

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

**TOTAL FUND PERFORMANCE**  
(Expressed in Percentages, Net of Fees)

	<b>10 Yr</b>	<b>5 Yr</b>	<b>3 Yr</b>	<b>1 Yr</b>	<b>Qtr</b>	<b>Month</b>	<b>Fiscal YTD</b>	<b>Cal YTD</b>
<b>Total Public Equity Strategies</b>	<b>10.7</b>	<b>6.5</b>	<b>10.3</b>	<b>3.9</b>	<b>2.5</b>	<b>5.0</b>	<b>3.9</b>	<b>13.9</b>
<i>Benchmark<sup>1</sup></i>	10.2	6.5	11.0	4.8	3.0	5.3	4.8	14.5
<b>Total Investment-Grade Fixed Income</b>	<b>4.9</b>	<b>3.4</b>	<b>2.8</b>	<b>8.3</b>	<b>3.2</b>	<b>1.4</b>	<b>8.3</b>	<b>6.4</b>
<i>Benchmark<sup>2</sup></i>	3.9	2.9	2.3	7.9	3.1	1.3	7.9	6.1
<b>Total Credit Strategies</b>	<b>8.3</b>	<b>4.8</b>	<b>7.4</b>	<b>6.8</b>	<b>3.2</b>	<b>2.6</b>	<b>6.8</b>	<b>8.1</b>
<i>Benchmark<sup>3</sup></i>	7.2	4.7	6.8	7.7	3.1	2.4	7.7	9.5
<b>Total Real Assets</b>	<b>11.2</b>	<b>10.3</b>	<b>9.4</b>	<b>7.8</b>	<b>1.8</b>	<b>2.0</b>	<b>7.8</b>	<b>4.7</b>
<i>Benchmark<sup>4</sup></i>	9.3	8.5	7.3	6.9	1.7	1.0	6.9	4.0
<b>Total Private Equity</b>	<b>14.5</b>	<b>13.0</b>	<b>16.8</b>	<b>14.0</b>	<b>4.7</b>	<b>5.1</b>	<b>14.0</b>	<b>4.8</b>
<i>Benchmark<sup>5</sup></i>	16.8	10.7	14.8	8.3	12.2	2.0	8.3	1.2
<b>Total Private Investment Partnerships</b>	<b>n/a</b>	<b>n/a</b>	<b>8.2</b>	<b>6.7</b>	<b>2.0</b>	<b>2.0</b>	<b>6.7</b>	<b>1.5</b>
<i>Benchmark<sup>6</sup></i>	n/a	n/a	8.2	6.6	6.9	0.8	6.6	1.5
<b>Total Multi-Asset Public Strategies</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>2.2</b>	<b>1.6</b>	<b>2.4</b>	<b>2.2</b>	<b>6.0</b>
<i>Benchmark<sup>7</sup></i>	n/a	n/a	n/a	6.0	3.6	3.7	6.0	10.5
<b>Total Fund</b>	<b>9.4</b>	<b>6.5</b>	<b>8.8</b>	<b>6.7</b>	<b>2.8</b>	<b>3.6</b>	<b>6.7</b>	<b>9.1</b>
<i>VRS Custom Benchmark<sup>8</sup></i>	8.9	6.3	8.7	6.8	3.9	3.2	6.8	9.3

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 Capital US Aggregate 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.

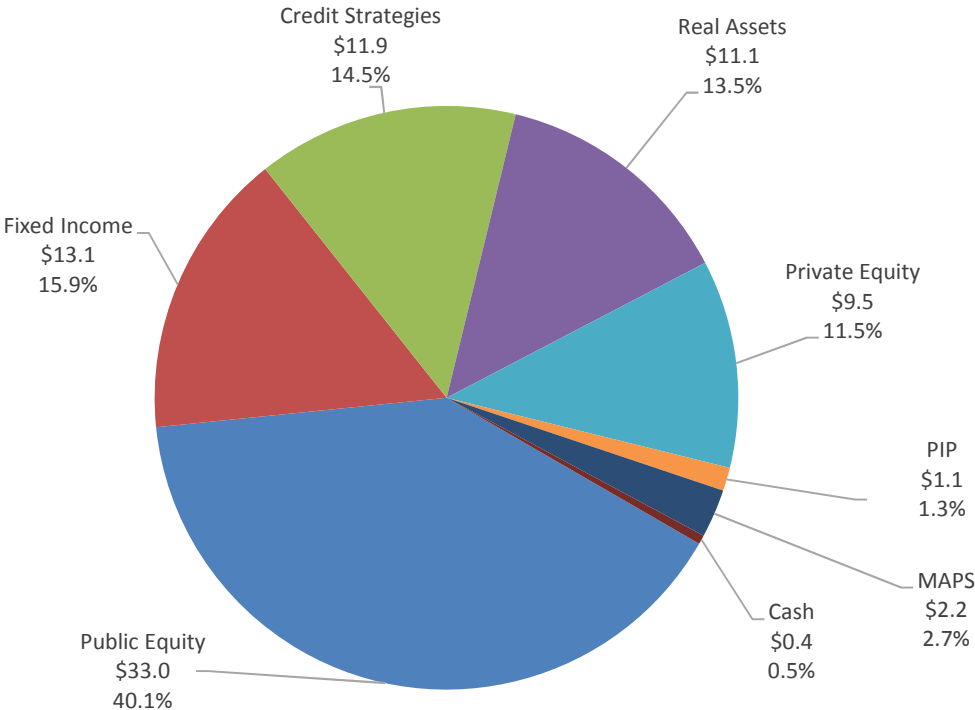
Source: Bank of New York Mellon

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

(Dollar amounts in Billions / Percent of Total Fund)

**Total Fund market value = \$82.3 billion**



Source: Bank of New York Mellon

# Fund Performance – Net of Fees



	<b>VRS Return</b> (As of June 30, 2019)
1-year	6.7%
3-year	8.8%
5-year	6.5%
10-year	9.4%
15-year	7.1%
20-year	6.2%
25-year	8.4%

Source: Bank of New York Mellon

# Fund Performance – Gross of Fees



	<b>VRS Return</b> (As of June 30, 2019)
1-year	7.1%
3-year	9.2%
5-year	6.9%
10-year	9.7%
15-year	7.4%
20-year	6.5%
25-year	8.6%

Source: Bank of New York Mellon