

**Virginia Retirement System  
Performance Summary  
As of September 30, 2019**

**TOTAL FUND PERFORMANCE**

(Expressed in Percentages, Net of Fees)

	10 Yr	5 Yr	3 Yr	1 Yr	Qtr	Month	Fiscal YTD	Cal YTD
<b>Total Public Equity Strategies</b>	<b>9.0</b>	<b>6.8</b>	<b>8.7</b>	<b>0.5</b>	<b>0.2</b>	<b>2.1</b>	<b>0.2</b>	<b>14.1</b>
<i>Benchmark<sup>1</sup></i>	8.6	6.9	9.4	1.5	0.4	1.8	0.4	15.0
<b>Total Investment-Grade Fixed Income</b>	<b>4.6</b>	<b>3.9</b>	<b>3.4</b>	<b>10.7</b>	<b>2.4</b>	<b>-0.5</b>	<b>2.4</b>	<b>9.0</b>
<i>Benchmark<sup>2</sup></i>	3.7	3.4	2.9	10.3	2.3	-0.5	2.3	8.5
<b>Total Credit Strategies</b>	<b>7.2</b>	<b>5.2</b>	<b>6.2</b>	<b>5.3</b>	<b>0.6</b>	<b>0.3</b>	<b>0.6</b>	<b>8.8</b>
<i>Benchmark<sup>3</sup></i>	6.4	5.1	5.8	6.6	1.1	0.1	1.1	10.6
<b>Total Real Assets</b>	<b>11.5</b>	<b>10.2</b>	<b>9.2</b>	<b>8.2</b>	<b>2.0</b>	<b>2.0</b>	<b>2.0</b>	<b>6.9</b>
<i>Benchmark<sup>4</sup></i>	9.5	8.4	7.1	6.9	1.5	0.5	1.5	5.5
<b>Total Private Equity</b>	<b>14.7</b>	<b>12.8</b>	<b>16.7</b>	<b>14.0</b>	<b>4.3</b>	<b>4.4</b>	<b>4.3</b>	<b>9.4</b>
<i>Benchmark<sup>5</sup></i>	15.5	10.5	15.4	10.1	4.0	6.1	4.0	5.3
<b>Total Private Investment Partnerships</b>	<b>n/a</b>	<b>n/a</b>	<b>9.4</b>	<b>7.5</b>	<b>2.8</b>	<b>2.8</b>	<b>2.8</b>	<b>4.3</b>
<i>Benchmark<sup>6</sup></i>	n/a	n/a	9.3	7.0	2.5	2.9	2.5	4.0
<b>Total Multi-Asset Public Strategies</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>1.9</b>	<b>0.8</b>	<b>1.1</b>	<b>0.8</b>	<b>6.8</b>
<i>Benchmark<sup>7</sup></i>	n/a	n/a	n/a	6.1	1.4	0.1	1.4	12.1
<b>Total Fund</b>	<b>8.4</b>	<b>6.8</b>	<b>8.0</b>	<b>5.5</b>	<b>1.4</b>	<b>1.6</b>	<b>1.4</b>	<b>10.6</b>
<i>VRS Custom Benchmark<sup>8</sup></i>	8.0	6.6	8.1	5.9	1.4	1.4	1.4	10.9

Notes:

- Effective July 2015, the Public Equity Custom Benchmark is a blend of the MSCI ACWI IMI with developed market currencies 50% hedged (net VRS tax rates) Index (80%) and the Credit Suisse Equity Long/Short Broad Index (20%).
- Effective July 2014, the Investment-Grade Fixed Income Custom Benchmark consists of the Bloomberg Barclays US Aggregate Bond Index.
- Effective July 2012, the Credit Strategies Custom Benchmark is the weighted average of the Citigroup Broad Investment Grade Index (10%), the Bank of America Merrill Lynch BB-B Constrained Index (20%), the S&P Performing Loan Index (30%), the Emerging Market Debt Custom Benchmark (20%), and the Bank of America Merrill Lynch All U.S. Convertibles Index (20%). For the four years prior to July 2012, the risk-adjusted benchmark is the weighted average of the Bank of America Merrill Lynch U.S. High Yield BB-B Constrained Index and the Bank of America All Convertibles Index.
- Effective July 2014, the Real Assets Custom Benchmark is the market value weighted blend of the Total Real Estate Benchmark, of which 85% is the NCREIF Private Real Estate Benchmark (ODCE Index (net) lagged by three months) and 15% is the Total REIT Benchmark (FTSE/EPRA/NAREIT Developed REIT Index) and the Other Real Assets Custom Benchmark (the CPI-U Index plus 400 basis points per annum lagged by three months) with modified benchmarking for Other Real Assets during the increased allocation period.
- Effective July 2013, the Private Equity Custom Benchmark is the MSCI ACWI IMI with the Developed Market Currencies 50% Hedged customized for the VRS dividend withholding tax rates lagged by three months plus 250 basis points per annum with modified benchmarking during the increased allocation period.
- The Private Investment Partnerships Benchmark is the weighted average of the custom VRS Private Equity Benchmark (MSCI 50% hedged customized for the VRS dividend withholding tax rates lagged by three months plus 250 basis points) (40%), the NCREIF Private Real Estate Benchmark (ODCE Index (net) lagged by three months) (30%), the Other Real Assets Custom Benchmark (the CPI-U Index plus 400 basis points per annum lagged by three months) (10%), the Credit Strategies Rate Sensitive Benchmark (the Bank of America Merrill Lynch High Yield BB-B Constrained Index) (10%), and the Credit Strategies Non-Rate Sensitive Benchmark (the S&P Performing Loan Index) (10%).
- Effective July 2018, the Multi-Asset Public Strategies Custom Benchmark is the market value weighted average of the benchmarks of the mandates (Dynamic Strategies and Risk-Based Investments) within the program.
- The VRS Custom Benchmark is a blend of the Asset Class Benchmarks at policy weights.

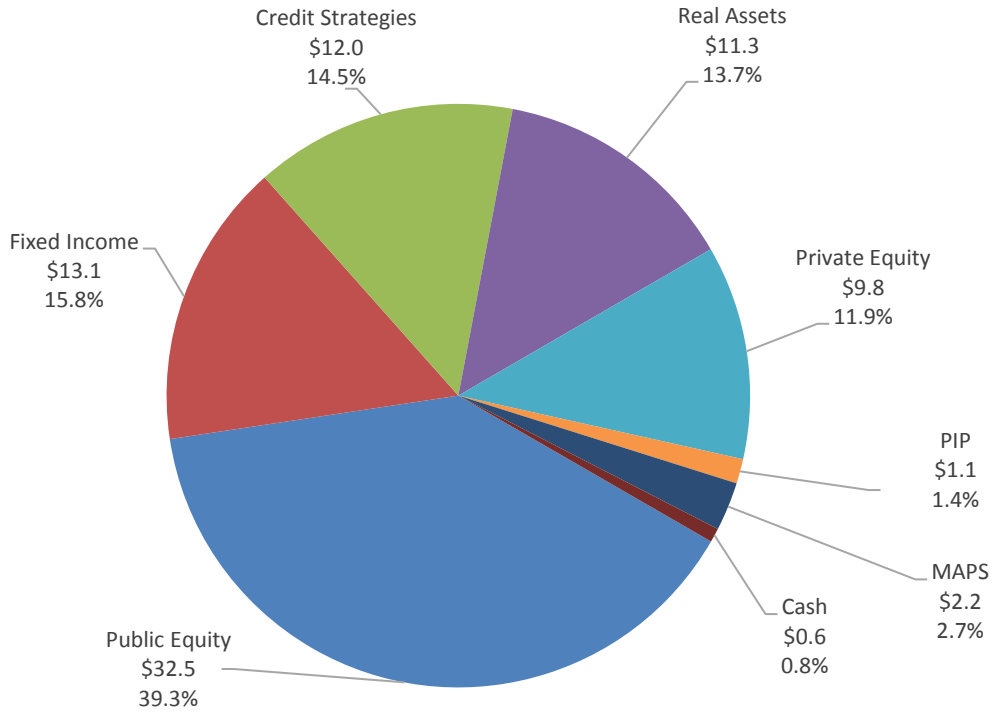
Source: Bank of New York Mellon

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# Virginia Retirement System Asset Allocation as of September 30, 2019

(Dollar amounts in Billions / Percent of Total Fund)

**Total Fund market value = \$82.7 billion**



Source: Bank of New York Mellon

# Fund Performance – Net of Fees



	<b>VRS Return</b> (As of September 30, 2019)
1-year	5.5%
3-year	8.0%
5-year	6.8%
10-year	8.4%
15-year	7.1%
20-year	6.4%
25-year	8.3%

Source: Bank of New York Mellon