Should I Buy an Income Annuity?

The purchase of any financial product involves a trade off. For example when saving for retirement, you are often faced with making a trade off between how much you want to protect your investments from poor markets versus taking advantage of good markets. The result of this decision may be seen in the portion of your investments you place with bonds versus equities.

Trade-offs can become even more complex when the time comes to generate cash flow from those savings. This is why many people seek financial advice when transitioning into retirement. When addressing a variety of uncertainties that include how long you will live, inflation, healthcare cost, and market performance, advisors often recommend insured products to complement investment products like stocks, bonds and mutual funds.

Based on the selections you made, this analysis looks to demonstrate the trade-offs inherent when allocating a portion of one's savings into an income annuity[1] to support a cash flow plan in retirement. You will see how an income annuity can possibly help increase spending power in retirement while also understanding the potential cost to an estate over time. To receive a similar analysis that is specific to you and your needs, please ask your financial advisor.

Before investing in an income annuity, consult with your financial advisor regarding your specific needs.

1 Your Longevity

Statistics tell us that if we start with a large group of people your age, half of these people will be alive in **30** years. This is known as your life expectancy. In fact, there is a 10% chance you will still be alive in **43** years - a number that's large enough that you need to plan ahead.

Your Longevity[2]	Female Age	Years[3]
Your Current Age	60	n/a
50% Chance of Survival (Life Expectancy)	90	30 years
25% Chance of Survival	97	37 years
10% Chance of Survival	103	43 years

1. An income annuity is also known as a Single Premium Immediate Annuity, a SPIA, a Fixed Income Annuity, an Immediate Fixed Annuity or a FIA
2. Society of Actuaries; A2000 Mortality Table assuming good health
3. The probability that you will be alive in the number of years shown

2 Withdrawing Income from Your Investments

For the purpose of this analysis, we will take into account only your investable savings and not include any other equity you may have built up in other assets like your house. Today, most retirees need to rely on both the principal and interest from their savings to help support their income needs in addition to the lifetime income they may receive from other sources.

To help ensure you extend your savings as a source of income throughout your retirement, financial advisors often recommend you limit your initial withdrawals to about **4.00%** each year. Using this formula, you could withdrawal an initial amount of **$4,000** per year from your savings. This provides you with an initial annual budget of **$14,000** when combined with the Canada Pension Plan (CPP), Old Age security (OAS) and Pensions.

So How Long Could Your Savings Last as a Source of Income?

This analysis also anticipates that over time you would gradually increase your annual withdrawal from your savings slightly year after year to account for inflation (with an average inflation rate of **1.50%**).

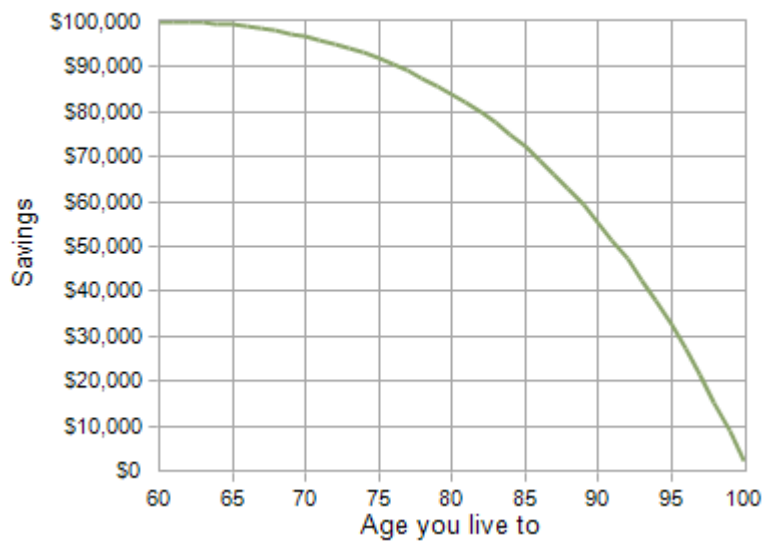
Assuming a steady return of **5.00%** on your equities and **2.50%** on your bonds[4], and if you maintain the same withdrawal rate adjusted for inflation, your savings may last for **42** years. After that time, you would theoretically only have the Canada Pension Plan, Old Age security and your Pension as a source of reliable income.

4. This model is based on a steady return. If markets fluctuate (as they always do), or if you do not achieve as high a return as forecasted here, your savings may not last as long

Your Current Savings	
Total Investable Savings	$100,000
Aggregate Asset Allocation	60% Equity / 40% Bond

Initial Lifetime Income Budget	
Annual Withdrawal from Savings (at 4.00%)	$4,000
Estimated Annual CPP and OAS	$10,000
Estimated Annual Pension Income	$0
Initial Annual Budget	$14,000

Remaining Savings at End of Life



3 Adding an Income Annuity to Your Investment Portfolio

Now let's compare what happens if you invest **$40,000** of your savings into an income annuity that today pays you **$1,933** per year[5] for as long as you are alive.

For the purposes of this analysis, we adjust your spending so that you deplete your savings at the same time in both scenarios. As a result, you could increase the withdrawal rate from your remaining **$60,000** in savings to **4.69%**. Along with the annuity this would provide you the option to increase your initial annual budget by **$753** to a total of **$14,753** per year.

This is because an income annuity provides a third element of return called a "survivor credit" in addition to principal and interest. This credit is the result of the "pooling of funds" from a group of people who buy income annuities from the same insurance company.

The Impact to Your Estate

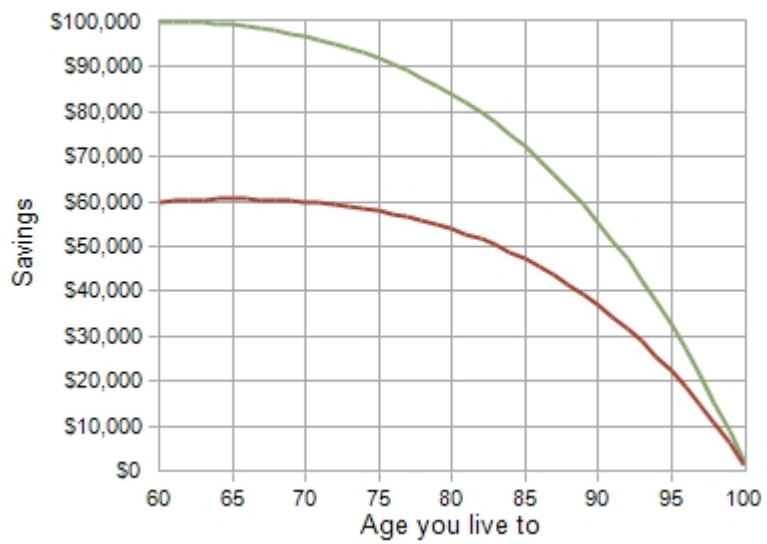
Although the annuity could increase your spending power, you should be aware of the potential impact on your inheritance of spending the additional initial **$753** per year that you receive from the income annuity. This is shown by the red line in the graph to the right. As you can see by comparing the green line (which represents no income annuity) to the red line, the difference in the total amount of your estate would receive depends on how long you live. In the extreme worst case, if you die immediately after purchasing an income annuity, your estate would receive **$19,320** from the annuity because of the type of guarantee you selected. On the other hand, if you live a long life the impact to your estate of spending the additional income from the annuity would be minimal.

5. The income generated from the annuity is an average of five competitive income annuities available on the CANNEX Income Annuity Exchange

The Income Annuity You Are Considering	
Allocation into Income Annuity	$40,000
Annual Income from Annuity	$1,933
Guarantee Type	Life with 10 year guarantee
Minimum Amount Paid	$19,320

Adjusted Initial Lifetime Income Budget	
Annual Income from Annuity	$1,933
Withdrawal from Remaining Savings (at 4.69%)	$2,820
Estimated Annual CPP and OAS	$10,000
Estimated Annual Pension Income	$0
Revised Annual Budget	**$14,753**
Extra Annual Income	**$753**

Remaining Savings with an Income Annuity



4 The Trade Off of Using an Income Annuity

The graph to the right shows one way to illustrate the cost/benefit trade off inherent in the purchase of the income annuity you may be considering.

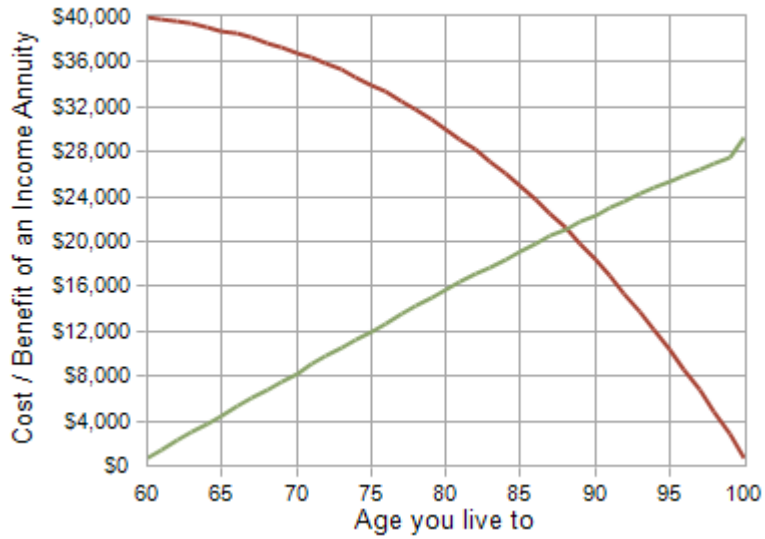
The Benefit - The green line represents the net cumulative impact of increasing your spending over time when allocating a portion of your savings into an Income Annuity as shown in this analysis.

The Cost - The red line represents the net difference between the balance of your investable savings over time both with and without the annuity - in other words, the difference between the two lines in the graph shown on the previous page. It is also important to point out that this cost is only relevant if you choose to spend the extra income as a result of the income annuity purchase.

One could look at this graph technically and conclude that if you were to live another **29** years (approximately where the lines cross) an income annuity would have been a profitable decision. On average, the chances that you will live for another **29** years is **55%**.

Of course there are other things to consider. Some studies have shown that people with pensions, annuities or other sources of guaranteed lifetime income are happier in retirement and show fewer symptoms of depression[6]. This may be because their income is more predictable. So, even if you live less than **29** years, your heirs may be comforted in knowing that you may have had a more enjoyable retirement because you purchased an income annuity.

The Cost/Benefit Trade off of Using an Income Annuity



6. Panis, Constantijn. 2003 "Annuities and Retirement Satisfaction"; Bender, Keith 2004 "The Well-Being of Retirees: Evidence Using Subjective Data"

5 Assumptions and Disclosures

This analysis is based on a number of assumptions and it is impossible to predict the performance of stocks, bonds or inflation. While investing some of your retirement savings in income annuities would enhance the retirement of most retiring people, only a financial advisor who has studied your needs would be in a position to help you determine what mix of products would optimize your retirement income. This analysis is for educational purposes and is not a complete financial plan.

Income Annuity Details	
Premium	$40,000
Annuity Type	Single Life
Guarantee Type	Life with 10 year guarantee
Birth Date - Primary	March 10, 1962
Sex - Primary	Female
Purchase Date	March 10, 2022
Province	Ontario
Income Start Date	April 10, 2022
Monthly Income	$161

Portfolio Assumptions	
Risk allocation before annuity investment	60% Equity / 40% Bond
Assumed Return on Equity Investments	5.00%
Assumed Return on Fixed Investments	2.50%
Assumed Inflation Rate	1.50%
Assumed Safe Withdrawal Rate	4.00%

- The income generated from the annuity is an average of five competitive income annuities available on the CANNEX Income Annuity Exchange
- The results shown in this analysis are before taxes. Please consult with your tax advisor before investing in an income annuity.
- Non-registered funds
- Monthly payouts before taxes

Before investing in an income annuity, consult with your financial advisor regarding your specific needs.

6 Methodology

- Longevity is projected using the Society of Actuaries A2000 Mortality Table with 1% improvement per year
- CPP and OAS payments are assumed to increase annually at the assumed inflation rate
- Pension payments are assumed to remain level
- All income is annualized by multiplying by the payment frequency
- An initial budget is determined using the above assumptions for a safe withdrawal rate from the existing portfolio plus any CPP, OAS and Pension payments (Portfolio A)
- The second budget for the portfolio that includes an income annuity (Portfolio B) is determined by the sum of the income annuity, CPP, OAS, Pension payments and a withdrawal rate from the remaining portfolio determined recursively so that the assets remaining at 10% probability of survival equals the assets in Portfolio A remaining at 10% probability of survival. If the assets are exhausted by that age, withdrawal rates in Portfolio B are determined recursively so that assets exhaust at the same age as Portfolio A. The allocation into the income annuity is first taken from the bond/fixed portion. Equities are used after the bond/fixed portion is exhausted.