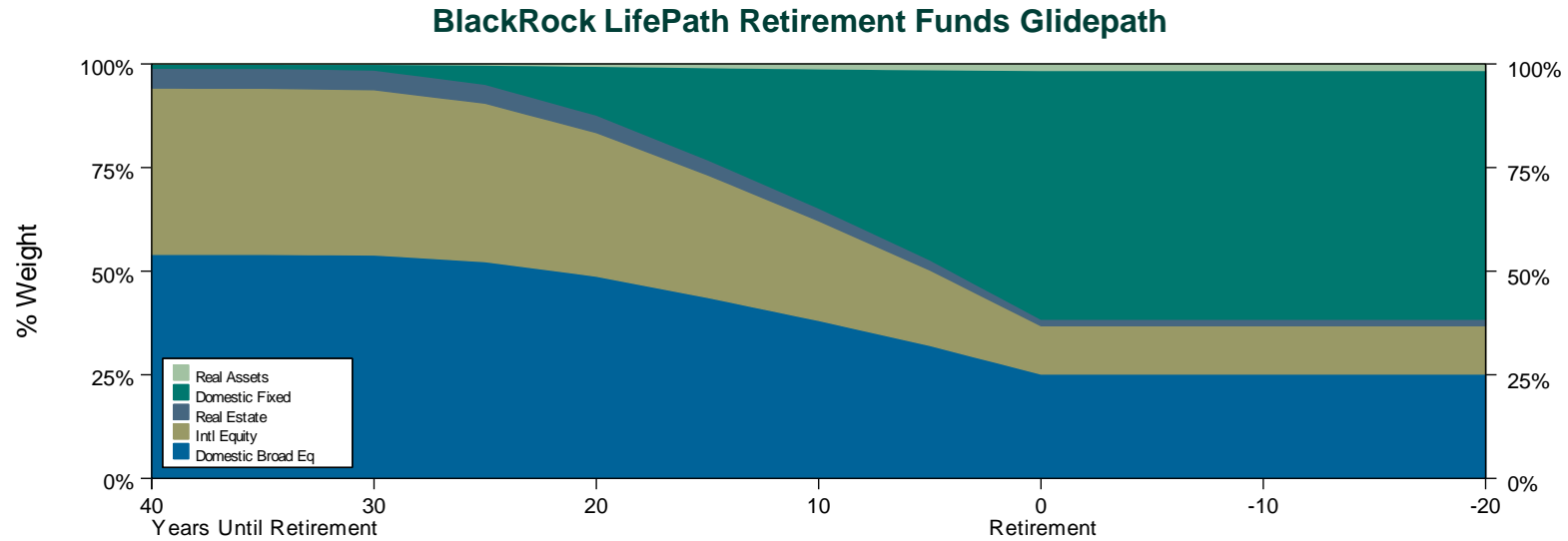


## Historical Allocation of Contributions



# Blackrock Lifepath Retirement Funds

Glidepath and Equity Roll-down Exposure as of December 31, 2020



# Cumulative Performance - Net of Fees

As of December 31, 2020

|                                 | Last Quarter | Last Year | Last 3 Years | Last 5 Years |
|---------------------------------|--------------|-----------|--------------|--------------|
| <b>Net Performance</b>          |              |           |              |              |
| <b>Target Date Funds</b>        |              |           |              |              |
| SERS Post Retirement Fund       | 6.77%        | 11.97%    | 7.72%        | 7.88%        |
| BlackRock Post Retirement Index | 6.77%        | 11.80%    | 7.66%        | 7.81%        |
| Callan Tgt Date 2000-2010       | 6.16%        | 10.61%    | 7.13%        | 7.62%        |
| SERS 2025 Retirement Fund       | 8.38%        | 12.19%    | 8.17%        | 9.12%        |
| BlackRock 2025 Index            | 8.37%        | 12.01%    | 8.09%        | 9.00%        |
| Callan Target Date 2025         | 9.17%        | 12.55%    | 8.17%        | 9.23%        |
| SERS 2030 Retirement Fund       | 10.09%       | 12.88%    | 8.74%        | 9.95%        |
| BlackRock 2030 Index            | 10.09%       | 12.72%    | 8.64%        | 9.79%        |
| Callan Target Date 2030         | 10.50%       | 13.17%    | 8.70%        | 9.98%        |
| SERS 2035 Retirement Fund       | 11.74%       | 13.58%    | 9.26%        | 10.74%       |
| BlackRock 2035 Index            | 11.72%       | 13.44%    | 9.15%        | 10.55%       |
| Callan Target Date 2035         | 12.02%       | 14.23%    | 9.12%        | 10.65%       |
| SERS 2040 Retirement Fund       | 13.26%       | 14.14%    | 9.71%        | 11.41%       |
| BlackRock 2040 Index            | 13.22%       | 13.98%    | 9.59%        | 11.21%       |
| Callan Target Date 2040         | 13.22%       | 14.83%    | 9.48%        | 11.18%       |
| SERS 2045 Retirement Fund       | 14.45%       | 14.83%    | 10.08%       | 11.90%       |
| BlackRock 2045 Index            | 14.42%       | 14.65%    | 9.92%        | 11.66%       |
| Callan Target Date 2045         | 14.07%       | 15.48%    | 9.63%        | 11.49%       |
| SERS 2050 Retirement Fund       | 15.05%       | 15.20%    | 10.25%       | 12.09%       |
| BlackRock 2050 Index            | 15.02%       | 15.07%    | 10.12%       | 11.87%       |
| Callan Target Date 2050         | 14.41%       | 15.63%    | 9.67%        | 11.54%       |
| SERS 2055 Retirement Fund       | 15.13%       | 15.32%    | 10.30%       | 12.11%       |
| BlackRock 2055 Index            | 15.14%       | 15.18%    | 10.17%       | 11.90%       |
| Callan Target Date 2055         | 14.69%       | 15.70%    | 9.89%        | 11.79%       |
| SERS 2060 Retirement Fund       | 15.13%       | 15.31%    | 10.29%       | 12.10%       |
| BlackRock 2060 Index            | 15.14%       | 15.19%    | 10.17%       | 11.90%       |
| Callan Target Date 2060         | 14.65%       | 15.87%    | 9.93%        | 12.00%       |
| SERS 2065 Retirement Fund       | 15.08%       | 15.15%    | -            | -            |
| BlackRock 2065 Index            | 15.14%       | 15.19%    | -            | -            |
| Callan Target Date 2065         | 14.89%       | 16.41%    | 10.01%       | -            |

Note: SERS Funds are the top fund in each grouping followed by each fund's respective benchmark and median peer.



# Cumulative Performance - Net of Fees

As of December 31, 2020

|                                 | Last<br>7<br>Years | Last<br>10<br>Years | Last<br>15<br>Years | Last<br>20<br>Years |
|---------------------------------|--------------------|---------------------|---------------------|---------------------|
| <b>Net Performance</b>          |                    |                     |                     |                     |
| <b>Target Date Funds</b>        |                    |                     |                     |                     |
| SERS Post Retirement Fund       | 6.19%              | 6.25%               | 5.94%               | -                   |
| BlackRock Post Retirement Index | 6.14%              | 6.21%               | 5.92%               | 5.86%               |
| Callan Tgt Date 2000-2010       | 5.97%              | 6.26%               | 5.18%               | -                   |
| SERS 2025 Retirement Fund       | 7.07%              | 7.37%               | -                   | -                   |
| BlackRock 2025 Index            | 6.99%              | 7.30%               | 6.32%               | 5.60%               |
| Callan Target Date 2025         | 7.15%              | 7.82%               | 6.39%               | -                   |
| SERS 2030 Retirement Fund       | 7.64%              | 7.94%               | 6.67%               | -                   |
| BlackRock 2030 Index            | 7.53%              | 7.85%               | 6.61%               | 5.74%               |
| Callan Target Date 2030         | 7.76%              | 8.53%               | 6.65%               | 5.39%               |
| SERS 2035 Retirement Fund       | 8.18%              | 8.47%               | -                   | -                   |
| BlackRock 2035 Index            | 8.05%              | 8.36%               | 6.87%               | 5.85%               |
| Callan Target Date 2035         | 8.20%              | 8.94%               | 7.02%               | -                   |
| SERS 2040 Retirement Fund       | 8.64%              | 8.92%               | 7.17%               | -                   |
| BlackRock 2040 Index            | 8.49%              | 8.79%               | 7.08%               | 5.90%               |
| Callan Target Date 2040         | 8.60%              | 9.30%               | 7.18%               | 5.56%               |
| SERS 2045 Retirement Fund       | 8.97%              | 9.28%               | -                   | -                   |
| BlackRock 2045 Index            | 8.80%              | 9.14%               | 7.24%               | 5.97%               |
| Callan Target Date 2045         | 8.87%              | 9.49%               | 7.70%               | -                   |
| SERS 2050 Retirement Fund       | 9.10%              | 9.49%               | -                   | -                   |
| BlackRock 2050 Index            | 8.95%              | 9.35%               | 7.48%               | 6.54%               |
| Callan Target Date 2050         | 8.93%              | 9.61%               | 6.87%               | -                   |
| SERS 2055 Retirement Fund       | 9.12%              | 9.62%               | -                   | -                   |
| BlackRock 2055 Index            | 8.97%              | 9.48%               | -                   | -                   |
| Callan Target Date 2055         | 9.09%              | 9.83%               | -                   | -                   |

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.

# Cumulative Performance - Net of Fees

As of December 31, 2020

|                                    | Last Quarter | Last Year | Last 3 Years | Last 5 Years |
|------------------------------------|--------------|-----------|--------------|--------------|
| <b>Net Performance</b>             |              |           |              |              |
| <b>Domestic Equity</b>             |              |           |              |              |
| SERS U.S. Large Company Index Fund | 12.16%       | 18.43%    | 14.19%       | 15.23%       |
| S&P 500 Index                      | 12.15%       | 18.40%    | 14.18%       | 15.22%       |
| Callan Lg Cap Broad MF             | 12.79%       | 18.47%    | 13.50%       | 14.42%       |
| SERS U.S. All Company Index Fund   | 14.63%       | 21.20%    | 14.43%       | 15.38%       |
| Russell 3000 Index                 | 14.68%       | 20.89%    | 14.49%       | 15.43%       |
| Callan Multi Cap Brd MF            | 14.94%       | 17.41%    | 11.52%       | 13.16%       |
| SERS U.S. SMID Company Idx Fund    | 27.50%       | 32.03%    | 15.35%       | 16.06%       |
| Dow Jones US Completion            | 27.41%       | 32.17%    | 15.21%       | 15.89%       |
| Callan SMID Broad MFs              | 23.61%       | 24.00%    | 14.72%       | 14.73%       |
| <b>International Equity</b>        |              |           |              |              |
| SERS Global Non-U.S. Index Fund    | 16.96%       | 11.15%    | 5.25%        | 9.35%        |
| MSCI ACWI ex US                    | 17.01%       | 10.65%    | 4.88%        | 8.93%        |
| Callan Non US Equity MFs           | 16.48%       | 11.12%    | 4.48%        | 7.75%        |
| <b>Domestic Fixed Income</b>       |              |           |              |              |
| SERS Short Term Investment Fund    | 0.04%        | 0.67%     | 1.69%        | 1.34%        |
| 3-month Treasury Bill              | 0.03%        | 0.67%     | 1.60%        | 1.20%        |
| Callan Cash Database(1)            | 0.07%        | 1.01%     | 1.88%        | 1.52%        |
| SERS U.S. Short Term Bond Idx Fund | 0.20%        | 3.36%     | 2.98%        | -            |
| Blmbg Gov/Cred 1-3 Yr              | 0.21%        | 3.33%     | 2.98%        | 2.21%        |
| Callan Short US Govt MFs           | 0.10%        | 3.57%     | 2.81%        | 1.96%        |
| SERS U.S. TIPS Index Fund          | 1.62%        | 11.00%    | -            | -            |
| Blmbg US TIPS                      | 1.62%        | 10.99%    | 5.92%        | 5.08%        |
| Callan TIPS MFs                    | 1.87%        | 10.29%    | 5.56%        | 4.88%        |
| SERS U.S. Bond Index Fund          | 0.65%        | 7.56%     | 5.35%        | 4.43%        |
| Blmbg Aggregate                    | 0.67%        | 7.51%     | 5.34%        | 4.44%        |
| Callan Core Bond MFs               | 1.28%        | 8.65%     | 5.83%        | 4.86%        |

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

# Cumulative Performance - Net of Fees

As of December 31, 2020

|                                    | Last<br>7<br>Years | Last<br>10<br>Years | Last<br>15<br>Years | Last<br>20<br>Years |
|------------------------------------|--------------------|---------------------|---------------------|---------------------|
| <b>Net Performance</b>             |                    |                     |                     |                     |
| <b>Domestic Equity</b>             |                    |                     |                     |                     |
| SERS U.S. Large Company Index Fund | 12.93%             | 13.90%              | 9.93%               | 7.51%               |
| S&P 500 Index                      | 12.92%             | 13.88%              | 9.88%               | 7.47%               |
| Callan Lg Cap Broad MF             | 12.36%             | 13.32%              | 9.82%               | 7.27%               |
| SERS U.S. All Company Index Fund   | 12.74%             | -                   | -                   | -                   |
| Russell 3000 Index                 | 12.76%             | 13.79%              | 9.98%               | 7.82%               |
| Callan Multi Cap Brd MF            | 10.42%             | 11.85%              | 8.83%               | 7.61%               |
| SERS U.S. SMID Company Idx Fund    | 11.89%             | 13.23%              | 10.68%              | 9.76%               |
| Dow Jones US Completion            | 11.73%             | 13.03%              | 10.48%              | 9.56%               |
| Callan SMID Broad MFs              | 10.74%             | 11.78%              | 9.91%               | 9.12%               |
| <b>International Equity</b>        |                    |                     |                     |                     |
| SERS Global Non-U.S. Index Fund    | 5.06%              | 5.15%               | -                   | -                   |
| MSCI ACWI ex US                    | 4.82%              | 4.92%               | 4.89%               | 5.23%               |
| Callan Non US Equity MFs           | 4.86%              | 6.00%               | 5.31%               | 5.19%               |
| <b>Domestic Fixed Income</b>       |                    |                     |                     |                     |
| SERS Short Term Investment Fund    | 1.01%              | 0.77%               | 1.41%               | -                   |
| 3-month Treasury Bill              | 0.87%              | 0.64%               | 1.23%               | 1.51%               |
| Callan Cash Database(1)            | 1.17%              | 0.94%               | 1.69%               | 1.95%               |
| BImbg Gov/Cred 1-3 Yr              | 1.78%              | 1.60%               | 2.56%               | 2.96%               |
| Callan Short US Govt MFs           | 1.63%              | 1.41%               | 2.46%               | 2.82%               |
| BImbg US TIPS                      | 3.92%              | 3.81%               | 4.31%               | 5.40%               |
| Callan TIPS MFs                    | 3.54%              | 3.37%               | 4.06%               | 4.85%               |
| SERS U.S. Bond Index Fund          | 4.08%              | 3.80%               | 4.45%               | 4.79%               |
| BImbg Aggregate                    | 4.09%              | 3.84%               | 4.49%               | 4.83%               |
| Callan Core Bond MFs               | 4.26%              | 4.13%               | 4.78%               | 4.97%               |

(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, 2020

| 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 |
|---|---------------------|------------------|---------------|---------------|---------------|----------------|---------------------------|----------------------|---------------|
| <b>Net of Fee Performance</b>                               |                     |                  |               |               |               |                |                           |                      |               |
| <b>Target Date Funds</b>                                    |                     |                  |               |               |               |                |                           |                      |               |
| <b>SERS Post Retirement Fund</b><br>Callan Tgt Date Ret Inc | 6.8 28              | 12.0 11          | 7.7 7         | 7.9 13        | 6.2 10        | 6.2 14         |                           |                      | 0.08 93       |
| BlackRock Post Retirement Index                             | 6.8 28              | 11.8 16          | 7.7 9         | 7.8 15        | 6.1 12        | 6.2 14         |                           |                      |               |
| <b>SERS 2025 Retirement Fund</b><br>Callan Target Date 2025 | 8.4 68              | 12.2 56          | 8.2 50        | 9.1 57        | 7.1 60        | 7.4 71         |                           |                      | 0.08 93       |
| BlackRock 2025 Index  | 8.4 69              | 12.0 58          | 8.1 54        | 9.0 63        | 7.0 62        | 7.3 72         |                           |                      |               |
| <b>SERS 2030 Retirement Fund</b><br>Callan Target Date 2030 | 10.1 67             | 12.9 57          | 8.7 47        | 9.9 51        | 7.6 55        | 7.9 72         |                           |                      | 0.08 93       |
| BlackRock 2030 Index  | 10.1 67             | 12.7 65          | 8.6 54        | 9.8 61        | 7.5 57        | 7.9 73         |                           |                      |               |
| <b>SERS 2035 Retirement Fund</b><br>Callan Target Date 2035 | 11.7 55             | 13.6 63          | 9.3 46        | 10.7 45       | 8.2 51        | 8.5 66         |                           |                      | 0.08 93       |
| BlackRock 2035 Index  | 11.7 57             | 13.4 68          | 9.2 50        | 10.6 60       | 8.1 62        | 8.4 73         |                           |                      |               |
| <b>SERS 2040 Retirement Fund</b><br>Callan Target Date 2040 | 13.3 44             | 14.1 61          | 9.7 36        | 11.4 34       | 8.6 46        | 8.9 66         |                           |                      | 0.08 93       |
| BlackRock 2040 Index  | 13.2 51             | 14.0 64          | 9.6 47        | 11.2 46       | 8.5 58        | 8.8 69         |                           |                      |               |
| <b>SERS 2045 Retirement Fund</b><br>Callan Target Date 2045 | 14.4 36             | 14.8 62          | 10.1 33       | 11.9 33       | 9.0 44        | 9.3 56         |                           |                      | 0.08 93       |
| BlackRock 2045 Index  | 14.4 36             | 14.7 64          | 9.9 40        | 11.7 44       | 8.8 53        | 9.1 66         |                           |                      |               |
| <b>SERS 2050 Retirement Fund</b><br>Callan Target Date 2050 | 15.1 29             | 15.2 55          | 10.3 32       | 12.1 31       | 9.1 42        | 9.5 55         |                           |                      | 0.08 93       |
| BlackRock 2050 Index  | 15.0 30             | 15.1 58          | 10.1 37       | 11.9 39       | 8.9 50        | 9.3 60         |                           |                      |               |
| <b>SERS 2055 Retirement Fund</b><br>Callan Target Date 2055 | 15.1 28             | 15.3 56          | 10.3 31       | 12.1 32       | 9.1 49        | 9.6 53         |                           |                      | 0.08 94       |
| BlackRock 2055 Index  | 15.1 28             | 15.2 59          | 10.2 37       | 11.9 45       | 9.0 56        | 9.5 57         |                           |                      |               |
| <b>SERS 2060 Retirement Fund</b><br>Callan Target Date 2060 | 15.1 30             | 15.3 59          | 10.3 35       | 12.1 46       |               |                |                           |                      | 0.08 93       |
| BlackRock 2060 Index  | 15.1 30             | 15.2 60          | 10.2 40       | 11.9 54       |               |                |                           |                      |               |

Returns:  
■ above median  
■ third quartile  
■ fourth quartile

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

Risk Quadrant:  
  
 Return  
 Risk

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, 2020

| 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       |
|--|--|--|--|--|--|--|---------------------------|----------------------|---------------------|
| <b>SERS 2065 Retirement Fund</b><br>Callan Target Date 2065<br>BlackRock 2065 Index                | 15.1 <sup>39</sup><br>15.1 <sup>38</sup> | 15.1 <sup>68</sup><br>15.2 <sup>68</sup> |  |  |  |  |                           |                      | 0.08 <sup>76</sup>  |
| <b>Domestic Equity</b>   |  |  |  |  |  |  |                           |                      |                     |
| <b>SERS U.S. Large Company Stock Index Fund</b><br>Callan Lg Cap Broad MF<br>S&P 500 Index         | 12.2 <sup>59</sup><br>12.1 <sup>59</sup> | 18.4 <sup>50</sup><br>18.4 <sup>51</sup> | 14.2 <sup>48</sup><br>14.2 <sup>48</sup> | 15.2 <sup>45</sup><br>15.2 <sup>45</sup> | 12.9 <sup>45</sup><br>12.9 <sup>45</sup> | 13.9 <sup>43</sup><br>13.9 <sup>44</sup> |                           |                      | 0.02 <sup>99</sup>  |
| <b>SERS U.S. All Company Index Fund</b><br>Callan Multi Cap Brd MF<br>Russell 3000 Index           | 14.6 <sup>53</sup><br>14.7 <sup>52</sup> | 21.2 <sup>41</sup><br>20.9 <sup>42</sup> | 14.4 <sup>41</sup><br>14.5 <sup>40</sup> | 15.4 <sup>35</sup><br>15.4 <sup>34</sup> | 12.7 <sup>32</sup><br>12.8 <sup>32</sup> |  |                           |                      | 0.03 <sup>99</sup>  |
| <b>U.S. Small/Mid Company Stock Index Fund</b><br>Callan SMID Broad MFs<br>Dow Jones US Completion | 27.5 <sup>19</sup><br>27.4 <sup>19</sup> | 32.0 <sup>33</sup><br>32.2 <sup>33</sup> | 15.4 <sup>48</sup><br>15.2 <sup>48</sup> | 16.1 <sup>42</sup><br>15.9 <sup>43</sup> | 11.9 <sup>40</sup><br>11.7 <sup>41</sup> | 13.2 <sup>41</sup><br>13.0 <sup>42</sup> |                           |                      | 0.03 <sup>100</sup> |
| <b>International Equity</b>  |  |  |  |  |  |  |                           |                      |                     |
| <b>SERS Global Non-U.S. Index Fund</b><br>Callan Non US Equity MFs<br>MSCI ACWI ex US              | 17.0 <sup>45</sup><br>17.0 <sup>45</sup> | 11.2 <sup>49</sup><br>10.7 <sup>53</sup> | 5.2 <sup>45</sup><br>4.9 <sup>48</sup>   | 9.3 <sup>39</sup><br>8.9 <sup>40</sup>   | 5.1 <sup>46</sup><br>4.8 <sup>53</sup>   | 5.2 <sup>67</sup><br>4.9 <sup>69</sup>   |                           |                      | 0.06 <sup>99</sup>  |
| <b>Domestic Fixed income</b>   |  |  |  |  |  |  |                           |                      |                     |
| <b>SERS Short Term Investment Fund</b><br>Callan Cash Database<br>3-month Treasury Bill            | 0.0 <sup>88</sup><br>0.0 <sup>93</sup>   | 0.7 <sup>85</sup><br>0.7 <sup>85</sup>   | 1.7 <sup>81</sup><br>1.6 <sup>85</sup>   | 1.3 <sup>80</sup><br>1.2 <sup>93</sup>   | 1.0 <sup>82</sup><br>0.9 <sup>93</sup>   | 0.8 <sup>83</sup><br>0.6 <sup>96</sup>   |                           |                      | 0.00 <sup>100</sup> |
| <b>Comments:</b> Callan Cash Database includes STIF, enhanced cash, and money market funds.        |  |  |  |  |  |  |                           |                      |                     |
| <b>SERS U.S. Short Term Bond Idx Fund</b><br>Callan Short US Govt MFs<br>Blmbg Gov/Cred 1-3 Yr     | 0.2 <sup>19</sup><br>0.2 <sup>19</sup>   | 3.4 <sup>55</sup><br>3.3 <sup>55</sup>   | 3.0 <sup>28</sup><br>3.0 <sup>28</sup>   |  | 2.2 <sup>13</sup><br>1.8 <sup>31</sup>   | 1.6 <sup>33</sup><br>1.6 <sup>33</sup>   |                           |                      | 0.03 <sup>99</sup>  |
| <b>SERS U.S. TIPS Index Fund</b><br>Callan TIPS MFs<br>Blmbg US TIPS                               | 1.6 <sup>75</sup><br>1.6 <sup>74</sup>   | 11.0 <sup>36</sup><br>11.0 <sup>36</sup> |  | 5.9 <sup>30</sup><br>5.1 <sup>37</sup>   | 3.9 <sup>27</sup><br>3.9 <sup>27</sup>   | 3.8 <sup>19</sup><br>3.8 <sup>19</sup>   |                           |                      | 0.03 <sup>99</sup>  |

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 December 31, 2020

| 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      |
|----------------------------------|---------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------------|----------------------|--------------------|
| <b>SERS U.S. Bond Index Fund</b> | 0.6 <sup>90</sup>   | 7.6 <sup>90</sup> | 5.4 <sup>79</sup> | 4.4 <sup>83</sup> | 4.1 <sup>72</sup> | 3.8 <sup>90</sup> |                           |                      | 0.03 <sup>98</sup> |
| Callan Core Bond MFs             |                     |                   |                   |                   |                   |                   |                           |                      |                    |
| Blmbg Aggregate                  | 0.7 <sup>90</sup>   | 7.5 <sup>90</sup> | 5.3 <sup>80</sup> | 4.4 <sup>83</sup> | 4.1 <sup>72</sup> | 3.8 <sup>85</sup> |                           |                      |                    |

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).

# 401(a) Plan Investment Structure

## Lineup Mapped to Callan's Clean Sheet



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## 401(a) and 457(b) Plans - 2020 Recap and 2021 Work Plan

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### 2020 Recap:

- Quarterly Performance Reports and Reviews as well as Market and Industry Trends Updates by Callan
- Ongoing Monitoring, Due Diligence and Watch List Recommendations of Investment Managers by Callan
- Callan Memo - 457(b) Plan Lineup Changes and Optimization
- Plan Administration and Investment Management Fee Benchmarking Analysis by Callan
- IPS Review and Update by SERS IO and Callan

### 2021 Work Plan:

- Quarterly Performance Reports and Reviews as well as Market and Industry Trends Updates by Callan
- Ongoing Monitoring, Due Diligence and Watch List Recommendations of Investment Managers by Callan
- Plan Administration and Investment Management Fee Education by Callan
- Plan Administration Fee Structure Analysis by Callan
- Plan Administration and Investment Management Fee Benchmarking Analysis by Callan - Continued
- Target Date Fund Suitability Analysis by Callan
- Installation of Callan PEP performance reporting software on SERS IO computers and onsite onboarding for PA SERS IO



Callan

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**Appendix – Callan Update**

# Published Research Highlights from 4Q20

## Under the Hood of Alternative Beta



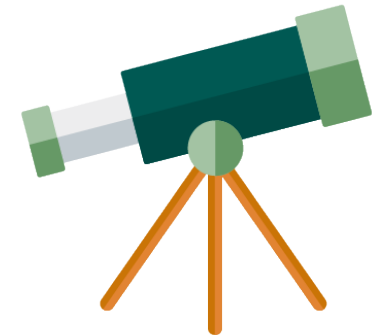
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## Private Equity 'Research Café'



## And coming in 2021: Our Capital Markets Assumptions



## Recent Blog Posts

**Will Boring Still Be Beautiful?**

James Veneruso

**The Private Equity Playbook: Playing Offense**

Alternatives Consulting Group

Plus our [blog](#) contains a wide array of posts related to the pandemic

## Additional Reading

*Private Equity Trends* quarterly newsletter

Active vs. Passive quarterly charts

*Capital Markets Review* quarterly newsletter

Monthly Updates to the Periodic Table

*Market Pulse Flipbook* quarterly markets update

# Callan Institute Events

Upcoming conferences, workshops, and webinars

## March Workshop - Virtual

**March 25, 2021**

**9:00 – 10:15am** (45 minutes prepared remarks; 30 minutes Q&A)

### A Fresh Look at Fixed Income – Generating Yield in a Zero Interest Rate Environment

As expectations for interest rates continue to fall, asset owners and fund managers are looking for new ways to generate returns. In this workshop, our consultants and specialists will share:

- How the drop in interest rate expectations impacts different types of investors.
- What Callan research has identified as potential approaches for garnering income and returns.
- What asset owners should consider as they evaluate options for their fixed income mandates.

This is your chance to step back and think differently about fixed income. You'll come away with a deeper understanding of the issues facing asset owners and how they are thinking about their options moving forward.

## Callan College

### Learn the Fundamentals

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

### Join our next virtual session:

**April 13, 2021 – April 15, 2021**

2-3 hour sessions over 3 days

### Join our next LIVE session in San Francisco:

**July 14, 2021 – July 15, 2021**

1.5 day session held in Callan's San Francisco office

## Save the Date!

### 2021 National Conference

### Summer 2021

We can't wait to see you!

## Callan Updates

Firm updates by the numbers, as of Dec. 31, 2020

Total Associates: 198

### Ownership

- 100% employees
- Broadly distributed across 99 shareholders

### Leadership Changes

- No changes to leadership this quarter

Total General and Fund Sponsor Consultants: more than 45

Total Specialty and Research Consultants: more than 60

Total CFA/CAIA/FRMs: more than 55

Total Fund Sponsor Clients: more than 400

AUA: more than \$2.5 trillion

**“One of the silver linings of the current work-from-home environment is the record attendance we have seen for our virtual education events. This includes our webinars, workshops, and our fiduciary education series, the ‘Callan College.’ Since education has always been at the heart of Callan’s consulting business, it’s encouraging to see our clients and associates adapt to the current situation and make education an even greater priority.”**

*- CEO & Chief Research Officer Greg Allen on Callan's COVID-19 Response*



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