About the Tax Planning Tools

The Tax Planning Tools are a collection of web-based tools for calculating income tax information. The current set of tools is:

Age Calculator
Alternative Minimum Tax (AMT) Calculator
California Sales Tax Calculator
California Sales Tax Deduction Calculator
Estimated Tax Calculator (Federal)
Estimated Tax Calculator (California)
Required Minimum Distribution (RMD) Calculator
Senior Deduction Calculator
Simple Math Calculator
Small Business Tax Calculator
Social Security - Taxable Benefit Calculator
Social Security - Lump Sum Calculator
State Income Tax Refund Calculator

You can access the latest version of these tools on the web using the following URL.

bruceblinn.com/6-OtherStuff/Taxes/index.html#TaxPlanningTools

These tools are intended to help you estimate various tax values. Since each tool estimates a specific value or a small set of values, the inputs can be kept fairly simple. This makes the tools easier to use and it also helps you understand what information is used to make the calculation.

You can enter as much or as little information as you want. Of course, the more information you enter and the more accurate the information is, the more accurate the calculation will be. A typical way to use these tools is to enter the information as accurately as possible (for example, from last year's tax return) and then vary one or more fields to see how it affects the calculation.

These tools only provide estimates. The tax laws are very complicated and these tools provide a vastly simplified view of the tax laws. They only try to provide an accurate estimate for common tax situations. Also, in general, the only checking that is done is to constrain the input values to valid ranges. If you enter a value that is not allowed in your situation, the calculation will show the result as if the value were allowed.

Interface

Each tool contains a brief description of its purpose and how to use it. The more complicated tools have a link to a separate page with more detailed information about the tool.

There is a lot of shared code between the tools, which gives them a similar appearance and behavior. For example, input fields are always green, and the fields that display the values that are calculated by the tools are always blue.

The tools are intended to be used in a browser (e.g., not on a phone). They are formatted so they will fit on a printed page.

Tooltips

Several of the tools provide tooltips. These are small popup displays that show up when you move the mouse over one of the fields. They provide a short explanation of the purpose of the fields. When available, tooltips are provided for input fields to help you enter the correct information and for output fields to explain what the information means.

Numeric Input

For any input field where a numeric value is expected, dollar signs ($) and commas (,) are ignored. This allows you to enter a number as, for example, "$40,000", "$40000", or "40000". In addition, numeric fields can contain simple arithmetic expressions. For example, you can enter "($40,000 + 4,000) * 0.075" to enter 7.5% of 44000. All numeric input will be rounded to the nearest whole number. The expression evaluator supports the following operators:

- Numbers with decimal points
- Operators for addition (+), subtraction (-), multiplication (*), and division (/)
- Unary minus operator (-)
- Parentheses
- Operator precedence for parentheses, unary minus, and for doing multiplication and division before addition and subtraction.

Debugging Information

Some of the tools can display additional information that shows internal calculations and intermediate results. Enter any of the following keywords in any input field to see this information. The keywords are not case-sensitive and can be entered in any order. Separate the input value and one or more keywords using commas or whitespace.

- Debug - Display intermediate results for the current tool.
- IncTax - Show the worksheet results for the federal income tax calculation.
- SEHI - Show the worksheet results for the self-employment health insurance calculation.
- SETax - Show the worksheet results for the self-employment tax calculation.
- SSTax - Show the worksheet results for the amount of Social Security that is taxable calculation.
- Trace - Logs function entry and exit to the console log.

Version Numbers

There is a single version number for all of the tax planning tools because there so much shared code between the tools. The version number is a 3-part number, but only the first two parts are usually present in released versions of the Tax Planning Tools.

The first part of the version number corresponds to the current tax year. Sometime between April 15 and early Fall, the first part of the version number is changed to the current year, and it will not be changed again until after the end of the tax season. When the first part of the version number is incremented, the other parts are reset.

The second part of the version number is the incremented each time a new version of the Tax Planning Tools is released. There are always two versions of the tools: the released version and a development version. The second part of the version number starts at 00 for the released version and 01 for the development version. Whenever the development version is merged into the released version, the second part of the version number is incremented by two in both versions. Thus, the second part of the version number in a released version is always and even number, and in the development version, it is an odd number that is one greater than the released version.

The third part of the version number starts at 000 and is incremented for each change. This part of the version number is rarely used in the released version of the Tax Planning Tools.

In summary:

- The first part of the version number is incremented each tax year.
- The second part of the version number is incremented whenever the development version is merged into the released version.
- And, the third part is incremented whenever the source code is changed.

The version number of the development version is always appended with an at sign (@) to call attention to the fact that that version is under development and not ready to be used.

Whenever the version number is shown in one of the tools, it is a link that you can click on to show the version history information.

Changes I'm Thinking About

- More tools
  - CTC, EIC, and CalEITC Calculators
  - Foreign Tax Credit Calculator
  - Currency Exchange Rate Calculator
- Add more checks to fields that have known limits so the input values do not exceed those limits.
- If an input field is modified internally, should the input field be updated so the user can see the corrected value?
- I could merge the small business tax calculation into the estimated tax calculation, but it would calculate values that are currently entered by the user. If more and more fields are calculated then the tool becomes more of a tax program than a tool for estimating the tax from the numbers that you enter. Where should the dividing line be?
- Should the tools be implemented as Excel spreadsheets? It would allow the user to see the actual computations that are being made. Users could review the formulas for accuracy and provide feedback. They could also make changes to their copy of the spreadsheet to prototype new ideas. However, since each spreadsheet contains all the code that it uses, once it is copied, it would be difficult to know how it differs from another version. It would be impossible to update all the copies when a change needs to be made. Version control could be a nightmare.

Feedback

If you have any feedback on the Tax Planning Tools, send it to bruce_blinn@yahoo.com. I would welcome any information about problems with the tools or suggestion on how to improve them.