



# Calculation Guide

## Contents

Cash Flow Decisions Defaults.....	2
Contributions and Additions to Assets .....	3
Retirement Plans (401K) .....	3
IRA .....	3
Other assets.....	3
Excess income.....	3
Taxation.....	4
Effective Income Tax Rate.....	4
Salary.....	4
Social Security Benefits .....	4
Pension .....	4
Existing Annuities .....	4
Proposed Annuities .....	5
Other income.....	5
Savings .....	5
Investments .....	5
IRA, 401(k) .....	6
Roth IRA .....	6
Medicare Surtax .....	6
Cash Flow Assumptions.....	7
Best Income Assumptions.....	9
Warnings and Info .....	10

## Cash Flow Decisions Defaults

- Age to start Social Security: 62 or current age if older than 62
- Retirement age: 65
- Lives to age: defaults to life expectancy based on the Social Security mortality tables, rounded to nearest age. <http://www.socialsecurity.gov/OACT/STATS/table4c6.html>
- Inflation rate: 2.5%. Historically, over the last 100 years the inflation rate has averaged 3% although the last decade has been much less than 3%.
- Income Tax rate: 25% for both pre-retirement and post-retirement
- Social Security Cost of Living adjustment: 2.5%. The long-term average increase over the history of Social Security is slightly higher but 2.5% is a reasonable estimate.
- Continue xx% percent of expenses at first retirement: 100%
- Continue xx% percent of expenses at first death: 100%
- Rate of return: 0%
- Custom Social Security filing method: File for Benefits
- Order of asset use: Savings, Investments, IRAS/401Ks, Roth IRAs; cash on hand will always be used before these assets
- Annual increase for salary: 0%
- Existing annuity: assumed to be lifetime, starting at current age, and set to 0% annual increase.
- Proposed annuity: Non-qualified annuity assumed to be lifetime, starting at current age, and set to 0% annual increase.
- Pension: defaults to a start age of 65 and assumed lifetime with 0% annual increase.
- Miscellaneous income: defaults to start at current age, assumed lifetime, continuing to current age +1, and not tax exempt.

## **Contributions and Additions to Assets**

All assets allow monthly contributions. The ability to make contribution is limited to available income; if no income remains after taxes and expenses, contributions will be curtailed.

### **RETIREMENT PLANS (401K)**

Employee contributions are deducted from salary pre-tax and deposited in the account. Contributions stop when salary stops. There are no contributions from post-retirement salary or any other source.

### **IRA**

Contributions are made from after-tax income, but will be considered deductible for income taxes. Contributions stop at owner's retirement age.

### **OTHER ASSETS**

Contributions are made from after-tax income, after other expenses have been paid. If no income remains to fulfill requested contribution, the deposit is not made.

### **EXCESS INCOME**

In years when income exceeds taxes, expenses and contributions, the money is placed into a separate account, similar to a checking account. It is referred to as cash on hand. In subsequent years, cash on hand earns interest net of taxes like a savings account. If income is insufficient to pay expenses, cash on hand is used before any other asset.

If expenses are lowered after first death where assets can accrue, you could possibly see a graph with an income need and a surplus. The percent of expenses met are based on what you needed over all years and the surplus is the amount of assets available at the end of all calculation years.

## **Taxation**

### **EFFECTIVE INCOME TAX RATE**

An “effective” income tax rate is used. It is estimated using the ratio of income taxes actually paid to total income, as opposed to the marginal rate which is the rate applied to the highest dollar of income.

### **SALARY**

FICA and Medicare is withheld from salary, 6.2% and 1.45% respectively.

Pretax contributions to retirement plans are deducted.

Withholding is based on effective income tax rate, resulting in a net paycheck amount.

### **SOCIAL SECURITY BENEFITS**

The portion of Social Security considered taxable income ranges from 0-85% based on the other income received. For further information on how this is calculated see <http://www.ssa.gov/planners/taxes.html>. This taxation is included in the income taxation each year.

### **PENSION**

Taxed at effective income tax rate.

### **EXISTING ANNUITIES**

Taxed at effective income tax rate, assumed to be fully taxable since we do not have information whether annuity is qualified or non-qualified moneys, premium cost or exclusion ratios.

## **PROPOSED ANNUITIES**

Purchase of annuities is assumed today.

### *Qualified*

Purchase of a qualified annuity assumes that a rollover or other means has been used to purchase the annuity as part of a retirement plan. All distributions from a qualified annuity are considered taxable income.

### *Non-qualified*

A proposed non-qualified annuity is taxed in proportion of the annuity purchase price to the expected return (ER). Part of each payment is considered to be a return of investment and the rest is taxed. The single life tables are used to calculate expected return based on the age annuity payments start.

ER = monthly Income X 12 X life expectancy multiple. For age 60 this factor is 24.2; for 65, 20.0, from Table V. This table is in the Tax Facts appendices.

Non-qualified annuities are purchased using the order specified for asset consumption.

## **OTHER INCOME**

Taxed at effective income tax rate.

## **SAVINGS**

Earnings are net of taxes. Withdrawals do not incur further tax.

## **INVESTMENTS**

Growth is tax-deferred. When withdrawals or liquidations are made, the gain above the basis is taxed as capital gains income at 15%. Each withdrawal is assumed to be partially basis in proportion to total withdrawn.

### **IRA, 401(K)**

Earnings are tax-deferred. Distributions and withdrawals are fully taxed at the income tax rate. Withdrawals prior to 59½ subject to 10% penalty.

### **ROTH IRA**

Earnings and withdrawals (after age 59½) are tax-free. No withdrawals prior to 59½. After age 59½ any withdrawals are assumed to meet the five year rule for tax-free withdrawals.

### **MEDICARE SURTAX**

The Medicare 0.9% surtax on excess earnings and the investment surtax of 3.8% are applied during income tax calculations.

## Cash Flow Assumptions

All asset growth, savings requested and income streams will be based on a partial year the first year if today's date is not in January.

All income streams available for expenses will be net of taxes, withholdings and pretax contributions.

All asset growth will be net of any earnings taxes. Any pretax contributions withheld from salaries will be deposited into appropriate plans along with employer contribution.

For IRAs and other retirement plans such as 401Ks, Required Minimum Distributions (RMD) are calculated each year and withdrawn from the account. The distribution after taxes is available for cash flow.

All withdrawals from assets will be net of taxes. Therefore, any amount needed to pay an expense as a cash source will be grossed up to pay any taxes due on that amount.

After all bills are paid, we use leftover cash to meet any deposits requested.

Income tax on Social Security is based on total other income (modified Adjusted Gross Income or MAGI). We determine the amount of tax at the beginning of year using a formula to determine what percent of Social Security is taxable. However, asset withdrawals needed to pay expenses during the processing year, such as capital gains income, could cause a greater percentage of Social Security income to be taxed. The taxes on Social Security income will be recalculated at the end of year. If additional tax is due at end of year, we will loop thru all cash sources and recalculate Social Security tax until no other taxes are incurred. We will recursively recalculate if needed until all tax is paid.

Excess investment income could cause a 3.8% surcharge if annual gross income is greater than the exemption amount of 200,000 for single, 250,000 if married.



Any moneys left over at end of year will be deposited into a cash on hand account (such as checking) and will grow based on the investment rate specified for all assets. Expenses paid from cash on hand will show up as assets on the graph.

The bar popup for the income need graph showing cash sources will only show the amount of the withdrawal that was used from each category to pay that year's needs, net of any taxes, deposits, etc.

If expenses are lowered after first death where assets can accrue, you could possibly see a graph with an income need and a surplus. The percent of expenses met are based on what you needed over all years and the surplus is the amount of assets available at the end of all calculation years.

## Best Income Assumptions

For every age combination from 62 to 70 for both clients (60 to 70 for widowed), we loop thru all possible social security filing methods and run cash flow to determine the overall needs deficit and surplus and save off the best filing method with values.

The 'best' rule is based on the cash flow that produced the lowest needs deficit amount. If deficit amount happens to be the same as another filing method for that age combination, then we take the filing method that produced a higher surplus or overall total net worth at the end of all years.

Once we find the best filing method for each age combination, we loop thru these results and find the 'best of the best' by determining which age combination and filing method produced the best overall cash flow scenario. The 'best' rule is the same as above.

As a side note, the best social security age combination and filing method may be different than SSPro's calculations for maximum benefits. SSPro only considers the maximum social security benefits over all years whereas the best income calculation looks at your whole portfolio of assets and income streams. Depending on the timing of your other income streams and assets, a different filing method and age combination may produce a lower needs deficit and overall total net worth.

## Warnings and Info

**Warning: Social Security benefits have been reduced due to excess earnings.**

A reduction to Social Security benefits has occurred due to excess earnings in any year

**Warning: Income insufficient to make requested contributions to savings or investments.**

If there is insufficient income remaining after expenses and taxes have been paid, contributions to savings and investments will not happen. We do not transfer money from another asset to make deposits in another asset.

**Warning: Penalty taxes were incurred for early withdrawals from a qualified plan.**

If a withdrawal is made from a Retirement Plan or IRA prior to owner age 59½, a 10% penalty applies in addition to the estimated income tax due. Does not apply to Roth IRA.

**Info: In this situation, the Social Security strategy used gives a better cash flow than Social Security maximization alone...**

If Optimal Cash flow is shown and the ages and/or filing method for the maximum Social Security strategy is different, the shortfall and surplus if any will be shown.

**Info: Optimizing Social Security cash flow would reduce remaining needs today to...**

**Info: Optimizing Social Security cash flow would increase surplus to...**

If a custom Social Security strategy is selected, the strategy which produces the best (optimal) cash flow is displayed. Optimal is measured first by the smallest shortfall today (NPV of needs) and/or the greatest surplus at last death, if shortfall is the same.

**Info: Social Security benefits don't start until age xx**

If the age benefits started is not equal to the requested start age, this message is displayed. This occurs if a filing method is not possible at the requested age, spousal benefits are delayed until the other spouse starts benefits or someone born 1955-1960 has a FRA age which pushes benefit start age to the following year.

**Info: Caution should be used when planning to retire later**

If retirement age is greater than FRA this message is shown

**Info: Your current home is valued at \$xxxxx in 20xx when first deficit occurs. You may consider downsizing your home or a reverse mortgage.**

If a deficit occurs and there is a home, this message suggests two possible ways to use the home equity to provide income.

**Info: Consider reducing your monthly expenses.**

If the percent of needs met is less than 80%, this option appears.

**Info: Consider working longer.**

If the percent of needs met is less than 80% and retirement age is less than 70, this suggestion appears.