	A	B	C	D	E	F	G	H	I	J
1	**File: SIPT.xls**		**Elementary glide-path calculator (SimpleCalc)**					**Next SIPT worksheet (Assumptions)**		
2										
3	**Simplified Income-Stream Planning Tool**									
4	**Calculate a financial Glide-Path from yearly Cash-flows, Income Streams, Expenses, Investment Accounts and Taxes**									
5										
6	**This Excel spreadsheet is designed for people who want to plan for future income, saving, and spending needs. It calculates rough**									
7	**estimates of saving and spending patterns over time. You must enter *summaries* of a range for your personal financial data as**									
8	**required by the model. These include applicable investments (taxable and retirement), pension, Social Security, work, annuity,**									
9	**and expenses. The final results are shown in summary tables and glide-path graphs for those tables. All data are entered and**									
10	**calculations are done only in this spreadsheet. No data are exported or saved from the spreadsheet (either locally or to the**									
11	**Internet). Once the data are entered, the spreadsheet estimates yearly cash-flows using income from various sources: work,**									
12	**pensions, Social Security, annuities, and life insurance benefits; contributions and withdrawals from tax-deferred 401(k), 403(b),**									
13	**457(b), IRAs, Roths, and savings investment accounts. The spreadsheet estimates yearly investment returns, taxes on**									
14	**investment returns, and expenses. Next, yearly Federal tax rates and resulting cash-flows are estimated. The spreadsheet allows**									
15	**for scheduled and irregular (upcoming additional) contributions and withdrawals for investment accounts (IRA, Roth, Savings)**									
16	**as well as for scheduled and irregular expenses and deductions. From this data, the spreadsheet then calculates yearly net**									
17	**worth. The glide-paths created are useful for investigating different planning scenarios by making changes to inputs.**									
18										
19	**The SIPT software may be run in a variety of spreadsheet programs including Windows Excel, the free OpenOffice or LibreOffice**									
20	**"calc", Google "sheet". The spreadsheet doesn't use Microsoft Visual Basic as VBA is not available in all spreadsheet**									
21	**programs. Apple's "numbers" spreadsheet program has some incompatibilities, so use either Excel for Mac or one of the free**									
22	**spreadsheet programs.**									
23										
24	**Why model? Although models by nature are imprecise, calculating a rough estimate of your income stream may be useful for**									
25	**financial planning. The spreadsheet represents a compromise between complexity and completeness and leans in the direction**									
26	**of a simpler model. As statistician George Box noted, "All models are wrong, but some are useful." To illustrate the concept of**									
27	**glide-path modeling, a very crude glide-path calculator, "SimpleCalc", is available (both in the SIPT spreadsheet and as a separate**									
28	**spreadsheet). This may be useful for you to experiment with to better understand the concept of glide-path before using the**									
29	**full SIPT spreadsheet, which uses a more complete financial planning model. These spreadsheets are educational tools.**									
30										
31	Last revision:	9/3/2016	V.0.24.17	***Beta***						
32	See	**Appendix D**		for the list of outstanding issues (things TODO), and full REVISION-LIST						
33										

Note: The spreadsheet will be revised each year after new Tax Tables & Cap-Gains/Div. rates & tax rules are announced.

** For more on *Beta-level* software see https://en.wikipedia.org/wiki/Software_release_life_cycle

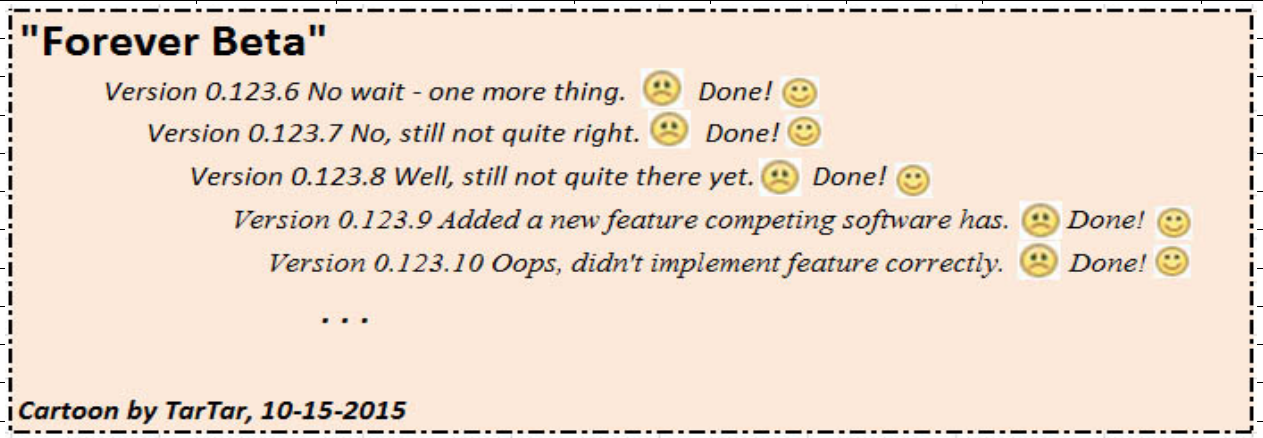


Table of Contents for Introduction

	A	B	C	D	E	F	G	H	I	J
67	5. Notes on the current version of the spreadsheet - what it does and does not handle									
68										
69	**Documentation in additional worksheets**									
70	Click on the any of the following hyperlinks to go to the worksheets									
71	**Assumptions**	Summary list of all settings in **Setup,** and **AgeData** through **ExpenseData** worksheets								
72	**Results**	Glide-path of income from Income & Withdrawal sources less Expenses & Taxes								
73	**Resources**	Lists of articles, literature, web sites related to financial planning								
74	**Appendix A**	List of all worksheets, describing their tables and sections								
75	**Appendix B**	Extra calculators (not tied in with the rest of the spreadsheet)								
76	**Appendix C**	Glossary - definitions of terms used in the spreadsheet								
77	**Appendix D**	List of outstanding issues (Things TODO and CHECK), and REVISION-LIST History								
78	**FAQ**	Answers to Frequently Asked Questions								
79										
80										
81	**Introduction**									
82										
83	**The Concept**									
84	While saving for future expenditures such as retirement, a new house, or a college education for your children you									
85	might wonder if you are saving enough or spending too much on current expenses. If you are near or in retirement,									
86	the spreadsheet lets you estimate, using a static model, your income stream and whether it will cover your expenses.									
87	It does not use a dynamic model such as those using Monte-Carlo or repeated random sequences of returns methods.									
88	A glide-path analysis lets you look at your finances over time. How does it change with the contributions to savings									
89	during your accumulation phase? How rapidly are your savings being depleted during retirement? It can be useful									
90	to periodically check how you are doing to make sure you're still on track to reach your goals and, if not, what									
91	might be changed to improve your retirement glide path. This **Introduction** worksheet gives an overview and a **FAQ**									
92	worksheet provides answers to some Frequently Asked Questions.									
93										
94	This **Simplified Income-Stream Planning Tool (SIPT)** spreadsheet lets you enter detailed personal data to help answer									
95	those questions more accurately - both for near term pre- and post-retirement. There are many rudimentary									
96	retirement calculators available on-line (see **RS. Resources** section **RS.8** for a list). To illustrate the flavor of these									
97	types of glide-path calculations, we provide an additional very simple one in the worksheet								SimpleCalc	
98	Note, the SimpleCalc worksheet is used just to introduce the concept of glide-path and is not part of the rest of the									

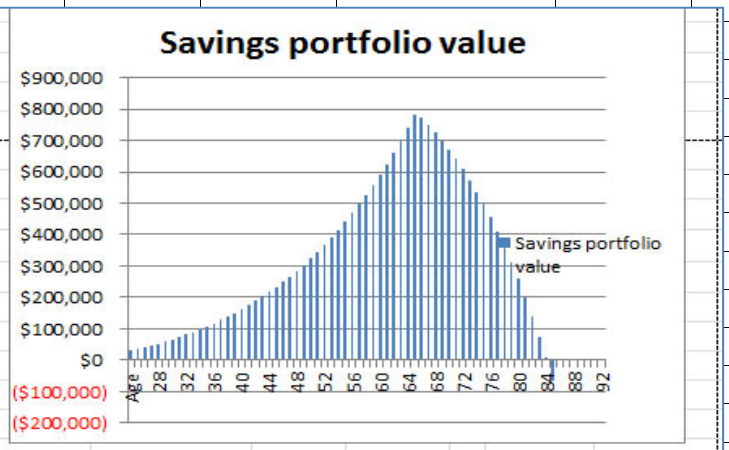
SIPT spreadsheet. The following screenshot shows some typical data and results. In this example, the person ran out at age 86. Their lifestyle with no change in saving, retirement age or expenses in retirement was not sustainable after age 86.

1. Enter your data in the Red cells below.

Your current age (same as retired if *already* retired):	25
Your expected retirement age:	67
Current value of savings portfolio:	$30,000
Current gross annual income (GAI):	$25,000
Annual contributons to savings portfolio:	$3,750
Yearly annuity from Social Security at retirement	$6,000

2. Additional parameters you can adjust or use THE defaults)

Pre-retirement annual rate of return on portfolio:	4.50%
Post-retirement annual rate of return on portfolio:	2.50%
Expected annual income Cost Of Living Adjustment:	2.00%
Increase of annual retirement withdrawals::	3.00%
Increase in annual contributions to savings portfolio:	2.00%
Percent of GAI needed in retirement when retire:	80%



You run out of savings at age	86
The value of your savings at retirement	$770,241
Percent of income saved while working	15.0%
Number of years you can fund in retirement	19
Percent of expenses from Soc. Sec. at retirement	13.3%

Values for savings and expenses over time

Year	Age	Savings portfolio value	Savings contribution	Gross Annual Income	Cola adjusted Social Security if any	Retired Annual Expenses	Percent expenses from Soc. Sec. In retirement
1	25	$30,000	$3,750	$25,000	$0	$0	0.0%
2	26	$35,269	$3,825	$25,500	$0	$0	0.0%
3	27	$40,853	$3,902	$26,010	$0	$0	0.0%

The complete SIPT spreadsheet described below provides a much more accurate and detailed analysis because it takes into account many other financial factors over time. Play with the SimpleCalc "toy" glide-path calculator first. If this looks interesting, then you might try using this SIPT spreadsheet. It is described in more detail below. Of course it can't predict the future but it may provide a better understanding of your financial situation, which may be useful in doing financial planning.

1. Description of the SIPT Spreadsheet

This spreadsheet software computes a rough estimate of yearly income and expense flows as various income sources and expenses come and go over time. Results are calculated at the end of each year. It uses a yearly "cash flow" calculation defined as the sum of income and withdrawals, and subtraction of expenses, contributions and estimated taxes are subtracted. Any funds left over each year in the cash account are saved back into the investment taxable savings account for the next year. Similarly, in years with a cash shortfalls, funds are taken from the savings account the next year. The spreadsheet is an Excel workbook consisting of a number of worksheets containing personal data that you enter. In Excel, the spreadsheet as a whole is called a workbook which in turn is a collection of worksheets. Clicking on one of the tabs at the bottom of the window will bring up that particular worksheet.

Setting up the spreadsheet

Use the **S. Setup** worksheet to specify which worksheets you will need to fill out. It works with one person S1 or two people called S1 and S2. S1 and S2 can be married or unmarried. However the latter should only use the tax filing status Separate Filing. In Excel, you switch between worksheets by clicking on the worksheet tab at the bottom of the Excel window or by clicking on worksheet hyperlinks (blue font with an underline) available throughout the spreadsheet. The **R. Results** worksheet summarizes data computed on the other data worksheets both as tables and as graphs of the data in the tables. The results are updated when data is changed in any of the other data entry worksheets.

Depending on your level of expertise and familiarity with financial terms, you may want to read the **Appendix C** worksheet (glossary of 'financial terms used in the SIPT spreadsheet) before entering your data. In addition, this spreadsheet requires you to switch between different worksheets that focus on *particular* types of data (e.g., work income, Social Security benefits, IRAs expenses, etc.).

Types of personal data required

One or more income sources can be defined and include: work income, pensions, Social Security, and annuity payouts. There are three types of investment accounts including: tax-deferred deductible IRA, Roth IRA, and savings (taxable investments), bank bank accounts, and CDs). For purposes of the spreadsheet, 401(k), 403(b), 457(b), Traditional-IRA, Rollover IRAs are considered to to be tax-deferred IRAs. Similarly a Roth-401(k) is considered a Roth IRA. This is because after you retire, retirement accounts may be rolled over to "Rollover-IRA" and Rollover-Roth" accounts. You may make both scheduled and irregular contributions/ withdrawals to each of the spreadsheet investment accounts. An irregular event is an upcoming one-time event occurring in a particular year. You may specify expenses as both scheduled and irregular events. You might think about your list of future

irregular expenses as a planning tool for your future expenses in your "Bucket List" - such as college expenses, retirement, trips, gifts, etc. (See the discussion of the 2007 comedy film **The Bucket List** http://en.wikipedia.org/wiki/Bucket_list for a nice definition.) The spreadsheet calculates your remaining assets yearly so you can use this for planning future expenses.

Income sources are: work income, pensions, Social Security, and annuity benefits. Investment accounts include tax-deferred IRAs, Roth IRAs, and savings investment accounts. Contributions, and withdrawals may be specified from investment accounts. Expenses and tax deductions are entered in the **10. ExpensesData** worksheet. Taxes are then estimated on the total taxable income. All data worksheets require you specify the age when the incomes, contributions and withdrawals or expenses start as well as when they end. Investment contributions and withdrawals as well as expenses and tax deductions are specified by both scheduled yearly events and by irregular events. Irregular events are specified at particular ages rather than on a yearly schedule.

If the cash-flow is ever negative for a particular year,the spreadsheet takes the shortfall from the taxable savings account (**9. SavingsData**). If this is a problem, one could possibly increase some of the income sources (IRA or ROTH) other than taxable savings and/or lower expenses to make the cash-flow positive if it were severely negative. The spreadsheet warn if this situation happens in **R.Results** section **R.8**.

1.1 Examples of some of the questions that can be investigated using this spreadsheet

Here are some examples of questions that might be answered using the SIPT. The details on the questions are described in the appendix FAQ number 13.

- Q.1 Will I run out of money during retirement?
- Q.2 Will the money being saved for college expenses (or a new home or cars, etc.) be adequate?
- Q.3 When should I take withdrawals on my tax-deferred IRAs?
- Q.4 When should I retire, claim Social Security, and how will this affect my savings?
- Q.5 How will irregular expenses affect my future income stream through retirement?
- Q.6 How much more income could I earn long term if I have a more aggressive stock portfolio (more stocks)?
- Q.7 What is the effect of different levels of inflation on my savings over time?
- Q.8 What would the effect be of adding annuities during retirement? What if I started them at different times?

1.2 Types of personal data required

Specify the starting and ending ages for each income stream (work, pension, Social Security, and/or annuities), and do

this independently for each spouse S1 and S2. Specify the expected average market returns for stock, bonds and cash (fixed income) in your investment portfolio. Historically, approximately 90% of your portfolio return is determined by your asset allocation (roughly the stock:bond ratio). In addition, specify (the same or different) Cost Of Living Adjustments or COLAs for each of these income streams that increase the income and expenses by that percentage each year. Also specify the expected Consumer Price Index (CPI) that can used as a default for the various COLAs you need to enter.

Types of Savings

Similarly, specify the age ranges for scheduled investment (IRA, Roth, taxable savings) contributions and withdrawals for S1 and S2. The IRA and Roth accounts are optional, but the savings account is required since it is used to reconcile the cash-flow and where insurance payouts (if any) are deposited. You may optionally specifyeither or both scheduled contributions as a fixed amount and withdrawals as a percentage each year that increase by a COLA if desired. You may also specify optional irregular contributions and withdrawal events that can occur at any age or have several events the same year independently for both S1 and S2. For example, one could withdraw money to buy a new car, pay for kids college, take a big trip and buy a new house at the same year. You specify the age (e.g., 59) rather than the year (e.g., 2019) for the events. It computes the sum of the scheduled and irregular contributions and withdrawals respectively each year. These are tracked separately for S1 and S2.

Types of Expenses

Expenses are specified similar to contributions and withdrawals for investment accounts, but as scheduled and irregular *expense* events. Whereas yearly investment account withdrawals are added to the cash-flow, expenses are subtracted from the cash-flow. Specify scheduled and optional irregular deductions that are used for part of the tax calculations. Otherwise, the starting and stopping ages with an expense COLA are specified. A rough estimate of Federal and State taxes that are computed are subtracted from the cash account. Note that State taxes are estimated by a fixed percentage, not as an AGI-dependent, marginal tax rate. Different states may also have various deduction levels associated with different types of pensions, etc. which are not taken into account.

It can be used by either a single person (S1) or a couple (S1 and S2)

If there is no individual S2, then just enter zeros for all income, contributions, withdrawals, and expenses for S2 entries.

S1 and S2 can be married or unmarried. Married S1 and S2 individuals may use tax filing status of Married Filing Jointly (MFJ) or Married Filing Separately (MFS). Single individuals can also use Head of Household (HH). However the unmarried S1 and S2 should only use the Tax filing status Single Filing (SF).

Limitations on the types of static types of calculations done in the spreadsheet

The computations use fixed estimates you specify for various parameters including a fixed CPI, fixed COLAs, fixed stock and fixed income returns whereas in reality these all change year to year, introducing major changes in the actual results. It does not address the problem of sequence of returns and sequence of withdrawals that can radically affect long-term returns. The reality is that all future rates of returns, CPIs, COLAs, tax rates, tax rules and schedules, deduction schedules, etc., are unknown. However, we know they *will* vary and both of these factors can greatly affect future results. Better methods such as monte-carlo or randomized sequences of actual past returns can improve the model, but still cannot guarantee returns. Such advanced methods are beyond the scope of this spreadsheet. Black Swan events do happen - think 9/11 and the 2008 Great Recession. These results are really ball-park estimates, but still may be useful for planning.

1.3 How the spreadsheet works

Each worksheet has **INSTRUCTIONS** that explain what is needed to be filled out in that worksheet. As data is entered, remember to save the Excel workbook (spreadsheet) after or during your editing of the various worksheets. Entered data will not be saved unless you tell Excel (or whatever spreadsheet program you are using) to save it. As you make changes, saving the spreadsheet often is a good idea. See section **3.** for a more detailed description on using the spreadsheet.

First, enter your personal configuration of the spreadsheet using the "S. Setup: worksheet"

First specify which data worksheets apply to you and that you want to use. Go to the **S. Setup** worksheet to specify the accounts that apply to your personal situation in section **S.1** and either select "used" or "ignored" for each of the worksheet options. Specify whether to include irregular contributions and withdrawals in the investment and expense accounts in section **S.2**. Finally, specify whether to add scheduled contributions and withdrawals for the investment accounts in table **S.3**.

Then enter your Age(s) and Tax data

After editing the **S. Setup** worksheet, you should edit the **1. AgeData** worksheet, and enter basic tax filing data in the **2. TaxData** worksheet.

Then enter your data into the relevant 3. WorkData through 10. ExpensesData worksheets

Visit each of the other data-entry worksheets that apply to you and enter your data. Ignore the other ones which can have zero values for the data. Some worksheets allow the entry of multiple sets of data as a table we call a "*Table-GUI*" - for example multiple jobs. (See the glossary in **Appendix C** or the **FAQ for more details).**

Finally, view the final results in the "R. Results" worksheet after all your data is entered

After all data is entered, view the results, which are summarized in the **R. Results** worksheet. The R. Results worksheet presents

	A	B	C	D	E	F	G	H	I	J
265	intermediate results computed in the rest of the worksheets in a more readable format presenting a global picture of the									
266	glide-paths for the different accounts and computed results on a year-by-year basis.									
267										
268	There is some limited error checking. See the **FAQ** number 15. for details.									
269										
270										
271	**1.4 Brief list of the worksheets**									
272	The worksheets are color coded by function. We list the main purpose of the following worksheets. See each worksheet									
273	for more details.									
274										
275	**Introduction** and **Resources** worksheets are white.				*additional documentation*					
276	**SimpleCalc** worksheet:		**SimpleCalc**		*elementary glide-path calculator*					
277										
278	**Appendices A, B, C, D** worksheets are				*additional documentation*					
279										
280	You can view a summary view at any time of all your settings in **S. Setup,** and **1. AgeData** through **10. ExpenseData** worksheets.									
281	Assumptions worksheet		**Assumptions**		*summary list of all settings by user in the other worksheets*					
282	The **Assumptions** worksheet is not edited since it summarizes the other data worksheets.									
283										
284	Results worksheet:		**R. Results**		*summarizes spreadsheet glide-path results **after** entering your data*					
285	The **R. Results** worksheet is not edited since it summarizes the other data worksheets.									
286										
287	Configuration worksheets:		**S. Setup**		*used to configure entire spreadsheet (indicate which sheets are used)*					
288			**1. AgeData**		*enter age, CPI, market returns, insurance used throughout spreadsheet*					
289			**2. TaxData**		*enter Federal tax data and filing status*					
290										
291	The income worksheets specify one or more sources of yearly income,									
292	Income worksheets:		**3. WorkData**		*enter current or future work income data, if any*					
293			**4. Pension Data**		*enter current or future pension income data, if any*					
294			**5. SocSecData**		*enter current or future Social Security income data, if any*					
295			**6. AnnuityData**		*enter current or future annuity income data, if any*					
296										
297	The investment accounts are also a source of money through taking withdrawals (as well as allowing contributions).									

	A	B	C	D	E	F	G	H	I	J
298	Investment worksheets:		7. IRAdata		*enter tax-deferred IRA accounts data, if any (current or future)*					
299			8. RothData		*enter Roth IRA accounts data, if any (current or future)*					
300			9. SavingsData		*enter taxable savings accounts data, if any (current or future)*					
301										
302	This is the worksheet where you enter your yearly expenses									
303	Expense worksheet:		10. ExpensesData		*enter expenses data (current or future)*					
304										
305	This is where the yearly cash-flow is computed from (Income + Withdrawals - Contributions - Expenses - Taxes)									
306	You don't edit the **CashData** worksheet.									
307	Cash-flow worksheet:		11. CashData		*summarizes the cash flow from the other worksheets*					
308										
309	This RMD table used with IRA withdrawals is in the RMDtable worksheet									
310	Don't edit the **RMDtable** worksheet unless the IRS updates its RMD data.									
311	RMD table worksheet:		12. RMDtable		*contains the IRS Required Minimum Distribution data*					
312										
313	For each of the applicable data worksheets accounts, enter income, contributions and/or withdrawals or expense data									
314	(i.e., ages, amounts, rates of return (ROR), COLAs, etc.). There is a detailed list of all these worksheets tables and sections in									
315	Appendix A.									
316										
317	**All worksheets are protected except for the red cells where you enter your data**									
318	Because entering data in non-red cells might corrupt the spreadsheet, we protect all worksheets except red cells where									
319	data is entered. Any worksheet can be unprotected by going into the Excel Format option and clicking									
320	on *Unprotect worksheet* . For more details on protecting/unprotecting worksheets, see **RS. Resources RS.9 Excel resources.**									
321										
322										
323	**1.5 How the yearly income stream cash-flow and net worth are calculated**									
324	Both scheduled and irregular withdrawals taken from the tax-deferred IRA, Roth IRA, and savings accounts are added to the									
325	cash-flow in the **11. CashData** worksheet. Both scheduled and irregular Expenses (**10. ExpensesData** worksheet) and Federal and									
326	State taxes (**2. TaxData** worksheet) are taken from the cash account. The following equations give a top-level explaination of the									
327	computations. For each year y,									
328										
329	**Cash(y) = Income(y) + Withdrawals(y) - SavingsContributions(y) - Expenses(y) - Taxes(y) + Insurance Payout(y)**									
330	**Withdrawals(y) = SavingsWithdrawals(y) + IRAwithdrawals(y) + ROTHwithdrawals(y)**									

	A	B	C	D	E	F	G	H	I	J
331										
332	Then, the cash balance is added (subtracted if negative) to the savings account for the next year,									
333	taking contributions and withdrawals into account									
334										
335	**Savings(y+1) = [Savings(y) + SavingsContribution(y) - SavingsWithdrawal(y)] * (1+SAVINGSreturn) + Cash(y)**									
336	**IRA(y+1) = [IRA(y) + IRAcontribution(y) - IRAwithdrawal(y)] * (1+IRAreturn)**									
337	**ROTH(y+1) = [ROTH(y) + ROTHcontribution(y) - ROTHwithdrawal(y)] * (1+ROTHreturn)**									
338										
339	If large future expenses planned, you may want to lower expenses and/or withdraw some of the money									
340	over several years from the tax-deferred IRA, or taxable savings with high unrealized capital gains to help pay for them. Doing									
341	this over several years prior to the expense may possibly avoid going into a much higher marginal tax bracket. Then when									
342	this additional money is added to the Cash-flow, the expenses will be covered and the Cash-flow will not show a negative									
343	amount. There is an option in the **11. CashData** worksheet to rebalance spouse S1 and S2 by rebalancing cash between									
344	them for a year in which one of them has a negative balance. This is enabled in the **Setup S.2** worksheet. If the cash flow for									
345	either S1 or S2 is negative, it then subtracts the negative amount from the positive one so the one with extra cash may help									
346	out the other who has a negative balance.									
347										
348	**How excess or insufficient cash is handled at the end of each year**									
349	Each year, all income and investment withdrawals are "deposited" or added into the cash-flow table in **11. CashData**									
350	worksheet. Expenses and taxes are "removed" or subtracted from the **11. CashData** worksheet. The resulting excess (or									
351	shortfall) is calculated and added or (removed) from the taxable savings in **9. SavingsData**. Here is an example to help clarify									
352	the difference between scheduled and unscheduled events. For example, you might schedule yearly withdrawals from the									
353	savings account on either a specific schedule (e.g., 1%/year) or on an irregular basis such as a particular withdrawal for a new car									
354	as a specific dollar amount (e.g., $22,000).									
355										
356	**How life insurance payouts are handled**									
357	If there is a life insurance payout for S1 and/or S2 for policies described in **1. AgeData** section **1.4**, the payout is added to the income									
358	in **9. SavingsData** table **9.4.2.1** tax-free to the savings according to the payee (S1, S2 or Other).									
359										
360										
361	**2. The two versions of the SIPT spreadsheets you can download: "Demo" or "User"**									
362	The spreadsheet is distributed in two different versions depending on whether it has demonstration (demo) data or not.									
363	The demonstration **(Demo)** version has all data-entry worksheets data set up for demonstration purposes to gives									

typical examples of reasonable values. However, to make it easier to enter your data, a **User** version is provided with all data entry fields set to blank (or $0 or 0%) as appropriate.

The spreadsheet files are distributed with the name, version number, and revision data as part of the file

The file names for both versions of the "Simplified-Income-Planning-Tool" are prefixed with "**SIPT-**".

For example, the version number is indicated as: **V.0.19.2**

This is followed by the release date indicated by: **11-8-2015a**

a) full demo data	**SIPT-Demo-V.0.19.2-11-8-2015a.xlsx**
b) no demo data	**SIPT-User-V.0.19.2-11-8-2015a.xlsx**

a) The **Demo** version is the spreadsheet with full demonstration data. It is useful for viewing examples of date you might enter in all worksheets. In most people's situations, you might only use a few of these types of income sources for your data.

b) The **User** version of the spreadsheet has no demonstration data and is ready for you to enter your own data. All data entries are set to either $0 or 0.0% in all data-entry worksheets. All worksheets are unselected in worksheet **S. Setup**.

To enter data either override the demonstration data version or use the empty User version

Direct the spreadsheet to not use any particular data worksheet by selecting "**ignoring**" them in the **S. Setup** worksheet section **S.1** is used to declare the data worksheets that *you do want* you specify as "**used**". (Alternatively,the spreadsheet will ignore data from worksheets by setting the income, contribution or withdrawal amounts etc. data to **$0** to remove them from the calculations.] The investment returns for the investment account (IRA, Roth, and savings accounts) from the previous year are added to the current year for each of the respective accounts (whether the balance is + or -).

S. Setup section **S.2** enables/disables the use of Irregular contributions and withdrawals by selecting "**yes**" or "**no**". **S. Setup** worksheet **S.3** enables/disables the use of scheduled contributions and withdrawals by selecting "**yes**" or "**no**".

2.1 Disclaimer

This software models an income stream from several different income sources, investment withdrawals, expenses, taxes and cash-flows over time. No claim is made to the accuracy, suitability, and correctness of the algorithms. Also, note that the further out one goes over time, the less accurate any estimates will be. Since the software uses static models and static rates of return, CPI, etc. that are entered, it will not track actual market values over time. The software uses only Excel formulas and *does not use Visual Basic (VBA)* , so one can easily review all computations as desired. Because it uses generic spreadsheet coding (with no VBA), it will run in a variety of

spreadsheet programs such as Windows Excel, free OpenOffice or LibreOffice "calc", free Google "sheet", etc.. Use this software at your own discretion and risk as an initial way to think about personal finance problems. This is educational software. Absolutely no warranty is offered for this software and no responsibility is taken for any errors in. or use of the software.

3. Detailed directions for using the spreadsheet

This section elaborates on the discussion in the above. "**1.3 How the spreadsheet works**" section.

The spreadsheet as it is distributed has demonstration data entered in **red** cells through the worksheet. Enter data by overwriting the demonstration data. Save your spreadsheet with a new file name as you make changes. The demonstration data provides examples of answers to give an idea of typical values. Note that negative numbers are shown as red ($1,234) rather than -$1,234, and should not be edited.

The first worksheets you should use to enter your data

First configure the spreadsheet to your personal situation. This is done in the **S. Setup** worksheet sections **S.1** to **S.3**.

By ignoring any worksheets specified in **S. Setup** section S.1, the spreadsheet will ignores that data. Enter data in **1. AgeData** and **2. TaxData** worksheets since these are used by the other data worksheets. In table **S. Setup S.1** declares the set of data worksheets that are applicable to you, where you select either "**use**" or "**ignore**". In **S. Setup** section **S.2** configure the worksheets to use irregular contributions and withdrawals for investment accounts and the expenses account. In **S.3** you configure the spreadsheet to use scheduled contributions and withdrawals for the investment accounts.

Most of the **S.2** and in **S.3** require a "**yes**" or "**no**" answer with one question using having a **"keep"** or **"remove"** question.

Then, enter data in other worksheets

After setting the initial configuration in the **S. Setup, 1. AgeData** and **2. TaxData** worksheets, enter the rest of your data in the data worksheets **3. WorkData** through **10. ExpensesData** have selected (see section **1.4** above for a list of data entry worksheets). Again, only enter data in the red cells on the worksheets. Switch between worksheets either by clicking on the tabs at the bottom of this Excel window or by clicking on the hypertext worksheet name in the **Worksheet Navigation** table at the end of each worksheet (see an example at the bottom of this worksheet). Some worksheets (like this one) will also have hyperlinks to other worksheets.

3. WorkData, 4. PensionData, 5. SocSecData, 6. AnnuityData, 7. IRAdata, 8. RothData, 9. SavingsData, 10. ExpensesData

If a particular data worksheet does not apply to one of the spouses S1 or S2, or there is no spouse S2, then just enter **$0** for any income, contribution, withdrawal, etc. amounts for that worksheet. That lets the data be ignored in computing the results from

the various data sources. Although by not using that worksheet specified in **S. Setup** section **S.1**, it will also ignore that data.

Finally, view your results in the "R. Results" worksheet

As you enter the data into the various worksheets, the spreadsheet will automatically recompute the other worksheets that use it to incorporate those changes. In particular, they will be reflected in the R. Results worksheet. You can see how changes in any worksheet affects the results by going back and forth between the **R. Results** worksheet and the data worksheet you are currently working on. In addition, the user entered data is accumulated in an Assumptions worksheet.

Experimenting with other configurations after you have entered your personal data

You can model the income stream in various ways using temporary changes in the **S. Setup** configuration you might make. For example you could leave out various income sources such as stopping work, adding an annuity, adding a Roth IRA, etc. You could also try using different years for claiming Social Security, working longer, taking withdrawals from the IRAs or savings at different ages, or leave out or reduce certain expenses, etc. See FAQ *"13. What types of questions might be investigated using this spreadsheet?"* entry for some suggestions.

Where you may enter data

The color of cells in worksheets indicates whether it is used for data entry or displaying results.

ONLY enter or edit data in RED cells.

ORANGE cells are normally not changed unless the IRS changes various tax rates (do not edit).

BLUE cells are major results or intermediate results (do not edit).

BLACK cells are intermediate computations (do not edit).

GRAY areas of the other worksheets indicate where the analysis has not been implemented yet and should be ignored.

Also, don't edit tables in any of the other worksheets beyond the following warning message if it is present:

- - - > DO NOT CHANGE ANY VALUES in the following tables in this worksheet. < - - -

4. A detailed list of all worksheet tables and sections is in Appendix A

	A	B	C	D	E	F	G	H	I	J
462	Appendix A	is a detailed list of all worksheet tables and sections. As mentioned, it consists of those worksheets into								
463	which you enter your personal data, those that you may have to edit when the IRS rule or data changes, a cash-flow table where									
464	income and expenses are tallied, and finally the **R. Results** worksheet where results are summarized. It may be useful to look									
465	through these lists to familiarize yourself with the type of data that will be needed and what types of results are presented -									
466	or just view the different worksheets.									
467										
468										
469	**5. Notes on the current version of the spreadsheet - what it does and does not handle**									
470	See the	FAQ	for details on the what the current version of the spreadsheet does and does not handle include taxes.							
471	How static CPI and returns are handled. How tax-free muni bond income is handled. How RMDs are handled, etc.									Appendix D
472	lists more information about the current status including a list of things TODO and the ongoing REVISION-LIST history.									
473										
474										
475		Elementary glide-path calculator (SimpleCalc)					Next SIPT worksheet (Assumptions)			
476										
477	**Worksheet Navigation.**									
478	To go to a specific worksheet, click on one of the following:									
479		Introduction								
480		Assumptions								
481		R. Results								
482		S. Setup								
483		1. AgeData								
484		2. TaxData								
485		3. WorkData								
486		4. PensionData								
487		5. SocSecData								
488		6. AnnuityData								
489		7. IRAdata								
490		8. RothData								
491		9. SavingsData								
492		10. ExpensesData								
493		11. CashData								
494		12. RMDtable								

	A	B	C	D	E	F	G	H	I	J
495		RS. Resources		Articles, literature, web sites						
496		Appendix A		List of all worksheets tables & section						
497		Appendix B		Extra calculators						
498		Appendix C		Glossary of terms						
499		Appendix D		List of outstanding issues and Revision list						
500		FAQ		Frequently Asked Questions						

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