

Calculations and Assumptions

The MoneyGuidePro (MGP) calculations are designed to provide an estimate of results using assumptions that are appropriate, reasonably predictable, and conservative. We believe it's better to be a bit more conservative so that your clients' estimated results are typically understated rather than overstated.

Why MGP Uses a Portfolio Return

MGP always uses a portfolio return calculated as the weighted average of the asset class returns for the investment assets being used in a Plan. You specify an asset class allocation when entering an asset. Each asset class has a return. When using historical returns, an index is used as a proxy for each class. When using projected returns, you use the default returns provided by MGP or your firm. By using the portfolio return, MGP simulates a portfolio that is rebalanced each year. Also, MGP applies the portfolio allocation to each tax category. MGP does not reduce the portfolio value for any costs associated with annual rebalancing (e.g. transaction fees and tax liabilities). When using historical returns, use the Expense Adjustment (located in the Create Portfolios section of User Options) to adjust the return for each asset class on a program level. On a plan level, use the Total Return Adjustment (located in the Return Override on the Current Allocation page or on the What If Worksheet) to adjust the portfolio return. When using projected returns, the returns are net of expenses.

Many cash-flow softwares require the user to input a return for each asset. Specifying a return for each asset makes it difficult to maintain the specified portfolio allocation. For example, during an accumulation period, if you begin with a portfolio that is 50% stocks and 50% bonds, after a few years, the portfolio usually will have more stocks than bonds because of the stocks' higher growth rate. The longer the accumulation period, the higher the percentage of stocks and the lower the percentage of bonds represented in the portfolio. Maintaining the portfolio allocation during the distribution period is a challenge as well. Clients' assets have to be liquidated in order to fund their goals. Assume the initial portfolio holdings are 50% intermediate-term bonds and 50% small cap stocks. To maintain balance each year you must calculate how much to use from each asset class in order to have the ending portfolio balance maintain the 50-50 allocation. The amount will vary each year based on investment earnings, taxes, untaxed gains, and Required Minimum Distributions (RMD's). The order of liquidation is an important consideration when you are spending down the portfolio. Once you liquidate any asset you have changed the portfolio allocation. If you rebalance after liquidating an asset you do so by liquidating part or all of your other assets, which may violate the selected spend-down order. Unless each asset has exactly the same allocation, it is impossible to keep the portfolio in balance AND follow a prescribed order of asset liquidation.

The MGP approach uses the portfolio return for each tax category. This simulates how your client's portfolio could grow and be spent, while maintaining the selected allocation. We believe it is the best approach for long-term planning.

Why MGP Uses a Rolling Plan Year

MoneyGuidePro uses a Rolling Plan Year rather than a Calendar Year. Each time you run a plan, the current date begins the plan year and it rolls forward for 365 days. For example, if you create or access a plan on April 10, 2016, the first plan year, represented as 2016, would be 04/10/16 through 04/09/17.

Rolling Plan Year is beneficial because it eliminates the need to prorate numerous variables (e.g., asset additions, goal amounts, and taxes) for the first and last years of the plan. It is especially important to remember MoneyGuidePro uses a Rolling Plan Year when reviewing plans near the end of the calendar year, because you will see full annual additions and goal values. If you are running a plan one or two months before your clients are retiring, you might consider entering them in the Program as retired since they will spend most of the first plan year in retirement.

Tax assumptions

The MGP tax assumptions are shown, and can be changed, on the Tax and Inflation Options page, accessed from the Start/Personal page or the What If Worksheet in a Financial Goal Plan. The Program, by default, uses marginal taxes before retirement and progressive taxes during retirement. There are two age-dependent events in the calculations: (1) tax penalties when tax-deferred, Roth, or qualified assets are used before the owner of the assets is age 59½; and (2) Required Minimum Distributions (RMD) for qualified assets after the owner of the assets is age 70½.

Tax Categories

MGP groups assets into tax categories, each with its own taxation rules and assumptions. The tax categories are: taxable, tax-free, tax-deferred, Roth, qualified, 529 Plans, and Coverdell Education Savings Accounts (CESAs). The qualified category includes both Traditional IRAs and Employer Sponsored Retirement Plans. The Program also categorizes tax-deferred, Roth, and qualified tax buckets for both the client and co-client, since tax penalties are assessed based on the age of the owner. When either the client or co-client reaches their Planning Age (i.e., age at death) in the Plan, MGP assumes ownership of their assets transfers to the survivor, keeping the funds in their original tax categories without assessing taxes.

When MGP funds expenses, it uses the assets in a prescribed spending order. When funding a goal, the Program first uses Earmarked Assets. If there are no Earmarked Assets available for the goal expense or when Earmarked funds are exhausted, Fund All Goals Assets are used. Fund All Goals Assets are used in the same spending order as the Earmarked Assets.

When taxes (and tax penalties) are due, MGP assumes taxes are paid within the tax category. For example, when using taxable assets, taxes are due when the untaxed gain is used. MGP determines the amount available to fund the goal from the taxable category, after paying the taxes from within the category.

Spending Order

The MGP default spending order is:

1. Reliable Income
2. Retirement Cash Reserve
3. 529 Savings Plans
4. Coverdell Education Savings Accounts (CESAs)
5. Taxable
6. Tax-free
7. Tax-deferred for client without penalty
8. Tax-deferred for co-client without penalty
9. Inherited Roth for client
10. Inherited Roth for co-client
11. Roth for client without penalty
12. Roth for co-client without penalty
13. Inherited Traditional IRA for client
14. Inherited Traditional IRA for co-client
15. Qualified for client without penalty
16. Qualified for co-client without penalty
17. Tax-deferred for client with penalty
18. Tax-deferred for co-client with penalty
19. Roth for client with penalty
20. Roth for co-client with penalty
21. Qualified for client with penalty
22. Qualified for co-client with penalty

The first five items in the Spending Order, Reliable Income, Retirement Cash Reserve, 529 Savings Plans, CESAs, and Taxable, are fixed and cannot be changed. The remaining items can be reordered. If you want to change this default for all of your clients, go to the Financial Goal Options section of User Options. If you want to change from the default Spending Order for any scenario in a client's Plan, you can do so in the Spending Order section of the What If Worksheet.

Reliable Income

Reliable Income is determined based on the sum of retirement incomes and income from variable annuities with GMWB's by year and by earmark.

Retirement Cash Reserve

Retirement Cash Reserve simulates a strategy of consistently maintaining a stated level of cash holdings during retirement to fund short-term goal expenses. It is designed to reduce the impact of liquidating assets during potential market downturns. It is determined and funded each year based on the strategy entered on Current Allocation. For more information on Retirement Cash Reserve refer to our user guide entitled "Bucket Strategies: Retirement Cash Reserve & Aspirational Bucket."

529 Savings Plans

The earnings on 529 Plans are federally tax-free. When you enter each 529 Plan, you specify whether it is also state tax-free. If the asset will generate state taxes MGP assumes that

state taxes are paid each year. The Program also assumes that funds from 529 Savings Plans are used to pay only qualified college expenses as defined in the 529 Plan regulations.

Coverdell Education Savings Accounts (CESAs)

The earnings on CESAs are tax-free. MGP assumes that funds from CESAs are used to pay only qualified college expenses as defined in the CESA regulations.

Taxable Assets

Each taxable asset has both a current value and a cost basis. The Program assumes annual additions to taxable assets are after-tax dollars, so all additions increase both the current value and the cost basis. On the Tax and Inflation Options page, you can specify what percentage of annual taxable earnings should not be taxed until withdrawn (i.e., used to fund a goal expense). The remaining percentage of taxable earnings is taxed in the year earned. The MGP default is to tax all earnings on taxable assets each year, so the default for the percent of annual taxable earnings not taxed until withdrawn is zero.

MGP uses the long-term capital gains (LTCG) percentages and rates defined on the Tax and Inflation Options page to determine the percentage of earnings taxed at the LTCG rate, and the tax rate applied.

The earnings taxed in the year earned are added to cost basis. The earnings not taxed in the year earned become untaxed gains, and will be taxed in the year withdrawn.

When taxable assets are spent, the cost basis is used first, and then the untaxed gain, simulating a tax loss harvesting strategy. When the untaxed gain is used for a goal expense, taxes are generated. MGP applies the same LTCG rates and percentages to the untaxed gain as to the earnings.

Tax-Free Assets

The earnings on tax-free assets are free from federal taxes. When you enter a tax-free asset, you specify whether it is also state tax-free. If the asset generates state taxes, MGP assumes you pay the state taxes on the earnings each year.

Tax-Deferred Assets

Each tax-deferred asset has both a current value and a cost basis. The Program assumes annual additions to tax-deferred assets are after-tax dollars, so all additions increase both the current value and the cost basis. The earnings on tax-deferred assets grow tax-deferred; taxes are paid when the assets are used to fund a goal. When tax-deferred assets are used, the appreciation is used first and the principal is used last, which is proper for tax-deferred assets that are not annuitized. The Program assesses tax penalties if the tax-deferred assets are used before the owner of the assets is age 59½.

Roth Assets

The Program assumes Roth assets will be, or have been, owned for at least five years before being spent, which allows distributions to be tax-free. MGP assesses a 10% tax penalty if a Roth IRA asset is used before the owner of the asset is age 59½.

Qualified Assets

Qualified assets are Traditional IRA's and Employer Sponsored Plans. Each qualified asset can have a pre-tax value and an after-tax value. Additions are specified as either pre-tax or after-tax. All earnings grow tax-deferred; taxes are paid when the asset is used to fund goals. When qualified assets are used, if part of the value is from after-tax additions, the Program makes pro-rata withdrawals from the pre-tax and after-tax portions of the assets, including paying necessary taxes pro-rata. The Program assesses tax penalties if a qualified asset is used before the owner of the asset is age 59½.

When the owner of a qualified account reaches age 70½, MGP calculates the Required Minimum Distributions (RMD's) based upon the Uniform Lifetime Method, unless the difference between the ages of the client and co-client is greater than ten years. In that case, the program uses the Joint Recalculation Method. At the beginning of each year, the Program calculates the RMD and withdraws that amount from the qualified assets. Taxes are paid on the RMDs and the net amount is then added to the taxable assets. RMD taxes are paid from assets based on the spending order.

For inherited IRA's, MGP calculates the annual RMD based on the year the IRA was inherited and the current owner's life expectancy. RMD withdrawals continue from the current year through the end of the owner's Plan OR until the IRA value is depleted through funding of goals. In RMD calculations, MGP assumes: (1) the owner of the Inherited IRA is the only beneficiary, (2) the owner has selected the life expectancy distribution option, and (3) all RMDs for past years have been completed.

Order of Calculations for Annual Portfolio Results

The calculations in MGP are done each year in the following order:

1. For College Goals, the college expense is reduced by a 529 Prepaid Tuition Plan, Other Funding Sources, and Assets Owned by Others, if applicable.
2. If either client or co-client has reached age 70½, Required Minimum Distributions are taken from qualified assets, including necessary taxes. The net amount is then added to Taxable Assets.
3. Additions to Investment Assets and Other Additions (from Other Assets or Insurance Policies) are added to assets.
4. The Stock Options and Restricted Stock amount is added to Taxable Assets. Taxes are calculated based on the rates entered on the Stock Options or Restricted Stock Start pages.
5. Taxes are subtracted from Strategy Income. Taxes on Immediate Annuity Strategy Income are based on the Exclusion Ratio (entered on the Immediate Annuity page) and the options chosen on the Tax and Inflation Options page. The Exclusion Ratio determines what portion of the immediate annuity payment is taxed. The selections on the Tax and Inflation Options page determine what tax rates are used.

For employed clients using the Roth Conversion Goal Strategy, MGP uses the marginal tax rate to calculate taxes due on the conversion. For retired clients, MGP calculates the

conversion taxes using the tax method selected on the Tax and Inflation Options page. The default during retirement uses a standard deduction, personal exemption, and the progressive tax table. When taxes for the Roth Conversion are paid from the investment portfolio, MGP first uses Taxable Fund All Goals assets, then uses funds from the converted Roth IRA. If the owner of the asset is less than 59½, the Program assesses penalties on the taxes paid from the Roth IRA asset. The net (after-tax) Strategy Income amount is added to the Taxable Assets.

6. Taxes are subtracted from Retirement Income sources. Taxes are calculated based on the options chosen on the Tax and Inflation Options page. The net Retirement Income amounts are added to Taxable Assets.
7. In items 2 through 6, the amounts are added to either Earmarked or Fund All Goals Assets based on the goal funding designations of the asset or income source. The Program default is to use all assets (with the exception of 529 plans and Coverdell's) and income sources earmarked as Fund All Goals. You may change the goal funding designation for any asset or income source on its input page.
8. Goal Expenses are subtracted from assets, with Earmarked Assets being used first for each goal, then Fund All Goals Assets. Taxes on withdrawal and tax penalties, if any, are calculated and subtracted from the assets. Taxes on withdrawals occur when the untaxed gain of a taxable asset or appreciation from a tax-deferred or qualified asset is used to fund a goal expense. Tax Penalties occur when a tax-deferred or qualified asset is used before the owner of the asset has reached age 59½. All taxes and penalties are paid from within the same tax category by grossing up the expense amount.

To fund the goal expense, Earmarked Assets are used in a prescribed spending order. (See the Spending Order section above for details). If there are no Earmarked Assets available for the Goal Expense, then Fund All Goals Assets are used. Fund All Goals Assets are used in the same spending order as the Earmarked Assets.
9. Investment Earnings are calculated using the portfolio return and added to Earmarked and Fund All Goals assets.
10. Taxes on Investment Earnings of taxable assets are calculated and subtracted from the assets. Taxes are calculated based on the options chosen on the Tax and Inflation Options page. Prior to retirement the MGP taxation default is the clients' marginal federal and state tax rates. During retirement MGP uses default fixed deductions and progressive federal and state tax rates. For both periods, the MGP default is to pay taxes on taxable earnings in the year earned. The Tax and Inflation Options setting is "What portion of your Annual Taxable Investment Earnings will not be taxed until withdrawn?" The default is 0%. For both periods, MGP defaults to 20% of federally taxable earnings being taxed at the Long Term Capital Gains (LTCG) rate, and the remaining 80% taxed at the ordinary income tax rate. The Tax and Inflation Options setting is "What portion of your Taxable Investment Gains will be taxed at the LTCG rate?" The default is 20%.

Other User Guides of Interest

- "Planning Philosophy of MoneyGuidePro" - explains the MGP philosophy of financial planning.

- “Tax Defaults and Calculations” – provides a more detailed explanation of our tax calculations.
- “What if Worksheet - Overview” – covers all options in the What if Worksheet, including the ability to change the spending order for a single scenario.
- “Bucket Strategies: Retirement Cash Reserve & Aspirational Bucket” – provides a more detailed explanation of the Retirement Cash Reserve and Aspirational Bucket.