

## Sustaining Income Through Retirement: 4 Strategies for Retiring Clients

### Executive Summary

Over the next 15 to 20 years, baby boomers are expected to reallocate nearly \$8.4 trillion in retirement assets from investment products that support wealth accumulation to those that will support spending needs through retirement.<sup>1</sup> Fortunately, today's retirees have access to a much wider range of strategies for turning personal savings into reliable streams of income than their predecessors had. But for most, awareness and a thorough appreciation of these strategies will only occur with the guidance of a financial professional.

For financial professionals, this monumental shift in both client objectives and in invested assets represents a tremendous opportunity to extend their relationships into their clients' next life phase.

*The objective of this paper is to potentially add to a financial professional's knowledge base by discussing and contrasting four strategies for turning retirement savings into a sustainable retirement income stream for their clients.*

To accomplish this, we will look specifically at the use of mutual funds with automated income payments, variable annuities with guaranteed minimum withdrawal benefits, income annuities, and combinations of mutual funds and income annuities.

As we do so, we will examine the pros and cons of each strategy, which might include:

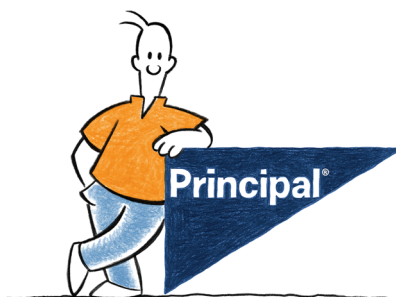
- Access to account balance
- Growth potential
- Inflation risk
- Market risk
- Guarantees
- Income predictability

What is unique about this analysis compared to other research currently available is that, wherever possible, we have maintained common assumptions among the four strategies presented. This approach allows for a fairer comparison.

It is our expectation that by delving into the nuances of these four strategies, financial professionals will find themselves better equipped to help their clients make informed decisions and select a retirement income strategy that best meets their unique needs.

*By Noelle E. Fox and Drew A. Denning, Retiree Services Group, The Principal Financial Group®*

<sup>1</sup> *Playing the Long Game: Global Asset Management 2006*, Boston Consulting Group, December 2006.



Not FDIC/NCUA Insured	No Bank Guarantee
Not A Deposit	May Go Down In Value
Not Insured By Any Federal Government Agency	

It has been well-reported throughout the media that baby boomers face an uncertain financial future as they transition from full-time employment into their retirement years.

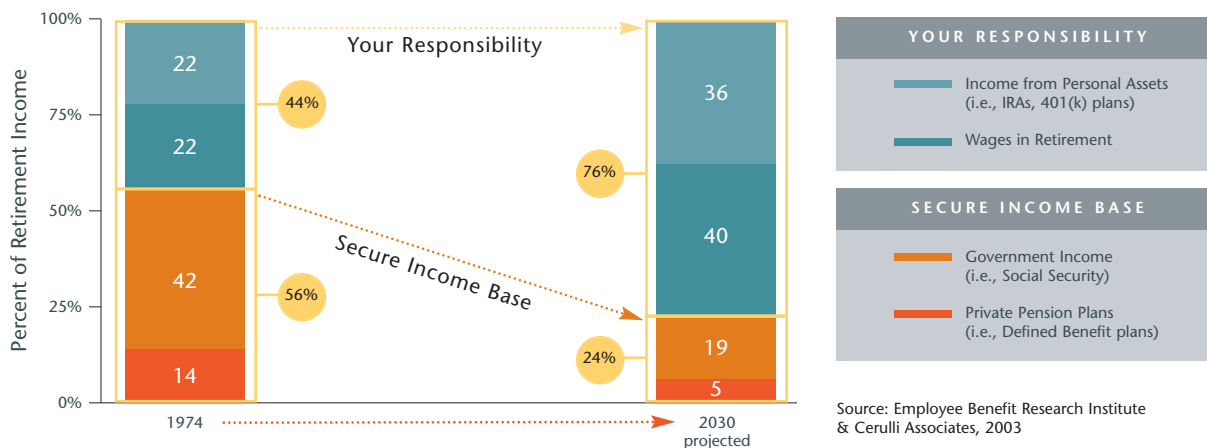
As with prior generations, baby boomers face the twin retirement savings challenges of keeping up with inflation while protecting against losses due to volatile market swings. Baby boomers also face an increased risk of outliving their savings, thanks to increased longevity.

Moreover, as the uncertainty of having enough retirement income has escalated, so has a retiree's share of the financial responsibility for securing a comfortable lifestyle. Unlike the prior generation, fewer baby boomers can rely on employer-provided pension plans for sufficient retirement income and healthcare coverage.<sup>3</sup> Meanwhile, Social Security will provide proportionately less income replacement than it did for prior generations (see chart below).

But fortunately for today's retirees, there has never been a more diverse range of strategic alternatives available for turning personal savings into retirement income. Helping baby boomers identify the best of these strategies and navigate their way through them represents a tremendous opportunity for financial professionals.

This paper is offered as a means of helping financial professionals deliver consistent and insightful guidance in this area. It may also be used as a framework for comparing some of the numerous alternatives available for converting wealth into retirement income so that financial professionals may refine their guidance to better serve each of their retiree clients' specific situations.

*One baby boomer reaches retirement age approximately every 8 seconds.<sup>2</sup>*



<sup>2</sup> US Bureau of the Census

<sup>3</sup> US Department of Labor, Pension Benefit Guarantee Corporation, Internal Revenue Service, US Department of Commerce, EBRI, Bernstein, and Mercer Human Resources Consulting estimates.

---

*When asked what percentage of their retirement savings they could spend each year in retirement and not run out, 64% of people estimated 6% or higher.<sup>4</sup> According to industry experts, most retirees can afford to withdraw only 4% to 5%.*

---

## How Can Retirees Maintain Adequate Income?

During the wealth accumulation phase, saving—and then saving even more—is the best strategy an individual can follow to improve his or her chances of accumulating adequate retirement funds. Similarly, in the distribution phase of a retiree's life, the rate at which money is spent is the most important factor in maintaining sufficient retirement income for the rest of his or her life. When deciding on a withdrawal rate, many retirees mistakenly overestimate the return they can consistently achieve in the market. As a rule of thumb, a retiree can withdraw 4 to 5 percent, adjusted annually for inflation, and still retain a high probability that his or her savings will last through a 25- to 30-year retirement.

While saving more and spending less are the key drivers in establishing and maintaining a secure retirement income, retirees may also improve their income flow by employing thoughtful asset allocation strategies and utilizing innovative retirement products throughout their retirement years.<sup>5</sup>

Financial experts offer a variety of approaches for generating adequate income in retirement. However, there is no one-size-fits-all solution. For this reason, retirees need education, guidance, appropriate product selection and ongoing communication with their financial professional to create and maintain personalized retirement income plans.

<sup>4</sup> Q2 2007 Principal Financial Group Well-Being Index

<sup>5</sup> Diversification/asset allocation is no guarantee for future results.

## 4 Retirement Income Strategies

In an effort to help financial professionals provide valuable guidance for their clients, we will explore the differences among four strategies for turning retirement savings into a sustainable retirement income stream. By comparing the strengths and weaknesses of each option, financial professionals can help clients make an informed decision about which strategy best meets each client's needs.

The four retirement income strategies we will discuss are:

- Mutual funds with automated income payments
- Variable annuities with guaranteed minimum withdrawal benefits (GMWB)
- Income annuities
- Combinations of mutual funds and income annuities

### A NOTE ON OUR CALCULATIONS

To help provide a fair analysis, we have held the underlying investments and assumptions constant for all four strategies wherever possible.

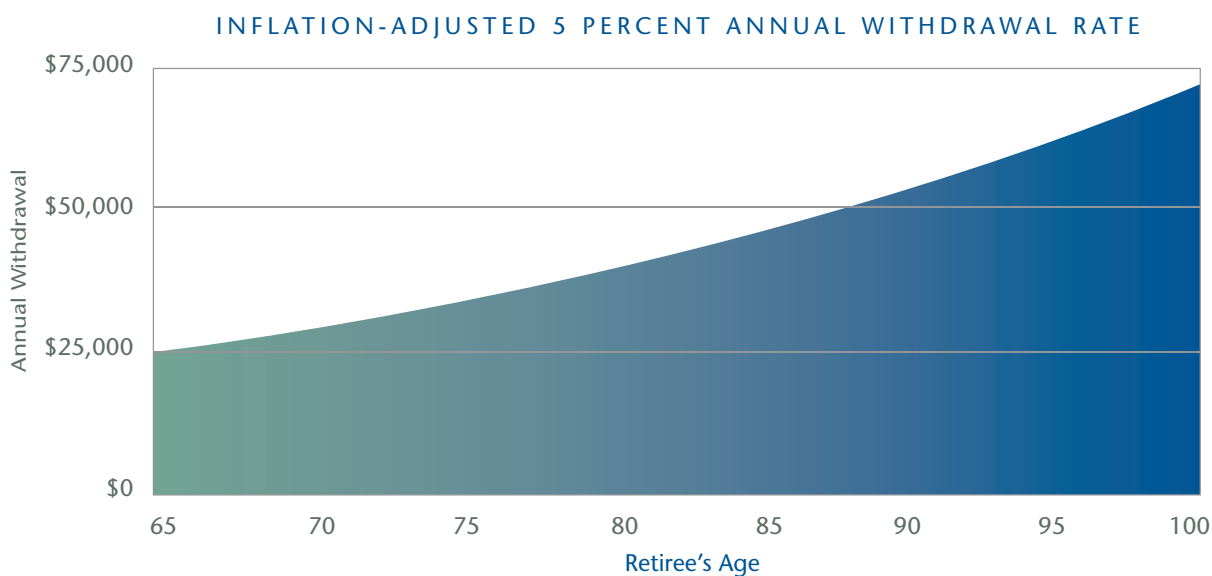
- All illustrations that follow are based on the same hypothetical individual—a retiree, 65 years of age, with \$500,000 saved for retirement.
- Where it is possible to select a particular withdrawal rate and inflation adjustment, we have used a 5 percent annual withdrawal rate adjusted by a 3 percent annual inflation rate.
- The underlying investments consist of a lifecycle asset allocation mutual fund that gradually grows more conservative over time.

## Strategy 1: Mutual Funds with Automated Income Payments

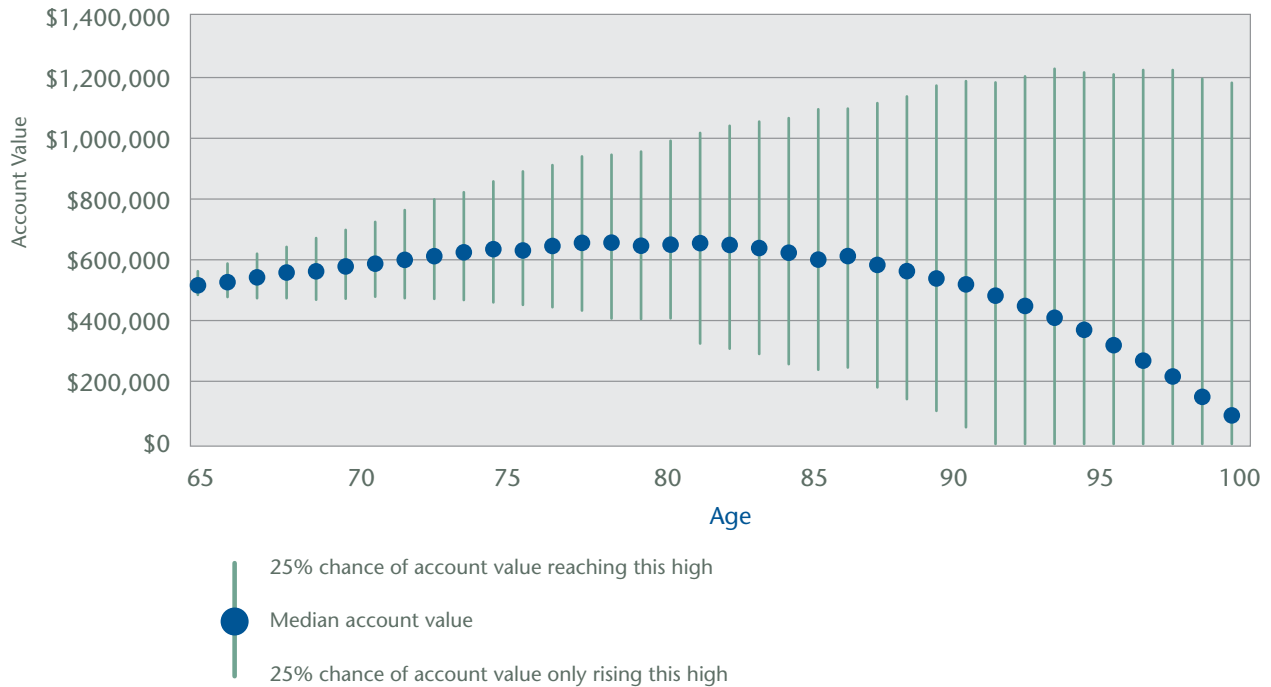
Mutual funds with automated income payments are designed to automatically provide a steady, inflation-adjusted monthly payment, much like some income annuities. But, where an income annuity turns a lump sum investment into a stream of payments, a mutual fund with automated income payments still offers access to the underlying account balance. Also, the income distributed by these mutual funds is not guaranteed to be either steady—predictable from year to year—or to keep pace with inflation.

The graph below shows an inflation-adjusted 5 percent annual withdrawal rate being taken from a hypothetical retirement mutual fund. The shaded area represents what the investor is looking for—a steady, inflation-adjusted withdrawal.

But with a mutual fund, if an investor withdraws that desired amount, he or she will have no longevity protection. Once the mutual fund is depleted, the investor can no longer receive income from it. Also, while the potential for investment growth with a mutual fund is appealing, the investor receives no protection against market losses. This means the investor may outlive his or her retirement savings.



RETIREMENT MUTUAL FUND WITH INFLATION-ADJUSTED WITHDRAWALS: ACCOUNT VALUE (75<sup>th</sup>, 50<sup>th</sup>, and 25<sup>th</sup> PERCENTILES)



The graph above illustrates this risk by showing the expected account value of a mutual fund over a 35-year retirement, assuming an inflation-adjusted withdrawal is taken each year. As the investor ages, the account value may decrease and the investor risks outliving his or her retirement savings.

Despite these risks, a retiree's worst-case scenario—outliving his or her income—may not be as probable when mortality is factored into the estimation. The following chart demonstrates that, as an investor ages, his or her chance of running out of retirement savings increases. And as the chance of running out of retirement savings increases, the chance of the investor being alive decreases.

Retiree's age	70	75	80	85	90	95	100
Chance of money running out	0%	0%	0%	5%	15%	30%	45%
Chance of being alive* (mortality)	94%	83%	70%	52%	31%	14%	4%

\*Longevity rates calculated from A2000 mortality table

STRATEGY 1:  
MUTUAL FUNDS WITH  
AUTOMATED INCOME PAYMENTS

**Endowment-Style Mutual Funds**

*pros*

- Access to account balance
- Potential for continued account balance growth

*cons*

- Inadequate longevity protection
- Market risk
- Income is not predictable or guaranteed to adjust for inflation

**Self-Liquidating Mutual Funds**

*pros*

- Access to account balance
- Potential for account balance growth, but limited due to liquidation style

*cons*

- No protection against longevity
- Market risk
- Income is not predictable or guaranteed to adjust for inflation

Investment option fluctuations and longevity are important factors for an investor to consider when considering a mutual fund with automated income payments.

**Types of Mutual Funds with Automated Income Payments**

Mutual funds with automated income payments come in two forms: endowment-style and self-liquidating. Each form works in a different way to help control the risk of an investor outliving his or her savings.

**Endowment-Style Mutual Funds**

Endowment-style mutual funds are designed to last throughout the investor's lifetime. The income payments are linked to account performance. Consequently, in the event of market volatility—be it a rapidly rising or falling stock or bond market—the amount of each distribution check could vary widely from year to year. The potential for such volatility makes it difficult for the investor to consistently budget his or her retirement expenses. So, while this strategy technically does provide longevity protection by providing some income for life, that income may not be sufficient to meet the retiree's needs.

**Self-Liquidating Mutual Funds**

Self-liquidating mutual funds are designed to completely liquidate over a predetermined time horizon. The investor agrees to that time horizon when purchasing the mutual fund. Instead of spreading out assets to last a lifetime, these mutual funds are designed for the assets to last through the predetermined date. Income is tied to account performance, so income payments may be unpredictable. Typically, investors who select a self-liquidating mutual fund have other assets set aside to cover their fixed expenses in case they outlive the money in the self-liquidating mutual fund.

While mutual funds with automated income payments do fulfill a retiree's need to generate income, they lack the ability to provide full income for life and the income predictability of other retirement income strategies.

*All investments in mutual funds involve risk and upon withdrawal may be worth more or less than their original investment.*



---

## Strategy 2: Variable Annuities with Guaranteed Minimum Withdrawal Benefits (GMWB)

A variable annuity contract with a guaranteed minimum withdrawal benefit rider (GMWB) is a distribution choice for retirees concerned about maintaining a minimum retirement income. As a variable annuity, the product allows the owner to stay invested in the market, similar to Strategy 1. And the GMWB rider provides a minimum level of income through guaranteed benefit payments.

By opting to receive income payments at a fixed percentage rate for life, a retiree is protected against outliving this particular income stream. The guaranteed portion also establishes an income “floor,” which cushions the retiree against market risk. This means that, regardless of fluctuations in the value of the investment options that make up the variable annuity contract, the retiree will continue to receive a guaranteed minimum income payment for life.

The payment rate that is guaranteed for life differs from product to product and from company to company, but generally ranges between 3.5 percent and 7 percent. The older an owner is when he or she begins receiving income from the product, the higher the payment will be.

### **Benefit Withdrawal Base**

It is important for owners to understand that the guaranteed income payments and fees associated with GMWBs are based on an amount called the “benefit withdrawal base,” not the actual account value.

If income payments are taken immediately after purchasing the GMWB, the benefit withdrawal base is equal to the *actual* or market account value. For example, if \$500,000 is invested in the GMWB, the initial benefit withdrawal base will be \$500,000. And while the benefit withdrawal base determines what the withdrawal and fee amounts will be, those withdrawals and fees are deducted from the *actual* account balance.

*By opting to  
receive income payments  
at a fixed percentage  
rate for life, a retiree  
is protected against  
outliving this particular  
income stream.*

---

---

*Despite the risk of poor market performance, income payments will not decline below the guaranteed level.*

---

### **The Effect of Market Gains**

Because this is a variable annuity product, the benefit withdrawal base has the ability to “step-up” in response to market gains in the account value.<sup>6</sup> This step-up enables the owner to receive higher guaranteed income payments. While not modeled in this paper, individuals also have the option of delaying receipt of income and may enjoy step-ups in the benefit withdrawal base until income payments begin.

### **The Effect of Market Losses**

The primary benefit of the GMWB is its guaranteed income payment. This does not, however, mean that the owner’s actual account balance is guaranteed. The actual account balance can decrease due to poor market performance, which can lead to a lack of future step-ups in the benefit withdrawal base. Still, despite this risk, income payments will not decline below the guaranteed level. This is because the payments are based on the benefit withdrawal base—not the actual account value—and the benefit withdrawal base cannot decline due to market losses. Even if the actual account balance declines to zero, the retiree will continue to receive income payments from the insurance company based on the amount of the current benefit withdrawal base. And since the account value is zero, there will be no further GMWB fees.

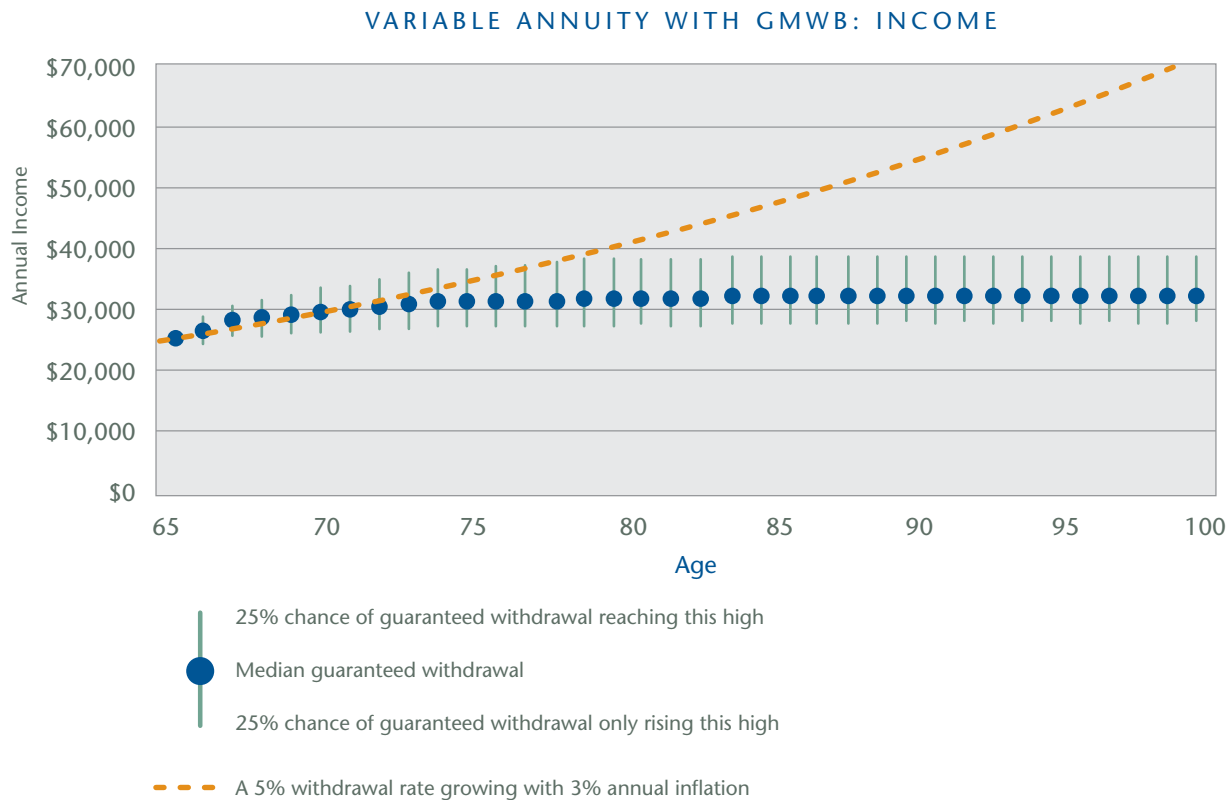
While the guaranteed income may provide retirees with some assurance, it comes at a price—the GMWB fee. Remember, the GMWB fee is based on the benefit withdrawal base and is providing income protection, so market losses that decrease the owner’s actual account balance will not affect the GMWB fee he or she will pay. Therefore, if the owner’s actual account balance decreases, but the GMWB fee remains the same, the owner is paying higher fees in proportion to the actual account balance. Fees associated with the GMWB are the price retirees pay for the assurance of knowing they will always receive a minimum income.<sup>7</sup>

### **A hypothetical retiree**

Given the complexity of the GMWB, it may help to take a look at an example of how it might perform for a hypothetical retiree. The next illustration shows the likely annual income provided by a variable annuity with GMWB rider.

<sup>6</sup> In addition, some companies include what are called “sunset” provisions on the GMWB, which would terminate the option to step up when the retiree reaches a certain age or after a specified number of years.

<sup>7</sup> Guarantees are based upon the promises and claims-paying ability of the issuing insurance company.



This graph demonstrates the income provided by the GMWB under varying market conditions. The green vertical band and blue dots represent the income from the GMWB product; the top of each bar represents the 75th percentile of market conditions, the bottom of each bar represents the 25th percentile, and the dark blue dots indicate income under median market conditions. The orange line represents what the owner is looking for—a steady, inflation-adjusted withdrawal; in this case, that is a 5 percent withdrawal rate adjusted for a 3 percent annual inflation. Comparing the GMWB product (bars and dots) with the owner’s needs (orange line), it is clear that the GMWB generally is not expected to meet retirees’ needs for long-term inflation-adjusted income.

Ideally, a retiree would like a reliable income that increases a little each year to offset the negative impact of inflation. However, any growth in the payments from the GMWB is dependent on account performance. To have any increase in the monthly payments, even just to make up for inflation, the account balance must grow enough from investment returns to exceed the benefit withdrawal base and prompt a step-up.

ANNUAL RETURN  
FOR STEP-UP

FUND MANAGEMENT FEES	+	0.75%
M&E FEE	+	1.25%
GMWB FEE	+	0.75%*
INFLATION	+	3.00%
WITHDRAWAL	+	5.00%
	=	10.75%

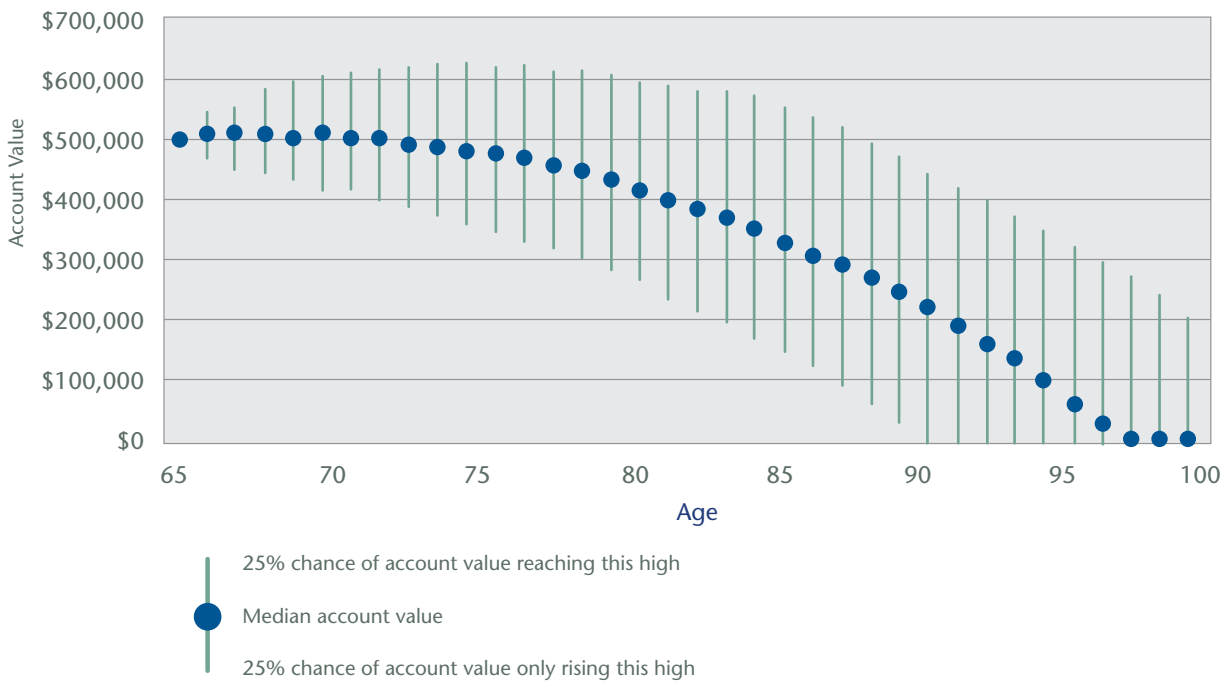
\*GMWB fees are based on the benefit withdrawal base. A retiree will pay fees at a proportionately higher level if his or her actual account balance declines.

As shown in the chart to the left, the annual fees can add up to more than 2.75 percent. Assuming inflation is 3 percent, the investment would have to earn a 5.75 percent return just to make up for the eroding impact of fees and inflation. In order to allow income to “step up” on a regular basis after withdrawals start, the annual return would need to be at least 10.75 percent, due to the 5 percent annual withdrawal.

Given that the account is unlikely to achieve a 10.75 percent return year after year, the impact to the account value can be seen below. By taking just the allowable income for life—even without excess withdrawals—the returns to the portfolio are not likely to offset the income and fees coming out of the actual account balance. Absent a rising account value, the beneficial future step-ups will not occur, making it very difficult for the retiree’s spending power to keep pace with inflation over the long term.<sup>8</sup>

A conclusion that can be drawn from this scenario is that, although many GMWB owners will benefit from occasional step-ups and increased income payments soon after purchasing the product, the account balance will eventually decline.

## VARIABLE ANNUITY WITH GMWB: ACCOUNT VALUE



<sup>8</sup> Please note that this chart should not be compared to the account value chart presented in Strategy 1. In that strategy, a constant income from a 5 percent real withdrawal rate is generated in all market conditions. Because the income from a GMWB is tied to market performance, less money can be taken in poor market conditions and more money can be taken in good market conditions.

## Investment Options

Generally, the owner has a specific set of investment options or portfolios to choose from. To maintain consistency, this paper uses a lifecycle asset allocation that starts with 70 percent equity and gradually grows more conservative. However, some GMWB providers are starting to offer a portfolio with 80 percent equity as the most aggressive investment option. The set of available investment options prevents an owner from being overly exposed to market volatility. Such restrictions are intended to limit the volatility in the underlying portfolio's market value and reduce the risk that the actual account balance will be diminished by market losses.

The combination of liquidity, equity market exposure, and income guarantees that a variable annuity with a GMWB offers is designed to appeal to the risks and fears faced by today's retirees. However, it is important for owners to understand that these benefits—the income guarantees and step-up values—come at a price: extra fees. Those fees will reduce the account value, and since annual payment increases are tied to account value performance, they can hamper the ability of payments to keep pace with inflation.

## Strategy 3: Income Annuities

Income annuities turn a lump sum of retirement savings into a regular stream of income. That income stream can be guaranteed for life, protecting a retiree against the risk of outliving his or her savings. Income annuities have no risk from market exposure and maximize spending for an individual. Retirees can also select additional features with this product that will address the risk of their income not keeping pace with inflation or not paying the remainder of their investment upon an early death.

With relatively low fees and fully guaranteed payments, income annuities are generally considered a cost-effective strategy. But, as with all retirement income products, there is a tradeoff.

### STRATEGY 2: VARIABLE ANNUITIES WITH GMWB

#### *pros*

- Potential upside from market exposure
- Guaranteed minimum income level for life
- Access to account balance

#### *cons*

- Fees can reduce performance
- May be complicated for owners to understand
- Market risk

### STRATEGY 3: INCOME ANNUITIES

#### pros

- Guaranteed income for life
- No market risk
- Can be inflation-protected

#### cons

- Decision is irrevocable (however, some may offer liquidity provisions)
- No potential for future account balance growth

Chief among the drawbacks owners encounter with income annuities is a loss of control. Once an annuity is purchased, the owner cannot surrender the contract for the cash value. More recently, some income annuities have introduced options that allow a partial level of cash liquidity after the initial purchase. However, when exercising this liquidity option, future payments are reduced proportionately to reflect this return of purchase premium.

Other concerns can be addressed through the selection of additional features, but adding features will reduce the income payment received. Still, the cost may be worth it if those features address key owner concerns, such as:

- **The risk of dying before the owner has received much value from the annuity.** This risk can be reduced through a refund option, which entitles the beneficiaries of the owner's estate to either a lump sum or a payment stream equal to the remaining value of the initial premium.
- **The risk of the owner's spouse not being covered after the owner's death.** Owners can choose to base the annuity payments on their life expectancy and that of their spouse. This ensures that either spouse will continue to receive an income payment should the other spouse pass away.
- **Inflation risk.** This can be controlled by purchasing an annuity linked to the Consumer Price Index (CPI). The annuity's payments increase with the government's regularly reported increases in the CPI. Another option that addresses inflation risk involves adding a fixed annual increase feature. This gives the owner an annual "raise" based on a predetermined rate.

Although income annuities can create cost-effective, inflation-protected income that is guaranteed for life, they are not a complete solution to retirement income. Retirees need some liquidity to pay for the unexpected costs in retirement, especially those that arise in healthcare. Retirees also need flexibility in spending, since retirement could last more than 30 years and, over the course of time, spending needs are likely to change.

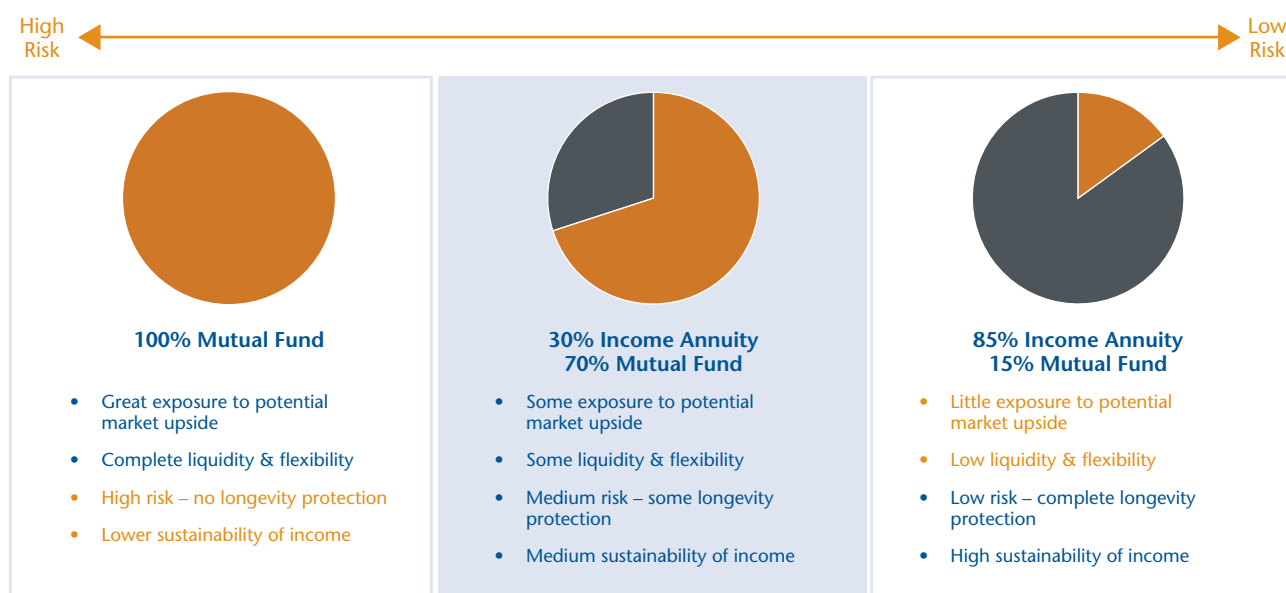
## Strategy 4: Combinations of Mutual Funds and Income Annuities

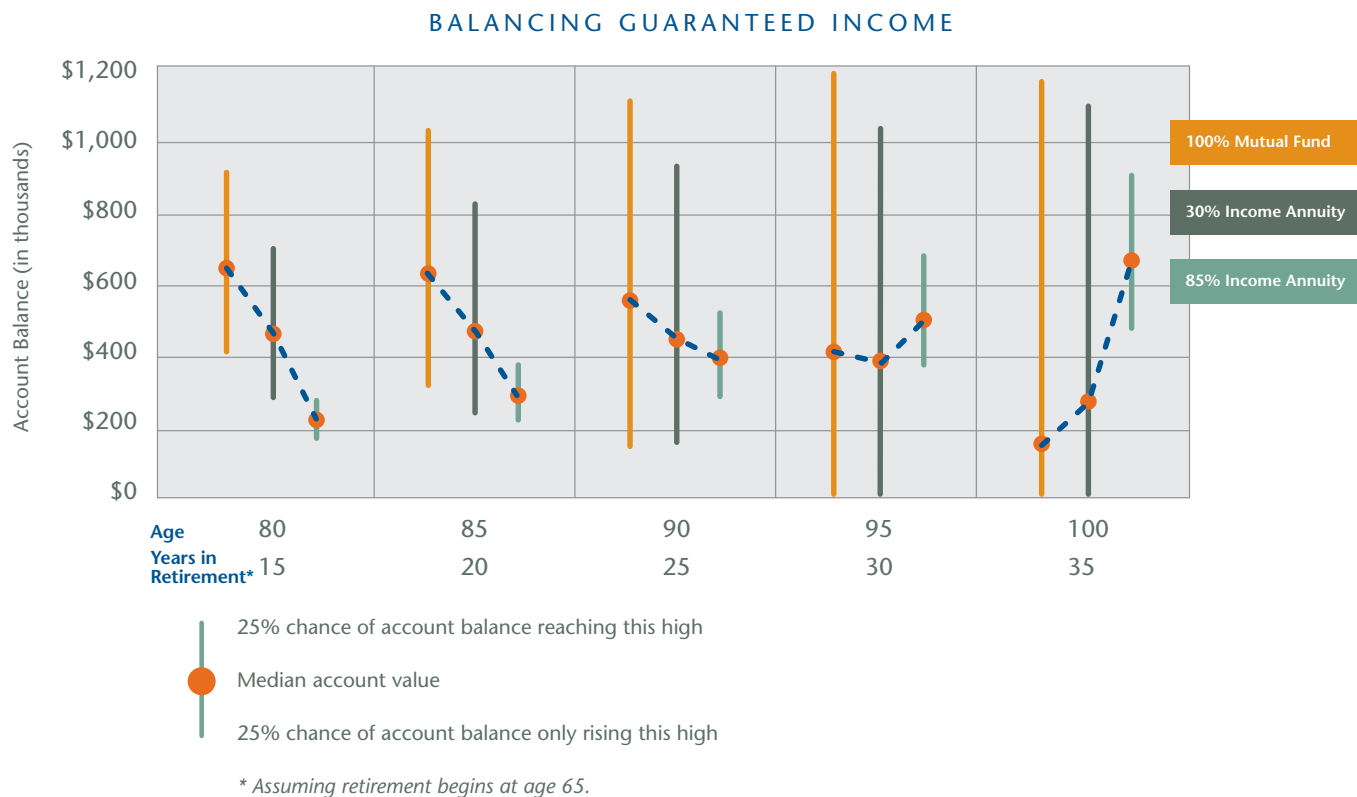
The income annuity becomes a more effective solution when combined with other investment options, such as mutual funds. By combining retirement-appropriate mutual funds with income annuities, a retiree can enjoy the advantages of each product. While the mutual fund provides market exposure, control, liquidity, and flexibility in spending, the annuity provides a baseline of guaranteed income.

Assuming a retiree has a 30-year retirement, adding a slice of income annuity to his or her portfolio can actually create a higher and more predictable income versus an investment solely in mutual funds. To better understand how this would work, the chart below illustrates three investment scenarios, all of which involve the annual withdrawal of a 5 percent inflation-adjusted income.

The first scenario uses a portfolio composed entirely of mutual funds. The second has 30 percent of its value allocated to an income annuity and 70 percent to mutual funds. The last portfolio has allocated 85 percent of its value to an income annuity and only 15 percent to mutual funds. (Note: It would be rare for a retiree to annuitize 85 percent of his or her portfolio, as it would leave too little flexibility to cover large, unexpected expenses. It is used here simply to paint a clearer picture of the income annuity's benefits.)

### COMBINATIONS OF MUTUAL FUNDS AND INCOME ANNUITIES





#### STRATEGY 4: COMBINATIONS OF MUTUAL FUNDS AND INCOME ANNUITIES

##### pros

- Access to retirement savings
- Control over investment options
- Some guaranteed income for life

##### cons

- Some market risk
- Guaranteed income decision is irrevocable

Under these circumstances, the 85 percent income annuity portfolio generates its entire withdrawal from the annuity, leaving the mutual fund to grow untouched. As the 85 percent income annuity portfolio demonstrates in the graph above, an annuity can actually help create a higher and more predictable account balance over a long retirement.

Retirees can reap some of those same income annuity benefits by annuitizing 30 percent of their assets. Doing so provides the owner with balance between receiving a floor of guaranteed income while maintaining some flexibility against unexpected expenses.

By combining traditional investments, a retiree can generate retirement income that adequately meets all of his or her retirement needs at a low cost. However, this solution is not for everyone. Consider the example of a retiree entering his or her drawdown phase with a significant portion of guaranteed income from a combination of pensions and Social Security. In such cases, retirees may be better equipped to face the unexpected costs in retirement by forgoing an annuity purchase and keeping their remaining savings liquid.

Also, income annuities are typically not appropriate for individuals in poor health, as longevity protection is not the primary concern.



MEETING RETIREES' EXPECTATIONS FOR A  
25- TO 30-YEAR RETIREMENT

Retirees' Expectations	STRATEGY 1		STRATEGY 2	STRATEGY 3	STRATEGY 4		
	Mutual Funds with Automated Income Payments		Variable Annuities with GMWB Rider	Income Annuities	Combinations of Mutual Funds and Income Annuities		
	Endowment-Style Mutual Fund	Self-Liquidating Mutual Fund			100% Mutual Fund	30% Income Annuity 70% Mutual Fund	85% Income Annuity 15% Mutual Fund
Automatic inflation-adjusted income							
Full income for life							
Potential account value growth							
Predictable legacy benefit							
Simple to understand							
Ability to change strategy							

Best    Average    Worst

## Conclusion

After evaluating multiple alternatives, it is clear that no single product or withdrawal strategy is always the right answer for every retiree and every situation. Financial professionals can best help their retiree clients by working with them to understand which features are most beneficial to them given their circumstances, and then help them select the strategy that will best meet their needs.

To aid financial professionals in doing this, the chart above summarizes the tradeoffs highlighted in this paper.<sup>9</sup>

As the population of baby boomers enters retirement, financial guidance will be an imperative component of this generation's success in shifting from wealth accumulators to wealth consumers. By assisting retirees with education and guidance, financial professionals can help make the daunting responsibility of planning for retirement more manageable.

Financial professionals can offer solutions to help improve the odds that their clients will receive adequate income during retirement, no matter how long that retirement may be or the extent of the resources available to fund it. Fortunately for financial professionals, a multitude of options now exists for providing clients with such guidance, including the four strategies examined in this paper.

*For more in-depth information or to further discuss any of the strategies featured in this paper, please contact the **Principal Financial Group® Advanced Retirement Team at (800) 451-5447, option 3, and then option 5.***

<sup>9</sup> Note that this chart evaluates the strategies based on a 25- to 30-year retirement. A shorter retirement of 10 to 15 years could look dramatically different.

## ASSUMPTIONS

- Investor Age:** 65.
- Account Balance:** The hypothetical investor has saved \$500,000 in a qualified 401(k) account. Unlike qualified funds where strategies and products have similar tax implications, non-qualified funds should be assessed with tax implications in mind. Clients with all or a portion of non-qualified funds should seek advice from their tax professional.
- Inflation:** Annual inflation assumed to be a flat 3%.
- Mutual Fund:** For the mutual fund investment option of all strategies shown, a retiree-appropriate lifecycle mix of assets is assumed. This mix systematically becomes more conservative each year from age 65 to age 92. The following chart shows the start and end point of this mix:

	Cash & Short-Term Bonds	Inflation-Protected Bonds	Core Bonds	Preferred Securities	High Yield Securities	US Equity	International Equity	Real Estate
Age 65	0.00%	0.00%	18.80%	5.70%	5.00%	45.40%	19.40%	5.70%
Age 92	12.50%	12.50%	40.00%	7.00%	3.00%	14.00%	6.00%	5.00%
Long-Term Expected Return	3.00%	4.00%	5.00%	5.50%	7.00%	8.25%	8.25%	5.75%

- Expected Returns:** Assumptions provided by The Principal® were developed in conjunction with Wilshire Associates.
- Fund Fees:** The average fund fees for the underlying investment are assumed to be 0.75%.
- GMWB Fees:** Retail products are the basis for all illustrations with the GMWB, including a mortality and expense fee of 1.25% and a GMWB fee of 0.75%.
- Income Annuities:** For all income annuity calculations, life-contingent rates as of 5/16/2008 were used. The first monthly payment is assumed to be paid on 6/16/2008, one month from the premium receipt date. Rates are single life, age 65, unisex, with an installment refund and a fixed annual increase of 3%. Monthly income would be \$48.78 for \$10,000 of premium, leading to a year-one payout rate of 5.85%.
- Withdrawal Rate:** Illustrations assume a starting withdrawal rate of 5%.
- Monte Carlo:** The outcomes were developed utilizing Monte Carlo analysis and running 1,000 simulations. The modeling of the investment portfolio includes the expected return, standard deviation, correlation and covariance for each specific asset class. The projections generated by these simulations regarding the likelihood of various scenarios are hypothetical in nature, do not reflect actual investment results and are not guarantees of future results.

## ABOUT THE PRINCIPAL FINANCIAL GROUP

The Principal Financial Group® (The Principal®)<sup>1</sup> is a leader in offering businesses, individuals and institutional clients a wide range of financial products and services, including retirement and investment services, life and health insurance, and banking through its diverse family of financial services companies. A member of the Fortune 500, the Principal Financial Group has \$311.1 billion in assets under management<sup>2</sup> and serves some 18.6 million customers worldwide from offices in Asia, Australia, Europe, Latin America and the United States. Principal Financial Group, Inc. is traded on the New York Stock Exchange under the ticker symbol PFG. For more information, visit [www.principal.com](http://www.principal.com).

<sup>1</sup> Insurance issued by Principal Life Insurance Company. Securities offered through Princor Financial Services Corporation, member SIPC and/or independent broker dealers. Securities sold by a Princor Registered Representative are offered through Princor. Bank products offered through Principal Bank®, member FDIC, Equal Housing Lender. Principal Life, Princor® and Principal Bank are members of the Principal Financial Group, Des Moines, IA 50392.

<sup>2</sup> Insurance and securities are not insured by the FDIC; are not obligations or deposits of Principal Bank nor guaranteed by Principal Bank; and are subject to investment risks, including possible loss of the principal invested.



WE'LL GIVE YOU AN EDGE®

Principal Financial Group, Des Moines, Iowa 50392-0001, [www.principal.com](http://www.principal.com)

**FOR FINANCIAL PROFESSIONAL USE ONLY**

While this communication may be used to promote or market a transaction or an idea that is discussed in the publication, it is intended to provide general information about the subject matter covered and is provided with the understanding that The Principal is not rendering legal, accounting, or tax advice. It is not a marketed opinion and may not be used to avoid penalties under the Internal Revenue Code. You should consult with appropriate counsel or other advisors on all matters pertaining to legal, tax, or accounting obligations and requirements.

Insurance issued by Principal Life Insurance Company.

**Principal Funds, Inc. is distributed by Principal Funds Distributor, Inc.**

Securities offered through Princor Financial Services Corporation, 800/247-1737, member SIPC.  
Principal Life and Princor® are members of the Principal Financial Group®, Des Moines, IA 50392.

©2008 Principal Financial Services, Inc.

PQ 8683 | 07/2008 | 6430072010