WHITE PAPER

Retirement Planner

Retirement Planner

The Retirement Planner may help improve your understanding of your retirement outlook. The tool supports retirement planning for up to two individuals. The tool considers each individual's personal retirement preferences, current and future employment expectations, any potential additional monthly retirement income sources, and current combined monthly expenses. Using the information provided and the accounts included, the Retirement Planner will generate a retirement outlook to help you plan for your future.

User Details

The Retirement Planner utilizes user data when generating a retirement outlook. User data may be prefilled from existing user/account information or manually entered by the user. Some prefilled user data may be changed and, in doing so, may affect the retirement outlook.

Retirement Plan Information

Field	Definition
Name	Name is the individual's name. The name will be prefilled for the user that is currently logged in from existing user/account data and is not an editable field. However, when including an additional individual in the retirement plan, the name field is not prefilled and is editable.
Date of Birth	Date of birth is the individual's date of birth. The DOB will be prefilled for the user who is currently logged in from existing user/account data and is not an editable field. When including an additional individual in the retirement plan, the DOB field is not prefilled and is editable.
Base Currency	The currency used throughout the Retirement Planner is prefilled from existing user/account data and is not an editable field. Accounts included with a currency other than the base currency will have their figures converted to the base currency.
Retirement Status	For each individual, use this field to define whether they are retired or not. The field is defaulted to "Not Retired" but may be changed at any time.
Desired Retirement Age	For each individual, use this field to define the age at which they would like to retire. This field is not prefilled, is required, and can be changed by the user at any time.
Retirement Plan End Year	The retirement plan end is the year in which you would like the retirement plan to end. This field is not prefilled, is required, and can be changed by the user at any time.
Annual Inflation Rate %	The average inflation rate you expect before and during retirement. The default value for the field is 3% and may be changed by the user at any time.
Total Annual Compensation	Each individual's total annual compensation (salary, bonus, commissions, etc.). This field will be prefilled for the user that is currently logged in from existing user/account data and is an editable field. When including an additional individual in the retirement plan, this field is not prefilled, is required, and is editable at any time.
Annual Compensation Growth Rate %	For each individual, this is the average annual rate at which their total compensation will grow. The field defaults to 3% and may be changed by the user at any time.
Effective Tax Rate %	The effective tax rate each individual expects to pay on taxable distributions during retirement. The field defaults to 20% and may be changed by the user at any time.

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Monthly Retirement Income

Field	Definition
Income Label	The label given to the additional monthly retirement income. This field is required and can be changed at any time.
Amount	The amount of the additional monthly retirement income. This field is required and can be changed at any time.
Taxable	A toggle to select if an additional monthly retirement income is taxable or not. This field is defaulted to “Yes” and can be changed at any time.
Start Date	A start date for the additional monthly retirement income. This field is not required and may be changed at any time. If no start date is provided, the income will start when the individual retires.
End Date	An end date for the additional monthly retirement income. This field is not required and may be changed at any time. If no end date is provided, the income will continue until the end of the retirement plan.

Monthly Expenses

Field	Definition
Expense Label	The label given to the current monthly expense. This field is required and can be changed at any time.
Amount	The amount of the current monthly expense. This field is required and can be changed at any time.
Start Date	A start date for current monthly expense. This field is not required and may be changed at any time. If no start date is provided, the expense will start immediately.
End Date	An end date for the current monthly expense. This field is not required and may be changed at any time. If no end date is provided, the expense will continue until the end of the retirement plan.

Life Events

Field	Definition
Life Event Label	The label given to the life event. This field is required and can be changed at any time.
Amount	The amount of the life event. This field is required and can be changed at any time.
What will be the impact?	Choose between a one-time income or one-time expense as a result of the life event. This field is required and may be changed at any time.
When will this life event take place?	Choose a specific date for the life event or select date ranges for the event to occur randomly during the retirement plan. This field is required and may be changed at any time. If a random date option is selected, a random date during the applicable window will be generated for the life event.

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Account Details

The Retirement Planner allows users to include or exclude various accounts within their retirement plan. The tool currently supports brokerage, bank, other asset, and real estate account types. Before an account may be included in the view, the account will need to be configured. The information we will need to collect for an account will be determined by the account type.

Accounts

This panel shows all the possible accounts that may be configured and included in the Retirement Plan.

Account Configuration

Users must configure an account and select to have it included in the plan before the account can be included in the Retirement Plan. Depending on the type of account, you will need to make some simple assumptions to better project the accounts impact throughout the Retirement Plan.

Brokerage Accounts

Question	Additional Information
Taxable	We ask this question to determine if we should deduct taxes from distribution during retirement.
Account Owner	Only applicable to retirement plans which include two individuals. We ask this question to determine if an account is owned by one of the individuals on the plan or if the account is owned jointly.
Contribution Type	We ask this question to determine how the individual(s) will be contributing to the account before retirement. • **No Contribution** • **Amount > Annual Contribution Amount** The amount that will be contributed to the account annually. • **Percent > Percent of Total Compensation** The percentage of total annual compensation that will be contributed to the account annually.

Bank Accounts

Question	Additional Information
Taxable	We ask this question to determine if we should deduct taxes from distribution during retirement.
Account Owner	Only applicable to retirement plans which include two individuals. We ask this question to determine if an account is owned by one of the individuals on the plan or if the account is owned jointly.
Contribution Type	We ask this question to determine how the individual(s) will be contributing to the account before retirement. • **No Contribution** • **Amount > Annual Contribution Amount** The amount that will be contributed to the account annually. • **Percent > Percent of Total Compensation** The percentage of total annual compensation that will be contributed to the account annually.
Interest Rate	We ask this question to determine the interest the checking or savings account receives so that we can project the account growth throughout the retirement plan.

Other Asset and Real Estate Accounts

Question	Additional Information
Account Owner	Only applicable to retirement plans which include two individuals. We ask this question to determine if an account is owned by one of the individuals on the plan or if the account is owned jointly.
Annual Appreciation Rate %	We ask this question to determine the average annual appreciation or depreciation a user would expect to see for the other asset or real estate account.

How will this asset be utilized?	We ask this question to determine how the account will be utilized during retirement:
	• **Sell**
	• **Loan > Loan Amount as a Percent of Asset Value**
	  ○ We ask about loan amount as a percentage of the asset value to determine how your expenses are impacted at the time of the sale.
	  ○ Only available for Real Estate account types.

Monthly Expense Adjustment	We ask this question to determine if the monthly expenses should be adjusted up or down based on the sale or loan against the other asset or real estate account.
Liquidate Last	Users can designate only one of their Other Asset or Real Estate accounts to be liquidated last. By designating an account as liquidate last, the Other Asset or Real Estate account would be utilized only after all other accounts have been utilized to cover expenses.

Retirement Outlook

The Retirement Outlook uses an interactive chart and corresponding table to better depict the user's retirement picture. Within the Retirement Outlook, you may choose between an Asset Value view and a Retirement Income view.

The Asset Value view will show the user how the account values grow before retirement, the value of all accounts at retirement, and how withdrawals from the accounts affects the value of all accounts throughout retirement.

The Retirement Income view will show users the yearly Total Income, Expenses, and the Surplus/Deficit when applicable. This view starts from the year of the earliest retirement start date and ends at the retirement end date year.

The Pre-Retirement Return and Post-Retirement Return fields may be adjusted to see how various market conditions impact the Retirement Outlook. Once you have made a change to either field, clicking on the Recalculate button will reload both the chart and table.

Table

Regardless of the view selected, the table will display to users a detailed yearly breakdown of various retirement figures. The table columns are configurable and consist of the following:

- Year
- Age
- Starting NAV
- Contributions
- Distributions
- Weighted Return
- Ending NAV
- Total Retirement Income
- Total Expenses
- Surplus or Deficit
- Total Compensation
- Compensation Growth Rate
- Inflation Rate
- Distribution Income
- Additional Other Income
- Sale & Loan Proceeds Withdrawal

Assumptions and Methodology

Within the Retirement Planner tool, we make various assumptions to assist with projecting the users Retirement Outlook.

General Assumptions

Factor	Assumption
Inflation	The inflation rate will remain constant through the retirement plan.
Monthly Expenses	The shared current monthly expenses are adjusted monthly by the configured inflation rate throughout the retirement plan.
Interest Rate	When including a Bank account type, we assume the provided interest rate remains constant throughout the retirement plan.
Annual Appreciation	The appreciation rate provided for an Other Asset or Real Estate account remains constant throughout the retirement plan.
Market Performance	Both pre-retirement and post-retirement market performance will remain constant throughout their respective time frames and is the return used to calculate brokerage account growth.
Life Events	A life event which results in a one-time income will not be taxed. When creating a life event, if one-time income option is chosen, users should enter the after-tax amount of the life event.

Pre-Retirement Assumptions

Factor	Assumption
Total Compensation	The total compensation provided for each individual will grow annually in January at the provided annual compensation growth rate. Total compensation will be set to zero for the applicable individual during retirement.
Annual Compensation Growth Rate %	The compensation growth rate for each individual will remain constant through the retirement plan.
Contributions	Contributions from an individual will stop once the individual enters retirement.

Post-Retirement Assumptions

Factor	Assumption
Monthly Retirement Income	Additional monthly retirement income grows annually by the expected inflation rate starting when the individual enters retirement. This income is used first to cover any expenses before any distributions or sale/loan proceeds.
Distributions	Distributions occur only during retirement and only up to the amount needed to cover expenses.
Other Asset or Real Estate Sales	A sale of an Other Asset or Real Estate account occurs to cover expenses when all other higher priority accounts have been withdrawn to zero and additional distribution income is needed to cover the total expenses. The sales proceeds will then be used to cover expenses when available. Taxes are not deducted from the sale proceeds.
Real Estate Loans	A loan against a Real Estate account will take place to cover expenses when all other higher-priority accounts have been withdrawn to zero and additional income is needed to cover the total expenses. The loan proceeds will then be used to cover expenses when available.
Taxes	Both Distributions (when configured such that withdrawals are taxable) and retirement income (when configured such that the income is taxable) are taxed at the users specified Expected Effective Tax Rate in Retirement.

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Methodology

Factor	Explanation
Compounding	Monthly compounding is used throughout the length of the retirement plan.
Early Withdrawals	This tool does not track or account for early withdrawal penalties in any capacity. Required Minimum Distributions. This tool does not track or account for required minimum distributions (RMDs) in any capacity.
Taxes	If an account is configured such that distributions are taxable, the total net distribution is calculated by [distribution amount – (distribution amount * effective tax rate)].
Weighted Return	The weighted return considers each account's individual expected return and account size to show the combined assumed return for all accounts that are included in the retirement plan.
Starting NAV	The total starting value of all Brokerage, Bank, Other Asset and Real Estate accounts, plus any Other Asset or Real Estate sales or loan proceeds.
Contributions	**Percent Contributions** For each individual, percent contributions are added monthly to the respective account as a percentage of the individual's total monthly compensation (Total Compensation / 12). **Amount Contribution** For each individual, amount contributions are made once annually to an account in January.
Distributions	Distributions occur only during retirement and only up to the amount needed to cover expenses. • **Account Priority** – Distributions are taken first from taxable accounts, then tax- differed accounts, then non-taxable accounts, then Other Asset or Real Estate accounts, and lastly Other Asset or Real Estate accounts marked as the Last Resort. When more than one account of the same type is included, distributions are taken from the largest account first. • **Account Ownership** – Each individual may take distributions from jointly owned accounts, accounts owned by the other individual, as well as their own accounts.
Ending NAV	Total ending value of all Brokerage, Bank and Other Asset accounts, plus any Other Asset sales or loan proceeds. Ending Value = (Starting Value + Contributions – Distributions) + (Starting Value + Contributions – Distributions) * (Market Performance Assumption (for bank/brokerage account types) OR Interest Rate (when selected for bank accounts) OR Annual Appreciation Rate (for Other Asset accounts)).
Sale & Loan Proceeds	**Sale Proceeds** The sale proceeds when a real estate or other asset account is sold is determined by the value of the account at the time of the sale. Note, taxes and fees are not taken out of the sale proceeds. **Loan Proceeds** The loan proceeds when a real estate account is sold is determined by the value of the account at the time of the loan and the loan amount percentage of total account value.
Different Retirement Dates	When a retirement plan includes two individuals, the expenses are combined and shared. In the event of the individuals retiring at separate times within the plan, we will calculate the retirement individual's percentage of expenses that they will need to cover. The retired individuals expense obligation is calculated by (retired profile compensation / total combined compensation). This percentage expense obligation will be used to determine how much distributions must equal for the retired individual.

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