SUMMIT
FINANCIAL GROUP, LLC

The Retirement Income Challenge

THE RETIREMENT INCOME CHALLENGE

At its core, retirement is a lifetime income challenge. When someone quits working, their lifestyle still requires monthly expenditures, but the corresponding paycheck disappears. Replacing that paycheck is the primary motivation for decades of saving in an effort to build the wealth necessary to continue one's standard of living. To make matters worse, retirement expenses typically increase two-and-a-half times over a 30-year retirement due to inflation! Add this up and you can see why achieving financial independence is top of mind in personal finance.

There's a myriad of literature written about saving, investing, and accumulating enough wealth to retire, but precious little about how to use those assets to support 30-plus years of living. The focus of this white paper is to discuss some of the challenges the prospective retiree faces, and to describe some of the strategies employed to meet those challenges. We hope you find it helpful and informative on your path to financial independence.

Know Where You Are Heading

Much of the anxiety around whether people can afford to retire comes from not knowing what amount of income will be necessary to meet the next 30 years without a paycheck. Given that, it would seem natural to design a cash flow plan before retiring. However, very few people have a good grasp on their current expenses, and even less have projected those expenses for a 30-year retirement including inflation. As a result, it is quite difficult to determine if they can afford to retire, or how to position their assets into a spending plan. In our firm, the cash flow analysis is part of a broader financial planning process (a separate white paper). However, the key takeaway for the retirement income challenge is determining your cash flow needs on a go-forward basis. With some thought and a few inflation assumptions, you can approximate your cash flow needs throughout retirement. Using software, you can get a lot more specific, but putting something on paper is a good start. Be sure to think about the "nice-to-haves" in addition to the necessities. Things like travel, weddings, college for grandchildren, and helping family members with first home purchases are some of the discretionary expenses that clients tell us are the most meaningful in their retirement experience.

What Now?

You are ready to retire, and you think you have a good handle on your retirement expenses. Now it's time to start using the money you saved over the years to support your lifestyle. How will it work? This is a question we hear time and again from investors who think they can retire, but have anxiety around how to position their assets to last their lifetime.

The Old Rules of Thumb

- Live off the Income – Three decades ago, Certificates of Deposit were paying much higher interest rates, and many retirees positioned their portfolio in CDs or fixed income securities to live off

Summit Financial Group, LLC | 2000 Crow Canyon Place, Suite 450 | San Ramon, CA 94583
SUMMITADVISORS.COM | 925.866.7800

the interest and not touch the principal. The 30 years hence have seen a continuous decline in interest rates until present day where CDs pay only a fraction of 1% annually[1]. To illustrate this, the retiree who retired with $1,000,000 in savings in 1990 received almost $85,000 in income in year 1, whereas that same $1,000,000 might earn $10,000 in interest in 2020. Factor in the cost of living, which would have doubled their income needs over that time period, and you have a recipe for disaster. If a retiree was planning on spending 100% of the income from the portfolio each year, their standard of living declined dramatically! For those contemplating retirement today, this strategy is untenable as the portfolio would have to be very large indeed to support 30 years of income on less than a 1% interest rate.

- The 4% Rule – In 1994, William Bengen introduced the 4% Rule, which posited that 4% was the maximum amount one could safely withdraw from a portfolio composed of 50% stocks and 50% bonds while increasing the withdrawals for inflation each year for 30 years. He later revised this to a 4.5% withdrawal rate by adding some other investment classes to the allocation, but the original 4% moniker stuck, and it became accepted practice in the industry of financial advice.

  Much has been made of the 4% Rule in the last few years. Many pundits claim that in the wake of the Great Recession of 2007-2009, and the recent COVID-19 induced panic of 2020, that stock returns may not approach their historical averages while bonds are paying a fraction of their former interest rates. Thus something closer to 3% may be more realistic in the current timeframe for recent retirees.

  We find the 4% rule (or any particular rule of thumb) to be a blunt instrument in determining a 30-year income strategy for each particular client. Sometimes client needs require more than a standard inflation adjustment for life's unexpected changes, and there are often other sources of income or inheritances that factor into the analysis. In addition, Bengen's analysis assumed that the portfolio was rebalanced annually, and that investors never sold their portfolio regardless of the market environment. As we'll see below, this is rarely the case!

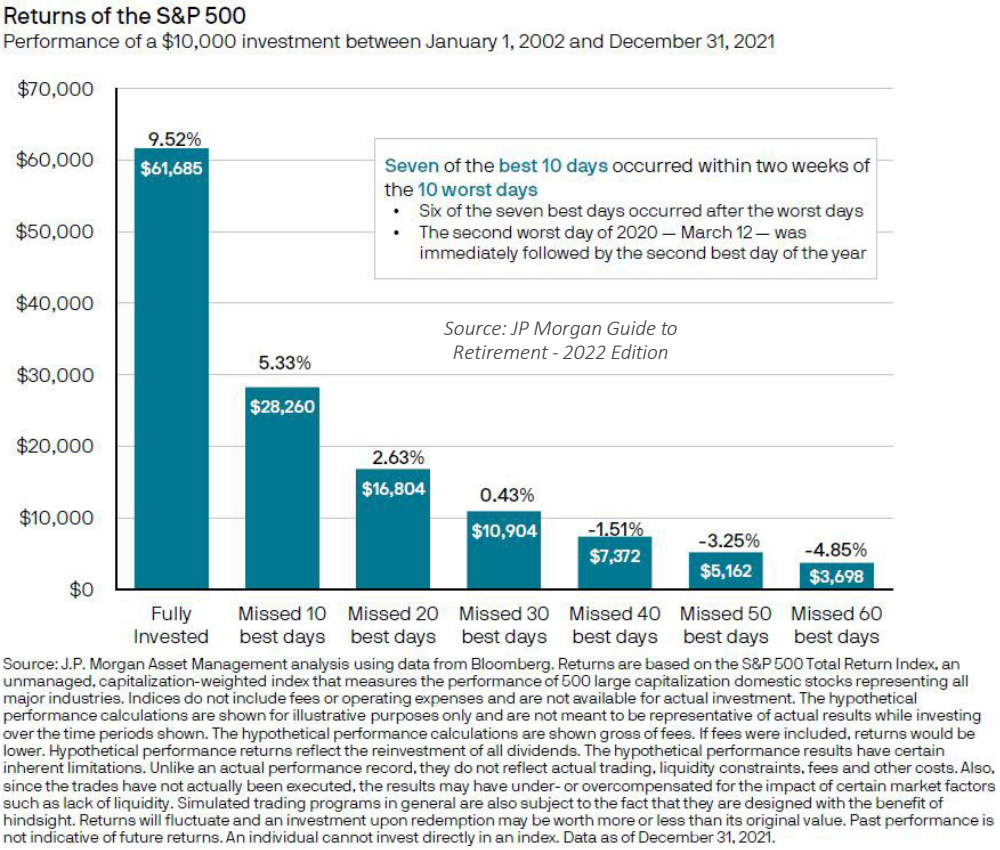
Behavior Management

Our favorite research study each year is the Quantitative Analysis of Investor Behavior (QAIB) produced by DALBAR[2]. The QAIB consistently shows that investors meaningfully underperform their own investments due to poor behavior. The latest study (referencing investment returns from 1989-2019) shows that the average investor[3] in an asset allocation fund (a mixed portfolio of stocks and bonds) earned only 2.95% during the 30-year period in question. Meanwhile, a portfolio that was 60% in the S&P 500 index (stocks) and 40% in the Barclays Aggregate Index (bonds) earned 8.50% over the same 30-year time frame – a gap of over 5%! Let's assign a 1% expense ratio to the indices (because you can't invest directly in an index). Hypothetically, this would still result in a 7.50% rate of return for an asset allocation portfolio that was left alone for 30 years. To put these numbers in perspective, $100,000 invested at 7.50% for 30 years grows to $875,495. That same $100,000 investment is only worth $239,216 if the rate of return is 2.95% over 30 years – ouch[4]!

Summit Financial Group, LLC | 2000 Crow Canyon Place, Suite 450 | San Ramon, CA 94583
SUMMITADVISORS.COM | 925.866.7800

Why is the gap between the investments themselves and investor results so large? The answer is investor behavior! Nobody wants to sell their portfolio when things are going well, but investors tend to panic when markets swoon. This tendency to react when markets sell off can be hazardous to your portfolio. The chart below from JP Morgan illustrates how difficult this can be. Note that over the last 20 years, if an investor in the US Market via the S&P 500 missed only the best 60 days, their average annual rate of return was a negative -4.85% versus the investor who earned 9.52% over the same period by merely staying invested!

Figure 1



Source: J.P. Morgan Asset Management analysis using data from Bloomberg. Returns are based on the S&P 500 Total Return Index, an unmanaged, capitalization-weighted index that measures the performance of 500 large capitalization domestic stocks representing all major industries. Indices do not include fees or operating expenses and are not available for actual investment. The hypothetical performance calculations are shown for illustrative purposes only and are not meant to be representative of actual results while investing over the time periods shown. The hypothetical performance calculations are shown gross of fees. If fees were included, returns would be lower. Hypothetical performance returns reflect the reinvestment of all dividends. The hypothetical performance results have certain inherent limitations. Unlike an actual performance record, they do not reflect actual trading, liquidity constraints, fees and other costs. Also, since the trades have not actually been executed, the results may have under- or overcompensated for the impact of certain market factors such as lack of liquidity. Simulated trading programs in general are also subject to the fact that they are designed with the benefit of hindsight. Returns will fluctuate and an investment upon redemption may be worth more or less than its original value. Past performance is not indicative of future returns. An individual cannot invest directly in an index. Data as of December 31, 2021.

Jump in and out of the market at your own peril! As you can imagine, as advisors, we spend an inordinate amount of time coaching and managing client behavior to avoid the big mistake of selling into a panic downturn. Although no one can predict the future, there is a mountain of historical evidence suggesting diversified portfolios of equity investments have outperformed inflation over time. As such, investing in the markets has been a good way to grow one's wealth and help sustain a 30-year retirement in the face of rising expenses. However, staying invested and not panicking can be the key to success.

Therefore, it is important for the retiring investor to resist the temptation to bail out of their investments at the first sign of trouble and stay committed to their portfolio.

Sequence of Returns

Perhaps the most perplexing risk of the Retirement Income Challenge is something called the *Sequence of Returns*. Advisors can calculate your income needs and build a corresponding spending strategy. They can coach and counsel you not to panic during the inevitable market downturns. But advisors cannot control the markets or the sequence in which you experience annual investment returns. As you'll see, not all returns are created equal. In fact, portfolios with the same long-term average rate of return can have dramatically different outcomes! To illustrate this, see Figure 2 below. This graphic depicts two separate mythical portfolios over a 30-year time frame with an average annual return of 6%. In our example, both Calvin and Hobbes retired at age 65 and withdrew 4% from a $1,000,000 portfolio. Each year, both increased their income by 3% to account for a rising cost of living.

Figure 2

Calvin			1,000,000
Age	Return	Withdrawal	Balance
65	10%	(40,000)	1,056,000
66	16%	(41,200)	1,177,168
67	10%	(42,436)	1,248,205
68	9%	(43,709)	1,312,901
69	-2%	(45,020)	1,242,523
70	6%	(46,371)	1,267,921
71	10%	(47,762)	1,342,175
72	3%	(49,195)	1,331,769
73	-2%	(50,671)	1,255,476
74	-10%	(52,191)	1,082,957
75	10%	(53,757)	1,132,120
76	16%	(55,369)	1,249,031
77	10%	(57,030)	1,311,201
78	9%	(58,741)	1,365,181
79	8%	(60,504)	1,409,051
80	6%	(62,319)	1,427,537
81	10%	(64,188)	1,499,683
82	3%	(66,114)	1,476,576
83	8%	(68,097)	1,521,157
84	-10%	(70,140)	1,305,915
85	10%	(72,244)	1,357,038
86	16%	(74,412)	1,487,846
87	10%	(76,644)	1,552,323
88	9%	(78,943)	1,605,983
89	8%	(81,312)	1,646,645
90	6%	(83,751)	1,656,668
91	10%	(86,264)	1,727,444
92	3%	(88,852)	1,687,751
93	-2%	(91,517)	1,564,309
94	-10%	(94,263)	1,323,042
	6.00%	Average Return	

Hobbes			1,000,000
Age	Return	Withdrawal	Balance
65	-10%	(40,000)	864,000
66	-10%	(41,200)	740,520
67	-2%	(42,436)	684,122
68	9%	(43,709)	698,050
69	8%	(45,020)	705,272
70	6%	(46,371)	698,436
71	10%	(47,762)	715,741
72	3%	(49,195)	686,542
73	-2%	(50,671)	623,154
74	-2%	(52,191)	559,544
75	10%	(53,757)	556,366
76	16%	(55,369)	581,156
77	10%	(57,030)	576,538
78	9%	(58,741)	564,399
79	8%	(60,504)	544,207
80	6%	(62,319)	510,801
81	10%	(64,188)	491,274
82	3%	(66,114)	437,915
83	10%	(68,097)	406,799
84	-10%	(70,140)	302,993
85	10%	(72,244)	253,824
86	16%	(74,412)	208,118
87	10%	(76,644)	144,621
88	9%	(78,943)	71,589
89	8%	(81,312)	(10,501)
90	6%	(83,751)	(99,907)
91	10%	(86,264)	(204,788)
92	3%	(88,852)	(302,449)
93	16%	(91,517)	(457,000)
94	10%	(94,263)	(606,389)
	6.00%	Average Return	

*This hypothetical example is for illustrative purposes only. Not based on any particular investment. Assumes **6% average** return. Investments will fluctuate and when redeemed, may be worth more or less than originally invested.*

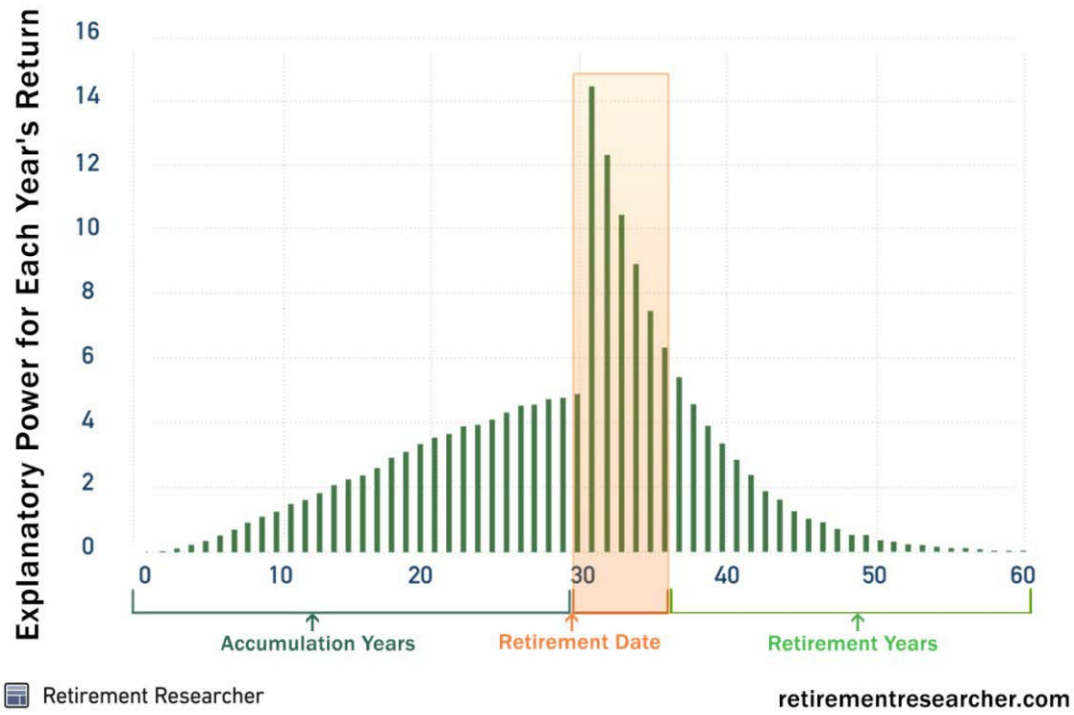
Summit Financial Group, LLC | 2000 Crow Canyon Place, Suite 450 | San Ramon, CA 94583
SUMMITADVISORS.COM | 925.866.7800

Calvin had the good fortune of retiring into a nice bull run in the markets. His first four years were stellar, and although he experienced downturns later, his portfolio was larger at age 94 than it was when he started despite his withdrawals. Calvin is a happy camper!

On the other hand, Hobbes had the misfortune of retiring into a bear market. His first three years of income withdrawals occurred while his assets were depressed by negative returns. Although he experienced better returns later, the damage was already done and Hobbes exhausted his portfolio by age 89. Hobbes might have been forced to tap into his home equity (if he owned a home) or significantly lower his expenses to preserve his nest egg. The takeaway is that **downturns in the early years of retirement are the most damaging**. Taking withdrawals when the entirety of the nest egg is depressed puts significant strain on a retirement income plan. On the other hand, good returns in the early years overwhelm the withdrawals and the compounding effect on the larger nest egg can be enough to withstand bear markets in the later years.

Noted retirement researcher Dr. Wade Pfau illustrates this concept in Figure 3 below with a graph that shows the relative importance of each year's annual return throughout an investor lifetime. The chart assumes that years 1-30 are the accumulation years, where one is investing money pre-retirement. Years 31-60 are the withdrawal years post-retirement. During the savings years, the relative importance of each year's return increases leading up to retirement. However, the first five years after retirement are far more important than any years before or after! Some have dubbed this the retirement red zone, where much of the success or failure of the plan is decided.

Figure 3



Summit Financial Group, LLC | 2000 Crow Canyon Place, Suite 450 | San Ramon, CA 94583
SUMMITADVISORS.COM | 925.866.7800

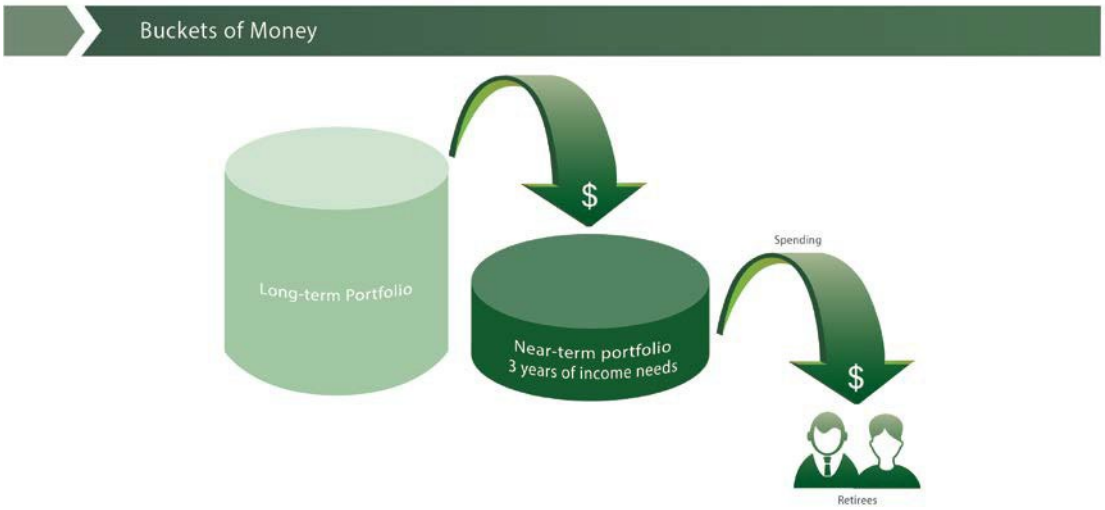
On some level this is disconcerting to both investors and advisors. After all, predicting the first five years of returns after your retirement date is akin to predicting the first five rolls at the craps table.

However, understanding the Sequence of Returns Risk is an important part of retirement planning and strategies should be employed to handle it. The following are some ideas to help mitigate the impact that the Sequence of Returns can have on a retirement income plan.

Buckets of Money

As illustrated previously, spending withdrawals taken from a depressed portfolio in the early years of retirement are the most damaging. One strategy employed by advisors is to create different portfolios of risk as part of a client's spending strategy. Setting aside 3 years' worth of projected withdrawals in a portfolio of low risk fixed income securities can help alleviate the need to sell more aggressive investments into a market downturn. Fixed income securities of this type typically have relatively nominal yields, but are rarely impacted by market downturns.

Figure 4



In periods of positive returns, assets are cascaded from the more aggressive bucket into the short-term bucket to refill it back to the 3-year spending cushion. In times of market turmoil, the short-term bucket is spent down for up to three years so that the longer term investments can be allowed to recover before withdrawals need to be taken.

Make no mistake; employing the buckets of money will likely reduce the overall return of the portfolio because a segment of your nest egg is deployed into assets with lower average rates of return. However, hedging against a large downturn in the early years of retirement seems worth the sacrifice. Remember, the goal is to make your assets last as long as you do – not necessarily outperform a benchmark
every year.

Summit Financial Group, LLC | 2000 Crow Canyon Place, Suite 450 | San Ramon, CA 94583
SUMMITADVISORS.COM | 925.866.7800

Dynamic Spending

In our Calvin and Hobbes example, the assumption was that the same income was needed each year plus a 3% increase for inflation regardless of investment performance. When planning for retirement using modeling software, the assumption of consistent inflation is critical, and all care should be taken to assure that income can continue indefinitely including this increase. However, when real bullets start flying in a retirement bear market, there's no rule which states that you must withdraw the same amount from your portfolio each year, nor must you add an inflation adjustment. In fact, during serious bear markets, it is possible that inflation is negligible during that period, and that investors might even spend less.

Most people have some discretionary expenses as part of their retirement lifestyle and therefore a little flexibility in the budget, if and when needed. If you are facing a 20% bear market, human nature is to pull back from expenses like travel and entertainment while the nest egg is under pressure. Doing so can positively impact the likelihood of the portfolio lasting to life expectancy because you withdraw less money while the assets are depressed.

In addition, some studies have shown that spending is not linear in retirement. Although we are hesitant to build a spending plan that relies on these assumptions, there is evidence that people spend more money in the first decade or two of retirement than in the later years. Travel and other discretionary expenses tend to decrease at older ages while medical expenses become more prevalent. Some commentators believe you can actually withdraw more like 5-6% of your portfolio in the early years of retirement if you are committed to decreasing this in the older ages.

Whether you plan to spend less as you age, or you are merely willing to be a little flexible during times of economic pressure, dynamic spending can help preserve your nest egg. If dynamic spending is combined with the buckets of money strategy, you can further insulate your portfolio from an early market shock spoiling your best laid plans.

Annuity Income as a Hedge

Few products in the financial landscape garner as much negative publicity as annuities. Unfortunately, they are misrepresented at times by salespeople, further fueling the negative perception. However, the purpose of an annuity is to provide an income stream – and if used properly they execute that mission. For our purposes, we are only discussing annuity income features like annuitization (an irrevocable stream of payments), or guaranteed withdrawal riders (which promise a minimum annual withdrawal amount regardless of performance) as a retirement spending source. Please note that annuities have mortality and expense charges with additional charges for riders, investment expenses, and surrender fees. No claim should be made that an annuity will outperform other investments; in fact, there is a good chance they will underperform given their high expense load. However, an income guarantee can have merit in a retirement spending plan.

As we learned earlier, withdrawals from depressed assets during the early years of retirement are the most damaging. However, if a segment of your portfolio is allocated to an annuity with an income

guarantee, you can offload some of that risk to an insurance company. The insurance company assumes the risk of the assets lasting throughout the annuitant's lifetime. Because insurance companies have many policyholders going through retirement together, they can guarantee the income based on actuarial assumptions. Those statistics suggest some people will not live to life expectancy and in those cases, the income guarantee provided by the annuity wasn't really needed and the insurance company pockets the fee they charged for the guarantee. Meanwhile, others live beyond life expectancy causing the insurance company to fund the income even after the principal is depleted, whereby the insurance company takes a loss. To the investor holding an annuity income guarantee, the possibility of income even after principal is depleted can be thought of as a "mortality credit". These mortality credits help hedge the risk of running out of money due to a market downturn whereas you might be forced to cut your withdrawals if there were no guarantee.

One technique involves using an annuity to guarantee an income stream that matches the "must have" retirement expenses. After accounting for Social Security benefits and any pension income, you determine any additional income needed to meet the "must have" expenses in retirement. Then, sufficient funds are placed in an annuity such that it guarantees that needed income.

It is important to note that using annuities to hedge downside risk does nothing to protect against inflation. While the cost of living marches upwards, the income guaranteed by the annuity typically does not. In our opinion, annuities should not compose too much of your retirement portfolio. In fact, if one is committed to their investment portfolio and resists panic during market downturns, they may not need the expense of the annuity at all. Annuity income is merely another tool, similar to Buckets of Money, and Dynamic Spending, that can help someone navigate the Retirement Income Challenge.

In Summary

It is easy to see why the Retirement Income Challenge is a top priority for many investors. Three decades of rising expenses, the tendency for investors to panic in down markets, low interest rates on savings, the Sequence of Returns Risk, and lengthening life expectancies combine to create quite the puzzle. But knowledge is power, and with an understanding of the risks comes the ability to build a strategy that matches your retirement spending needs.

If you haven't already done so, make time to design your desired lifestyle in retirement. Give special consideration to the "want to" items in addition to the "must have" expenses. If you are going to leave your paycheck behind, you'll have more fun if your retirement strategy includes the good stuff! Sit with your advisor and map out those expenses, including inflation, for the rest of your life. Doing so should give you a clear picture of what you'll need to live the life you imagine.

Then, with spending plan in hand, build your investment strategy accordingly. Work with your advisor to determine if the Buckets of Money strategy would help weather an early downturn in the markets. Or perhaps you'll decide to spend a bit more in the early years because you know where you can cut expenses in a downturn or later in life. Perhaps you'd feel more comfortable sticking with your investment portfolio if some portion contained an annuity

guarantee, despite the fees. There is no magic formula for the perfect retirement spending plan. However, a well thought out strategy that matches your goals and allows you to stay committed will give you the best chance at the retirement you have been working toward!

[1] JP Morgan Guide to the Markets – Q2 2022

[2] Quantitative Analysis of Investor Behavior, 2022, DALBAR, Inc. www.dalbar.com

[3] Average stock investor, average bond investor and average asset allocation investor performance results are based on a DALBAR study, "Quantitative Analysis of Investor Behavior (QAIB), 2022." DALBAR is an independent financial research firm. Using monthly fund data supplied by the Investment Company Institute, QAIB calculates investor returns as the change in assets after excluding sales, redemptions and exchanges. This method of calculation captures realized and unrealized capital gains, dividends, interest, trading costs, sales charges, fees, expenses and any other costs. After calculating investor returns in dollar terms, two percentages are calculated for the period examined: Total investor return rate and annualized investor return rate. Total return rate is determined by calculating the investor return dollars as a percentage of the net of the sales, redemptions, and exchanges for the period.

[4] This is a hypothetical example is for illustrative purposes only. Not based on any particular investment. Assumes 7.50% and 2.95% annual return respectively. These values assume that the rate of return will continue unchanged for all years shown. This is not likely to occur and actual results may be more or less favorable than those shown.

Investments will fluctuate and when redeemed may be worth more or less than when originally invested.

Investments in fixed income securities are subject to the creditworthiness of their issuers and interest rate risk. As such, the net asset value of bond and real estate funds will fall as interest rates rise.

Neither diversification nor asset allocation guarantee against loss, they are methods used to manage risk.
Index performance returns do not reflect any management fees, transaction costs or expenses. One cannot invest directly in an index. Past performance does not guarantee future results.

The S&P 500 Index is an unmanaged index of 500 stocks that is generally representative of the performance of larger companies in the U.S. Please note an investor cannot invest directly in an index.

The Barclays U.S. Aggregate Bond Index is a broad-based bond index comprised of government, corporate, mortgage and asset-backed issues, rated investment grade or higher, and having at least one year to maturity. Please note an investor cannot invest directly in an index.

An annuity is intended to be a long-term, tax-deferred retirement vehicle. Earnings are taxable as ordinary income when distributed, and if withdrawn before age 59 ½, may be subject to a 10% federal tax penalty. There are charges and expenses associated with annuities, such as deferred sales charges for early withdrawals.

All guarantees are based on the financial strength and claims paying ability of the issuing insurance company.

Securities offered through Raymond James Financial Services, Inc., member FINRA/SIPC. Investment advisory services are offered through Raymond James Financial Services Advisors, Inc. Summit Financial Group, LLC is not a registered broker/dealer and is independent of Raymond James Financial Services. TR# 252784 DOFU 7/2023*

Summit Financial Group, LLC | 2000 Crow Canyon Place, Suite 450 | San Ramon, CA 94583
SUMMITADVISORS.COM | 925.866.7800

SUMMIT
FINANCIAL GROUP, LLC