

## The RAF 5/50/4 Cost of Future Income Index<sup>SM</sup>

The **RAF 5/50/4 Future Income Index<sup>SM</sup>** was developed to highlight the variability in the *cost of income* when that income is produced by an initial annual withdrawal from assets accumulated at different rates of return. It assumes the desire to produce a \$50,000 initial annual cashflow five years from the date of investment by applying a 4% initial withdrawal rate from a portfolio of securities. The “cost” of the income is the value of the initial portfolio, when grown at a specified compound annualized growth rate, such that the portfolio value is \$1,250,000 at the time 4% withdrawals begin five years later to produce an initial annual cashflow of \$50,000.

### Q3 2021: \$674,750

The index is calculated using past S&P 500 Index performance over two distinct five-year periods:

- The first five-year period is the most recently completed five calendar years.
  - CAGR for 2016-2020: 15.27%
  - \$614,250 grew to \$1,250,000 in this five-year period.
  - It “cost” \$614,500 on 1/1/16 such that a 4% withdrawal produced \$50,000 on 1/1/21.
- The second is a five-calendar year period that began with the Shiller CAPE (cyclically adjusted price earnings ratio) at similar levels as the first month of the latest calendar quarter. For July of 2021, the Shiller CAPE is roughly 38, a similar level to that in January of 1999.
  - CAGR for 1999-2003: -0.62%
  - \$1,289,500 shrank to \$1,250,000 in this five-year period.
  - It “cost” \$1,289,000 on 1/1/99 such that a 4% withdrawal produced \$50,000 on 1/1/04.
- The difference in the cost of that \$50,000 income, i.e. the difference in initial portfolio value necessary to achieve an ending value of \$1,250,000 in five years’ time over those two five-year periods, is \$674,750. That enormous disparity is purely the result of capital markets vagaries.

- The implications for the value of annuities here are strong. In many cases, an annuity with a guaranteed lifetime withdrawal benefit will be able to produce a \$50,000 cash flow in five years, for a cost much closer to the much lower initial investment amount afforded by periods with abnormally high market returns, even if the markets return nothing or decline over a five-year period. Further, only an annuity can also guarantee that cash flow for a lifetime(s).

*IMPORTANT: Please note that the RAF 5/50/4 Price of Future Income Index<sup>SM</sup> uses past performance in its calculation methodology, which is not indicative of future results. The “S&P 500 Index” is a product of S&P Dow Jones Indices LLC, a division of S&P Global, or its affiliates (“SPDJ”). Shiller CAPE Source: multpl.com. Annuity source information: Wink Intel, Inc. Annuity Specs Tool*