

Investments Report

FOR THE QUARTER ENDING SEPTEMBER 30, 2022





FOR THE QUARTER ENDING SEPTEMBER 30, 2022



Ronald D. Schmitz
Chief Investment
Officer

The stock and bond markets were decidedly negative for the calendar year ended June 30, as well as for the 12-month fiscal year to date (FYTD) at the end of June. The quarter ended September 30 was a continuation of the trend.

The table below shows the VRS portfolio performance as well as the Board-approved benchmark and excess return.

| | FYTD | 1 Year | 3 Year | 5 Year | 10 Year |
|----------------|------|--------|--------|--------|---------|
| VRS Total Fund | -3.1 | -5.0 | 7.5 | 7.0 | 7.9 |
| Benchmark | -5.2 | -11.6 | 3.8 | 4.8 | 6.6 |
| Excess Return | 2.1 | 6.6 | 3.7 | 2.2 | 1.3 |

Returns in the short term (FYTD and 1 year) are negative, indicating losses. However, VRS' diverse portfolio had limited losses compared to portfolios that are only invested in stocks and bonds. More importantly, the longer-term numbers are strong—both relative to the long-term assumed rate of return and relative to the policy benchmark. The investment team expects that the policy will have periods with negative returns. These short-term drops are necessary in order to tap into the longer-term advantages of investing in the markets.

To provide additional context to the past quarter's returns, keep these important points in mind with regard to the VRS portfolio overall:

- Absolute performance has tailed off in the last year or so, but relative performance remains elevated well above normal levels.
- Longer-term returns exceed the 6.75% assumed rate of return, and portfolio returns were in excess of benchmark by well above longterm expected margins.
- Over the last one, three and 10 years, all asset classes have exceeded respective benchmarks. In the last five years, all asset classes except public equity have exceeded benchmark.

(Continued)



From the CIO FOR THE QUARTER ENDING SEPTEMBER 30, 2022



Ronald D. Schmitz
Chief Investment
Officer

(Continued)

- The VRS strategy of increasing exposure to private markets has paid off in both the short and long term.
 - In the last 12 months, public stocks and bonds were down mid-to-high teens (-19.4% and -14.9%, respectively).
 - In that same period, credit was mildly negative at -1.4%, while Real Assets and Private Equity were up 20.0% and 8.7%, respectively.
 - Over the last 10-year period, stocks were up 7.6%, while bonds were up 1.6%, annualized.
 - For the same 10-year period, Credit was up 6.1%, Real Assets were positive 10.8% and Private Equity generated 16.9%, annualized.

As I head into retirement at year end, I'm gratified by VRS' successful run for the decade or so that I have had the privilege to work with a talented staff and a dedicated Board.

The Board engaged in an arduous process for selecting a new CIO. Andrew Junkin has been on board and in a transition period for several months and is well-positioned to take the helm—with the help of a terrific investment staff. VRS is in good hands.



Performance Summary AS OF SEPTEMBER 30, 2022

TOTAL FUND PERFORMANCE

(Expressed in Percentages, Net of Fees)

| | 10 Yr. | 5 Yr. | 3 Yr. | 1 Yr. | Qtr. | Month | Fiscal YTD | Cal YTD |
|---------------------------------------|--------|-------|-------|-------|-------|-------|---------------|------------|
| Total Public Equity Strategies | 7.6 | 4.1 | 3.9 | -19.4 | -6.0 | -8.4 | -6.0 | -23.3 |
| Benchmark ¹ | 7.5 | 4.5 | 3.8 | -20.9 | -6.5 | -9.6 | -6.5 | -25.5 |
| Total Fixed Income | 1.6 | 0.6 | -2.0 | -14.9 | -4.6 | -4.6 | -4.6 | -14.9 |
| Benchmark ² | 0.9 | -0.3 | -3.3 | -15.1 | -4.6 | -4.4 | -4.6 | -15.1 |
| Total Credit Strategies | 6.1 | 5.6 | 6.0 | -1.4 | -0.6 | -1.9 | -0.6 | -3.2 |
| Benchmark ³ | 4.3 | 2.9 | 1.5 | -7.2 | 0.2 | -3.0 | 0.2 | -7.9 |
| Total Real Assets | 10.8 | 10.0 | 10.9 | 20.0 | 1.9 | 1.7 | 1.9 | 12.7 |
| Benchmark ⁴ | 9.1 | 8.3 | 9.2 | 17.5 | 2.7 | 0.1 | 2.7 | 11.5 |
| Total Private Equity | 16.9 | 19.2 | 22.1 | 8.7 | -4.1 | -3.8 | -4.1 | 0.9 |
| Benchmark ⁵ | 12.1 | 9.6 | 7.9 | -16.2 | -15.7 | -8.6 | -15.7 | -15.3 |
| Total Private Investment Partnerships | n/a | 9.7 | 11.2 | 8.2 | -1.2 | -1.2 | -1.2 | 3.5 |
| Benchmark ⁶ | n/a | 7.3 | 7.2 | -1.1 | -3.8 | -3.4 | -3.8 | -2.7 |
| Total Multi-Asset Public Strategies | n/a | n/a | 2.6 | -7.0 | -2.2 | -3.9 | -2.2 | -9.2 |
| Benchmark ⁷ | n/a | n/a | 1.9 | -11.4 | -3.4 | -4.9 | -3.4 | -13.8 |
| Total Fund | 7.9 | 7.0 | 7.5 | -5.0 | -3.1 | -4.0 | -3.1 | -8.9 |
| VRS Custom Benchmark ⁸ | 6.6 | 4.8 | 3.8 | -11.6 | -5.2 | -6.0 | -5.2 | -14.3 |

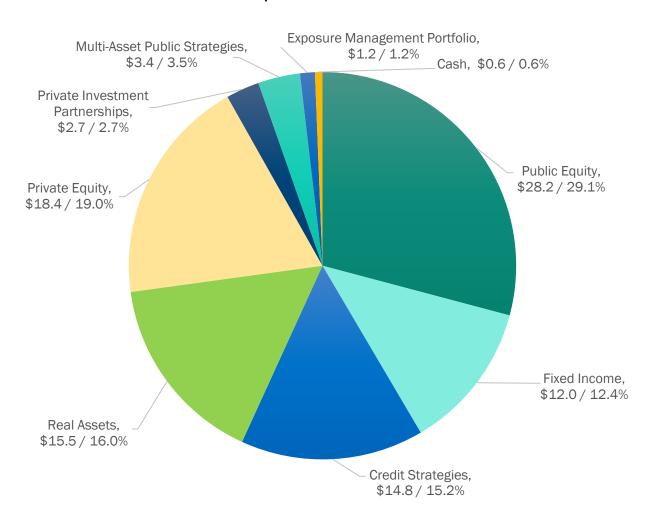
Notes:

- 1. Effective February 2020, the Public Equity Custom Benchmark is the MSCI ACWI IMI (net VRS tax rates) Index.
- 2. Effective July 2020, the Fixed Income Custom Benchmark is a blend of the Bloomberg Barclays Aggregate Bond Index (90%), Bloomberg Barclays US High Yield Ba/B 2% Issuer Cap Index (5%), and J.P. Morgan EMBI Global Core Index (5%).
- Effective January 2020, the Credit Strategies Custom Benchmark is a blend of the S&P Performing Loan Index (60%),
 Bloomberg Barclays US High Yield Ba/B 2% Issuer Cap Index (30%), and Bloomberg Barclays US Aggregate Bond Index (10%).
- 4. 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).
- 5. Effective July 2020, the Private Equity Custom Benchmark is the MSCI ACWI IMI Index (net VRS tax rates) lagged by three months.
- 6. Effective January 2020, the Private Investment Partnerships Custom Benchmark is the weighted average of the custom Private Equity Benchmark (MSCI ACWI IMI Index (net VRS tax rates) lagged by three months) (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 Bloomberg Barclays US High Yield Ba/B 2% Issuer Cap Index (10%), and 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.
- 8. The VRS Custom Benchmark is a blend of the Asset Class Benchmarks at policy weights.

Source: Bank of New York Mellon 4



Total Fund Market Value = \$96.8 billion



Dollar Amounts in Billions / Percent of Total Fund

Source: Bank of New York Mellon

Differences in totals are due to rounding



Fund Performance NET OF FEES

| | VRS Return (as of September 30, 2022) | | | | |
|---------|---------------------------------------|--|--|--|--|
| 1-year | -5.0% | | | | |
| 3-year | 7.5% | | | | |
| 5-year | 7.0% | | | | |
| 10-year | 7.9% | | | | |
| 15-year | 5.6% | | | | |
| 20-year | 8.1% | | | | |
| 25-year | 6.8% | | | | |

Source: Bank of New York Mellon