‘PensionPlanner’ Manual

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VersionAPR24

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INTRODUCTION

“How can the PensionPlanner benefit me?”

The short answer is you would use the PensionPlanner like you would use a chart and compass if you were taking a sailing trip from Halifax to Lisbon. You would not just start sailing east and hope for the best. You would plan where you want to be at various times and check your progress along the way. You know you would have to make constant corrections due to the wind and currents.

The PensionPlanner can help you set your financial course, whether you're 20 or 60, from where you are to where you want to be **before and** during retirement. You just put in your personal financial details and compare one set of possible actions against others. Each year you can compare your “Plan” with what actually happened and make any necessary corrections. It would be a good idea to get your Plan updated every three to five years because taxes and government programs change often.

Most people are not number nerds (like me) and are not used to working with spreadsheets. There is a learning curve in the personal finance space; but this Manual will make things as easy as possible using screenshots and step-by-step explanations. If you can stick with it all the way through this Manual and get your custom PensionPlanner report, not only will you be more informed but you will also get peace of mind knowing you have a solid plan in place. Checking your progress each year will provide tremendous reassurance that you are on track to reaching your financial/retirement goals.

You will be able to get **clear answers** to questions such as:

- “How much should I save each year?”
- “Which is better: Buying or Renting?”
- “What Return on Investment do I need?”
- “When should I take my CPP/OAS?”
- “Where should I put extra cash: RRSP, TFSA, or pay down debt?”
- “Should I incorporate my small business?”
- “What is the best Salary/Dividend mix to pay myself?”
- and much more!

May I make a suggestion? Just skim-read through the Manual to get a general idea of what the PensionPlanner is all about; read it again more slowly.

The PensionPlanner comes in two flavours: Singles and Couples (Married). Even if you’re single, you probably know people who are married and who may be interested in what this Manual is about; so, read the Manual, and then pass it along!

If you live in any province/territory except Quebec (Quebec has QPP instead of CPP) and are between the ages of 20 and 60, single or married, employee or business owner, the PensionPlanner is for you!

PART I – FOR SINGLES

CHAPTER 1 - Set up Your Financial Info

We will start with the PensionPlanner for Singles.

Our "test subject" is a resident of BC born in January, 1990 who will have lived in Canada for at least 40 years between age 18 and age 65. He plans on starting his CPP pension benefits and OAS/GIS the month after his 65th birthday. He anticipates needing retirement income until age 85.

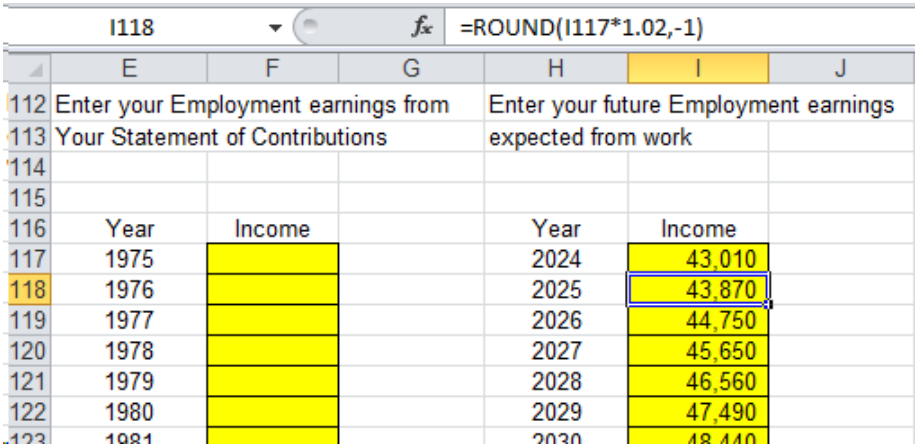
We open the Data Entry Form for Singles (download from our web site) and fill in the details:

3		Select:		
4	Home Province	BC		
5	YRS in Canada by age 65	40		
6	Month & Year of birth	January	1990	
7	Month & Year start CPP	February	2055	"Opt
8	Month & Year start OAS	February	2055	"Opt

We enter the employment income from his very first job to the current year and then what he expects to make until he plans to retire. He would get his Statement of Contributions from Service Canada and would enter the data into the Data Entry Form. For this example, we will start at $36K in 2015 and increase each year by 2% (since this is just an example, we will use a simple formula; you would enter your actual income numbers; don't enter commas – formatting is automatic):

	D	E	F	G
154		2012		
155		2013		
156		2014		
157		2015	36,000	
158		2016	36,720	
159		2017	37,450	
160		2018	38,200	
161		2019	38,960	
162		2020	39,740	
163		2021	40,530	
164		2022	41,340	
165		2023	42,170	

When you enter your estimates for your future employment income, you can use a formula as illustrated below or just enter whole numbers.

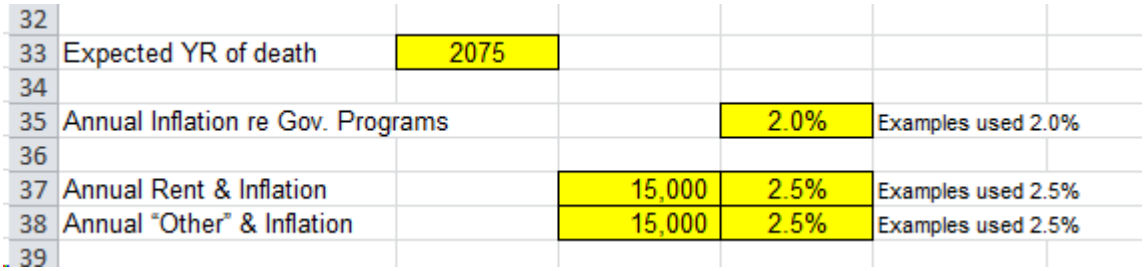


I118 =ROUND(I117*1.02,-1)

	E	F	G	H	I	J
112	Enter your Employment earnings from			Enter your future Employment earnings		
113	Your Statement of Contributions			expected from work		
114						
115						
116	Year	Income		Year	Income	
117	1975			2024	43,010	
118	1976			2025	43,870	
119	1977			2026	44,750	
120	1978			2027	45,650	
121	1979			2028	46,560	
122	1980			2029	47,490	
123	1981			2030	48,440	

That's the income part; now for the expenses.

We will enter $15,000 for rent, with inflation at 2.5%, and $15,000 for all “Other” expenses, also with inflation at 2.5%, into the Data Entry Form (you can use different inflation rates for “Rent” vs “Other” if you wish – Mortgages will enter the picture in later chapters):



32					
33	Expected YR of death	2075			
34					
35	Annual Inflation re Gov. Programs			2.0%	Examples used 2.0%
36					
37	Annual Rent & Inflation		15,000	2.5%	Examples used 2.5%
38	Annual “Other” & Inflation		15,000	2.5%	Examples used 2.5%
39					

BTW, you have two options for entering your estimated “Other” expenses: one, use the two lines indicated in the screenshot above; or two, enter the numbers for each year further down in the Data Entry Form - you can also adjust your projected spending on “Other” for major changes such as children leaving home and retirement. See the data entry form and reports example – links on our “How to Order” web page.

Below is the 50+ year projection for Income, Taxes and Expenses (this is the “Pension” tab) which is one page of your PensionPlanner Report. We will explain what each column is all about.

(You will see the terms “tab” and “page”; “tab” refers to a tab in the spreadsheet, while “page” refers to a section of your report. They contain the same data but your report doesn’t have any formulas.)

2															CASH
3	Year	Age	Employed	Other	CPP	PRB	Sub-Total	OAS	GIS	Sub-Total	Total	Taxes	Expenses	Other	BAL
4	2024	34	43,010	-	-	-	43,010	-	-	-	43,010	(6,867)	(30,000)	-	8,143
5	2025	35	43,870	-	-	-	43,870	-	-	-	43,870	(6,952)	(30,750)	-	14,311
6	2026	36	44,750	-	-	-	44,750	-	-	-	44,750	(7,122)	(31,519)	-	20,420
7	2027	37	45,650	-	-	-	45,650	-	-	-	45,650	(7,299)	(32,307)	-	26,464
8	2028	38	46,560	-	-	-	46,560	-	-	-	46,560	(7,478)	(33,114)	-	32,432
9	2029	39	47,490	-	-	-	47,490	-	-	-	47,490	(7,662)	(33,942)	-	38,317
10	2030	40	48,440	-	-	-	48,440	-	-	-	48,440	(7,853)	(34,791)	-	44,113
11	2031	41	49,410	-	-	-	49,410	-	-	-	49,410	(8,049)	(35,661)	-	49,814
12	2032	42	50,400	-	-	-	50,400	-	-	-	50,400	(8,250)	(36,552)	-	55,412
13	2033	43	51,410	-	-	-	51,410	-	-	-	51,410	(8,458)	(37,466)	-	60,898
14	2034	44	52,440	-	-	-	52,440	-	-	-	52,440	(8,671)	(38,403)	-	66,264
15	2035	45	53,490	-	-	-	53,490	-	-	-	53,490	(8,890)	(39,363)	-	71,502
16	2036	46	54,560	-	-	-	54,560	-	-	-	54,560	(9,114)	(40,347)	-	76,602
17	2037	47	55,650	-	-	-	55,650	-	-	-	55,650	(9,344)	(41,355)	-	81,553
18	2038	48	56,760	-	-	-	56,760	-	-	-	56,760	(9,579)	(42,389)	-	86,345
19	2039	49	57,900	-	-	-	57,900	-	-	-	57,900	(9,824)	(43,449)	-	90,972
20	2040	50	59,060	-	-	-	59,060	-	-	-	59,060	(10,074)	(44,535)	-	95,423
21	2041	51	60,240	-	-	-	60,240	-	-	-	60,240	(10,329)	(45,649)	-	99,685
22	2042	52	61,440	-	-	-	61,440	-	-	-	61,440	(10,590)	(46,790)	-	103,745
23	2043	53	62,670	-	-	-	62,670	-	-	-	62,670	(10,826)	(47,960)	-	107,630
24	2044	54	63,920	-	-	-	63,920	-	-	-	63,920	(11,065)	(49,158)	-	111,326
25	2045	55	65,200	-	-	-	65,200	-	-	-	65,200	(11,320)	(50,387)	-	114,819
26	2046	56	66,500	-	-	-	66,500	-	-	-	66,500	(11,580)	(51,647)	-	118,092
27	2047	57	67,830	-	-	-	67,830	-	-	-	67,830	(11,846)	(52,938)	-	121,137
28	2048	58	69,190	-	-	-	69,190	-	-	-	69,190	(12,120)	(54,262)	-	123,945
29	2049	59	70,570	-	-	-	70,570	-	-	-	70,570	(12,398)	(55,618)	-	126,499
30	2050	60	71,980	-	-	-	71,980	-	-	-	71,980	(12,683)	(57,009)	-	128,787
31	2051	61	73,420	-	-	-	73,420	-	-	-	73,420	(12,975)	(58,434)	-	130,797
32	2052	62	74,890	-	-	-	74,890	-	-	-	74,890	(13,275)	(59,895)	-	132,518
33	2053	63	76,390	-	-	-	76,390	-	-	-	76,390	(13,581)	(61,392)	-	133,935
34	2054	64	77,920	-	-	-	77,920	-	-	-	77,920	(13,894)	(62,927)	-	135,033
35	2055	65	-	-	24,097	-	24,097	14,501	-	14,501	38,598	1,061	(64,500)	-	110,192
36	2056	66	-	-	26,814	-	26,814	16,136	4,778	20,914	47,728	1,141	(66,113)	-	92,948
37	2057	67	-	-	27,350	-	27,350	16,452	9,271	25,724	53,074	1,111	(67,766)	-	79,366
38	2058	68	-	-	27,897	-	27,897	16,786	8,883	25,669	53,566	1,077	(69,460)	-	64,550
39	2059	69	-	-	28,455	-	28,455	17,120	9,035	26,155	54,610	1,043	(71,196)	-	49,007
40	2060	70	-	-	29,024	-	29,024	17,463	9,192	26,654	55,678	1,006	(72,976)	-	32,715
41	2061	71	-	-	29,605	-	29,605	17,814	9,351	27,165	56,769	967	(74,800)	-	15,651
42	2062	72	-	-	30,197	-	30,197	18,164	9,510	27,675	57,871	927	(76,670)	-	(2,221)
43	2063	73	-	-	30,801	-	30,801	18,533	9,677	28,209	59,010	883	(78,587)	-	(20,915)
44	2064	74	-	-	31,417	-	31,417	18,901	9,842	28,743	60,160	839	(80,552)	-	(40,469)
45	2065	75	-	-	32,045	-	32,045	19,277	10,012	29,289	61,334	791	(82,566)	-	(60,910)
46	2066	76	-	-	32,686	-	32,686	21,629	10,198	31,827	64,512	365	(84,630)	-	(80,663)
47	2067	77	-	-	33,339	-	33,339	22,062	10,374	32,436	65,775	281	(86,746)	-	(101,352)
48	2068	78	-	-	34,006	-	34,006	22,504	10,553	33,058	67,064	193	(88,914)	-	(123,009)
49	2069	79	-	-	34,686	-	34,686	22,956	10,736	33,692	68,379	102	(91,137)	-	(145,665)
50	2070	80	-	-	35,380	-	35,380	23,418	10,937	34,355	69,735	7	(93,416)	-	(169,338)
51	2071	81	-	-	36,088	-	36,088	23,879	11,122	35,001	71,089	(90)	(95,751)	-	(194,090)
52	2072	82	-	-	36,809	-	36,809	24,359	11,330	35,690	72,499	(193)	(98,145)	-	(219,928)
53	2073	83	-	-	37,546	-	37,546	24,849	11,526	36,375	73,921	(262)	(100,598)	-	(246,867)
54	2074	84	-	-	38,297	-	38,297	25,348	11,725	37,073	75,370	(321)	(103,113)	-	(274,932)
55	2075	85	-	-	39,063	-	39,063	25,847	11,940	37,787	76,849	(384)	(105,691)	-	(304,157)

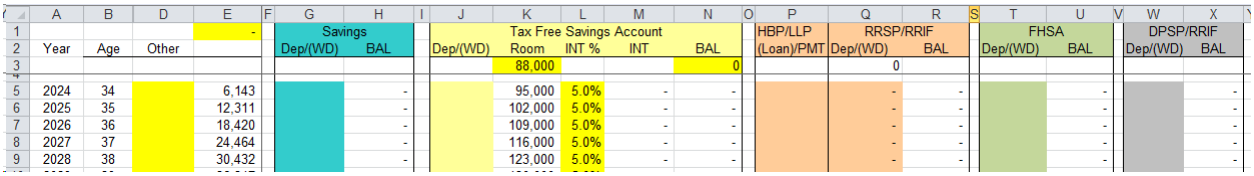
(FYI: These are screenshots copied from Excel and pasted here. Your custom report will be 'printed' to a stand-alone file – it will not be a screenshot.)

You can view this 50 year projection as an **early warning system**. You can see that there is trouble on the horizon – a number shown as (304,157) means the bank balance is projected to be more than $300,000 in overdraft in 2075. Things **will** change during the next 50 years, but isn't it better to have a plan that you know will change than not to have any plan at all?

Look at row 42 for year 2062; at the far right you see (2,221). This projection shows running out of money in 2062 at age 72. Also, no one would accumulate over $100K in their chequing account, so we will look at where best to put the extra cash.

Now let's set up our bank/investment account balances.

We go to the CASH tab. (Another page of your PensionPlanner Report)



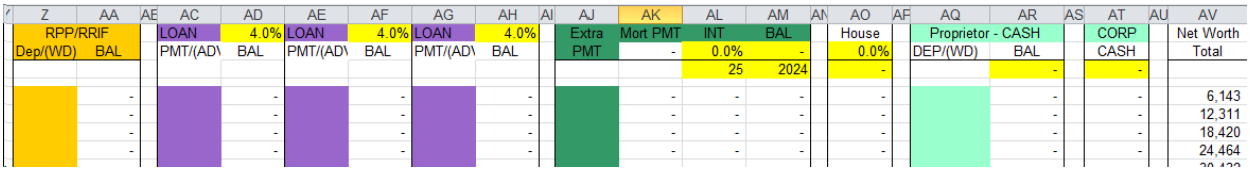
	A	B	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
1				-		Savings			Tax Free Savings Account						HBP/LLP	RRSP/RRIF			FHSA			DPSP/RRIF	
2	Year	Age	Other			Dep/(WD)	BAL		Dep/(WD)	Room	INT %	INT	BAL		(Loan)/PMT	Dep/(WD)	BAL		Dep/(WD)	BAL		Dep/(WD)	BAL
3										88,000			0			0							
5	2024	34		6,143			-			95,000	5.0%	-	-			-	-			-			-
6	2025	35		12,311			-			102,000	5.0%	-	-			-	-			-			-
7	2026	36		18,420			-			109,000	5.0%	-	-			-	-			-			-
8	2027	37		24,464			-			116,000	5.0%	-	-			-	-			-			-
9	2028	38		30,432			-			123,000	5.0%	-	-			-	-			-			-

Again, we will cover all the columns as we go.

The "Other" column (D) is for adjustments not taken care of by the Income or Expenses we just covered, or any transfers between accounts (which we will cover shortly). Column E is our running balance including the adjustments.

Next is columns G and H for our Taxable Savings Account. Columns J to N show the TFSA, with cells for Beginning Balance (N3), beginning Contribution Room (K3), and Rates of Return for each year (col L). In column Q we put RRSP contributions/withdrawals and in column P any HBP/LLP loan/payments. There's space for a FHSA in T and U, and for a DPSP in W and X.

Scroll to the right and see:



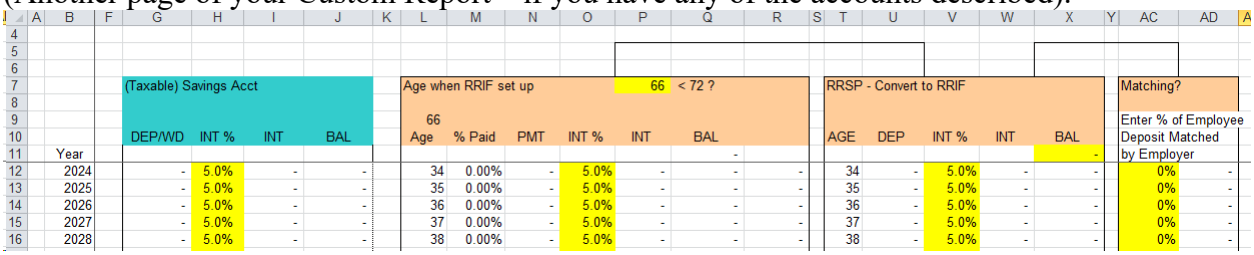
	Z	AA	AE	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AF	AQ	AR	AS	AT	AU	AV
	RPP/RRIF			LOAN	4.0%	LOAN	4.0%	LOAN	4.0%		Extra	Mort PMT	INT	BAL		House		Proprietor - CASH			CORP		Net Worth
	Dep/(WD)	BAL		PMT/(AD\	BAL	PMT/(AD\	BAL	PMT/(AD\	BAL		PMT	-	0.0%	-		0.0%		DEP/(WD)	BAL		CASH		Total
													25	2024		-							
		-			-		-		-			-	-	-		-			-		-		6,143
		-			-		-		-			-	-	-		-			-		-		12,311
		-			-		-		-			-	-	-		-			-		-		18,420
		-			-		-		-			-	-	-		-			-		-		24,464

Columns Z and AA are for the RPP/RRIF of a company sponsored pension plan; next we have columns for three separate debts at different interest rates; in columns AJ thru AM we can keep track of a mortgage; column AO is for the value of our home; next we have "Proprietor – Cash" and "CORP" which are for business owners (See Part III); and finally, column AV keeps a running balance of our Net Worth.

> Note: Whichever columns you don't need won't appear on your custom report. We will have examples to explain all of them, so hang in there!

Let's take a look at the various options for investment accounts.

We go to the RIF tab; this is our gathering point for all our investment accounts except the TFSA. (Another page of your Custom Report – if you have any of the accounts described).



	A	B	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	AC	AD	A
7				(Taxable) Savings Acct					Age when RRIF set up				66	< 72 ?			RRSP - Convert to RRIF						Matching?		
9									66																
10				DEP/WD	INT %	INT	BAL		Age	% Paid	PMT	INT %	INT	BAL			AGE	DEP	INT %	INT	BAL		Enter % of Employee Deposit Matched by Employer		
11		Year												-							-				
12		2024		-	5.0%	-	-		34	0.00%	-	5.0%	-	-	-		34	-	5.0%	-	-		0%	-	
13		2025		-	5.0%	-	-		35	0.00%	-	5.0%	-	-	-		35	-	5.0%	-	-		0%	-	
14		2026		-	5.0%	-	-		36	0.00%	-	5.0%	-	-	-		36	-	5.0%	-	-		0%	-	
15		2027		-	5.0%	-	-		37	0.00%	-	5.0%	-	-	-		37	-	5.0%	-	-		0%	-	
16		2028		-	5.0%	-	-		38	0.00%	-	5.0%	-	-	-		38	-	5.0%	-	-		0%	-	

The first account is your Taxable Savings Account with column H for annual interest rates earned; the interest earned in this account is taxable income. This section is tied to the Cash tab shown on the top of page 5 (colour-coded).

You would enter the Balance and Interest Rate in the Data Entry Form:

	A	B	C	D
72				
73	Investment Accounts:			
74	("Balance" or "BAL" as of Dec 31/23)			
75				
76	Taxable Savings Acct	Balance	IRR	
77			5.0%	

Next you see the RRSP/RRIF section.

We have spaces to put:
your RRSP beginning balance (X11)
your interest rate earned inside your RRSP (column V)
your age when your RRSP will be converted to a RRIF (P7)
your interest rate earned inside your RRIF (column O)
what percentage of your RRSP contributions will be matched by your employer (column AC)

Enter the details in the Data Entry Form (include your RRSP Contribution Room Balance):

	A	B	C	D	E	F	G	H	I	J
81										
82	RRSP	Balance	RRSP IRR	YR when RR	RRIF IRR	ER Match		Contrib. Room BAL		HBP/LLP BAL
83			5.0%	66	5.0%					
84										

If you don't withdraw all your money in your RRSP at some point you will have to convert it to some kind of annuity vehicle - like a RRIF. Names of these investment accounts differ and **Rules differ between provinces so consult a professional.**

Note: You don't have to use all the columns/investment vehicles; they are there if your unique situation calls for any of them. When the PensionPlanner is set up for your finances, anything which doesn't apply to you will be left out.

Further to the right in the RIF tab you see a section for a FHSA and a section for a DPSP/RRIF:

	A	B	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV
4																			
5																			
6																			
7			FHSA					Age when RRIF set up				66			DPSP - Convert to RRIF				
8																			
9								66											
10			DEP	INT %	INT	BAL		Age	% Paid	PMT	INT %	INT	BAL		AGE	DEP	INT %	INT	BAL
11		Year				-							-						-
12		2024	-	5.0%	-	-		34	0.00%	-	4.00%	-	-		34	-	4.00%	-	-
13		2025	-	5.0%	-	-		35	0.00%	-	4.00%	-	-		35	-	4.00%	-	-
14		2026	-	5.0%	-	-		36	0.00%	-	4.00%	-	-		36	-	4.00%	-	-
15		2027	-	5.0%	-	-		37	0.00%	-	4.00%	-	-		37	-	4.00%	-	-

The FHSA beginning balance will be in cell AI11 and the annual interest rates in column AG. The setup for the DPSP/RRIF is the same as for the RRSP/RRIF discussed above.

Enter the details in the Data Entry Form:

	A	B	C	D	E	F
84						
85	FHSA	Balance	IRR			
86			5.0%			
87						
88	DPSP	Balance	DPSP IRR	YR when RR	RRIF IRR	
89			4.0%	66	4.0%	

If you leave your employer, you can convert your DPSP to a RRSP, RRIF or Annuity – again, **consult a professional.**

Further to the right you would see the section for an employer-sponsored Registered Pension Plan or RPP; the setup is the same as for RRSP/RRIF discussed above:

	A	B	AW	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BI	BQ	BR	BS	BT
4																					
5																					
6																					
7				Age when RRIF set up				66				RPP - Convert to RRIF									
8				Age pmts begin																	RSP
9				66														Enter % of Employee			Contrib Room
10				Age	% Paid	PMT	INT %	INT	BAL			AGE	DEP	INT %	INT	BAL		Deposit Matched			BAL
11		Year							-							-		by Employer			-
12		2024		34	0.00%	-	5.00%	-	-	-		34	-	5.00%	-	-		0%	-		-
13		2025		35	0.00%	-	5.00%	-	-	-		35	-	5.00%	-	-		0%	-		-
14		2026		36	0.00%	-	5.00%	-	-	-		36	-	5.00%	-	-		0%	-		-
15		2027		37	0.00%	-	5.00%	-	-	-		37	-	5.00%	-	-		0%	-		-
16		2028		38	0.00%	-	5.00%	-	-	-		38	-	5.00%	-	-		0%	-		-

At the far right you see column BT which keeps track of the RSP Contribution Room. Cell BT11 will show the Contribution Room Balance as of the beginning of 2024; this amount would be entered into the Data Entry Form next to the RRSP data – see previous page. For each year, the balance of the previous year will be added to 18% of the previous year's gross salary; any contributions into the RRSP, DPSP, or RPP, along with any employer matching, will then be deducted to give that year's ending balance.

Note: this is meant to be a **guide only**; your Notice of Assessment will give you your actual Balance.

Enter the RPP details in the Data Entry Form:

	A	B	C	D	E	F
90						
91	RPP	Balance	RPP IRR	YR when RR	RRIF IRR	ER Match
92			5.0%	66	5.0%	
93						

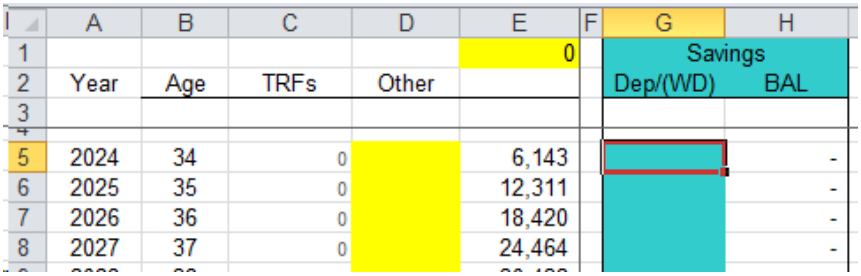
Now let's get to the fun part: how to put the PensionPlanner to good use.

CHAPTER 2 - Managing the Cash

This is where you will start to see the value of the PensionPlanner spreadsheet!

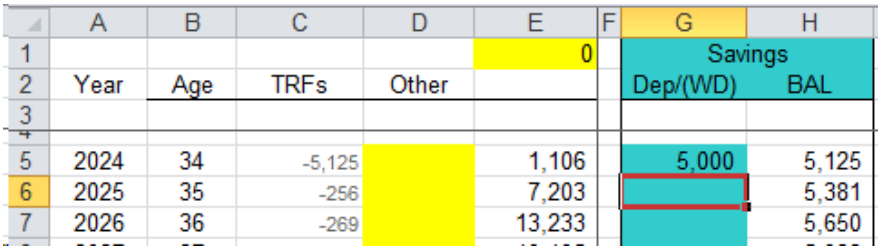
You enter all your details into the Data Entry Form; we retrieve that data and enter it into the PensionPlanner to produce your reports. Most of what follows is a "behind the curtain" look at what happens to your data. We don't want the PensionPlanner to be a "Black Box" where you have no idea of where the numbers in your report came from. We take the position that too much information (which you can choose to skip) is better than too little.

First stop: the Taxable Savings Account (TSA) with IRR of 5% (see bottom of page 5 and top of page 6).



	A	B	C	D	E	F	G	H
1					0		Savings	
2	Year	Age	TRFs	Other			Dep/(WD)	BAL
3								
5	2024	34	0		6,143			-
6	2025	35	0		12,311			-
7	2026	36	0		18,420			-
8	2027	37	0		24,464			-

See what happens if we transfer $5,000 out of our chequing into the TSA:

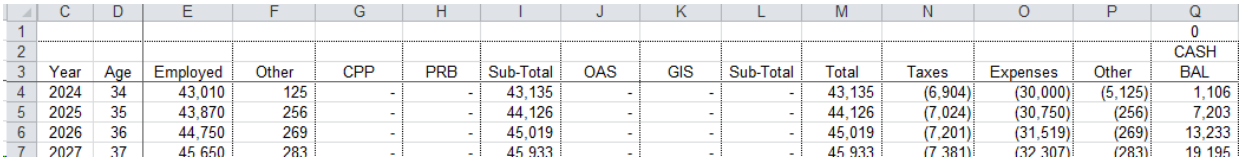


	A	B	C	D	E	F	G	H
1					0		Savings	
2	Year	Age	TRFs	Other			Dep/(WD)	BAL
3								
5	2024	34	-5,125		1,106		5,000	5,125
6	2025	35	-256		7,203			5,381
7	2026	36	-269		13,233			5,650

The TSA balance of $5,125 = $5,000 transfer + interest at 5% for 6 months.
The chequing balance of $1,106 = $6,143 - $5,000 transfer - $37 (tax on $125 interest).

(FYI: Deposits/withdrawals are assumed to be made mid-year to simulate transactions taking place throughout the year.)

Here is the top part of the Pension tab:



	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1															0
2															CASH
3	Year	Age	Employed	Other	CPP	PRB	Sub-Total	OAS	GIS	Sub-Total	Total	Taxes	Expenses	Other	BAL
4	2024	34	43,010	125	-	-	43,135	-	-	-	43,135	(6,904)	(30,000)	(5,125)	1,106
5	2025	35	43,870	256	-	-	44,126	-	-	-	44,126	(7,024)	(30,750)	(256)	7,203
6	2026	36	44,750	269	-	-	45,019	-	-	-	45,019	(7,201)	(31,519)	(269)	13,233
7	2027	37	45,650	283	-	-	45,933	-	-	-	45,933	(7,381)	(32,307)	(283)	19,195

The interest of $125 is added in column F to be taxed; it is then taken out in column P because it is part of the TSA balance – not chequing. The (5,000) remainder in column P is the transfer out of chequing into the TSA.

With that out of the way, we can get to the good stuff! Next up, the TFSA.

We go back to the Cash tab.

We want to leave a balance of $2,000 in our account at each year-end (to pay the bills in early JAN), so we enter 2000 in the Data Entry Form.

70			
71	Chequing Balance (Dec 31/23)	2,000	Maintain this Balance
72			
73	Investment Accounts:		
74	("Balance" or "BAL" as of Dec 31/23)		

It appears in cell E1 in the screenshot below. Now, let's project a transfer of the excess cash into the TFSA for each year.

You would enter your expected IRR and Contribution Room balance in the Data Entry Form:

	A	B	C	D	E
73	Investment Accounts:				
74	("Balance" or "BAL" as of Dec 31/23)				
75					
76	Taxable Savings Acct	Balance	IRR		
77			5.0%		
78					
79	TFSA	Balance	IRR	Contrib. Room Balance	
80			5.0%	88,000	

and we would enter 6100 in cell J5 of the PensionPlanner Cash tab for a transfer into the TFSA (we would enter these numbers when we generate your report):

	A	B	D	E	F	J	K	L	M	N
1				2000			Tax Free Savings Account			
2	Year	Age	Other			Dep/(WD)	Room	INT %	INT	BAL
3							88,000			
4										
5	2024	34		2,043		6,100	88,900	5.0%	153	6,253
6	2025	35		8,211			95,900	5.0%	313	6,565
7	2026	36		14,320			102,900	5.0%	328	6,893
8	2027	37		20,364			109,900	5.0%	345	7,238
9	2028	38		26,332			116,900	5.0%	362	7,600

If we repeat this for each year until the Expected Year of Death:

	A	B	D	E	F	J	K	L	M	N
1				2,000		Tax Free Savings Account				
2	Year	Age	Other			Dep/(WD)	Room	INT %	INT	BAL
3							88,000			0
5	2024	34		2,043		6,100	88,900	5.0%	153	6,253
6	2025	35		2,011		6,200	89,700	5.0%	468	12,920
7	2026	36		2,020		6,100	90,600	5.0%	799	19,819
8	2027	37		1,964		6,100	91,500	5.0%	1,143	27,062
9	2028	38		2,032		5,900	92,600	5.0%	1,501	34,463
10	2029	39		2,017		5,900	93,700	5.0%	1,871	42,233
11	2030	40		2,013		5,800	95,400	5.0%	2,257	50,290
12	2031	41		2,014		5,700	97,200	5.0%	2,657	58,647
13	2032	42		2,012		5,600	99,100	5.0%	3,072	67,319
14	2033	43		1,998		5,500	101,100	5.0%	3,503	76,323
15	2034	44		1,964		5,400	103,200	5.0%	3,951	85,674
16	2035	45		2,002		5,200	105,500	5.0%	4,414	95,288
17	2036	46		2,002		5,100	108,400	5.0%	4,892	105,279
18	2037	47		1,953		5,000	111,400	5.0%	5,389	115,668
19	2038	48		2,045		4,700	114,700	5.0%	5,901	126,269
20	2039	49		1,972		4,700	118,000	5.0%	6,431	137,400
21	2040	50		2,023		4,400	121,600	5.0%	6,980	148,780
22	2041	51		1,985		4,300	125,300	5.0%	7,547	160,627
23	2042	52		2,045		4,000	129,300	5.0%	8,131	172,758
24	2043	53		2,030		3,900	134,400	5.0%	8,735	185,394
25	2044	54		2,026		3,700	139,700	5.0%	9,362	198,456
26	2045	55		2,019		3,500	145,200	5.0%	10,010	211,966
27	2046	56		1,992		3,300	150,900	5.0%	10,681	225,947
28	2047	57		2,037		3,000	156,900	5.0%	11,372	240,319
29	2048	58		2,045		2,800	163,100	5.0%	12,086	255,205
30	2049	59		1,999		2,600	169,500	5.0%	12,825	270,631
31	2050	60		1,987		2,300	176,700	5.0%	13,589	286,520
32	2051	61		1,997		2,000	184,200	5.0%	14,376	302,896
33	2052	62		2,018		1,700	192,000	5.0%	15,187	319,783
34	2053	63		2,035		1,400	200,100	5.0%	16,024	337,207
35	2054	64		2,033		1,100	208,500	5.0%	16,888	355,195
36	2055	65		1,992		(24,800)	242,800	5.0%	17,140	347,535
37	2056	66		2,048		(17,300)	269,600	5.0%	16,944	347,179
38	2057	67		1,966		(13,500)	292,600	5.0%	17,021	350,700
39	2058	68		2,050		(14,900)	317,500	5.0%	17,163	352,963
40	2059	69		2,007		(15,500)	343,000	5.0%	17,261	354,723
41	2060	70		2,015		(16,300)	369,300	5.0%	17,329	355,752
42	2061	71		1,951		(17,000)	396,300	5.0%	17,363	356,115
43	2062	72		1,979		(17,900)	424,200	5.0%	17,358	355,573
44	2063	73		1,985		(18,700)	452,900	5.0%	17,311	354,184
45	2064	74		2,031		(19,600)	483,500	5.0%	17,219	351,803
46	2065	75		1,990		(20,400)	514,900	5.0%	17,080	348,483
47	2066	76		2,037		(19,800)	545,700	5.0%	16,929	345,612
48	2067	77		2,048		(20,700)	577,400	5.0%	16,763	341,676
49	2068	78		1,991		(21,600)	610,000	5.0%	16,544	336,619
50	2069	79		2,035		(22,700)	643,700	5.0%	16,263	330,183
51	2070	80		1,962		(23,600)	678,300	5.0%	15,919	322,502
52	2071	81		2,010		(24,800)	715,100	5.0%	15,505	313,207
53	2072	82		1,972		(25,800)	752,900	5.0%	15,015	302,422
54	2073	83		2,033		(27,000)	791,900	5.0%	14,446	289,869
55	2074	84		1,968		(28,000)	831,900	5.0%	13,793	275,662
56	2075	85		2,043		(29,300)	873,200	5.0%	13,051	259,413

We see the projected transfers into the TFSA right up to expected retirement; then transfers from the TFSA back to chequing to cover the shortfalls beginning in year 2055.
Note that the Net Worth is now projected to be about $261K.

TIP: Have you ever considered buying a mutual fund and thought that the Management Expense Ratio (MER) of, say, 2% was "reasonable"? Let's add that 2% into the example above:

	A	B	D	E	F	J	K	L	M	N	O
1				2,000		Tax Free Savings Account					
2	Year	Age	Other			Dep/(WD)	Room	INT %	INT	BAL	
3							88,000			0	
47	2066	76		2,037		(19,800)	545,700	7.0%	58,240	880,343	
48	2067	77		2,048		(20,700)	577,400	7.0%	60,899	920,542	
49	2068	78		1,991		(21,600)	610,000	7.0%	63,682	962,624	
50	2069	79		2,035		(22,700)	643,700	7.0%	66,589	1,006,513	
51	2070	80		1,962		(23,600)	678,300	7.0%	69,630	1,052,543	
52	2071	81		2,010		(24,800)	715,100	7.0%	72,810	1,100,553	
53	2072	82		1,972		(25,800)	752,900	7.0%	76,136	1,150,889	
54	2073	83		2,033		(27,000)	791,900	7.0%	79,617	1,203,506	
55	2074	84		1,968		(28,000)	831,900	7.0%	83,265	1,258,771	
56	2075	85		2,043		(29,300)	873,200	7.0%	87,088	1,316,560	
57	2076	86		2,043		-	886,200	7.0%	-	1,316,560	

Compound interest, the Eighth Wonder of the World!

We have just covered some of the most basic functions of this spreadsheet; it's time to shake things up a little!

Assume there was a child born in 2013.

If we scroll to the bottom of the Cash page, we notice that the projected balance (col E) has increased by almost $100K due to the Canada Child Benefit, Provincial Child Benefit, and related credits.

	A	B	D	E	F	J	K	L	M	N
1				2,000		Tax Free Savings Account				
2	Year	Age	Other			Dep/(WD)	Room	INT %	INT	BAL
3							88,000			0
47	2066	76		98,708		(20,100)	528,100	5.0%	16,735	341,387
48	2067	77		98,703		(21,000)	550,200	5.0%	16,544	336,931
49	2068	78		98,725		(22,000)	573,300	5.0%	16,297	331,228
50	2069	79		98,741		(23,000)	597,400	5.0%	15,986	324,214
51	2070	80		98,733		(24,000)	622,500	5.0%	15,611	315,825
52	2071	81		98,741		(25,100)	659,600	5.0%	15,164	305,889
53	2072	82		98,655		(26,100)	697,700	5.0%	14,642	294,431
54	2073	83		98,653		(27,300)	737,000	5.0%	14,039	281,170
55	2074	84		98,719		(28,500)	777,500	5.0%	13,346	266,016
56	2075	85		98,719		(29,600)	819,100	5.0%	12,561	248,976
57	2076	86		98,719		-	832,100	5.0%	-	248,976

You can also look at the Pension tab and see the Tax amounts up to 2031 are “refunds”. Income tax (Paid) / Refunds are combined with government benefits like the Canada Child Benefit – to save room.

Year	Age	Employed	Other	CPP	PRB	Sub-Total	OAS	GIS	Sub-Total	Total	Taxes	Expenses	Other
2024	34	43,010	-	-	-	43,010	-	-	-	43,010	4,222	(30,000)	(6,100
2025	35	43,870	-	-	-	43,870	-	-	-	43,870	4,546	(30,750)	(6,200
2026	36	44,750	-	-	-	44,750	-	-	-	44,750	4,611	(31,519)	(6,100
2027	37	45,650	-	-	-	45,650	-	-	-	45,650	4,676	(32,307)	(6,000
2028	38	46,560	-	-	-	46,560	-	-	-	46,560	4,742	(33,114)	(6,000
2029	39	47,490	-	-	-	47,490	-	-	-	47,490	4,808	(33,942)	(5,900
2030	40	48,440	-	-	-	48,440	-	-	-	48,440	4,873	(34,791)	(5,800
2031	41	49,410	-	-	-	49,410	-	-	-	49,410	4,938	(35,661)	(5,700
2032	42	50,400	-	-	-	50,400	-	-	-	50,400	(8,250)	(36,552)	(5,600
2033	43	51,410	-	-	-	51,410	-	-	-	51,410	(8,458)	(37,466)	(5,400

Now that you see how that works, let's go back to our example without children.

Ready to play “What If”?

We can now ask: What if we put the extra cash into a RRSP instead of the TFSA?

Here we introduce a peculiar feature:

	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
1															2000					
2															CASH					
3	Year	Age	Employed	Other	CPP	PRB	Sub-Total	OAS	GIS	Sub-Total	Total	Taxes	Expenses	Other	BAL					
64																				
65																				
66			675,600	627,991	(299,424)	-	-	-	565,613	-									261,455	
67																				
68			CPP/PRB	OAS/GIS	TAX	ER-CPP	RSP/RIF IN	Savings Int	TFSA INT	Mort INT	CPP/PRB	OAS/GIS	TAX	ER-CPP	INT	Total			Net Worth Difference	
69																				
70																				
71										-										

We will use this section to compare two (or more) options or scenarios and see exactly where the differences lie. An example will illustrate.

We copy the details as shown:

	675,600	627,991	(299,424)	-	-	-	565,613	-							261,455	
	CPP/PRB	OAS/GIS	TAX	ER-CPP	RSP/RIF IN	Savings Int	TFSA INT	Mort INT	CPP/PRB	OAS/GIS	TAX	ER-CPP	INT	Total	Net Worth Differen	
	675,600	627,991	(299,424)	-	-	-	565,613	-							261,455	

This is our Base Scenario; we will leave this for now and get back to it with another Scenario to compare. Time to see how the RIF tab is tied to the CASH tab.

We enter a 5% IRR inside the RRSP/ RRIF, and our Contribution Room balance, using the Data Entry Form:

	A	B	C	D	E	F	G	H	I	J
79	TFSA	Balance	IRR	Contrib. Room Balance						
80			5.0%	88,000						
81										
82	RRSP	Balance	RRSP IRR	YR when RR	RRIF IRR	ER Match		Contrib. Room BAL		HBP/LLP BAL
83			5.0%	66	5.0%			63,120		
84										
85	FHSA	Balance	IRR							

It will show in your report (the RRSP Contribution Room isn't shown – it's further to the right):

	A	B	G	H	I	J	L	M	N	O	P	Q	R	T	U	V	W	X	AC	AD
7			(Taxable) Savings Acct				Age when RRIF set up				66	< 72 ?		RRSP - Convert to RRIF					Matching?	
9							66													
10			DEP/WD	INT %	INT	BAL	Age	% Paid	PMT	INT %	INT	BAL		AGE	DEP	INT %	INT	BAL	Enter % of Employee Deposit Matched by Employer	
11		Year										-						-		
12		2024	-	5.0%	-	-	34	0.00%	-	5.0%	-	-	-	34	-	5.0%	-	-	0%	-
13		2025	-	5.0%	-	-	35	0.00%	-	5.0%	-	-	-	35	-	5.0%	-	-	0%	-
14		2026	-	5.0%	-	-	36	0.00%	-	5.0%	-	-	-	36	-	5.0%	-	-	0%	-
15		2027	-	5.0%	-	-	37	0.00%	-	5.0%	-	-	-	37	-	5.0%	-	-	0%	-
16		2028	-	5.0%	-	-	38	0.00%	-	5.0%	-	-	-	38	-	5.0%	-	-	0%	-

Back to the CASH tab; instead of transferring extra cash from our chequing account to the TFSA, let's transfer similar amounts to the RRSP:

	A	B	D	E	J	K	L	M	N	P	Q	R
1				2000	Tax Free Savings Account					HBP/LLP	RRSP/RRIF	
2	Year	Age	Other		Dep/(WD)	Room	INT %	INT	BAL	(Loan)/PMT	Dep/(WD)	BAL
3						88,000			0			
5	2024	34		3,527		95,000	5.0%	-	-		6,100	6,253
6	2025	35		9,761		102,000	5.0%	-	-			6,565
7	2026	36		15,869		109,000	5.0%	-	-			6,893
8	2027	37		21,914		116,000	5.0%	-	-			7,238
9	2028	38		27,881		123,000	5.0%	-	-			7,600

You will notice that for the year 2024 the ending balance in the chequing account is $3,527 compared to $2,043 when we transferred the $6,100 into the TFSA. The $1,500 (approx.) difference is due to the tax break on the $6,100 RRSP contribution.

> The income in this example is relatively low; for higher income levels, we could try out RRSP contributions from 0% to 18% of gross salary up to the RSP Contribution Room Balance and compare the results with just using the TFSA. Keep an eye out for an example on this.

If we put similar amounts into the RRSP as we did into the TFSA, and then the extra from the tax break into the TFSA, then transfer from the TFSA back into chequing when needed (from 2055):

	A	B	D	E	F	J	K	L	M	N	O	P	Q	R
1				2,000		Tax Free Savings Account						HBP/LLP	RRSP/RRIF	
2	Year	Age	Other			Dep/(WD)	Room	INT %	INT	BAL		(Loan)/PMT	Dep/(WD)	BAL
3							88,000			0			0.18	
5	2024	34		2,027		1,500	93,500	5.0%	38	1,538			6,100	6,253
6	2025	35		1,986		1,400	99,100	5.0%	112	3,049			6,300	13,023
7	2026	36		2,044		1,300	104,800	5.0%	185	4,534			6,200	20,029
8	2027	37		1,957		1,400	110,400	5.0%	262	6,196			6,200	27,385
9	2028	38		1,958		1,400	116,000	5.0%	345	7,941			6,000	34,904
10	2029	39		1,962		1,400	121,600	5.0%	432	9,773			5,900	42,697
11	2030	40		1,985		1,300	127,800	5.0%	521	11,594			5,900	50,880
12	2031	41		2,000		1,300	134,000	5.0%	612	13,506			5,800	59,369
13	2032	42		1,998		1,300	140,200	5.0%	708	15,514			5,700	68,179
14	2033	43		1,973		1,300	146,400	5.0%	808	17,622			5,600	77,328
15	2034	44		2,008		1,200	152,700	5.0%	911	19,733			5,500	86,832
16	2035	45		1,992		1,200	159,000	5.0%	1,017	21,950			5,400	96,709
17	2036	46		1,993		1,200	165,800	5.0%	1,128	24,278			5,200	106,874
18	2037	47		1,998		1,200	172,600	5.0%	1,244	26,721			5,000	117,343
19	2038	48		2,020		1,100	179,500	5.0%	1,364	29,185			4,900	128,233
20	2039	49		2,032		1,100	186,400	5.0%	1,487	31,772			4,700	139,462
21	2040	50		2,044		1,000	193,400	5.0%	1,614	34,385			4,600	151,150
22	2041	51		2,021		1,000	200,400	5.0%	1,744	37,130			4,400	163,218
23	2042	52		2,049		900	207,500	5.0%	1,879	39,909			4,200	175,683
24	2043	53		2,018		900	215,600	5.0%	2,018	42,827			4,000	188,568
25	2044	54		2,016		800	223,800	5.0%	2,161	45,788			3,800	201,891
26	2045	55		2,035		700	232,100	5.0%	2,307	48,795			3,600	215,675
27	2046	56		2,002		700	240,400	5.0%	2,457	51,952			3,400	229,944
28	2047	57		1,986		700	248,700	5.0%	2,615	55,267			3,100	244,619
29	2048	58		1,998		600	257,100	5.0%	2,778	58,645			2,900	259,822
30	2049	59		2,002		600	265,500	5.0%	2,947	62,193			2,600	275,479
31	2050	60		1,986		600	274,400	5.0%	3,125	65,917			2,300	291,610
32	2051	61		2,019		500	283,400	5.0%	3,308	69,726			2,000	308,240
33	2052	62		2,011		400	292,500	5.0%	3,496	73,622			1,800	325,497
34	2053	63		2,028		300	301,700	5.0%	3,689	77,611			1,500	343,310
35	2054	64		1,953		300	310,900	5.0%	3,888	81,799			1,200	361,705
36	2055	65		2,036		(24,900)	345,300	5.0%	3,467	60,366				379,791
37	2056	66		2,026		(4,500)	359,300	5.0%	2,906	58,772				382,547
38	2057	67		2,009		(4,200)	373,000	5.0%	2,834	57,405				384,617
39	2058	68		1,967		(8,900)	391,900	5.0%	2,648	51,153				385,911
40	2059	69		1,968		(9,400)	411,300	5.0%	2,323	44,076				386,378
41	2060	70		1,996		(9,800)	431,100	5.0%	1,959	36,235				385,895
42	2061	71		1,983		(10,000)	451,100	5.0%	1,562	27,796				384,305
43	2062	72		2,030		(10,900)	472,000	5.0%	1,117	18,014				382,249
44	2063	73		1,990		(11,500)	493,500	5.0%	613	7,127				379,694
45	2064	74		(2,970)		(7,300)	511,800	5.0%	174	1				376,612
46	2065	75		(15,981)			522,800	5.0%	0	1				372,976
47	2066	76		(28,222)			533,800	5.0%	0	1				368,763
48	2067	77		(41,240)			544,800	5.0%	0	1				363,880
49	2068	78		(55,077)			555,800	5.0%	0	1				358,353
50	2069	79		(69,729)			566,800	5.0%	0	1				352,101
51	2070	80		(85,234)			577,800	5.0%	0	1				345,093
52	2071	81		(101,649)			589,800	5.0%	0	1				337,304
53	2072	82		(118,969)			601,800	5.0%	0	1				328,654
54	2073	83		(137,246)			613,800	5.0%	0	1				319,114
55	2074	84		(156,520)			625,800	5.0%	0	1				308,640
56	2075	85		(176,812)			637,800	5.0%	0	1				297,150

This is that “Early Warning System” in action.

The TFSA is expected to reach zero in year 2064; although there is $376K in the RRIF, that money will be fully taxed if/when withdrawn. Drawing down the RRIF we end up with a projected negative balance at age 85:

	A	B	D	E	F	J	K	L	M	N	O	P	Q	R
1				2,000		Tax Free Savings Account						HBP/LLP	RRSP/RRIF	
2	Year	Age	Other			Dep/(WD)	Room	INT %	INT	BAL		(Loan)/PMT	Dep/(WD)	BAL
3							88,000			0			0.18	
42	2061	71		1,983		(10,000)	451,100	5.0%	1,562	27,796				384,305
43	2062	72		2,030		(10,900)	472,000	5.0%	1,117	18,014				382,249
44	2063	73		1,990		(11,500)	493,500	5.0%	613	7,127				379,694
45	2064	74		2,177		(7,300)	511,800	5.0%	174	1			(6,500)	369,950
46	2065	75		1,934			522,800	5.0%	0	1			(17,000)	348,953
47	2066	76		2,111			533,800	5.0%	0	1			(18,000)	326,561
48	2067	77		2,109			544,800	5.0%	0	1			(20,000)	301,737
49	2068	78		2,108			555,800	5.0%	0	1			(22,500)	274,091
50	2069	79		1,921			566,800	5.0%	0	1			(25,000)	243,685
51	2070	80		2,065			577,800	5.0%	0	1			(28,500)	209,622
52	2071	81		2,213			589,800	5.0%	0	1			(32,000)	172,090
53	2072	82		2,072			601,800	5.0%	0	1			(35,500)	131,290
54	2073	83		2,027			613,800	5.0%	0	1			(40,000)	86,479
55	2074	84		1,989			625,800	5.0%	0	1			(45,000)	37,515
56	2075	85		(9,658)			637,800	5.0%	0	1			(35,000)	244

Now we're ready to fill in the details for Scenario 1 – Transfer to RRSP:

675,600	439,803	(412,434)	-	525,141	-	70,801	-							(9,413)	
CPP/PRB	OAS/GIS	TAX	ER-CPP	RSP/RIF IN	Savings Int	TFSA INT	Mort INT	CPP/PRB	OAS/GIS	TAX	ER-CPP	INT	Total	Net Worth Difference	
675,600	627,991	(299,424)	-	-	-	565,613	-							261,455	
675,600	439,803	(412,434)	-	525,141	-	70,801	-	-	(188,188)	(113,010)	-	30,329	(270,869)	(9,413)	(270,868)

Putting about the same amounts into the RRSP as we did with the TFSA, and the extra from the Tax break into the TFSA and then start collecting the pension payments starting at age 65, drawing down the TFSA and then the RRIF would result in:
about $188K less GIS ($440K - $628K)
about $113K more tax ($412K - $299K)
and about $30K more interest ($525K + $71K - $565K)
for a total difference in projected Net Worth of -$271K (leaving a Net Worth at age 85 of -$9K).

Putting extra cash into the TFSA is clearly the better option **for this example**.

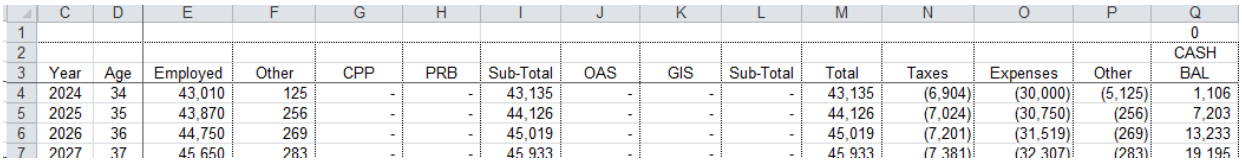
We would go through the projected transfers from the current year to the "Expected Year of Death". This is especially relevant when RRSPs are included because you want to include the tax effect in the years of contribution and the tax effect in the years of withdrawal. There is also a possible effect on GIS.

Tip: If you contribute to a RRSP, don't give the government an interest-free loan each year. Pay only the tax you will owe each payday. [T1213 Request to Reduce Tax Deductions at Source - Canada.ca]

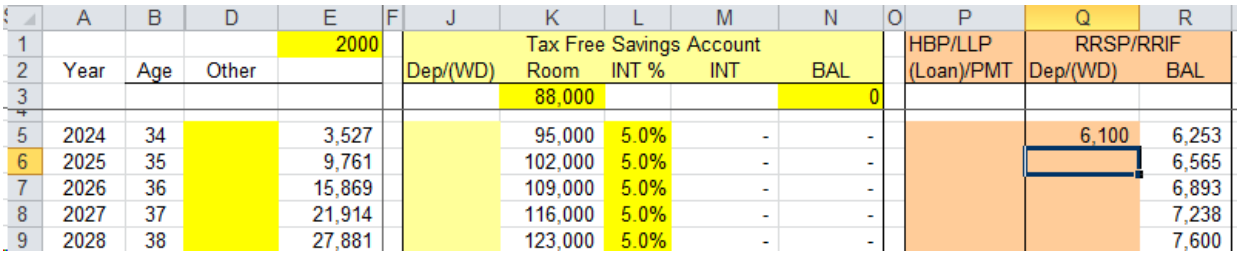
* * *

Report available: **PensionPlanner for Singles – Early Warning System**. Page one: Income, Taxes, and Expenses (Pension tab). Page two: Chequing account, TSA, TFSA, etc showing the transfers between the accounts (Cash tab). Page three: TSA details, RRSP details, etc. (RIF tab).

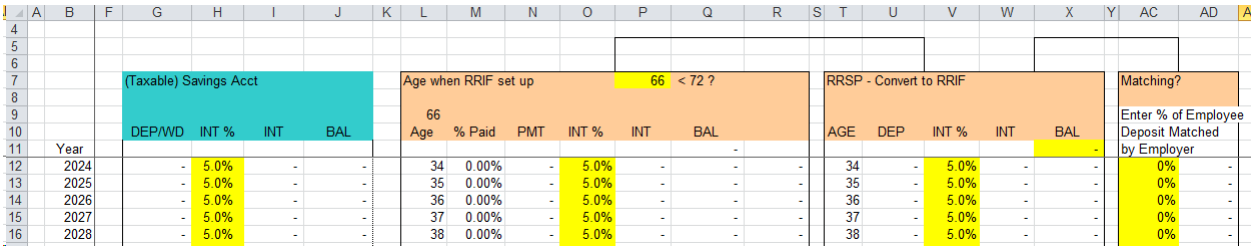
Here are reminder screenshots of the three tabs/pages:



	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1															0
2															CASH
3	Year	Age	Employed	Other	CPP	PRB	Sub-Total	OAS	GIS	Sub-Total	Total	Taxes	Expenses	Other	BAL
4	2024	34	43,010	125	-	-	43,135	-	-	-	43,135	(6,904)	(30,000)	(5,125)	1,106
5	2025	35	43,870	256	-	-	44,126	-	-	-	44,126	(7,024)	(30,750)	(256)	7,203
6	2026	36	44,750	269	-	-	45,019	-	-	-	45,019	(7,201)	(31,519)	(269)	13,233
7	2027	37	45,650	283	-	-	45,933	-	-	-	45,933	(7,381)	(32,307)	(283)	19,195



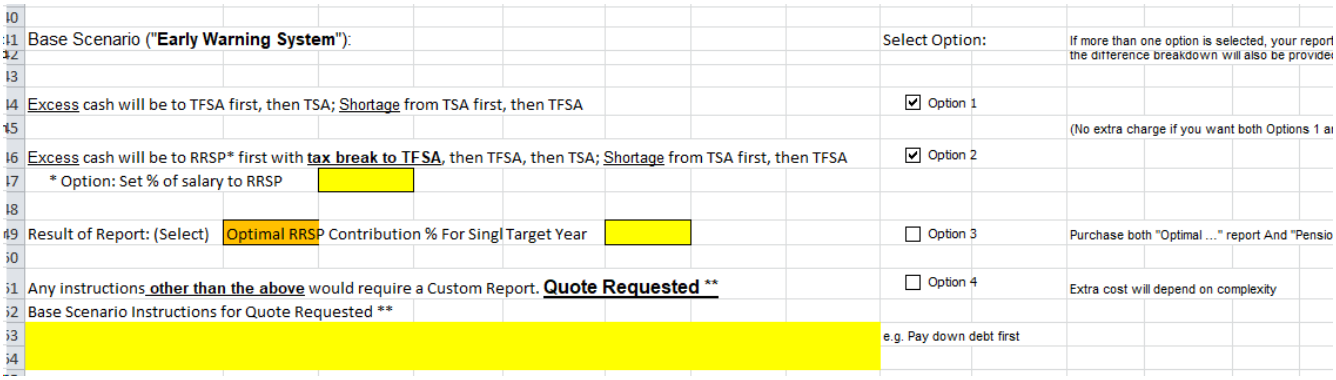
	A	B	D	E	F	J	K	L	M	N	O	P	Q	R
1				2000		Tax Free Savings Account						HBP/LLP	RRSP/RRIF	
2	Year	Age	Other			Dep/(WD)	Room	INT %	INT	BAL		(Loan)/PMT	Dep/(WD)	BAL
3							88,000			0				
5	2024	34		3,527			95,000	5.0%	-	-			6,100	6,253
6	2025	35		9,761			102,000	5.0%	-	-				6,565
7	2026	36		15,869			109,000	5.0%	-	-				6,893
8	2027	37		21,914			116,000	5.0%	-	-				7,238
9	2028	38		27,881			123,000	5.0%	-	-				7,600



	A	B	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	AC	AD	A
4																									
5																									
6																									
7				(Taxable) Savings Acct					Age when RRIF set up				66	< 72 ?			RRSP - Convert to RRIF						Matching?		
8																									
9									66																
10				DEP/WD	INT %	INT	BAL		Age	% Paid	PMT	INT %	INT	BAL			AGE	DEP	INT %	INT	BAL		Enter % of Employee Deposit Matched by Employer		
11		Year												-							-				
12		2024		-	5.0%	-	-		34	0.00%	-	5.0%	-	-	-		34	-	5.0%	-	-		0%	-	
13		2025		-	5.0%	-	-		35	0.00%	-	5.0%	-	-	-		35	-	5.0%	-	-		0%	-	
14		2026		-	5.0%	-	-		36	0.00%	-	5.0%	-	-	-		36	-	5.0%	-	-		0%	-	
15		2027		-	5.0%	-	-		37	0.00%	-	5.0%	-	-	-		37	-	5.0%	-	-		0%	-	
16		2028		-	5.0%	-	-		38	0.00%	-	5.0%	-	-	-		38	-	5.0%	-	-		0%	-	

* * *

IMPORTANT: When you fill out the Data Entry Form you will choose one or more of the following **four options** for your "PensionPlanner For Singles" Report:

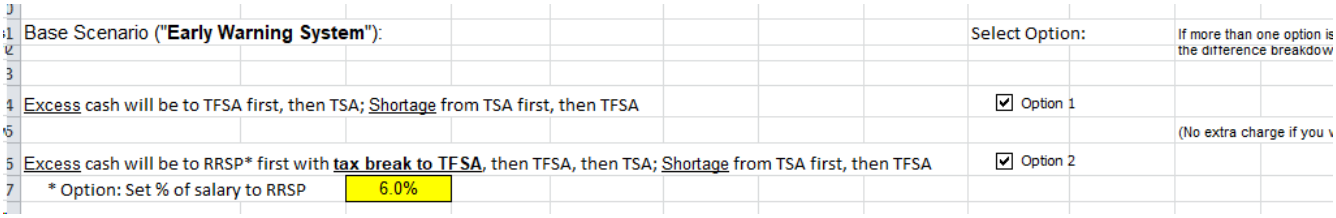


You would not select any option if you were not buying the "PensionPlanner for Singles" report; for example, if you just wanted the "CPP Benefit by Year and Month" report **or** a Custom Report.

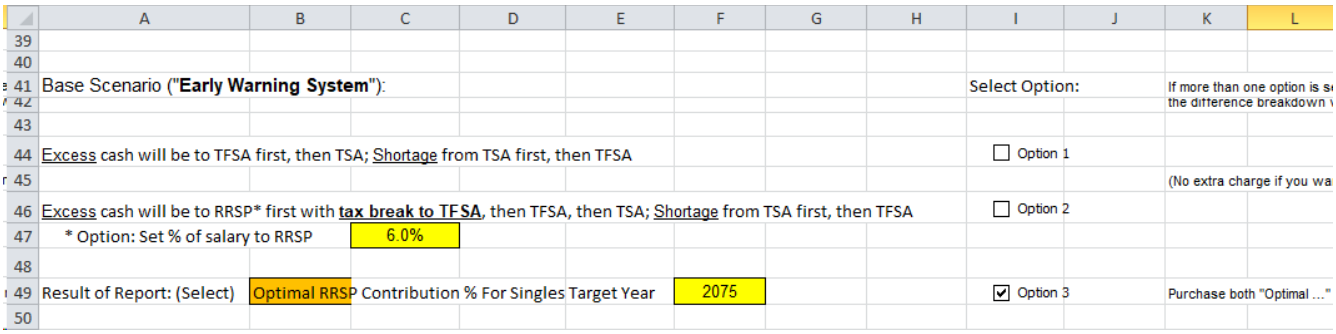
In the example above, **Option One** is selected because we wanted to see the projected Net Worth if all extra cash went into, and came from, the TFSA first, and then the TSA.

Option Two is also selected because we wanted to compare the (TFSA) Option One with putting all extra cash into the RRSP. No extra charge for comparing the two options.

If you wanted the RRSP option, and let's say, you always deposit 6% of your salary into your RRSP, your selections could be:



Option Three for your Base Scenario example (keep reading for details on this option):



Select the “Optimal ...” report in cell B49:
Optimal CPP & OAS for Singles, or
Optimal RRSP Contribution % For Singles, or
Optimal Salary/Dividend Mix For Singles (for Business owners)

Enter your Target year (the year you want the maximum Net Worth) in cell F49.

You would buy both reports, “PensionPlanner for Singles” and the “Optimal ...” report you selected. The results of your “Optimal ...” report would be your Base Scenario or a Scenario to be compared to the Base Scenario.

In the screenshot above, “Optimal RRSP Contribution % For Singles” is selected; this report would encompass both the TFSA Option One and the RRSP Option Two and everything in between to find the highest projected Net Worth scenario.

Option Four for your Base Scenario example:

	A	B	C	D	E	F	G	H	I	J	K
40											
41	Base Scenario (**"Early Warning System"**):								Select Option:		If more than on
42											the difference
43											
44	Excess cash will be to TFSA first, then TSA; Shortage from TSA first, then TFSA								☐ Option 1		
45											(No extra char
46	Excess cash will be to RRSP* first with **tax break to TFSA**, then TFSA, then TSA; Shortage from TSA first, then TFSA								☐ Option 2		
47	* Option: Set % of salary to RRSP										
48											
49	Result of Report: (Select)	Optimal RRSP Contribution % For Single			Target Year				☐ Option 3		Purchase both
50											
51	Any scenario **other than the above** would require a Custom Scenario **Quote** **								☑ Option 4		Extra cost will
52	Scenario Instructions for Quote Requested **										
53	Pay off loan and then pay down mortgage								e.g. Pay down debt first		
54											
55											

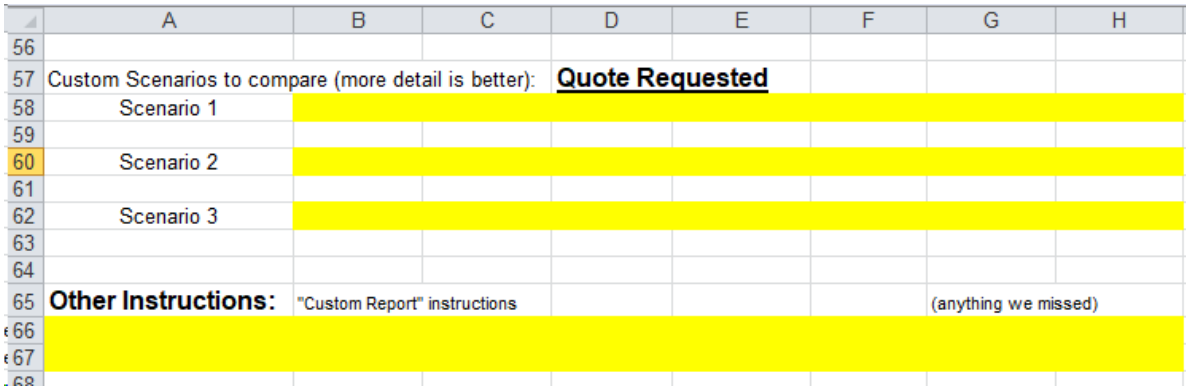
There are two parts to this option where a Quote is necessary: one, when your Base Scenario requirements won’t fit with any of the options One through Three; and/or two, if you want extra cash to go into your RRSP but you don’t want the tax break to go into your TFSA as in the example exercise (supply the details in the yellow area in rows 53 & 54).

In the screenshot above, Option 4 instructions are to put all extra cash into paying down debt beginning with the loan.

* * *

What if we didn't draw down the RRSP/RRIF? What kind of IRR (Internal Rate of Return) would we need in the TFSA to have enough to cover the transfers out?

In the Cash tab, let's try increasing the IRR. We would need about 7.5% IRR in the TFSA to break even in the TFSA at age 85 if we deposit into the RRSP first and then any extra tax refund into the TFSA, and then draw down the TFSA. The projected Net Worth at age 85 would be about $320K. Screenshots are not provided; this is one example of an unlimited number of possible **Custom Scenarios**.



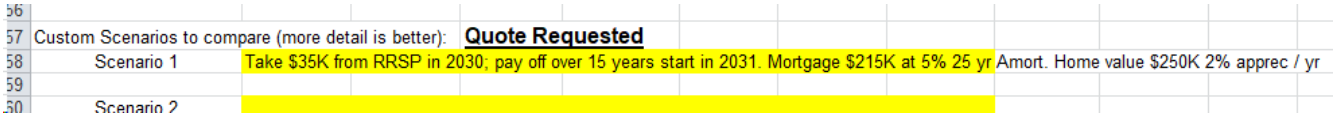
	A	B	C	D	E	F	G	H
56								
57	Custom Scenarios to compare (more detail is better):			**Quote Requested**				
58	Scenario 1							
59								
60	Scenario 2							
61								
62	Scenario 3							
63								
64								
65	**Other Instructions:**	"Custom Report" instructions					(anything we missed)	
66								
67								

"**Custom Scenario**" Defined: any scenario other than the first three preset Options in the screenshot on the previous page; a Custom Scenario is to be compared to one or more scenarios while keeping the Earned Income and Total Expenses the same.

"**Custom Report**" Defined: any report requested which either, one, changes the Earned Income or Total Expenses, or two, requires output different than the preset Reports offered.

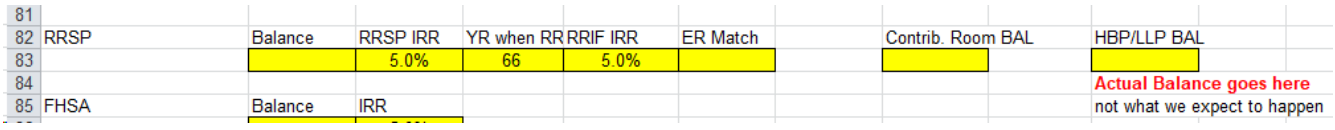
We will change the IRR back to 5% because we want to "lean towards pessimism" in our projection.

Let's suppose that we want to use $35K of the RRSP funds for a down payment on a house using the Home Buyers Plan in the year 2030 and pay it off over the following 15 years (these details would be included in the data entry form you send to us as a "**Custom Scenario**"):



56				
57	Custom Scenarios to compare (more detail is better):	**Quote Requested**		
58	Scenario 1	Take $35K from RRSP in 2030; pay off over 15 years start in 2031. Mortgage $215K at 5% 25 yr	Amort. Home value $250K 2% apprec / yr	
59				
60	Scenario 2			

If you <u>currently have</u> a HBP/LLP loan, the details would be entered in the Data Entry Form here:



81									
82	RRSP	Balance	RRSP IRR	YR when RR	RRIF IRR	ER Match		Contrib. Room BAL	HBP/LLP BAL
83			5.0%	66	5.0%				
84									Actual Balance goes here
85	FHSA	Balance	IRR						not what we expect to happen

In the "HBP/LLP" column of the PensionPlanner (screenshot below) the (35,000) (Loan) is followed by 15 payments PMT of 2,333 (35K/15); the $35K is transferred into the chequing account and then transferred out in column D for the actual down payment. But we aren't finished setting up our example yet!

Let's fill in the mortgage details (include in the data entry form "Quote Requested" area):
Purchase in 2030, Price: $35K Down + $215K Mortgage at 5%, 25 year amortization
Home Value: $250K appreciating at 2% per year

			2000	Tax Free Savings Account					HBP/LLP	RRSP/RRIF		Extra	Mort PMT	INT	BAL	House	Net Worth
Year	Age	Other		Dep/(WD)	Room	INT %	INT	BAL	(Loan)/PMT	Dep/(WD)	BAL	PMT	15,082	5.0%	215,000	2.0%	Total
					88,000			0						25	2030	250,000	
2024	34		2,027	1,500	93,500	5.0%	38	1,538		6,100	6,253		-	-	-	-	11,817
2025	35		1,963	1,500	99,000	5.0%	114	3,152		6,200	12,920		-	-	-	-	18,035
2026	36		2,000	1,400	104,600	5.0%	193	4,744		6,100	19,819		-	-	-	-	26,563
2027	37		1,992	1,400	110,200	5.0%	272	6,417		6,100	27,062		-	-	-	-	35,470
2028	38		1,970	1,500	115,700	5.0%	358	8,275		5,900	34,463		-	-	-	-	44,707
2029	39		1,973	1,400	121,300	5.0%	449	10,124		5,900	42,233		-	-	-	-	54,330
2030	40	(35,000)	4,288	1,400	127,400	5.0%	541	12,065	(35,000)	5,800	15,290		15,082	10,649	210,567	255,000	76,076
2031	41		4,695	1,400	133,500	5.0%	638	14,103	2,333	5,700	24,230		15,082	10,423	205,907	260,100	97,221
2032	42		5,631	1,300	139,700	5.0%	738	16,141	2,333	5,600	33,514		15,082	10,184	201,009	265,302	119,580
2033	43		6,901	1,400	145,800	5.0%	842	18,383	2,333	5,500	43,161		15,082	9,934	195,860	270,608	143,193
2034	44		8,697	1,300	152,000	5.0%	952	20,635	2,333	5,400	53,187		15,082	9,670	190,447	276,020	168,091
2035	45		11,000	1,300	158,200	5.0%	1,064	22,999	2,333	5,200	63,509		15,082	9,393	184,758	281,541	194,290
2036	46		13,732	1,300	164,900	5.0%	1,182	25,481	2,333	5,100	74,245		15,082	9,102	178,778	287,171	221,852
2037	47		16,997	1,200	171,700	5.0%	1,304	27,985	2,333	5,000	85,415		15,082	8,796	172,492	292,915	250,821
2038	48		20,753	1,300	178,400	5.0%	1,432	30,717	2,333	4,700	96,837		15,082	8,475	165,884	298,773	281,196
2039	49		25,070	1,100	185,300	5.0%	1,563	33,380	2,333	4,700	108,829		15,082	8,136	158,938	304,749	313,091
2040	50		29,889	1,200	192,100	5.0%	1,699	36,279	2,333	4,400	121,113		15,082	7,781	151,636	310,844	346,489
2041	51		35,348	1,000	199,100	5.0%	1,839	39,118	2,333	4,300	133,909		15,082	7,408	143,961	317,060	381,475
2042	52		41,307	1,100	206,000	5.0%	1,983	42,202	2,333	4,000	147,038		15,082	7,015	135,894	323,402	418,054
2043	53		47,914	900	214,100	5.0%	2,133	45,234	2,333	3,900	160,720		15,082	6,602	127,413	329,870	456,325
2044	54		55,050	900	222,200	5.0%	2,284	48,419	2,333	3,700	174,882		15,082	6,168	118,499	336,467	496,318
2045	55		62,826	800	230,400	5.0%	2,441	51,660	2,333	3,500	189,546		15,082	5,712	109,129	343,196	538,100
2046	56		73,512	800	238,600	5.0%	2,603	55,063		3,300	202,406		15,082	5,233	99,279	350,060	581,761
2047	57		84,961	700	246,900	5.0%	2,771	58,533		3,000	215,602		15,082	4,729	88,926	357,062	627,232

The cash balances look much better, right? There's one piece of information missing. $5K of Tax, M&R with inflation of 2%.

BTW: If you have a mortgage, you would enter the details in the Data Entry Form here (example details are not related to exercise):

	Mortgage:	Balance	Year Start	Amort. PRD	Int Rate	Home Value	Apprec. %	Tax, M&R	Inflation	
		250,000	2020	25	6.0%	265,000	2.5%	5,000	2.5%	Example

Back to our exercise; your report would show:

						2000				
						CASH	Mortgage	T,M&R	Other	Rent
Year	Age	Total	Taxes	Expenses	Other	BAL		2.0%	2.5%	2.5%
2024	34	36,910	(5,383)	(30,000)	(1,500)	2,027	0	-	15,000	15,000
2025	35	37,670	(5,485)	(30,750)	(1,500)	1,963	0	-	15,375	15,375
2026	36	38,650	(5,694)	(31,519)	(1,400)	2,000	0	-	15,759	15,759
2027	37	39,550	(5,852)	(32,307)	(1,400)	1,992	0	-	16,153	16,153
2028	38	40,660	(6,068)	(33,114)	(1,500)	1,970	0	-	16,557	16,557
2029	39	41,590	(6,244)	(33,942)	(1,400)	1,973	0	-	16,971	16,971
2030	40	42,640	(6,448)	(37,478)	(1,400)	(712)	15,082	5,000	17,395	17,395
2031	41	43,710	(6,657)	(38,013)	(3,733)	(5,405)	15,082	5,100	17,830	17,830
2032	42	44,800	(6,872)	(38,560)	(3,633)	(9,671)	15,082	5,202	18,276	18,276
2033	43	45,910	(7,092)	(39,121)	(3,733)	(13,707)	15,082	5,306	18,733	18,733
2034	44	47,040	(7,327)	(39,696)	(3,633)	(17,323)	15,082	5,412	19,201	19,201
2035	45	48,290	(7,591)	(40,284)	(3,633)	(20,541)	15,082	5,520	19,681	19,681

We can see that there will still be a shortfall each year beginning in 2030 (the year of the purchase). Of course, you would adjust your RRSP contributions to match the available cash, but since this is just an exercise to explain how the PensionPlanner spreadsheet works, we will go with the example as is.

What can we do about the projected shortfall? There are only two ways out of this: make more money

or spend less money.

We want to rent out the basement for $8,000 per year and increase by 2% each year for the next 9 years. We enter the following "Non-CPP related Income" in the Data Entry Form:

	H	I	J	K	L	M
	Enter your future Employment earnings expected from work			Enter Your Earnings from other sources (not CPP related) "Basement rental" as example		
	Year	Income		Year	Income	
	2024	43,010		2024		
	2025	43,870		2025		
	2026	44,750		2026		
	2027	45,650		2027		
	2028	46,560		2028		
	2029	47,490		2029		
	2030	48,440		2030	8,000	
	2031	49,410		2031	8,160	
	2032	50,400		2032	8,320	
	2033	51,410		2033	8,490	
	2034	52,440		2034	8,660	
	2035	53,490		2035	8,830	
	2036	54,560		2036	9,010	
	2037	55,650		2037	9,190	
	2038	56,760		2038	9,370	
	2039	57,900		2039	9,560	

Back to the Pension tab:

Year	Age	Employed	Other	CPP	PRB	Sub-Total
2027	37	45,650	(6,000)	-	-	39,650
2028	38	46,560	(6,000)	-	-	40,560
2029	39	47,490	(5,900)	-	-	41,590
2030	40	48,440	2,200	-	-	50,640
2031	41	49,410	2,460	-	-	51,870
2032	42	50,400	2,723	-	-	53,123

Note that for the year 2030, taxable income was reduced by $5,800 from the RRSP contribution and increased by $8,000 from the rental income = $2,200

"Other" column holds the RRSP contributions which reduce income for tax calculations combined with the basement rental income which increase income for tax calculations. The "Other" column also includes taxable interest, pension income, and dividend income; details ahead!

If we make this example our Base Scenario, what IRR would we need to earn inside our investment accounts to equal the Base Scenario Net Worth shown above if we did **not** buy a home? Another example of a **Custom Scenario**.

We undo everything related to the home purchase and run a few possibilities for IRR rates. The result is: the TFSA would need a IRR of about 7% to equal the result of buying a home while earning 5% in the RRSP and TFSA (in this example).

Time to change gears and look at some other functions available to you.

If we were to make use of a FHSA, make deposits for six years, and withdraw the money and make the down payment in 2030, this is what it might look like (you guessed it ... details would be included in the data entry form as a **Custom Scenario**):

				2,000	Tax Free Savings Account					FHSA	
Year	Age	TRFs	Other		Dep/(WD)	Room	INT %	INT	BAL	Dep/(WD)	BAL
				686,346		88,000			0		
2024	34	-1,500		2,027	1,500	93,500	7.5%	56	1,556	6,100	6,253
2025	35	-1,500		1,963	1,500	99,000	7.5%	173	3,229	6,200	12,920
2026	36	-1,400		2,000	1,400	104,600	7.5%	295	4,924	6,100	19,819
2027	37	-1,400		1,992	1,400	110,200	7.5%	422	6,746	6,100	27,062
2028	38	-1,500		1,970	1,500	115,700	7.5%	562	8,808	5,900	34,463
2029	39	-1,400		1,973	1,400	121,300	7.5%	713	10,921	5,900	42,233
2030	40	44,145	(50,000)	2,007	200	128,600	7.5%	827	11,948	(44,345)	(0)
2031	41	-5,700		2,008	5,700	130,400	7.5%	1,110	18,757		(0)

Here's how to keep track of a Loan.

If we scroll to the left and enter the Loan details for an ending balance in 2027 of $40,800 ($40K plus Interest for ½ year at 4%) and the payments (col AD):

	A	B	D	E	F	J	K	L	M	N	O	P	Q	R	S	AD	AE
1				2000			Tax Free Savings Account					HBP/LLP	RRSP/RRIF			LOAN	4.0%
2	Year	Age	Other			Dep/(WD)	Room	INT %	INT	BAL		(Loan)/PMT	Dep/(WD)	BAL		PMT/(AD\	BAL
3							88,000			0							
5	2024	34		2,027		1,500	93,500	5.0%	38	1,538			6,100	6,253			-
6	2025	35		1,963		1,500	99,000	5.0%	114	3,152			6,200	12,920			-
7	2026	36		2,000		1,400	104,600	5.0%	193	4,744			6,100	19,819			-
8	2027	37	(40,000)	1,992		1,400	110,200	5.0%	272	6,417			6,100	27,062		(40,000)	40,800
9	2028	38		(1,670)		1,500	115,700	5.0%	358	8,275			5,900	34,463		3,640	38,719
10	2029	39		(5,307)		1,400	121,300	5.0%	449	10,124			5,900	42,233		3,640	36,555
11	2030	40	(35,000)	(5,548)		1,400	127,400	5.0%	541	12,065		(35,000)	5,800	15,290		3,640	34,305
12	2031	41		(7,831)		1,400	133,500	5.0%	638	14,103		2,333	5,700	24,230		3,640	31,964
13	2032	42		(9,588)		1,300	139,700	5.0%	738	16,141		2,333	5,600	33,514		3,640	29,530
14	2033	43		(11,017)		1,400	145,800	5.0%	842	18,383		2,333	5,500	43,161		3,640	26,998
15	2034	44		(11,924)		1,300	152,000	5.0%	952	20,635		2,333	5,400	53,187		3,640	24,365
16	2035	45		(12,340)		1,300	158,200	5.0%	1,064	22,999		2,333	5,200	63,509		3,640	21,627
17	2036	46		(12,336)		1,300	164,900	5.0%	1,182	25,481		2,333	5,100	74,245		3,640	18,779
18	2037	47		(11,808)		1,200	171,700	5.0%	1,304	27,985		2,333	5,000	85,415		3,640	15,818
19	2038	48		(10,814)		1,300	178,400	5.0%	1,432	30,717		2,333	4,700	96,837		3,640	12,738
20	2039	49		(9,226)		1,100	185,300	5.0%	1,563	33,380		2,333	4,700	108,829		3,640	9,534
21	2040	50		(14,333)		1,200	192,100	5.0%	1,699	36,279		2,333	4,400	121,113		3,640	6,203
22	2041	51		(18,731)		1,000	199,100	5.0%	1,839	39,118		2,333	4,300	133,909		3,640	2,738
23	2042	52		(21,905)		1,100	206,000	5.0%	1,983	42,202		2,333	4,000	147,038		2,792	(0)
24	2043	53		(21,766)		900	214,100	5.0%	2,133	45,234		2,333	3,900	160,720			(0)
25	2044	54		(21,227)		900	222,200	5.0%	2,284	48,419		2,333	3,700	174,882			(0)
26	2045	55		(20,181)		800	230,400	5.0%	2,441	51,660		2,333	3,500	189,546			(0)
27	2046	56		(16,359)		800	238,600	5.0%	2,603	55,063			3,300	202,406			(0)

The amount in cell AD8 is also in cell D8 because this loan amount will not be sitting in the chequing account – it will be spent. As you can see, we are back into negative territory in the chequing account starting in 2028 so extra cash will be needed.

The other Loan accounts work in the same way. Fill in the Interest rate, get the beginning balance, adjust the chequing account balance (if necessary), and fill in the annual payments.

Before moving on to the “Pre-Retirement” section, let's take a look at the other accounts in the RIF tab.

In the Data Entry Form, you would enter details for your DPSP:

	A	B	C	D	E
87					
88	DPSP	Balance	DPSP IRR	YR when RR	RRIF IRR
89			4.0%	66	4.0%

In the RIF tab of the PensionPlanner, we enter 4 in columns AN and AT:

	A	B	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV
4															
5															
6															
7				Age when RRIF set up				66			DPSP - Convert to RRIF				
8															
9				66											
10				Age	% Paid	PMT	INT %	INT	BAL		AGE	DEP	INT %	INT	BAL
11		Year							-						-
12		2024		34	0.00%	-	4.00%	-	-		34	-	4.00%	-	-
13		2025		35	0.00%	-	4.00%	-	-		35	-	4.00%	-	-
14		2026		36	0.00%	-	4.00%	-	-		36	-	4.00%	-	-
15		2027		37	0.00%	-	4.00%	-	-		37	-	4.00%	-	-
16		2028		38	0.00%	-	4.00%	-	-		38	-	4.00%	-	-

In the Data Entry Form for a Registered Pension Plan:

	A	B	C	D	E	F
90						
91	RPP	Balance	RPP IRR	YR when RR	RRIF IRR	ER Match
92			5.0%	66	5.0%	100.0%
93						

And in the PensionPlanner, we would enter 5 in columns BD and BK, and 100 in column BQ;

	A	B	AW	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BI	BQ	BR
4																			
5																			
6																			
7				Age when RRIF set up				66				RPP - Convert to RRIF							
8				Age pmts begin															
9				66														Enter % of Employee	
10				Age	% Paid	PMT	INT %	INT	BAL			AGE	DEP	INT %	INT	BAL		Deposit Matched	
11		Year							-							-		by Employer	
12		2024		34	0.00%	-	5.00%	-	-	-		34	-	5.00%	-	-		100%	-
13		2025		35	0.00%	-	5.00%	-	-	-		35	-	5.00%	-	-		100%	-
14		2026		36	0.00%	-	5.00%	-	-	-		36	-	5.00%	-	-		100%	-
15		2027		37	0.00%	-	5.00%	-	-	-		37	-	5.00%	-	-		100%	-
16		2028		38	0.00%	-	5.00%	-	-	-		38	-	5.00%	-	-		100%	-
17		2029		39	0.00%	-	5.00%	-	-	-		39	-	5.00%	-	-		100%	-

Back to the CASH tab. We enter 2000 in cell W7 for a $2,000 deposit by your employer into your

DPSP account in 2026 (you would explain the arrangement for your DPSP in the Data Entry Form). There is no effect on your chequing account (screenshot is of the Cash tab after selecting Option 1 – see top of page 10):

	A	B	D	E	F	J	K	L	M	N	O	W	X
1				2,000		Tax Free Savings Account						DPSP/RRIF	
2	Year	Age	Other			Dep/(WD)	Room	INT %	INT	BAL		Dep/(WD)	BAL
3							88,000			0			
5	2024	34		2,043		6,100	88,900	5.0%	153	6,253			-
6	2025	35		2,011		6,200	89,700	5.0%	468	12,920			-
7	2026	36		2,020		6,100	90,600	5.0%	799	19,819		2,000	2,040
8	2027	37		1,964		6,100	91,500	5.0%	1,143	27,062			2,122
9	2028	38		2,032		5,900	92,600	5.0%	1,501	34,463			2,206

We enter 3000 in cell Z7 for a $3,000 deposit by you (and a matching $3,000 by your employer) into your RPP account in 2026.

	A	B	D	E	F	J	K	L	M	N	O	W	X	Y	Z	AA
1				2,000		Tax Free Savings Account						DPSP/RRIF			RPP/RRIF	
2	Year	Age	Other			Dep/(WD)	Room	INT %	INT	BAL		Dep/(WD)	BAL		Dep/(WD)	BAL
3							88,000			0						
5	2024	34		2,043		6,100	88,900	5.0%	153	6,253			-			-
6	2025	35		2,011		6,200	89,700	5.0%	468	12,920			-			-
7	2026	36		(300)		6,100	90,600	5.0%	799	19,819		2,000	2,040		3,000	6,150
8	2027	37		(296)		6,100	91,500	5.0%	1,143	27,062			2,122			6,458
9	2028	38		(228)		5,900	92,600	5.0%	1,501	34,463			2,206			6,780

The Cash balance of (300) = 2,020 – 3000 + 680 Tax Break on the RPP contribution.
The RPP balance of 6,150 = 3,000 employee contribution + employer matching + Interest (6 mths)

We will reset everything to just before cash transfers between accounts before continuing.

Yes, it's time for another "What-if"!

What if our friend missed saving and investing in their TFSA for 10 years? What effect would that have on the required IRR in the TFSA to meet the $210K ending Net Worth? (A **Custom Report** because we are changing the Total Expenses)

Here are the first few years; the amounts in column D were put into the TFSA (column J) in the previous Scenario but will be spent in this case:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1					2000		Savings				Tax Free Savings Account				
2	Year	Age	TRFs	Other			Dep/(WD)	BAL		Dep/(WD)	Room	INT %	INT	BAL	
3											88,000			0	
5	2024	34	0	(6,100)	2,043			-			95,000	8.8%	-	-	
6	2025	35	0	(6,200)	2,011			-			102,000	8.8%	-	-	
7	2026	36	0	(6,100)	2,020			-			109,000	8.8%	-	-	
8	2027	37	0	(6,000)	2,064			-			116,000	8.8%	-	-	
9	2028	38	0	(6,000)	2,032			-			123,000	8.8%	-	-	
10	2029	39	0	(5,900)	2,017			-			130,000	8.8%	-	-	
11	2030	40	0	(5,800)	2,013			-			137,500	8.8%	-	-	
12	2031	41	0	(5,700)	2,014			-			145,000	8.8%	-	-	
13	2032	42	0	(5,600)	2,012			-			152,500	8.8%	-	-	
14	2033	43	0	(5,400)	2,098			-			160,000	8.8%	-	-	
15	2034	44	-5,500		1,964			-		5,500	162,000	8.8%	242	5,742	
16	2035	45	-5,200		2,002			-		5,200	164,300	8.8%	734	11,676	
17	2036	46	-5,100		2,002			-		5,100	167,200	8.8%	1,252	18,028	
18	2037	47	-5,000		1,953			-		5,000	170,200	8.8%	1,806	24,834	
19	2038	48	-4,700		2,045			-		4,700	173,500	8.8%	2,392	31,927	
20	2039	49	-4,700		1,972			-		4,700	176,800	8.8%	3,016	39,643	

Here's the bottom section. As you can see, to reach the same $210K projected Net Worth at age 85, this person would need the IRR in the TFSA to increase from 5% to almost 9%.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1					2000		Savings				Tax Free Savings Account				
2	Year	Age	TRFs	Other			Dep/(WD)	BAL		Dep/(WD)	Room	INT %	INT	BAL	
3											88,000			0	
43	2062	72	19,400		1,977			-		(19,400)	493,100	8.8%	21,671	258,226	
44	2063	73	20,300		2,034			-		(20,300)	523,400	8.8%	21,831	259,757	
45	2064	74	21,100		2,026			-		(21,100)	554,500	8.8%	21,930	260,587	
46	2065	75	22,000		2,028			-		(22,000)	587,500	8.8%	21,964	260,551	
47	2066	76	21,300		2,012			-		(21,300)	619,800	8.8%	21,991	261,242	
48	2067	77	22,200		1,956			-		(22,200)	653,000	8.8%	22,013	261,055	
49	2068	78	23,300		2,031			-		(23,300)	687,300	8.8%	21,948	259,702	
50	2069	79	24,200		2,003			-		(24,200)	722,500	8.8%	21,789	257,291	
51	2070	80	25,300		2,042			-		(25,300)	758,800	8.8%	21,528	253,520	
52	2071	81	26,300		2,002			-		(26,300)	797,100	8.8%	21,153	248,372	
53	2072	82	27,400		1,959			-		(27,400)	836,500	8.8%	20,651	241,623	
54	2073	83	28,600		2,006			-		(28,600)	877,100	8.8%	20,004	233,028	
55	2074	84	29,700		2,028			-		(29,700)	918,800	8.8%	19,200	222,528	
56	2075	85	30,800		1,977			-		(30,800)	961,600	8.8%	18,227	209,955	
57	2076	86	0		1,977			-		-	974,600	8.8%	-	209,955	

What is best: put extra cash into the TFSA, the RRSP or pay down the mortgage (**Custom Scenarios**)?

Here is part of the Cash tab if all extra cash is transferred into the TFSA:

	A	B	C	D	E	F	J	K	L	M	N	O	P	Q	R	S	AG	AH	AI	AJ	AK	AL	AM	AS
1					2000		Tax Free Savings Account						HBP/LLP	RRSP/RRIF			Extra	Mort PMT	INT	BAL		House		Net Worth
2	Year	Age	TRFs	Other			Dep/(WD)	Room	INT %	INT	BAL		(Loan)/PMT	Dep/(WD)	BAL		PMT	15,082	5.0%	215,000		2.0%		Total
3								88,000			0								25	2030		250,000		
49	2068	78	-10,600		2,010		10,600	169,800	5.0%	46,744	986,915				-		-	-	-	-		541,186		1,530,111
50	2069	79	-10,500		2,027		10,500	170,300	5.0%	49,608	1,047,024				-		-	-	-	-		552,010		1,601,061
51	2070	80	-10,400		2,034		10,400	170,900	5.0%	52,611	1,110,035				-		-	-	-	-		563,050		1,675,118
52	2071	81	-10,300		2,008		10,300	172,600	5.0%	55,759	1,176,094				-		-	-	-	-		574,311		1,752,413
53	2072	82	-10,200		1,951		10,200	174,400	5.0%	59,060	1,245,354				-		-	-	-	-		585,797		1,833,102
54	2073	83	-10,000		1,981		10,000	176,400	5.0%	62,518	1,317,871				-		-	-	-	-		597,513		1,917,366
55	2074	84	-9,900		2,010		9,900	178,500	5.0%	66,141	1,393,912				-		-	-	-	-		609,464		2,005,386
56	2075	85	-9,800		2,015		9,800	180,700	5.0%	69,941	1,473,653				-		-	-	-	-		621,653		2,097,321
57	2076	86	0		2,015		-	193,700	5.0%	-	1,473,653				-		-	-	-	-		621,653		2,097,321

Set up the Base Scenario (all extra cash into the TFSA):

675,600	596,769	(298,868)	-	-	-	1,088,353	(162,061)								2,097,321	
CPP/PRB	OAS/GIS	TAX	ER-CPP	RSP/RIF IN	Savings Int	TFSA INT	Mort INT	CPP/PRB	OAS/GIS	TAX	ER-CPP	INT	Total		Net Worth Differe	
675,600	596,769	(298,868)	-	-	-	1,088,353	(162,061)								2,097,321	

Next, put the extra cash into the RRSP:

The top part of the Cash tab:

	A	B	C	D	E	J	K	L	M	N	P	Q	R	AG	AH	AI	AJ	AL	AS
1					2000	Tax Free Savings Account					HBP/LLP	RRSP/RRIF		Extra	Mort PMT	INT	BAL	House	Net Worth
2	Year	Age	TRFs	Other		Dep/(WD)	Room	INT %	INT	BAL	(Loan)/PMT	Dep/(WD)	BAL	PMT	15,082	5.0%	215,000	2.0%	Total
3							88,000			0						25	2030	250,000	
5	2024	34	-1,500		2,027	1,500	93,500	5.0%	38	1,538		6,100	6,253		-	-	-	-	11,817
6	2025	35	-1,500		1,963	1,500	99,000	5.0%	114	3,152		6,200	12,920		-	-	-	-	18,035
7	2026	36	-1,400		2,000	1,400	104,600	5.0%	193	4,744		6,100	19,819		-	-	-	-	26,563
8	2027	37	-1,400		1,992	1,400	110,200	5.0%	272	6,417		6,100	27,062		-	-	-	-	35,470
9	2028	38	-1,500		1,970	1,500	115,700	5.0%	358	8,275		5,900	34,463		-	-	-	-	44,707
10	2029	39	-1,400		1,973	1,400	121,300	5.0%	449	10,124		5,900	42,233		-	-	-	-	54,330
11	2030	40	-800		1,983	800	128,000	5.0%	526	11,450		3,100	47,522		15,082	10,649	210,567	255,000	105,389
12	2031	41	-800		1,971	800	134,700	5.0%	592	12,842		3,400	53,384		15,082	10,423	205,907	260,100	122,390
13	2032	42	-900		1,953	900	141,300	5.0%	665	14,407		3,600	59,743		15,082	10,184	201,009	265,302	140,396
14	2033	43	-900		2,026	900	147,900	5.0%	743	16,050		3,800	66,625		15,082	9,934	195,860	270,608	159,450
15	2034	44	-1,000		2,016	1,000	154,400	5.0%	827	17,877		4,100	74,159		15,082	9,670	190,447	276,020	179,625

(Note column AG for extra mortgage payments.)

The Scenario:

675,600	432,964	(355,680)	-	645,164	-	515,588	(162,061)								1,949,103	
CPP/PRB	OAS/GIS	TAX	ER-CPP	RSP/RIF IN	Savings Int	TFSA INT	Mort INT	CPP/PRB	OAS/GIS	TAX	ER-CPP	INT	Total		Net Worth Difference	
675,600	596,769	(298,868)	-	-	-	1,088,353	(162,061)								2,097,321	
675,600	432,964	(355,680)	-	645,164	-	515,588	(162,061)	-	(163,805)	(56,812)	-	72,400	(148,218)		1,949,103	(148,218)

$164K less GIS; $57K more tax; and $72K more interest; Result: $148K less Net Worth at age 85.

As for putting extra cash against the mortgage: since the interest rate on the mortgage is the same as in the TFSA, and both are “after-tax” rates, it would be essentially the same effect paying down the mortgage as putting the cash into the TFSA.

The exercises so far assumed a relatively low income. What if we doubled the income and increased the living expenses by 50% and then tried out some scenarios? This would be a **Custom Report** because we are changing the Earned Income Amounts. Use the “Other Instructions” area of the Data Entry Form to provide all the details on what your Custom Report will include.

Base Scenario (as before) put all extra cash into the TFSA; when there is no TFSA room, put the remainder into the Taxable Savings Account. Here is the Cash tab:

			2000	Savings		Tax Free Savings Account				
Year	Age	Other		Dep/(WD)	BAL	Dep/(WD)	Room	INT %	INT	BAL
							88,000			0
2024	34		1,973		-	20,400	74,600	5.0%	510	20,910
2025	35		2,017		-	20,400	61,200	5.0%	1,556	42,866
2026	36		1,969		-	20,700	47,500	5.0%	2,661	66,226
2027	37		2,015		-	20,800	33,700	5.0%	3,831	90,858
2028	38		2,046		-	21,000	19,700	5.0%	5,068	116,925
2029	39		2,046		-	21,200	5,500	5.0%	6,376	144,502
2030	40		1,955	8,400	8,610	13,000	-	5.0%	7,550	165,052
2031	41		1,873	13,900	23,288	7,500	-	5.0%	8,440	180,992
2032	42		1,952	13,700	38,495	7,500	-	5.0%	9,237	197,729
2033	43		1,882	13,800	54,565	7,500	-	5.0%	10,074	215,303
2034	44		1,949	13,600	71,233	7,500	-	5.0%	10,953	233,756
2035	45		1,941	13,600	88,735	7,500	-	5.0%	11,875	253,131
2036	46		1,945	13,000	106,496	8,000	-	5.0%	12,857	273,987
2037	47		1,911	12,900	125,044	8,000	-	5.0%	13,899	295,887
2038	48		1,926	12,700	144,313	8,000	-	5.0%	14,994	318,881
2039	49		1,872	12,600	164,444	8,000	-	5.0%	16,144	343,025
2040	50		1,936	12,300	185,274	8,000	-	5.0%	17,351	368,376
2041	51		1,895	12,200	207,042	8,000	-	5.0%	18,619	394,995
2042	52		1,934	11,900	229,592	8,000	-	5.0%	19,950	422,945
2043	53		1,943	10,700	252,039	9,000	-	5.0%	21,372	453,317
2044	54		1,912	10,500	275,403	9,000	-	5.0%	22,891	485,208
2045	55		1,919	10,200	299,629	9,000	-	5.0%	24,485	518,694
2046	56		1,946	9,900	324,758	9,000	-	5.0%	26,160	553,853
2047	57		1,970	9,600	350,835	9,000	-	5.0%	27,918	590,771
2048	58		1,954	9,300	377,910	9,000	-	5.0%	29,764	629,534
2049	59		1,959	8,900	405,928	9,000	-	5.0%	31,702	670,236
2050	60		1,962	8,000	434,424	9,500	-	5.0%	33,749	713,486
2051	61		1,945	7,600	463,935	9,500	-	5.0%	35,912	758,897
2052	62		1,983	7,100	494,410	9,500	-	5.0%	38,182	806,580
2053	63		1,953	6,700	525,997	9,500	-	5.0%	40,566	856,646
2054	64		1,925	6,200	558,652	9,500	-	5.0%	43,070	909,216
2055	65		2,392	(50,200)	535,130	-	9,500	5.0%	45,461	954,677
2056	66		2,313	(46,900)	513,814	-	19,000	5.0%	47,734	1,002,411
2057	67		2,341	(48,100)	490,202	-	28,500	5.0%	50,121	1,052,531
2058	68		2,375	(49,100)	464,385	-	38,500	5.0%	52,627	1,105,158
2059	69		2,405	(50,100)	436,252	-	48,500	5.0%	55,258	1,160,416
2060	70		2,427	(51,100)	405,687	-	58,500	5.0%	58,021	1,218,436
2061	71		2,358	(52,100)	372,568	-	68,500	5.0%	60,922	1,279,358
2062	72		2,364	(53,300)	336,564	-	78,500	5.0%	63,968	1,343,326
2063	73		2,344	(54,400)	297,633	-	88,500	5.0%	67,166	1,410,492
2064	74		2,384	(55,600)	255,524	-	98,500	5.0%	70,525	1,481,017
2065	75		2,350	(56,700)	210,183	-	99,600	5.0%	74,051	1,555,068
2066	76		2,301	(56,400)	162,882	-	100,700	5.0%	77,753	1,632,821
2067	77		2,312	(57,700)	111,884	-	101,800	5.0%	81,641	1,714,462
2068	78		2,302	(58,900)	57,105	-	102,900	5.0%	85,723	1,800,185
2069	79		2,328	(60,000)	(1,539)	(200)	104,200	5.0%	90,004	1,889,990
2070	80		1,950	1,600	24	(63,000)	168,300	5.0%	92,924	1,919,914
2071	81		1,979	-	25	(63,800)	244,100	5.0%	94,401	1,950,515
2072	82		2,044	-	26	(65,900)	322,000	5.0%	95,878	1,980,493
2073	83		1,983	-	27	(67,900)	401,900	5.0%	97,327	2,009,920
2074	84		2,027	-	29	(70,200)	484,100	5.0%	98,741	2,038,461
2075	85		1,991	-	30	(72,400)	568,500	5.0%	100,113	2,066,174
2076	86		1,991	-	30	-	581,500	5.0%	-	2,066,174

The Base Scenario:

1,157,598	424,603	(1,121,078)	-	-	529,730	2,128,074	-								2,068,195
CPP/PRB	OAS/GIS	TAX	ER-CPP	RSP/RIF IN	Savings Int	TFSA INT	Mort INT	CPP/PRB	OAS/GIS	TAX	ER-CPP	INT	Total		Net Worth Differ
1,157,598	424,603	(1,121,078)	-	-	529,730	2,128,074									2,068,195

For Scenario 1, let's assume that the maximum 18% of salary is put into the RRSP, and the tax break put into the TFSA:

> *Tip: Don't think you have the discipline to transfer the amount planned for each year? Calculate the monthly amount (yearly amount / 12) and set up pre-authorized monthly transfers from your "chequing" account to your investment accounts. This way you won't be tempted to spend what your plan says should be invested.*

			2000	Tax Free Savings Account					HBP/LLP	RRSP/RRIF	
Year	Age	Other		Dep/(WD)	Room	INT %	INT	BAL	(Loan)/PMT	Dep/(WD)	BAL
					88,000			0			
2024	34		1,952	9,300	85,700	5.0%	233	9,533		15,489	15,876
2025	35		1,953	9,100	83,600	5.0%	704	19,337		15,799	32,864
2026	36		2,034	9,000	81,600	5.0%	1,192	29,528		16,115	51,025
2027	37		1,977	9,100	79,500	5.0%	1,704	40,332		16,438	70,425
2028	38		1,970	9,000	77,500	5.0%	2,242	51,574		16,767	91,132
2029	39		1,991	8,900	75,600	5.0%	2,801	63,275		17,102	113,218
2030	40		2,035	8,800	74,300	5.0%	3,384	75,459		17,444	136,759
2031	41		1,996	8,800	73,000	5.0%	3,993	88,252		17,793	161,835
2032	42		1,969	8,700	71,800	5.0%	4,630	101,582		18,149	188,530
2033	43		2,047	8,500	70,800	5.0%	5,292	115,374		18,513	216,932
2034	44		2,020	8,500	69,800	5.0%	5,981	129,855		18,884	247,135
2035	45		1,982	8,400	68,900	5.0%	6,703	144,958		19,262	279,235
2036	46		2,023	8,200	68,700	5.0%	7,453	160,610		19,647	313,334
2037	47		2,031	8,100	68,600	5.0%	8,233	176,943		20,039	349,542
2038	48		2,003	8,000	68,600	5.0%	9,047	193,991		20,441	387,970
2039	49		2,025	7,800	68,800	5.0%	9,895	211,685		20,849	428,740
2040	50		1,991	7,700	69,100	5.0%	10,777	230,162		21,267	471,975
2041	51		1,987	7,500	69,600	5.0%	11,696	249,357		21,692	517,808
2042	52		2,005	7,300	70,300	5.0%	12,650	269,308		22,126	566,377
2043	53		2,033	7,100	72,200	5.0%	13,643	290,051		22,568	617,829
2044	54		1,962	7,000	74,200	5.0%	14,678	311,728		23,020	672,316
2045	55		1,979	6,700	76,500	5.0%	15,754	334,182		23,481	730,000
2046	56		1,971	6,500	79,000	5.0%	16,872	357,554		23,951	791,049
2047	57		2,024	6,200	81,800	5.0%	18,033	381,786		24,430	855,642
2048	58		2,024	6,000	84,800	5.0%	19,239	407,026		24,917	923,965
2049	59		1,959	5,800	88,000	5.0%	20,496	433,322		25,416	996,214
2050	60		2,012	5,400	92,100	5.0%	21,801	460,523		25,924	1,072,597
2051	61		1,970	5,200	96,400	5.0%	23,156	488,879		26,442	1,153,329
2052	62		2,020	4,800	101,100	5.0%	24,564	518,243		26,971	1,238,641
2053	63		2,046	4,500	106,100	5.0%	26,025	548,768		27,511	1,328,772
2054	64		2,031	4,200	111,400	5.0%	27,543	580,511		28,062	1,423,975
2055	65		1,951	(43,400)	164,300	5.0%	27,941	565,052			1,495,173
2056	66		1,967	5,600	168,200	5.0%	28,393	599,045			1,506,025
2057	67		1,979	5,800	171,900	5.0%	30,097	634,942			1,514,176
2058	68		1,983	6,800	175,100	5.0%	31,917	673,659			1,519,267
2059	69		1,963	7,800	177,300	5.0%	33,878	715,337			1,521,106
2060	70		1,995	8,900	178,400	5.0%	35,989	760,226			1,519,204
2061	71		2,030	10,300	178,100	5.0%	38,269	808,795			1,512,945
2062	72		1,960	9,900	178,200	5.0%	40,687	859,382			1,504,851
2063	73		1,968	9,300	178,900	5.0%	43,202	911,884			1,494,795
2064	74		2,015	8,700	180,200	5.0%	45,812	966,396			1,482,661
2065	75		1,952	8,200	173,100	5.0%	48,525	1,023,120			1,468,346
2066	76		1,973	8,800	165,400	5.0%	51,376	1,083,296			1,451,761
2067	77		1,971	8,300	158,200	5.0%	54,372	1,145,969			1,432,536
2068	78		2,035	7,500	151,800	5.0%	57,486	1,210,955			1,410,776
2069	79		2,039	6,900	146,000	5.0%	60,720	1,278,575			1,386,165
2070	80		2,020	6,200	140,900	5.0%	64,084	1,348,859			1,358,573
2071	81		1,975	5,400	147,500	5.0%	67,578	1,421,836			1,327,910
2072	82		1,966	4,600	154,900	5.0%	71,207	1,497,643			1,293,856
2073	83		1,993	3,700	163,200	5.0%	74,975	1,576,318			1,256,298
2074	84		1,992	2,800	172,400	5.0%	78,886	1,658,004			1,215,067
2075	85		1,991	1,900	182,500	5.0%	82,948	1,742,852			1,169,833

Scenario 1 compared to the Base Scenario:

1,157,598	424,603	(1,264,884)	-	2,229,339	-	1,418,752	-							2,914,675	
CPP/PRB	OAS/GIS	TAX	ER-CPP	RSP/RIF IN	Savings Int	TFSA INT	Mort INT	CPP/PRB	OAS/GIS	TAX	ER-CPP	INT	Total	Net Worth Difference	
1,157,598	424,603	(1,121,078)	-	-	529,730	2,128,074								2,068,195	
1,157,598	424,603	(1,264,884)	-	2,229,339	-	1,418,752		-	-	(143,806)	-	990,286	846,480	2,914,675	846,480

$144K more Tax and $990K more Interest for a total improvement of $846K

At this higher income level, taking full advantage of the RRSP is much better than using the TFSA (in this example).

What if your income is somewhere in between? Can we zero in on when it makes sense to focus on RRSP contributions instead of the TFSA?

Another preset report is the **Optimal RRSP Contribution %**. This report will calculate the projected Net Worth assuming 20 scenarios: 0% of gross pay RRSP contribution to 18% of gross pay, in steps of 1%, and the final scenario of all available cash up to the Contribution Room ("MAX"). Any cash left after the RRSP Contribution, including the tax break, is assumed to go into the TFSA.

1,714	1,704	1,677	1,650	1,622	1,605	1,619	1,637	1,656	1,674
0%	1%	2%	3%	4%	5%	6%	7%	8%	9%
1,691	1,706	1,721	1,734	1,745	1,754	1,761	1,767	1,769	1,769
10%	11%	12%	13%	14%	15%	16%	17%	18%	MAX

With **this example**, you can see that the projected Net Worth (000s) is about $110K higher with 0% RRSP contributions, $1,714K, than with 5% RRSP contributions, $1,605K.

What scenarios do you want to explore? The PensionPlanner has you covered!

CHAPTER 3 - Taxes

You may not have occasion to use this function, but if you do, you can include various credits. Below is a screenshot of the Tax tab: the T1 tax return is re-created:

	A	B	C	D	E
1			2024	2025	2026
2	BC				
3	No. of Children		0	0	0
4	Adult Dependant		0	0	0
5	Taxable Income		43,010.00	43,870.00	44,750.00
6	Total Income		43,010.00	43,870.00	44,750.00
7					
8	Lines 20600 to 23500:				
9	Childcare				
10			-	-	-
11	Moving				
12	Union Dues				
13	Other				
14	Net Income		43,010.00	43,870.00	44,750.00
15	Lines 24400 to 25700:				
16	Deductions				
17	Losses				
18	Taxable Income		43,010.00	43,870.00	44,750.00
19	(Formerly) Schedule 1:				
20	Basic Fed Amount		15,705.00	16,176.15	16,499.67
21	Age Amount		-	-	-
22	Eligible Dependant Amount		-	-	-
23	Canada Employment Amount		1,258.66	1,295.32	1,319.76
24	CPP		2,350.85	2,402.02	2,454.38
25	EI		713.97	728.24	742.85
26	Lines 31220 - 32600				
27	Lines 31220 - 32600				
28	Pension Income Amount		-	-	-
29	Medical Amt to Claim				
30	Less		-	-	-
31	Add Other Allowable				
32	Medical CR		-	-	-
33	Total Amt for NTC		20,028.47	20,601.73	21,016.66
34	NTC		3,004.27	3,090.26	3,152.50
35	Donations Amt to Claim				
36	Donations CR		-	-	-
37	TFNTC		3,004.27	3,090.26	3,152.50
38	Federal Tax		**6,451.50**	**6,580.50**	**6,712.50**
39	Fed Dividend Tax CR		-	-	-
40	TFNTC + FDTC		3,004.27	3,090.26	3,152.50
41	Federal Tax Payable		3,447.23	3,490.24	3,560.00
42	Form BC428:				
43	Basic Prov Amount		12,580.00	12,782.33	12,984.66
44	Age Amount		-	-	-
45	Eligible Dependant Amount		-	-	-
46	Children Amount		-	-	-
47	CEA (YT), FTB (MB) & SSA (SK)		-	-	-
48	CPP & EI		3,064.81	3,130.26	3,197.23
49	Prov 428 - Other				
50	Prov 428 - Other				
51	Pension Income Amount		-	-	-

52	Medical Amt to Claim	-	-	-
53	Less	-	-	-
54	Add Other Allowable			
55	Medical CR	-	-	-
56	Total AMT for NTC	15,644.81	15,912.59	16,181.88
57	NTC	791.63	805.18	818.80
58	Donations CR	-	-	-
59	TPNTC	791.63	805.18	818.80
60	Provincial Tax	**2,176.31**	**2,219.82**	**2,264.35**
61	Prov. Dividend Tax CR	-	-	-
62	TPNTC + PDTC	791.63	805.18	818.80
63	Prov Tax Payable	1,384.68	1,414.65	1,445.55
64	MISC	1,029.45	1,083.39	1,080.29
65				
66	Income Tax (Payable)/Refunc	**(3,802.46)**	**(3,821.50)**	**(3,925.26)**
67				
68	Payroll Taxes	3,064.81	3,130.26	3,197.23
69				
70	Total Tax (Payable)/Refund	**(6,867.27)**	**(6,951.76)**	**(7,122.48)**
75				
76	MISC:			
77	Provincial Surtax	-	-	-
78	Provincial Tax Reduction	-	-	-
79	Canada Workers Benefit	-	-	-
80	Refund. Med. Exp. Supplement	-	-	-
81	Ontario Health Premium	-	-	-
82	Climate Action Incentive	369.10	373.01	361.04
83	Cost of Living Supplement	-	-	-
84	GST/HST	291.25	321.50	327.80
85	Prov/Terr Child Benefit	-	-	-
86	Prov/Terr Credits	369.10	388.87	391.44
87	Canada Child Benefit	-	-	-
88		1,029.45	1,083.39	1,080.29
89				

The rows you see hi-lited in yellow are opportunities for possible adjustments to your tax calculations.

The “MISC” section lists the various credits calculated. These numbers, in some cases, will be rough approximations.

The effects on taxes of any actions taken elsewhere in the PensionPlanner are reflected here.

Suppose we have $2,000 of charitable donations and $3,000 of medical expenses to claim in 2026.

On the Tax tab, we scroll to the year 2026, and enter as follows:

	A	B	C	D	E
1			2024	2025	2026
27	Lines 31220 - 32600				
28	Pension Income Amount		-	-	-
29	Medical Amt to Claim				3,000.00
30	Less		-	-	1,342.50
31	Add Other Allowable				
32	Medical CR		-	-	1,657.50
33	Total Amt for NTC		20,028.47	20,601.73	22,674.16
34	NTC		3,004.27	3,090.26	3,401.12
35	Donations Amt to Claim				2,000.00
36	Donations CR		-	-	552.00
37	TFNTC		3,004.27	3,090.26	3,953.12
38	Federal Tax		**6,451.50**	**6,580.50**	**6,712.50**
39	Fed Dividend Tax CR		-	-	-
40	TFNTC + FDTC		3,004.27	3,090.26	3,953.12
41	Federal Tax Payable		3,447.23	3,490.24	2,759.38

Federal Tax Payable would be reduced from $3,560 to $2,759. The Provincial Tax Payable would also be reduced.

To see the effect(s) of yearly donations, medical expenses, child care, etc., supply all the data in our data entry form. See our "How to Order" page for more info. Any line items other than Child Care, Medical, or Donations requires a Quote and the details can be supplied in columns U and V; supply the Line number in the T1 Tax Return. An example:

	Q	R	S	T	U	V
111						
112					**Quote Requested**	
113		Child care	Medical	Donations	Other	Other
114					Specify T1 Line #	
115						
116	Year	Amount	Amount	Amount	Amount	Amount
117	2024		3,000	2,000		
118	2025		3,000	2,000		
119	2026		3,000	2,000		
120	2027		3,000	2,000		
121	2028		3,000	2,000		
122	2029		3,000	2,000		
123	2030					
124	2031					

Note to business owners: If you pay yourself all or mostly with dividends, you can pay yourself a salary just large enough to qualify for the childcare claim; see Part III.

The Tax tab is a tool to help you zero in on potential tax savings, but again, do your due diligence before taking any action.

You now have a good idea of how the PensionPlanner can help you plan and monitor your financial progress if you are in your 20s, 30s or 40s.

To find out how you can get even more value out of this "little spreadsheet" keep reading as we get into how the PensionPlanner can help you plan for your retirement years – long before most people even consider it and therefore miss out.

CHAPTER 4 - OAS/GIS

We will delete the amounts from the previous exercise to begin a Plan for someone a little older.

This person was born in June, 1965.

If we click on the Pension tab; with the previous data out of the way, this is what we will see:

Year	Age	Employed	Other	CPP	PRB	Sub-Total	OAS	GIS	Sub-Total	Total	Taxes
2024	59	-	-	-	-	-	-	-	-	-	1,819
2025	60	-	-	-	-	-	-	-	-	-	1,863
2026	61	-	-	-	-	-	-	-	-	-	1,886
2027	62	-	-	-	-	-	-	-	-	-	1,909
2028	63	-	-	-	-	-	-	-	-	-	1,932
2029	64	-	-	-	-	-	-	-	-	-	1,955
2030	65	-	-	-	-	-	4,819	7,198	12,018	12,018	1,882
2031	66	-	-	-	-	-	9,836	14,691	24,526	24,526	1,805
2032	67	-	-	-	-	-	10,032	14,985	25,017	25,017	1,825
2033	68	-	-	-	-	-	10,229	15,279	25,508	25,508	1,845
2034	69	-	-	-	-	-	10,435	15,586	26,020	26,020	1,865
2035	70	-	-	-	-	-	10,640	15,893	26,533	26,533	1,885
2036	71	-	-	-	-	-	10,854	16,212	27,066	27,066	1,905
2037	72	-	-	-	-	-	11,077	16,545	27,621	27,621	1,925
2038	73	-	-	-	-	-	11,291	16,864	28,155	28,155	1,945
2039	74	-	-	-	-	-	11,522	17,209	28,731	28,731	1,965
2040	75	-	-	-	-	-	11,753	17,555	29,308	29,308	1,985
2041	76	-	-	-	-	-	13,183	17,900	31,082	31,082	1,982
2042	77	-	-	-	-	-	13,446	18,258	31,704	31,704	2,002
2043	78						13,719	18,629	32,348	32,348	2,022

If someone born in June, 1965 had no income at all from any source, the image above shows the Old Age Security (OAS) and Guaranteed Income Supplement (GIS) s/he would receive.

--- Boring stuff Alert! ---

The OAS Pension is a monthly payment, which for 2024 is $713.34, is indexed for inflation, and is taxable income. To get the full amount you need to have lived in Canada for 40 years between age 18 and 65 (when you become eligible for OAS). If you lived in Canada for less than 40 years, the amount paid is pro-rated; the PensionPlanner takes care of these calculations for you. To be eligible for an OAS Pension, you are required to have lived in Canada for at least 10 years between the ages of 18 and 65. If your years in Canada are less than 10, you may still qualify; if the country you lived in has an agreement with Canada, your years in your former country will help you qualify.

At age 75, your OAS gets an automatic 10% raise.

OAS Pension Clawback: If your income (not including OAS) exceeds a minimum threshold ($91,000 for 2024) the excess is subject to a “Recovery Tax” of 15%; when your income has reached the maximum threshold you will receive $0 in OAS Pension. The PensionPlanner takes care of these calculations for you.

You can delay receiving your OAS/GIS for up to 5 years (60 months). For each month you delay, you will receive a 0.6% premium. The premium stays in effect for life. Is it worth it to delay?
We will try out some "What-If" scenarios later.

The OAS Benefits include the GIS and Allowance (covered later). The GIS is a monthly payment and is indexed for inflation, but is NOT taxable income. GIS is an income based benefit: more income means less GIS. If you are single and had $0 income in 2022 and 2023, your monthly GIS in 2024 would be $1,065. This amount is reduced if your income exceeds an Exemption threshold ($5,000 with a further exemption of up to $5,000). If you are married, other numbers/rates apply based on your status (covered later). More details at Service Canada.

That's some background info for you (in case you're curious).

A note about inflation: all calculations/example exercises in this Manual assume annual inflation of 2% (you can change this to what you want in the Data Entry form).

--- Boring stuff End ---

Back to the Pension tab; you can re-create some of the numbers for yourself:
2030 OAS: $713.34 x 6 months x 2% inflation for 6 years (2024 to 2030) = $4,819
2030 GIS: $1,065.47 x 6 months x 2% inflation for 6 years (2024 to 2030) = $7,198

If playing with (re-creating) numbers isn't your "thing", just keep reading. You don't need to fully understand where the numbers come from – I have included these explanations for those strange individuals (like me) who can't wait to get into the math :)

Now let's see what happens when we delay the OAS/GIS one month.

We select August, 2030 (instead of July) to start receiving OAS.

Go to the Pension tab (image below).

In 2030, only 5 OAS payments will be made; since there is 1 "Premium month", all payments (for life) will receive a 0.6% premium.

2												
3	Year	Age	Employed	Other	CPP	PRB	Sub-Total	OAS	GIS	Sub-Total	Total	Taxes
4	2024	59	-	-	-	-	-	-	-	-	-	1,819
5	2025	60	-	-	-	-	-	-	-	-	-	1,863
6	2026	61	-	-	-	-	-	-	-	-	-	1,886
7	2027	62	-	-	-	-	-	-	-	-	-	1,909
8	2028	63	-	-	-	-	-	-	-	-	-	1,932
9	2029	64	-	-	-	-	-	-	-	-	-	1,955
10	2030	65	-	-	-	-	-	4,040	5,999	10,039	10,039	1,897
11	2031	66	-	-	-	-	-	9,895	14,691	24,585	24,585	1,804
12	2032	67	-	-	-	-	-	10,093	14,985	25,077	25,077	1,824
13	2033	68	-	-	-	-	-	10,291	15,279	25,570	25,570	1,843
14	2034	69	-	-	-	-	-	10,497	15,586	26,083	26,083	1,863

OAS: $713.34 x **5** months x 2% inflation for 6 years (2024 to 2030) x **1.006** Premium = $4,040
GIS: $1,065.47 x 5 months x 2% inflation for 6 years (2024 to 2030) = $5,999

We could try delaying for 1 year, 2 years & 5 months, etc.; then check the changes in the Pension tab. We will show the results of <u>many</u> "What-if Scenarios" a little later, so stay tuned!

Note: <u>you cannot opt to take your OAS earlier than age 65</u>.

We will reset the OAS to age 65.

Okay we have covered the OAS fairly well. Let's get into the GIS. There's a publication by Service Canada called the "Table of Benefit Amounts by Marital Status and Income Level" and has tables for OAS, GIS, and Allowance/Allowance for Survivor (covered in later Chapters).

If you want to find out where the GIS numbers in the PensionPlanner come from, open the Table of Benefit Amounts file and scroll down. The first table is GIS for a single person who receives an OAS pension. Look up your income on the left and the GIS is to the right. So if your income (after the exemption amount) is between zero and $23.99, you get the full GIS of $1,065.47 per month, and then as your income increases from there your GIS is clawed back. You get the full GIS if you lived in Canada for 40 years between age 18 and 65. If you've lived in Canada for less than 40 years, the PensionPlanner makes an adjustment. If the number of years in Canada is below 10 there's a further adjustment.

CHAPTER 5 - Canada Pension Plan

While you work, almost 6% of your wages is paid into the CPP; your employer matches it. After just even one contribution you are entitled to a pension; it would be very small but it would be yours. You can start collecting CPP as early as age 60. For every month that you start under the age of 65 there is a "penalty". You can delay receiving your CPP until as late as age 70. For every month that you delay over the age of 65 there is a "premium". You can work while collecting CPP but you still pay into the CPP. It is paid into a different 'bucket' called the Post Retirement Benefit or the PRB (stay tuned).

How do you calculate your CPP Benefit?
You could build your own spreadsheet by following the instructions online, or

1 Get your Statement of Contributions from Service Canada.
2 Estimate your annual earnings until you decide to stop working.
3 Enter the numbers from steps 1 and 2 into the PensionPlanner via the Data Entry Form.

Let's take a look at an example. Keeping the setup from the last Chapter, we enter the income data shown:

Year	Earnings	Year	Earnings	Year	Earnings	Year	Earnings
1985	11,000	1997	23,000	2009	35,000	2021	47,000
1986	12,000	1998	24,000	2010	36,000	2022	48,000
1987	13,000	1999	25,000	2011	37,000	2023	49,000
1988	14,000	2000	26,000	2012	38,000	2024	50,000
1989	15,000	2001	27,000	2013	39,000	2025	51,000
1990	16,000	2002	28,000	2014	40,000	2026	52,000
1991	17,000	2003	29,000	2015	41,000	2027	53,000
1992	18,000	2004	30,000	2016	42,000	2028	54,000
1993	19,000	2005	31,000	2017	43,000	2029	55,000
1994	20,000	2006	32,000	2018	44,000	2030	56,000
1995	21,000	2007	33,000	2019	45,000		
1996	22,000	2008	34,000	2020	46,000		

Here is the CPP tab (calculation) data if this person takes CPP just after turning age 65:

Birthday	1965/06/15		Birth YR	1965		6	23580	Age	
Age Start CPP	65		Year Age 65	2030		7	24360	Start CPP	
	2030-07-15	780					780	Age in mths	
							780	Mths @ 65	
			Number of Contribution Months (NCM)				0	Mths to 65	
MPEA			1983/07/15	1966/01/01	1983/07/15	1983			
73,700	**70,440**		2035/06/15	2030/06/15	2030/06/15	2030			
72,000					564				
70,400				CRDO	-.00				
68,800									
67,300					564.00				
				Gen DOP	83%	96			
					468.00	8.00			
			Yrs of contrib & Contrib Prd		46	47			
1920									
1920									
	0								

GEN DOP		
Earnings	Smallest YR	
38,144.40	8	1.00
37,213.58	7	
35,355.98	6	
33,112.82	5	
32,762.79	4	
26,761.47	3	
-	2	
-	1	

Year	YBE	YMPE	YAMPE	UPE	APE	CRDO1	CRDO2	FAAPE	SAAPE	
1983	1800	18,500		-	-	-	-			-
1984	2000	20,800		-	-	-	-			-
1985	2300	23,400		11,000	33,113	-	-			33,113
1986	2500	25,800		12,000	32,763	-	-			32,763
1987	2500	25,900		13,000	35,356	-	-			35,356
1988	2600	26,500		14,000	37,214	-	-			37,214
1989	2700	27,700		15,000	38,144	-	-			38,144
1990	2800	28,900		16,000	38,998	-	-			38,998
1991	3000	30,500		17,000	39,262	-	-			39,262
1992	3200	32,200		18,000	39,376	-	-			39,376
1993	3300	33,400		19,000	40,071	-	-			40,071
1994	3400	34,400		20,000	40,953	-	-			40,953
1995	3400	34,900		21,000	42,385	-	-			42,385
1996	3500	35,400		22,000	43,776	-	-			43,776
1997	3500	35,800		23,000	45,255	-	-			45,255
1998	3500	36,900		24,000	45,815	-	-			45,815
1999	3500	37,400		25,000	47,086	-	-			47,086
2000	3500	37,600		26,000	48,709	-	-			48,709
2001	3500	38,300		27,000	49,657	-	-			49,657
2002	3500	39,100		28,000	50,443	-	-			50,443
2003	3500	39,900		29,000	51,197	-	-			51,197
2004	3500	40,500		30,000	52,178	-	-			52,178
2005	3500	41,100		31,000	53,130	-	-			53,130
2006	3500	42,100		32,000	53,541	-	-			53,541
2007	3500	43,700		33,000	53,193	-	-			53,193
2008	3500	44,900		34,000	53,340	-	-			53,340
2009	3500	46,300		35,000	53,248	-	-			53,248
2010	3500	47,200		36,000	53,725	-	-			53,725

2011	3500	48,300		37,000	53,960	-	-			53,960
2012	3500	50,100		38,000	53,428	-	-			53,428
2013	3500	51,100		39,000	53,760	-	-			53,760
2014	3500	52,500		40,000	53,669	-	-			53,669
2015	3500	53,600		41,000	53,881	-	-			53,881
2016	3500	54,900		42,000	53,889	-	-			53,889
2017	3500	55,300		43,000	54,773	-	-			54,773
2018	3500	55,900		44,000	55,445	-	-			55,445
2019	3500	57,400		45,000	55,223	-	-	8,283		55,223
2020	3500	58,700		46,000	55,200	-	-	16,560		55,200
2021	3500	60,100		47,000	55,086	-	-	27,543		55,086
2022	3500	61,500		48,000	54,978	-	-	41,233		54,978
2023	3500	62,900		49,000	54,874	-	-	54,874		54,874
2024	3500	64,300	68,801	50,000	54,774	-	-	54,774	-	54,774
2025	3500	65,800	75,012	51,000	54,596	-	-	54,596	-	54,596
2026	3500	67,300	76,722	52,000	54,426	-	-	54,426	-	54,426
2027	3500	68,800	78,432	53,000	54,263	-	-	54,263	-	54,263
2028	3500	70,400	80,256	54,000	54,031	-	-	54,031	-	54,031
2029	3500	72,000	82,080	55,000	53,808	-	-	53,808	-	53,808
2030	3500	73,700	84,018	28,000	26,761	-	-	26,761	-	26,761
2031	3500	75,400	85,956	-	-	-	-	-	-	
		Before CRDO			2,232,752	564				
				CRDO1		0				
				CRDO2	-	0				
		After CRDO			2,232,752	564				
				Gen DOP	203,351	96				
		AMPE Calc			2,029,401	468	4,336.33			1,084.08

FAMPE Calc	501,154	480	1,044.07		86.97		
SAMPE Calc	-	480	-		-		
					1,171.05		
			100.0%		1,171.05		Monthly reduction pre-65
			100.0%		1,171.05		Monthly Increase post-65
					1,171.05		

$1,171.05 is the calculated retirement benefit at age 65.

Another preset report shows the calculated **CPP Benefit by Year and Month** from 60 months earlier to 60 months later than age 65. Here is the report for this example:

Monthly CPP Pension Benefit Amounts by Year and Month											
	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
JAN		671	767	870	978	1,092	1,219	1,342	1,468	1,599	1,733
FEB		705	806	912	1,024	1,144	1,276	1,403	1,533	1,668	1,806
MAR		710	811	918	1,030	1,149	1,282	1,409	1,539	1,674	1,812
APR		716	816	923	1,036	1,155	1,288	1,415	1,545	1,679	1,817
MAY		721	822	928	1,041	1,160	1,294	1,420	1,551	1,685	1,823
JUN		726	827	934	1,047	1,166	1,300	1,426	1,557	1,691	1,829
JUL	635	731	832	939	1,052	1,171	1,306	1,432	1,563	1,698	1,836
AUG	640	736	837	944	1,058	1,178	1,312	1,439	1,569	1,704	
SEP	645	741	843	950	1,063	1,185	1,318	1,445	1,575	1,710	
OCT	651	747	849	956	1,069	1,192	1,324	1,451	1,581	1,715	
NOV	657	754	856	963	1,077	1,201	1,330	1,456	1,587	1,721	
DEC	664	761	863	971	1,084	1,210	1,336	1,462	1,592	1,727	

Blue cell: Monthly benefit amount if taking CPP the month after the 65th birthday.
Grey cells: more than 60 months before the month after the 65th birthday and more than 60 months after the month after the 65th birthday; therefore cannot take CPP.

If you're interested in "Break-even points" and Cumulative totals like the example on this web site you can get your own copy of this spreadsheet (to age 100):

Start CPP	Age 60	Age 61	Age 62	Age 63	Age 64	Age 65	Age 66	Age 67	Age 68	Age 69	Age 70
Amt/month	635	731	832	939	1,052	1,171	1,306	1,432	1,563	1,698	1,836
61	7,620	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
62	15,240	8,772	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
63	22,860	17,544	9,984	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
64	30,480	26,316	19,968	11,268	n/a	n/a	n/a	n/a	n/a	n/a	n/a
65	38,100	35,088	29,952	22,536	12,624	n/a	n/a	n/a	n/a	n/a	n/a
66	45,720	43,860	39,936	33,804	25,248	14,052	n/a	n/a	n/a	n/a	n/a
67	53,340	52,632	49,920	45,072	37,872	28,104	15,672	n/a	n/a	n/a	n/a
68	60,960	61,404	59,904	56,340	50,496	42,156	31,344	17,184	n/a	n/a	n/a
69	68,580	70,176	69,888	67,608	63,120	56,208	47,016	34,368	18,756	n/a	n/a
70	76,200	78,948	79,872	78,876	75,744	70,260	62,688	51,552	37,512	20,376	n/a
71	83,820	87,720	89,856	90,144	88,368	84,312	78,360	68,736	56,268	40,752	22,032
72	91,440	96,492	99,840	101,412	100,992	98,364	94,032	85,920	75,024	61,128	44,064
73	99,060	105,264	109,824	112,680	113,616	112,416	109,704	103,104	93,780	81,504	66,096
74	106,680	114,036	119,808	123,948	126,240	126,468	125,376	120,288	112,536	101,880	88,128
75	114,300	122,808	129,792	135,216	138,864	140,520	141,048	137,472	131,292	122,256	110,160
76	121,920	131,580	139,776	146,484	151,488	154,572	156,720	154,656	150,048	142,632	132,192
77	129,540	140,352	149,760	157,752	164,112	168,624	172,392	171,840	168,804	163,008	154,224
78	137,160	149,124	159,744	169,020	176,736	182,676	188,064	189,024	187,560	183,384	176,256
79	144,780	157,896	169,728	180,288	189,360	196,728	203,736	206,208	206,316	203,760	198,288

Download the free CPP_BreakEven.xlsx companion spreadsheet when you purchase the CPP Report; enter your numbers in the yellow cells.

Back to the Pension tab.

Year	Age	Employed	Other	CPP	PRB	Sub-Total	OAS	GIS	Sub-Total	Total	Taxes
2024	59	50,000	-	-	-	50,000	-	-	-	50,000	(9,320)
2025	60	51,000	-	-	-	51,000	-	-	-	51,000	(9,491)
2026	61	52,000	-	-	-	52,000	-	-	-	52,000	(9,715)
2027	62	53,000	-	-	-	53,000	-	-	-	53,000	(9,939)
2028	63	54,000	-	-	-	54,000	-	-	-	54,000	(10,163)
2029	64	55,000	-	-	-	55,000	-	-	-	55,000	(10,386)
2030	65	56,000	-	7,026	-	63,026	4,819	-	4,819	67,846	(12,285)
2031	66	-	-	14,334	178	14,512	9,836	-	9,836	24,348	1,028
2032	67	-	-	14,620	182	14,802	10,032	3,322	13,355	28,157	1,529
2033	68	-	-	14,913	186	15,098	10,229	6,833	17,062	32,160	1,543
2034	69	-	-	15,211	189	15,400	10,435	6,941	17,375	32,776	1,538
2035	70	-	-	15,515	193	15,708	10,640	7,047	17,688	33,396	1,519

Now let's explore the CPP numbers.

In cell G10 you see $7,026 for CPP for 2030; where did that number come from? $1,171 x 6 months.

In 2031, the CPP will be $14,334 = $1,171 x 12 months x 1.02 inflation for 1 year.

For every month before the age of 65 which you start your CPP (up to 60 months), your pension is reduced by 0.6%, and for every month after the age of 65 which you start your CPP (up to 60 months), your pension is increased by 0.7%. Let's take a closer look.

If we change the CPP start year to 2029 (one year earlier – age 64); the CPP has decreased to $1,051.89
If we change the CPP start year to 2031 (one year later - age 66); the CPP is now $1,305.89

Note: besides the adjustment of 0.6% per month or 0.7% per month, there are three other adjustments:
When you change the year/month of taking your CPP you also change the contributory period;
When you change the year of taking your CPP you also change the Maximum Pensionable Earnings Average (MPEA);
The CPP Enhancement program (begun in 2019).

CRDO:

Let's quickly cover the Child Rearing Drop Out Provision. If you have low or zero earnings for several years due to child rearing (working part time or not at all in order to raise one or more children) you can take those years out of the calculation for your CPP.

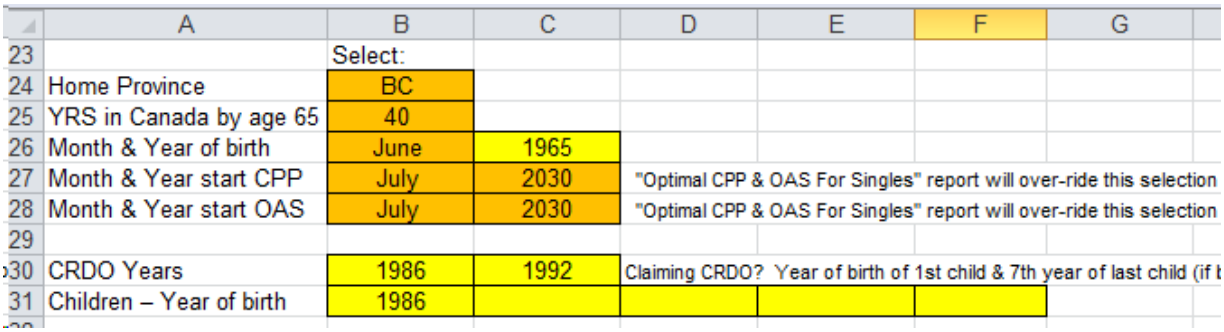
We will change the CPP year back to 2030, (CPP is again $1,171.05)

Change the employment income entries - delete the numbers for 1986 thru 1992.

The CPP has decreased from $1,171.05 to $1,140.20 with zero income for the years 1986 to 1992 due to child rearing (child born in 1986).

We take those years out of the CPP calculation; the CPP is now $1,214.75.

<u>This is just an example; if you qualify for CRDO, the change in your CPP will depend entirely on your particular circumstances</u>. The selection of the years 1986 through 1992 inclusive, in this example, takes those 84 months out of the CPP calculation. You can take out the 7 year period from the child's birth to the 7th birthday using our data entry form.



	A	B	C	D	E	F	G
23		Select:					
24	Home Province	BC					
25	YRS in Canada by age 65	40					
26	Month & Year of birth	June	1965				
27	Month & Year start CPP	July	2030	"Optimal CPP & OAS For Singles" report will over-ride this selection			
28	Month & Year start OAS	July	2030	"Optimal CPP & OAS For Singles" report will over-ride this selection			
29							
30	CRDO Years	1986	1992	Claiming CRDO? Year of birth of 1st child & 7th year of last child (if t			
31	Children – Year of birth	1986					

(If you have had more than one child born less than 7 years apart, take the years from the birth of the first child to the 7th birthday of the last child.)

We will reset the data to continue.

CPP - Post Retirement Benefit

Before 2012 if you were between the ages of 60 and 65, working and collecting CPP at the same time, you couldn't increase your benefit by continuing to contribute. Now if you are between the ages of 60 and 65, working and collecting CPP, you must contribute to the CPP Post Retirement Benefit (PRB). About 6% of your wages goes into the PRB and your employer matches it. If you are between the ages of 65 and 70, you can work while collecting CPP and you have the option to contribute to the PRB or not; the choice is yours. If you do decide to contribute, the employer must match it. The PRB has no effect on other CPP benefits like the retirement benefit, the disability benefit (not handled by the PensionPlanner) or survivor benefits (covered later).

Each year of contributions creates a new PRB fund separate from the regular CPP retirement benefit. Monthly payments from each PRB begin in the year following. Each PRB is indexed for inflation and is payable for the rest of the contributor's life. Monthly payments from all PRBs are added together and paid at the same time. This is separate from your regular CPP retirement benefit payments. PRBs are not subject to credit splitting or pension sharing (covered later - for those who are married).

Ready for an example? I thought you would be.

We will change the CPP year to 2025. The CPP will be $634.92 – reduced for taking CPP 60 months early.

Working and contributing to CPP after starting to collect CPP results in creation of PRBs.

If we look at the PRB tab to see the calculation of the PRBs:

	A	B	C	D	E	F	G	H	I	J	K	L
1							Birthday	1965/06/15			Inflation	2.00%
2												
3	YR	YMPE	YBE	MPEA	PRB	Earnings		Factor		2024	2025	2026
4	2023	67,000	3500	67,000		-		0.532				
5	2024	68,500	3500	67,750	-	-	-	0.532	0.006	-	-	-
6	2025	70,100	3500	68,533	-	25,500	-	0.604	0.006	-	-	-
7	2026	71,700	3500	69,325	107	52,000	107	0.676	0.006	-	-	106.56
8	2027	73,300	3500	70,120	346	53,000	238	0.748	0.006	-	-	-
9	2028	75,000	3500	71,720	619	54,000	266	0.820	0.006	-	-	-
10	2029	76,700	3500	73,360	926	55,000	295	0.892	0.006	-	-	-
11	2030	78,500	3500	75,040	1,267	56,000	322	0.958	0.007	-	-	-
12	2031	80,300	3500	76,760	1,649	-	357	1.042	0.007	-	-	-
13	2032	82,100	3500	78,520	1,682	-	-	1.126	0.007	-	-	-
14	2033	84,000	3500	80,320	1,715	-	-	1.210	0.007	-	-	-
15	2034	85,900	3500	82,160	1,750	-	-	1.294	0.007	-	-	-
16	2035	87,900	3500	84,040	1,785	-	-	1.378	0.007	-	-	-

You can see that 50% of employment income in 2025 will be used to calculate the regular CPP benefit and 50% to calculate the PRB because CPP will start halfway through the year.

CPP - The Untold Story

Over the years I have heard such comments as:
“The CPP won’t be around when I need it!”
“The government will clean out the CPP to …”
“I just read that the CPP fund had gone up 10% last year; so my CPP fund has gone up 10% too!”

Let’s take a trip back in time.

Up to the mid-1960s, a lot of retiring Canadians found themselves without enough savings on which to live. The federal and provincial governments put their heads together and came up with a forced retirement savings plan to cover one quarter of required funds for living expenses in retirement. (The other three components were assumed to be the OAS, a RRSP, and a company pension plan.) A set percentage of an employee’s income would be deducted from their pay, the employer would match it, and the combined total for all employees would be sent to the government on a regular basis. The plan was for incoming contributions to be paid out to retirees as needed. Special legislation was enacted to protect the CPP funds from government getting their hands on it. If a province wanted to exit, there were provisions put in place; more about that later.

Here is a table showing the progression in contribution rates:

1966	1.80%	1998	3.20%
20 years	1.80%	1999	3.50%
1987	1.90%	2000	3.90%
1988	2.00%	2001	4.30%
1989	2.10%	2002	4.70%
1990	2.20%	2003	4.95%
1991	2.30%	15 years	4.95%
1992	2.40%	2019	5.10%
1993	2.50%	2020	5.25%
1994	2.60%	2021	5.45%
1995	2.70%	2022	5.70%
1996	2.80%	2023	5.95%
1997	3.00%		

For the first 20 years of the CPP, people would have paid into the CPP for a handful of years at 1.8% and then collected the full pension for the rest of their lives. The ROI on their CPP contributions would have been astronomical.

The CPP had more contributions coming in than was needed to pay out in retirement pensions, so the excess was invested in guaranteed vehicles (like GICs). If a province wanted to exit, the law said that they would get whatever contributions that people put in, less the pensions paid out, with any added interest at the GIC rates during those years. Why would anyone want to back out of a deal where you contribute for a few years and collect a pension for life?!

Twenty years went by and the people in charge took a closer look at the CPP system and concluded that the CPP was not sustainable. Thus began a 15 year plan to get the CPP on a solid footing. The contributions rates would be gradually increased 175% from 1.8% of pay to 4.95%.

A few years before the 15 year plan was complete, the powers that be looked into their crystal ball and concluded that even a 175% increase in contributions won't save the CPP. Even more drastic action was needed. In 1999 the Canada Pension Plan Investment Board was created to manage and invest the CPP funds in the big, wide world of stocks and bonds. In 2018 another round of contribution rate increases was put into place along with a planned "Enhancement Program".

The CPP has spent the past 25 years trying to make up for the lost decades of very low contributions. For the first 20 to 30 years of its existence the CPP was falling further and further behind. After about 25 years investing in the wider market, the CPP is on a solid financial footing (and then some). The many years when the CPP fund had/will have high earnings were/will be countered by a few years of low earnings (or loss). What the CPP fund earns in any given year has no impact on what you will receive when you start your CPP pension. That amount is set in a formula based on your employment income – not the CPP Fund income.

People 'in the know' calculated that the CPP would need to earn a real return of 4% per year. Real return: IRR over and above inflation.

The OSFI publishes its report every three years. Here is the latest:
Actuarial Report (31st) on the Canada Pension Plan (osfi-bsif.gc.ca)
See Section 5.4, Table 10 (Historical) and Table 11 (Projection).

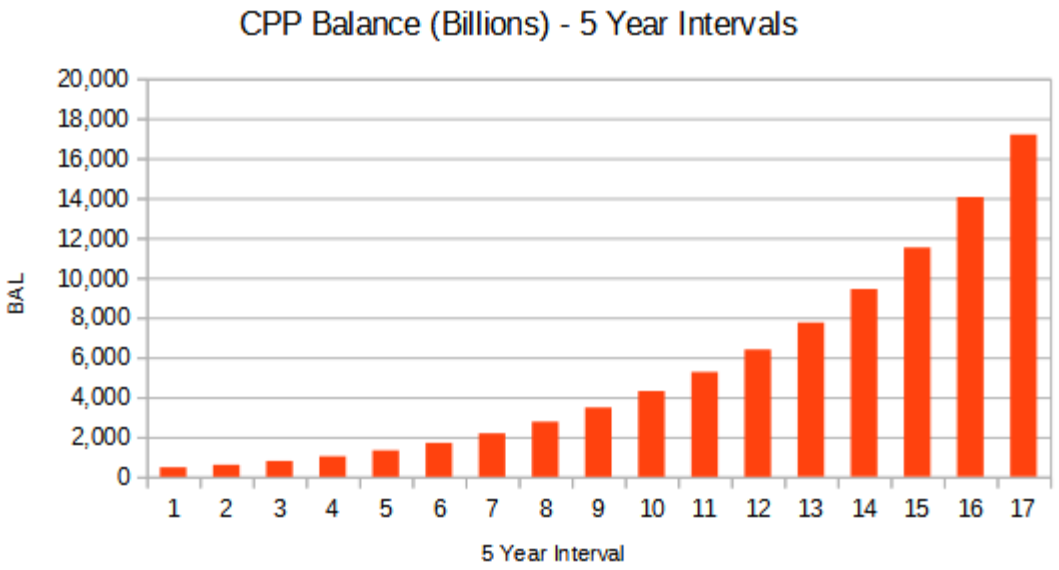
To make a long story short:

Average IRR since inception = 8%; Average IRR for last 30 years = 9%

Every OSFI report projects a IRR of about 6% per year to the year 2100; they want to be very conservative. Assuming inflation of 2% and a IRR of 6%, meaning a real return of 4%, will keep the CPP self-sustaining for the next 80 years and beyond.

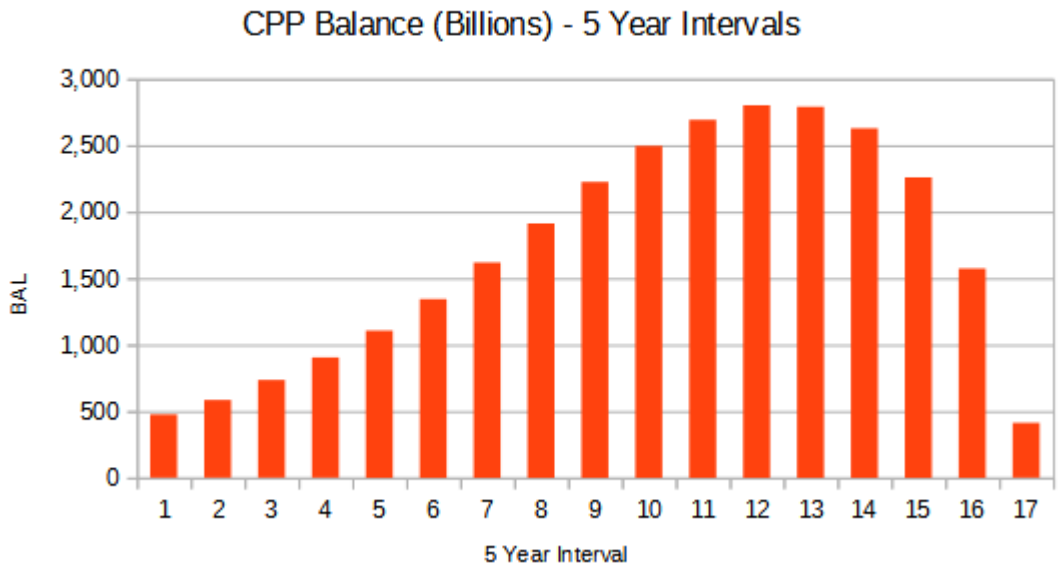
IRR of 6%: This graph (next page) shows the projected balance of the CPP to be about $17Trillion in the year 2100.
("1" is the year 2020)
At 7%, projected Balance of $56Trillion in 2100;
At 8%, projected Balance of $143Trillion in 2100;
At 9%, projected Balance of $328Trillion in 2100.

IRR of 6%:



IRR of 5%: This graph shows the expected balance of the CPP to be about $0.5T in the year 2100. A 5% IRR is clearly a disaster in the making.

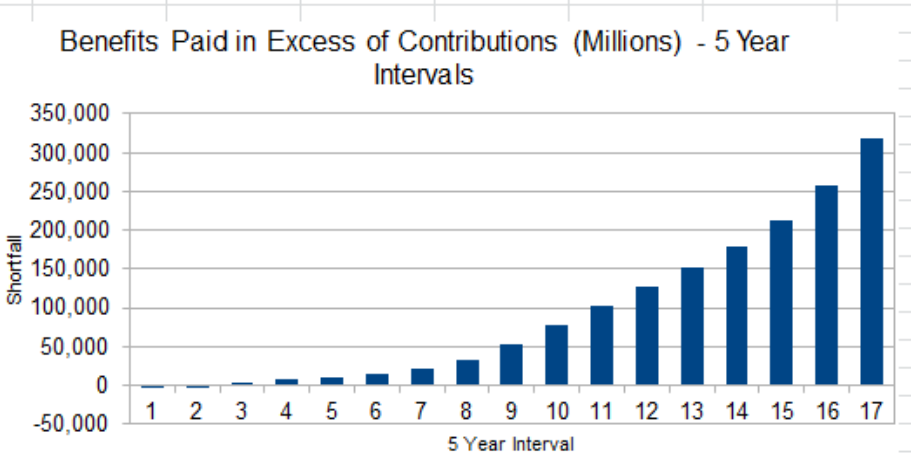
IRR of 5%:



Why the steep drop-off beginning around 2080 (interval 13)?

Here is a chart showing the problem (you can find these numbers in the OSFI report):

2020	-1,511
2025	-1,008
2030	3,881
2035	7,160
2040	10,265
2045	13,754
2050	20,464
2055	33,286
2060	53,498
2065	78,285
2070	102,947
2075	127,369
2080	152,513
2085	178,573
2090	211,750
2095	258,448
2100	318,238



In 2025 there will be about $1Billion more contributions than benefits paid out. From there, much more will be paid out than collected in contributions; and it accelerates, so that by the year 2100, benefits paid out is expected to exceed contributions coming in by over $300 Billion per year. Income in the year 2100 is expected to be about $1Trillion based on a IRR of 6%, so the income earned inside the CPP Fund takes care of the growing difference between contributions coming in and benefits paid out. With a IRR of 5% the increasing gap between contributions and benefits paid will just obliterate the Fund.

So, in reply to the statements at the beginning of this section:
The CPP will be around when you need it. The long-term average IRR would have to go from 9% to below 6%.
The federal government can't touch the CPP funds. A provincial plan is another matter.
The rate of return earned by the CPP fund has zero impact on the amount you will receive.

What should happen to the excess earnings (over 6%) is a topic for another day.

CHAPTER 6 - Optimizing Your Net Worth

In the previous Chapters in this Manual, we covered OAS/GIS, CPP Retirement Pension Benefit, and the CPP Post Retirement Benefit. In this Chapter we tie it all together and show you how to maximize your "money in the bank" by strategic planning.

First we need to set the stage with our example data. Keep the data from the last example in Chapter 5.

Tina will be renting out her basement apartment for $8,000/yr beginning in 2025, and increasing the rent by 3%/yr until 2034. Enter the data into the Data Entry Form:

	K	L	M
gs	Enter Your Earnings from		
	other sources (not CPP related)		
	"Basement rental" as example		
	Year	Income	
	2024		
	2025	8,000	
	2026	8,240	
	2027	8,487	
	2028	8,742	
	2029	9,004	
	2030	9,274	
	2031	9,552	
	2032	9,839	
	2033	10,134	
	2034	10,438	
	2035		

Next we update the expenses (from here on, we will skip the part about you would use the Data Entry Form and just show you the numbers as they would be entered in the PensionPlanner):

	C	D	V	W	X	Y	Z
1							
2				Mortgage	T,M&R	Other	Rent
3	Year	Age			2.0%	2.5%	2.5%
4	2024	59		0	-	25,000	-
5	2025	60		0	-	25,625	-
6	2026	61		0	-	26,266	-
7	2027	62		0	-	26,922	-
8	2028	63		0	-	27,595	-
9	2029	64		0	-	28,285	-
10	2030	65		0	-	28,992	-

Now take a look at the Pension tab; the Rental Income is in the "Other" column.

Year	Age	Employed	Other	CPP	PRB	Sub-Total	OAS	GIS	Sub-Total	Total	Taxes	Expenses	Other	CASH BAL
2024	59	50,000	-	-	-	50,000	-	-	-	50,000	(9,320)	(25,000)	-	17,680
2025	60	51,000	8,000	-	-	59,000	-	-	-	59,000	(11,556)	(25,625)	-	39,499
2026	61	52,000	8,240	-	-	60,240	-	-	-	60,240	(11,977)	(26,266)	-	61,496
2027	62	53,000	8,487	-	-	61,487	-	-	-	61,487	(12,252)	(26,922)	-	83,809
2028	63	54,000	8,742	-	-	62,742	-	-	-	62,742	(12,510)	(27,595)	-	106,445
2029	64	55,000	9,004	-	-	64,004	-	-	-	64,004	(12,779)	(28,285)	-	129,385
2030	65	56,000	9,274	7,026	-	72,300	4,819	-	4,819	77,120	(15,359)	(28,992)	-	162,153
2031	66	-	9,552	14,334	178	24,064	9,836	-	9,836	33,900	(403)	(29,717)	-	165,932
2032	67	-	9,839	14,620	182	24,641	10,032	939	10,971	35,612	(3)	(30,460)	-	171,082
2033	68	-	10,134	14,913	186	25,232	10,229	1,978	12,208	37,440	(105)	(31,222)	-	177,195
2034	69	-	10,438	15,211	189	25,838	10,435	1,945	12,380	38,218	(174)	(32,002)	-	183,238
2035	70	-	-	15,515	193	15,708	10,640	1,901	12,542	28,250	1,570	(32,802)	-	180,256
2036	71	-	-	15,826	197	16,022	10,854	4,557	15,411	31,433	1,584	(33,622)	-	179,651
2037	72	-	-	16,142	201	16,343	11,077	7,290	18,367	34,710	1,475	(34,463)	-	181,372

We go to the RIF tab, change the % in columns O and V to 3, and enter 80000 in cell X11:

		L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
7		Age when RRIF set up				66	< 72 ?			RRSP - Convert to RRIF					
9		66													
10		Age	% Paid	PMT	INT %	INT	BAL			AGE	DEP	INT %	INT	BAL	
11	Year						98,390							80,000	
12	2024	59	0.00%	-	3.00%	-	98,390	-		59	-	3.00%	2,400	82,400	
13	2025	60	0.00%	-	3.00%	-	98,390	-		60	-	3.00%	2,472	84,872	
14	2026	61	0.00%	-	3.00%	-	98,390	-		61	-	3.00%	2,546	87,418	
15	2027	62	0.00%	-	3.00%	-	98,390	-		62	-	3.00%	2,623	90,041	
16	2028	63	0.00%	-	3.00%	-	98,390	-		63	-	3.00%	2,701	92,742	
17	2029	64	0.00%	-	3.00%	-	98,390	-		64	-	3.00%	2,782	95,524	
18	2030	65	0.00%	-	3.00%	-	98,390	-		65	-	3.00%	2,866	98,390	
19	2031	66	4.17%	4,103	3.00%	2,890	97,177	-		66	-	3.00%	-	-	
20	2032	67	4.35%	4,227	3.00%	2,852	95,802	-		67	-	3.00%	-	-	
21	2033	68	4.55%	4,359	3.00%	2,809	94,252	-		68	-	3.00%	-	-	
22	2034	69	4.76%	4,486	3.00%	2,760	92,525	-		69	-	3.00%	-	-	
23	2035	70	5.00%	4,626	3.00%	2,706	90,606	-		70	-	3.00%	-	-	
24	2036	71	5.28%	4,784	3.00%	2,646	88,468	-		71	-	3.00%	-	-	
25	2037	72	5.40%	4,777	3.00%	2,582	86,273	-		72	-	3.00%	-	-	

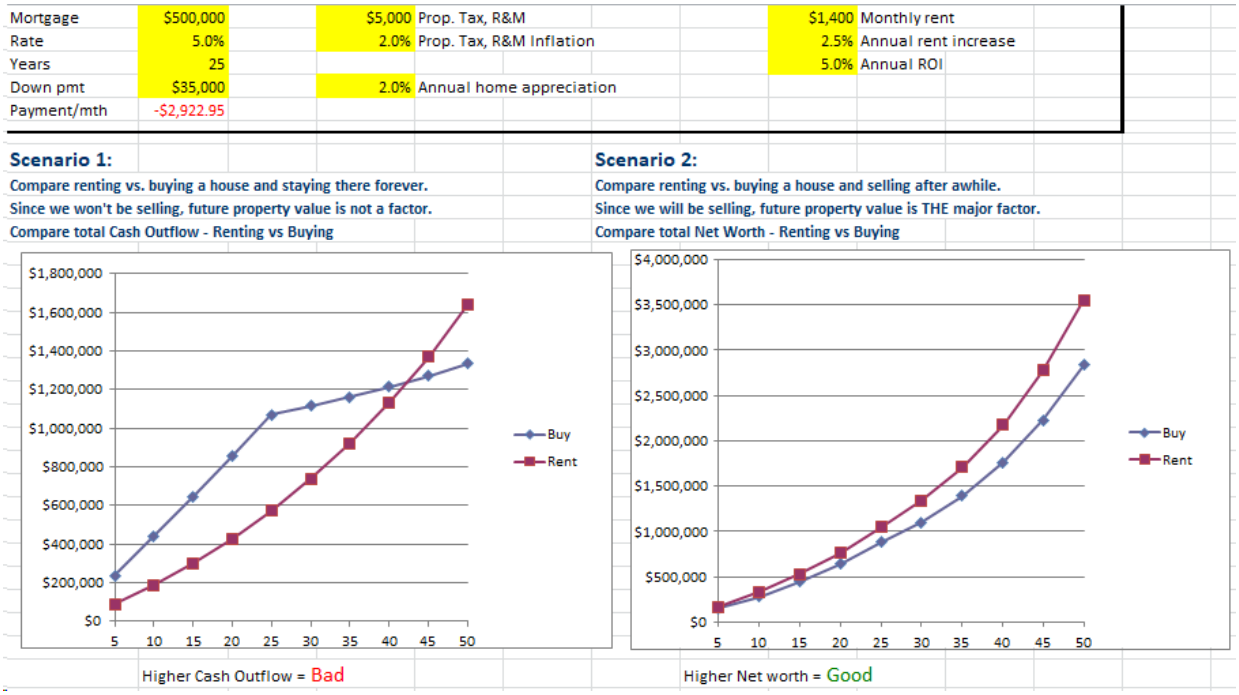
Note that at the beginning of the 66th year, the balance of $98,390 is transferred out of the RRSP and into the RRIF; interest accumulates in, and withdrawals from, the RIF begin in the 66th year (you can change this in the Data Entry Form). Your RIF probably has a minimum age limit – usually payments from a RIF can begin in the 66th year (consult a professional). The "% Paid" in column M is the minimum payout percentage – you can plan withdrawing more than this minimum via the Data Entry Form.

NOTE: These are just some simple examples to illustrate how the PensionPlanner works; your numbers will be different and as soon as you make one change anywhere in the PensionPlanner your results will change.

Buy or Rent?

Let's assume that you <u>can</u> afford to buy a home. The question remains: <u>Should</u> you buy? Does it make financial sense?

Here is another report available to you – in the form of a spreadsheet which you can customize.



(Note: "Annual ROI" is what you can earn in an investment after tax.)

The chart on the left shows that, with the data entered, it would make sense to buy only after 40 years if you are not planning on selling.

The chart on the right shows that, with the data entered, renting makes more financial sense if you are planning on buying and selling for a profit.

Don't just accept $5K as your estimate of "Taxes, Maintenance & Repairs". Do your research on what it costs to replace: roofing, windows/doors, flooring, painting, heating/cooling systems, kitchen/bathroom update, etc. Next estimate the lifespan of each purchase, and divide the cost of each purchase by its lifespan in years to get an annual cost for each purchase; and finally, add the annual costs to get your final number. The **<u>RentvsOwn.xlsx</u>** spreadsheet has a section to help with this.

What will your numbers show? Get your copy of this spreadsheet from our web site.

Optimizing your Net Worth, continued.

We will continue from our example data set up earlier in this chapter. CPP and OAS will begin at age 65.

For employment income we'll use the same data:

Year	Earnings	Year	Earnings	Year	Earnings	Year	Earnings
1985	11,000	1997	23,000	2009	35,000	2021	47,000
1986	12,000	1998	24,000	2010	36,000	2022	48,000
1987	13,000	1999	25,000	2011	37,000	2023	49,000
1988	14,000	2000	26,000	2012	38,000	2024	50,000
1989	15,000	2001	27,000	2013	39,000	2025	51,000
1990	16,000	2002	28,000	2014	40,000	2026	52,000
1991	17,000	2003	29,000	2015	41,000	2027	53,000
1992	18,000	2004	30,000	2016	42,000	2028	54,000
1993	19,000	2005	31,000	2017	43,000	2029	55,000
1994	20,000	2006	32,000	2018	44,000	2030	56,000
1995	21,000	2007	33,000	2019	45,000		
1996	22,000	2008	34,000	2020	46,000		

We will keep the expenses and delete all the rest of the data from the previous exercises.

We transfer funds between our accounts to cover any shortfalls and/or to take advantage of investment opportunities (some Scenarios to explore).

We enter the data for our Base Scenario – taking CPP at age 65:

359,630	374,904	(43,427)	-	-	-	255,085	-							371,392
CPP/PRB	OAS/GIS	TAX	ER-CPP	RSP/RIF IN	Savings Int	TFSA INT	Mort INT	CPP/PRB	OAS/GIS	TAX	ER-CPP	INT	Total	Net Worth Diffe
359,630	374,904	(43,427)	-	-	-	255,085								371,392

Let's take the CPP 5 years early.

We enter the data for the first Scenario:

296,054	429,834	(49,553)	-	-	1,275	282,131	-							384,941	
CPP/PRB	OAS/GIS	TAX	ER-CPP	RSP/RIF IN	Savings Int	TFSA INT	Mort INT	CPP/PRB	OAS/GIS	TAX	ER-CPP	INT	Total	Net Worth Difference	
359,630	374,904	(43,427)	-	-	-	255,085								371,392	
296,054	429,834	(49,553)	-	-	1,275	282,131		(63,576)	54,930	(6,126)	-	28,321	13,548	384,941	13,549

$64K less CPP,
$55K more GIS,
$6K more Tax, and
$28K more Interest
for a total improvement of $13K.

If we take the CPP 5 years later; we enter the data for the second Scenario:

399,633	367,769	(55,466)	-	-	-	234,378	-							371,515	
CPP/PRB	OAS/GIS	TAX	ER-CPP	RSP/RIF IN	Savings Int	TFSA INT	Mort INT	CPP/PRB	OAS/GIS	TAX	ER-CPP	INT	Total	Net Worth Difference	
359,630	374,904	(43,427)	-	-	-	255,085								371,392	
296,054	429,834	(49,553)	-	-	1,275	282,131		(63,576)	54,930	(6,126)	-	28,321	13,548	384,941	13,549
399,633	367,769	(55,466)	-	-	-	234,378		40,003	(7,135)	(12,039)	-	(20,707)	123	371,515	123

$40K more CPP,
$7K less GIS,
$12K more Tax, and
$21K less Interest
for … no difference.

This is an example Only! Your numbers will be different.

But … that's not the whole story.

If we take CPP at age 60 and delay the OAS for 1 year; we enter this Scenario:

296,054	438,261	(48,820)	-	-	681	280,529	-							391,905	
CPP/PRB	OAS/GIS	TAX	ER-CPP	RSP/RIF IN	Savings Int	TFSA INT	Mort INT	CPP/PRB	OAS/GIS	TAX	ER-CPP	INT	Total	Net Worth Difference	
359,630	374,904	(43,427)	-	-	-	255,085								371,392	
296,054	429,834	(49,553)	-	-	1,275	282,131		(63,576)	54,930	(6,126)	-	28,321	13,548	384,941	13,549
399,633	367,769	(55,466)	-	-	-	234,378		40,003	(7,135)	(12,039)	-	(20,707)	123	371,515	123
296,054	438,261	(48,820)	-	-	681	280,529		(63,576)	63,357	(5,393)	-	26,126	20,513	391,905	20,513

In this example, taking OAS one year later at age 66 while taking CPP at age 60 projects about $20K more than taking CPP and OAS at age 65. Your numbers will be different and project a different result.

The four Scenarios shown above can be one **Custom Report**.

We can try a range of options from taking CPP 5 years early and OAS at age 65 to taking CPP 5 years later and OAS 5 years later. This means we go through the above exercise 66 times to zero in on the optimum time to take **both** the CPP and OAS.

This preset report **Optimal CPP and OAS for Singles** on the next page shows the projected Net Worth (000s) at age 85 – you can select whatever age you wish. The optimum time to take CPP and OAS for this example is CPP at age 60 and OAS at age 66:

Projected Net Worth - Taking CPP & OAS by Year											
		CPP									
		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
OAS	2030	385	384	383	382	378	371	373	378	379	377	372
	2031	392	391	389	388	384	376	377	382	382	379	374
	2032	386	386	383	383	379	371	370	369	368	365	360
	2033	369	369	367	367	364	358	350	339	333	330	326
	2034	344	345	345	346	344	338	328	308	294	286	281
	2035	317	320	321	323	321	315	305	285	263	245	235

Everyone's financial situation is different; never take a fictitious example (like the one above) as advice.

This is just the tip of the iceberg; you can explore as many variations of these scenarios (and others) as you want with **Custom Scenarios** or a **Custom Report**. You can quickly and easily see if/when your funds will fall short and when you will have extra funds to invest and where to transfer those funds to get the most benefit.

Note that you will be tracking changes to: CPP, OAS/GIS, Tax, and Interest. If you change the number of years working or earnings during those years, you will be starting a new "batch" of Scenarios in a new Report. Your starting point would be earning specific amounts in specific years; from this, your CPP, OAS/GIS, Tax and Interest will form your Base Scenario. You could then try various "What-If" scenarios: when to collect CPP and OAS, as well as amounts and timing of transfers between the accounts.

You can "buy" Custom Scenarios to compare with your Early Warning System Base Scenario, and/or Custom Reports, as illustrated in earlier chapters.

* * *

Recap of Reports introduced in PART I – FOR SINGLES:
PensionPlanner for Singles - Early Warning System (our main preset Report)
CPP Monthly Pension Benefit – preset Report of 121 options to take your CPP
CPP_BreakEven.xlsx – free companion spreadsheet to the CPP Monthly Pension Benefit report
Optimal CPP & OAS for Singles – preset Report of 66 options to optimize CPP and OAS
Optimal RRSP Contribution % – preset Report of 20 options from 0% to Max contribution
RentvsOwn.xlsx – customizable spreadsheet to help with the "Rent vs Buy" question
Custom Report – What has you concerned? What Scenarios do you want to explore?

Visit the "Conclusion" section, and our "How to Order" page, for more info.

Don't stop reading! Even if you are young and single, there's a lot of good stuff ahead.

PART II – FOR COUPLES

CHAPTER 7 - OAS/GIS & Allowance

When someone reaches age 65, single or married, they will receive OAS subject to claw-back if income exceeds a specific amount (as discussed earlier). We covered the GIS for Singles but let's have a quick review of GIS. There are 4 categories: single, married with only one partner receiving OAS, married with one partner receiving OAS and the other partner receiving the Allowance, and married with both partners receiving OAS.

The Allowance is an OAS monthly benefit indexed for inflation and the maximum (2024) is $1,344/mth. It is 100% clawed back when the combined income of both partners reaches $39,648. The Allowance requirements: to receive the Allowance you must be between the ages of 60 to 64, your partner receives the OAS and you've lived in Canada at least 10 years since age 18.

Details on the maximum GIS benefit:

We covered GIS for Singles in Chapter 1 ($1,065.47)

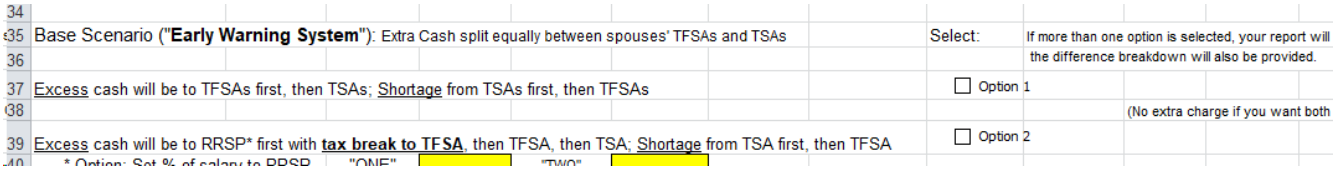
$641.35/mth is the maximum GIS for both spouses who receive OAS.

$641.35/mth is the maximum GIS for the one spouse who receives OAS while the other spouse receives the Allowance.

$1,065.47/mth is the maximum GIS for the one spouse who receives OAS

The PensionPlanner for Couples is very much like the PensionPlanner for Singles, but it has two of everything, and a couple of extra features. In the following exercises we use the very descriptive names of "One" for the older spouse and "Two" for the younger spouse.

The Data Entry Form for Couples has all the features of the Data Entry Form for Singles ... plus.



If splitting extra cash equally between the two TFSAs and the two TSAs just won't work with the way you have arranged your finances, let us know.

A major addition in the Data Entry Form for Couples vs for Singles:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
25	Investment Accounts:													
26	("Balance" as of Dec 31/23)											Is your spouse the Beneficiary/Successor?		
27												Select		
28	Taxable Savings Acct	Balance	IRR											
29												Yes		
30														
31	TFSA	Balance	IRR	Contrib. Room Balance										
32												Yes		
33														
34	RRSP	Balance	RRSP IRR	YR when RF	RRIF IRR	ER Match		Contrib. Room BAL		HBP/LLP BAL				
35				66								Yes		
36														
37	FHSA	Balance	IRR											
38												Yes		
39														
40	DPSP	Balance	DPSP IRR	YR when RF	RRIF IRR									
41												Yes		
42														
43	RPP	Balance	RPP IRR	YR when RF	RRIF IRR	ER Match								
44				66								Yes		
45														
46	Spousal RRSP	Balance	DPSP IRR	YR when RF	RRIF IRR									
47												Yes		

In the RIF tab in the PensionPlanner for Couples for the older spouse we see:

	A	B	C	D	E	F	G	H	I	J	K	L
1		**One**										
2					Is Two the beneficiary of this Savings Acct?						Yes	
3					Is Two the beneficiary of this RRSP/RRIF?						Yes	
4					Is Two the beneficiary of this FHSA?						Yes	
5					Is Two the beneficiary of this DPSP/RRIF?						Yes	
6					Is Two the beneficiary of this RPP/RRIF?						Yes	
7					Is One the beneficiary of this Spousal RRSP?						Yes	

Column "K" is where we select "Yes" for each account to assign your spouse as your beneficiary (or "No" if you don't want to). It's the same for spouse Two.

Although you see the term "Beneficiary", the PensionPlanner treats these items more like "Successor".

Note: there is a significant difference between "Beneficiary" and "Successor Holder" or "Successor Annuitant" – one more reason to consult a professional!

Spousal RRSPs are available for married couples to manage retirement income splitting. Stay tuned!

Look at the Pension tabs:

E	F	G	H	I	J	K	L	M	N	O	P	Q	R
Year	Age	One Employed	One Other	One CPP	One CPP-Surv	One PRB	One Sub-Total	One OAS	One GIS	One Allow-Surv	One Sub-Total	One Total	One Taxes
2024	53	-	-	-	-	-	-	-	-	-	-	-	946
2025	54	-	-	-	-	-	-	-	-	-	-	-	964
2026	55	-	-	-	-	-	-	-	-	-	-	-	983
2027	56	-	-	-	-	-	-	-	-	-	-	-	1,001
2028	57	-	-	-	-	-	-	-	-	-	-	-	1,020
2029	58	-	-	-	-	-	-	-	-	-	-	-	1,039

E	F	G	H	I	J	K	L	M	N	O	P	Q	R
Year	Age	Two Employed	Two Other	Two CPP	Two CPP-Surv	Two PRB	Two Sub-Total	Two OAS	Two GIS	Two Allowance	Two Sub-Total	Two Total	Two Taxes
2024	50	-	-	-	-	-	-	-	-	-	-	-	499
2025	51	-	-	-	-	-	-	-	-	-	-	-	508
2026	52	-	-	-	-	-	-	-	-	-	-	-	518
2027	53	-	-	-	-	-	-	-	-	-	-	-	527
2028	54	-	-	-	-	-	-	-	-	-	-	-	537
2029	55	-	-	-	-	-	-	-	-	-	-	-	547

Column “J” in both Pension tabs is for CPP Survivor's Benefit.
Column “O” in One’s Pension tab is for Survivor's Allowance; this is an additional benefit available for a surviving spouse when their partner dies. Column “O” in Two’s Pension tab is for the regular (OAS) Allowance, available to the youngest partner, **or** the Survivor's Allowance, whichever the circumstances require.

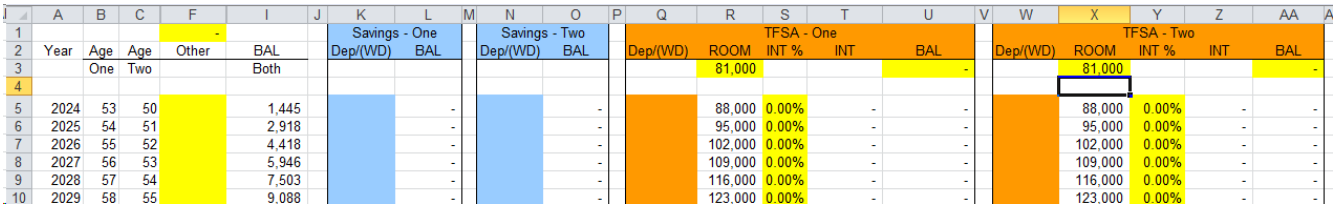
The Pensions_Both tab combines the data from both partners; some of the benefit and tax calculations depend on the combined income.

	A	B	C	D	E	F	G	H	I	J	K	L
1												
2	Year	Employed	Other	CPP	PRB	Sub-Total	OAS	GIS	Allowance	Sub-Total	Total	Taxes
3						<------				<------		
4	2024	-	-	-	-	-	-	-	-	-	-	1,445
5	2025	-	-	-	-	-	-	-	-	-	-	1,473
6	2026	-	-	-	-	-	-	-	-	-	-	1,500
7	2027	-	-	-	-	-	-	-	-	-	-	1,528
8	2028	-	-	-	-	-	-	-	-	-	-	1,557

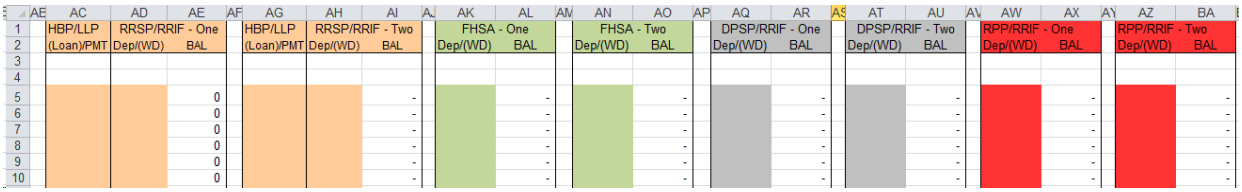
Your PensionPlanner for Couples Base Scenario report will contain 3 pages for Income, Taxes & Expenses (Spouse “One”, Spouse “Two”, and “Both”).

The Cash tab has the same setup as the PensionPlanner for Singles, but has two of everything (almost).

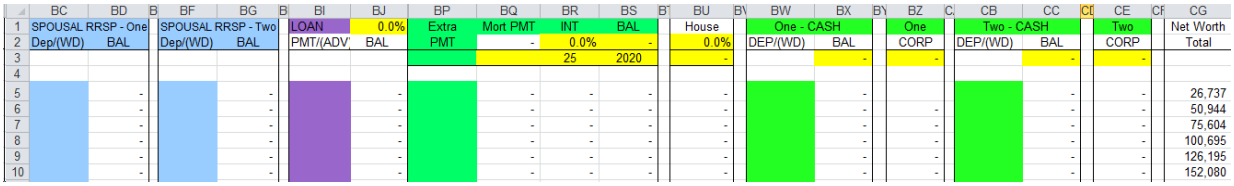
Below are 3 images of the top part of the Cash tab, from left to right (2 of 3 Loan accounts are hidden):



	A	B	C	F	I	K	L	N	O	Q	R	S	T	U	W	X	Y	Z	AA
1				-		Savings - One		Savings - Two		TFSA - One					TFSA - Two				
2	Year	Age	Age	Other	BAL	Dep/(WD)	BAL	Dep/(WD)	BAL	Dep/(WD)	ROOM	INT %	INT	BAL	Dep/(WD)	ROOM	INT %	INT	BAL
3		One	Two		Both						81,000			-		81,000			-
4																			
5	2024	53	50		1,445		-		-		88,000	0.00%	-	-		88,000	0.00%	-	-
6	2025	54	51		2,918		-		-		95,000	0.00%	-	-		95,000	0.00%	-	-
7	2026	55	52		4,418		-		-		102,000	0.00%	-	-		102,000	0.00%	-	-
8	2027	56	53		5,946		-		-		109,000	0.00%	-	-		109,000	0.00%	-	-
9	2028	57	54		7,503		-		-		116,000	0.00%	-	-		116,000	0.00%	-	-
10	2029	58	55		9,088		-		-		123,000	0.00%	-	-		123,000	0.00%	-	-



	AC	AD	AE	AG	AH	AI	AK	AL	AN	AO	AQ	AR	AT	AU	AW	AX	AZ	BA
1	HBP/LLP	RRSP/RRIF - One		HBP/LLP	RRSP/RRIF - Two		FHSA - One		FHSA - Two		DPSP/RRIF - One		DPSP/RRIF - Two		RPP/RRIF - One		RPP/RRIF - Two	
2	(Loan)/PMT	Dep/(WD)	BAL	(Loan)/PMT	Dep/(WD)	BAL	Dep/(WD)	BAL	Dep/(WD)	BAL	Dep/(WD)	BAL	Dep/(WD)	BAL	Dep/(WD)	BAL	Dep/(WD)	BAL
3																		
4																		
5			0			-		-		-		-		-		-		-
6			0			-		-		-		-		-		-		-
7			0			-		-		-		-		-		-		-
8			0			-		-		-		-		-		-		-
9			0			-		-		-		-		-		-		-
10			0			-		-		-		-		-		-		-



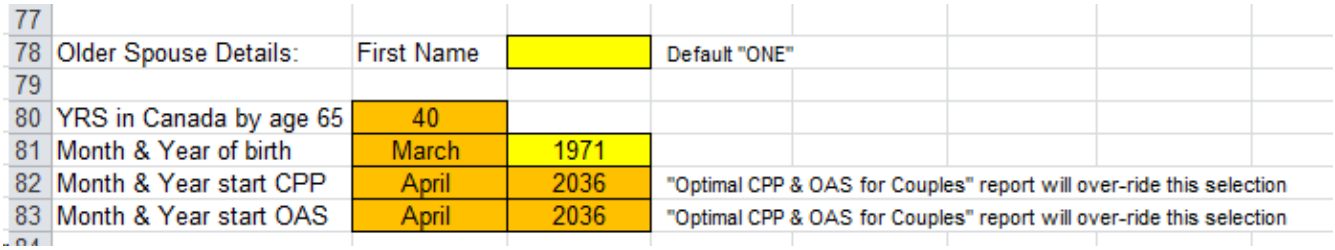
	BC	BD	BF	BG	BI	BJ	BP	BQ	BR	BS	BU	BW	BX	BZ	CB	CC	CE	CG
1	SPOUSAL RRSP - One		SPOUSAL RRSP - Two		LOAN	0.0%	Extra	Mort PMT	INT	BAL	House	One - CASH		One	Two - CASH		Two	Net Worth
2	Dep/(WD)	BAL	Dep/(WD)	BAL	PMT/(ADV	BAL	PMT	-	0.0%	-	0.0%	DEP/(WD)	BAL	CORP	DEP/(WD)	BAL	CORP	Total
3									25	2020	-		-	-		-	-	
4																		
5		-		-		-		-	-	-	-		-			-	-	26,737
6		-		-		-		-	-	-	-		-	-		-	-	50,944
7		-		-		-		-	-	-	-		-	-		-	-	75,604
8		-		-		-		-	-	-	-		-	-		-	-	100,695
9		-		-		-		-	-	-	-		-	-		-	-	126,195
10		-		-		-		-	-	-	-		-	-		-	-	152,080

Joint account or separate accounts: it is simpler using the PensionPlanner if you have a joint chequing account (which works just like the PensionPlanner for Singles covered earlier), but if you have two separate chequing accounts, combine the two balances as you work with the PensionPlanner's one "chequing" account. If that won't work because of the way you have arranged your finances, contact us and explain your particular setup; we can probably tweak the spreadsheet to accommodate you. It may be that more couples have arranged their finances like yours rather than like ours.

Time for our example!

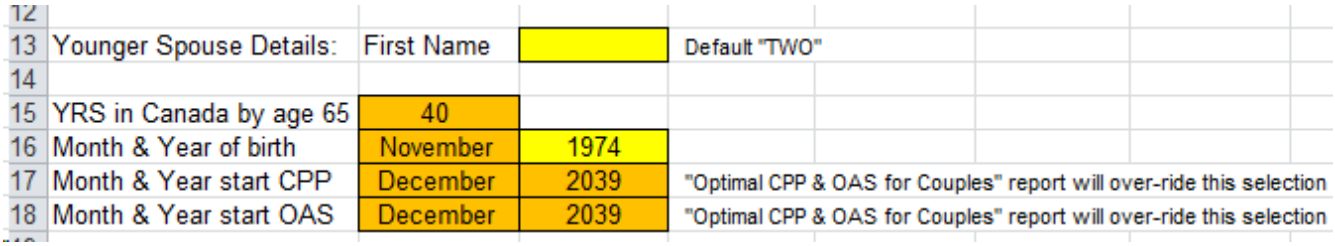
Select "BC" for Province of residence;

Select "MAR, 1971" for One's birth month and year, "APR, 2036" for One to start CPP & OAS;



77				
78	Older Spouse Details:	First Name		Default "ONE"
79				
80	YRS in Canada by age 65	40		
81	Month & Year of birth	March	1971	
82	Month & Year start CPP	April	2036	"Optimal CPP & OAS for Couples" report will over-ride this selection
83	Month & Year start OAS	April	2036	"Optimal CPP & OAS for Couples" report will over-ride this selection

Select “NOV, 1974” for Two's birth month and year, “DEC, 2039” for Two to start CPP & OAS.



12				
13	Younger Spouse Details:	First Name		Default "TWO"
14				
15	YRS in Canada by age 65	40		
16	Month & Year of birth	November	1974	
17	Month & Year start CPP	December	2039	"Optimal CPP & OAS for Couples" report will over-ride this selection
18	Month & Year start OAS	December	2039	"Optimal CPP & OAS for Couples" report will over-ride this selection

In the Input tab, we enter the following employment income data for One:

Year	Earnings	Year	Earnings	Year	Earnings	Year	Earnings
1991	15,000	2002	26,000	2013	37,000	2024	48,000
1992	16,000	2003	27,000	2014	38,000	2025	49,000
1993	17,000	2004	28,000	2015	39,000	2026	50,000
1994	18,000	2005	29,000	2016	40,000	2027	51,000
1995	19,000	2006	30,000	2017	41,000	2028	52,000
1996	20,000	2007	31,000	2018	42,000	2029	53,000
1997	21,000	2008	32,000	2019	43,000	2030	54,000
1998	22,000	2009	33,000	2020	44,000	2031	55,000
1999	23,000	2010	34,000	2021	45,000	2032	56,000
2000	24,000	2011	35,000	2022	46,000	2033	57,000
2001	25,000	2012	36,000	2023	47,000	2034	58,000

And the following for Two:

Year	Earnings	Year	Earnings	Year	Earnings	Year	Earnings
1993	24,000	2004	35,000	2015	46,000	2026	57,000
1994	25,000	2005	36,000	2016	47,000	2027	58,000
1995	26,000	2006	37,000	2017	48,000	2028	59,000
1996	27,000	2007	38,000	2018	49,000	2029	60,000
1997	28,000	2008	39,000	2019	50,000	2030	61,000
1998	29,000	2009	40,000	2020	51,000	2031	62,000
1999	30,000	2010	41,000	2021	52,000	2032	63,000
2000	31,000	2011	42,000	2022	53,000	2033	64,000
2001	32,000	2012	43,000	2023	54,000	2034	65,000
2002	33,000	2013	44,000	2024	55,000	2035	66,000
2003	34,000	2014	45,000	2025	56,000	2036	67,000

Pensions tab for Both – note the Allowance in column “I”:

	A	B	C	D	E	F	G	H	I	J	K	L
1												
2	Year	Employed	Other	CPP	PRB	Sub-Total	OAS	GIS	Allowance	Sub-Total	Total	Taxes
3						<------				<------		
13	2033	121,000	-	-	-	121,000	-	-	-	-	121,000	(22,105)
14	2034	123,000	-	-	-	123,000	-	-	-	-	123,000	(22,407)
15	2035	66,000	-	-	-	66,000	-	-	-	-	66,000	(7,760)
16	2036	67,000	-	11,999	-	78,999	8,141	1,340	-	9,481	88,480	(11,792)
17	2037	-	0	16,319	-	16,319	11,077	2,257	-	13,334	29,652	2,046
18	2038	-	0	16,645	-	16,645	11,291	5,060	9,110	25,462	42,107	2,082
19	2039	-	0	18,698	-	18,698	12,482	5,947	7,747	26,176	44,875	2,118
20	2040	-	0	38,378	-	38,378	23,506	10,770	-	34,276	72,654	973
21	2041	-	0	39,145	-	39,145	23,968	5,707	-	29,675	68,821	1,123

--- Boring stuff warning ---

The GIS in 2034 depends on the combined income in 2032 and 2033; the combined income in 2032 will determine the GIS for the first half of 2034, and the combined income in 2033 will determine the GIS in the second half of 2034.The PensionPlanner discounts the combined income back to 2024 dollars, and looks that number up in the table for GIS with one partner receiving the OAS and the other partner eligible for the Allowance; that number is then brought forward to 2034 dollars. Similar calculations apply to each year.

That takes care of the GIS calculations, now the Allowance.

Two's Allowance “window” will begin when s/he turns 60 and ends the month before their 65th birthday – as long as the older spouse is collecting OAS. The Allowance depends on the combined income in the preceding year; so the Allowance of $9,110 in 2038 depends on the combined income in 2037 being below the required threshold of about $40K – it is $16,319. (This income test was not met in the preceding two years.)

The PensionPlanner discounts the combined income back to 2024 dollars, and looks that number up in the table for Allowance; that number is then brought forward to 2038 and 2039 dollars. This calculation is done for each year in the five years of the Allowance window.

CHAPTER 8 - Survivor Benefits

There are 4 Survivor Benefits:

1. The Death Benefit – a one-time lump sum amount. It is the lesser of $2,500, which is not indexed, and 6 times the monthly CPP Retirement Benefit.

2. The Survivor Allowance – the regular OAS Allowance is changed to the Survivor Allowance when one partner dies. There is also the Survivor Allowance for the person who does not get the regular OAS Allowance. The amounts and the income thresholds for the regular Allowance and Survivor Allowance are different.

3. Children's Benefit – for children of the deceased under the age of 18. It is $281.72 per child per month in 2024.

4. Survivor's Pension – the calculation varies on a couple of factors: whether or not the survivor is over or under the age of 65 when collecting Survivor Benefits, and another factor is whether or not they receive the CPP Retirement Benefit.

Examples following will illustrate how the rules work.

We'll use the same sample data as in the previous Chapter.
Looking at Two's Pensions tab, we see that in 2038, Two's allowance should be about $9,000.

Year	Age	Two Employed	Two Other	Two CPP	Two CPP-Surv	Two PRB	Two Sub-Total	Two OAS	Two GIS	Two Allowance	Two Sub-Total	Two Total	Two Taxes
2024	50	55,000	-	-	-	-	55,000	-	-	-	-	55,000	(10,394)
2025	51	56,000	-	-	-	-	56,000	-	-	-	-	56,000	(10,522)
2026	52	57,000	-	-	-	-	57,000	-	-	-	-	57,000	(10,644)
2027	53	58,000	-	-	-	-	58,000	-	-	-	-	58,000	(10,764)
2028	54	59,000	-	-	-	-	59,000	-	-	-	-	59,000	(10,884)
2029	55	60,000	-	-	-	-	60,000	-	-	-	-	60,000	(11,002)
2030	56	61,000	-	-	-	-	61,000	-	-	-	-	61,000	(11,119)
2031	57	62,000	-	-	-	-	62,000	-	-	-	-	62,000	(11,235)
2032	58	63,000	-	-	-	-	63,000	-	-	-	-	63,000	(11,349)
2033	59	64,000	-	-	-	-	64,000	-	-	-	-	64,000	(11,462)
2034	60	65,000	-	-	-	-	65,000	-	-	-	-	65,000	(11,573)
2035	61	66,000	-	-	-	-	66,000	-	-	-	-	66,000	(7,937)
2036	62	67,000	-	-	-	-	67,000	-	-	-	-	67,000	(11,792)
2037	63	-	-	-	-	-	-	-	-	-	-	-	741
2038	64	-	-	-	-	-	-	-	-	9,110	9,110	9,110	755
2039	65	-	-	1,721	-	-	1,721	960	457	7,747	9,165	10,886	768
2040	66	-	-	21,060	-	-	21,060	11,753	5,385	-	17,138	38,199	608
2041	67	-	-	21,482	-	-	21,482	11,984	2,853	-	14,838	36,319	696
2042	68	-	-	21,911	-	-	21,911	12,224	503	-	12,727	34,638	752
2043	69	-	-	22,350	-	-	22,350	12,472	522	-	12,994	35,343	721

What happens to Two's numbers if One dies in 2037?
We go to the Input tab, select 2037 as the year of One's death.

Pensions tab for One shows 0 activity after 2036. Pensions tab for Two shows:

Year	Age	Two Employed	Two Other	Two CPP	Two CPP-Surv	Two PRB	Two Sub-Total	Two OAS	Two GIS	Two Allowance	Two Sub-Total	Two Total	Two Taxes
2024	50	55,000	-	-	-	-	55,000	-	-	-	-	55,000	(10,394)
2025	51	56,000	-	-	-	-	56,000	-	-	-	-	56,000	(10,522)
2026	52	57,000	-	-	-	-	57,000	-	-	-	-	57,000	(10,644)
2027	53	58,000	-	-	-	-	58,000	-	-	-	-	58,000	(10,764)
2028	54	59,000	-	-	-	-	59,000	-	-	-	-	59,000	(10,884)
2029	55	60,000	-	-	-	-	60,000	-	-	-	-	60,000	(11,002)
2030	56	61,000	-	-	-	-	61,000	-	-	-	-	61,000	(11,119)
2031	57	62,000	-	-	-	-	62,000	-	-	-	-	62,000	(11,235)
2032	58	63,000	-	-	-	-	63,000	-	-	-	-	63,000	(11,349)
2033	59	64,000	-	-	-	-	64,000	-	-	-	-	64,000	(11,462)
2034	60	65,000	-	-	-	-	65,000	-	-	-	-	65,000	(11,573)
2035	61	66,000	-	-	-	-	66,000	-	-	-	-	66,000	(7,937)
2036	62	67,000	-	-	-	-	67,000	-	-	-	-	67,000	(11,792)
2037	63	-	2,500	-	10,828	-	13,328	-	-	1,545	1,545	14,873	1,286
2038	64	-	0	-	11,044	-	11,044	-	-	12,977	12,977	24,021	1,564
2039	65	-	0	1,721	10,327	-	12,047	960	730	13,135	14,826	26,873	2,118
2040	66	-	0	21,060	-	-	21,060	11,753	9,597	-	21,350	42,410	1,654
2041	67	-	0	21,482	-	-	21,482	11,984	7,089	-	19,073	40,555	1,672
2042	68	-	0	21,911	-	-	21,911	12,224	4,789	-	17,013	38,924	1,691

Note the following: the $2,500 lump sum death benefit; Two's CPP Survivor Pension; the changes in Two's GIS, because at this point Two is single; and finally, Two's allowance in 2038 is now expected to be $12,977 Survivor's Allowance (instead of $9,110 Regular Allowance).

Now, let's assume that Two will take CPP one year later (DEC, 2040);
We go to the Input tab and select 2040 for the 1st year of CPP.

The Pensions tab for Two now shows:

Year	Age	Two Employed	Two Other	Two CPP	Two CPP-Surv	Two PRB	Two Sub-Total	Two OAS	Two GIS	Two Allowance	Two Sub-Total	Two Total	Two Taxes
2024	50	55,000	-	-	-	-	55,000	-	-	-	-	55,000	(10,394)
2025	51	56,000	-	-	-	-	56,000	-	-	-	-	56,000	(10,522)
2026	52	57,000	-	-	-	-	57,000	-	-	-	-	57,000	(10,644)
2027	53	58,000	-	-	-	-	58,000	-	-	-	-	58,000	(10,764)
2028	54	59,000	-	-	-	-	59,000	-	-	-	-	59,000	(10,884)
2029	55	60,000	-	-	-	-	60,000	-	-	-	-	60,000	(11,002)
2030	56	61,000	-	-	-	-	61,000	-	-	-	-	61,000	(11,119)
2031	57	62,000	-	-	-	-	62,000	-	-	-	-	62,000	(11,235)
2032	58	63,000	-	-	-	-	63,000	-	-	-	-	63,000	(11,349)
2033	59	64,000	-	-	-	-	64,000	-	-	-	-	64,000	(11,462)
2034	60	65,000	-	-	-	-	65,000	-	-	-	-	65,000	(11,573)
2035	61	66,000	-	-	-	-	66,000	-	-	-	-	66,000	(7,937)
2036	62	67,000	-	-	-	-	67,000	-	-	-	-	67,000	(11,792)
2037	63	-	2,500	-	10,828	-	13,328	-	-	1,545	1,545	14,873	1,286
2038	64	-	0	-	11,044	-	11,044	-	-	12,977	12,977	24,021	1,564
2039	65	-	0	-	11,159	-	11,159	960	730	13,135	14,826	25,985	2,109
2040	66	-	0	1,905	9,338	-	11,243	11,753	9,935	-	21,688	32,931	2,090
2041	67	-	0	23,320	-	-	23,320	11,984	10,214	-	22,198	45,518	1,349
2042	68	-	0	23,786	-	-	23,786	12,224	7,154	-	19,378	43,163	1,362

By postponing receiving CPP, Two will receive different amounts for the Survivor Benefit in 2039 and 2040, and the annual CPP received will increase by about $1,800; but this decision should not be made just based on this; as we will see, there are other factors which come into play.

Curious about where those numbers come from?

Here's a screenshot showing the calculation of the Survivor Pension benefit amounts **for this example:**

Survivors benefit		Two is >=65 when One dies		Two is <65 when One dies
	CRP - Survivor	1,757.56		1,757.56
	CRP - Deceased		1,333.21	
	MAX RP	1,690.19		1,690.19
Under 65	Flat Amt + 37.5% CRP			902.32
	37.5% x CRP			499.96
Over 65	60% CRP-D	799.93		
Option A	65+	-		
	<65			335.00
Option B Lesser of				
	40% of SB	319.97		199.98
	40% Survivor CRP	703.02		703.02
		319.97		199.98
		479.96		702.34
MIN of Option A or B		-		335.00
Special ADJ				-
	Survivors Benefit	-		335.00
	Two's age when One dies		63.08	
	Survivor benefit	-		335.00

$799.93 is the monthly benefit if Two is 65 or older and is not collecting CPP benefits.
$0.00 is the monthly benefit if Two is 65 or older and is collecting CPP benefits.
$902.32 is the monthly benefit if Two is younger than 65 and is not collecting CPP benefits.
$335.00 is the monthly benefit if Two is younger than 65 and is collecting CPP benefits.

The numbers (see the screenshot on the previous page) depend on when the survivor takes CPP and the survivor's age when collecting the Survivor's benefit:

In 2037, when One dies, Two will be 63 and not collecting CPP, so we take the amount $902.32 x 12 months = $10,828.

In 2038 Two will be still under age 65 and not collecting CPP, so $10,828 x 1.02 for inflation = $11,044.

In 2039 Two turns age 65: $902.32 indexed for inflation for two years x 11 months = $10,326 plus $799.93 indexed for inflation for two years x 1 month = $832. $10,326 +$832 = $11,158.

In 2040, Two starts collecting CPP beginning in December. 11 months not collecting CPP at $799.93 per month indexed for inflation for 3 years = $9,338 (1 month > 65 & collecting CPP = $0.00)

After 2040 Two is over 65 and collecting CPP for all 12 months of each year so the Survivor's Benefit is $0.00

One more survivor's benefit to cover: the Children's benefit.
We go to the Input tab, put in the number of children under age 18 (one) in Two's care next to the year 2038 only. Look at Two's Pension tab:

Year	Age	Two Employed	Two Other	Two CPP	Two CPP-Surv	Two PRB	Two Sub-Total	Two OAS	Two GIS	Two Allowance	Two Sub-Total
2033	59	64,000	-	-	-	-	64,000	-	-	-	-
2034	60	65,000	-	-	-	-	65,000	-	-	-	-
2035	61	66,000	-	-	-	-	66,000	-	-	-	-
2036	62	67,000	-	-	-	-	67,000	-	-	-	-
2037	63	-	2,500	-	10,828	-	13,328	-	-	1,545	1,545
2038	64	-	0	-	15,503	-	15,503	-	-	12,977	12,977
2039	65	-	0	-	11,159	-	11,159	960	612	9,873	11,446
2040	66	-	0	1,905	9,338	-	11,243	11,753	8,485	-	20,238
2041	67	-	0	23,320	-	-	23,320	11,984	10,214	-	22,198
2042	68		0	23,786			23,786	12,224	7,154		19,378

The CPP Survivor amount for 2038 increased $4,459 (from $11,044 to $15,503) = $281.72 x 12 x 1.02 inflation for 14 years (since 2024).

At this point there are some possible scenarios we could explore: run the CPP/OAS report to find the best years for Two to take CPP and OAS; run the "Early Warning System" report to see if/when Two will run out of cash; run a Custom report assuming an insurance payout on One's death and then compare putting extra cash into a RRSP vs a TFSA; … well, you get the idea.

Talk to an insurance professional to find out about your insurance options; the PensionPlanner can take care of the math but there is much more than math involved in such decisions!

Before continuing on to Chapter 9, we will delete the "child survivor" and reset the year of One's death to 2056.

CHAPTER 9 - Optimizing Net Worth for Couples

This Chapter is a detailed example of how to get value out of the PensionPlanner for Couples.

We will continue using the sample data from Chapter 8.

Now let's set up the annual expenses and the RSP balances; this works the same way as with the PensionPlanner for Singles.

Go to the Pensions_Both tab and in cells T2 to U4 enter $18K for Rent and Other Expenses, increasing by 2% per year:

	A	R	S	T	U
1					
2	Year		2.0%	2.0%	2.0%
3		Mortgage	M&R	Other	Rent
4	2024	-	-	18,000	18,000
5	2025	-	-	18,360	18,360
6	2026	-	-	18,727	18,727
7	2027	-	-	19,102	19,102

Go to Two's Deferred Profit Sharing Plan and enter:

	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ
7													
8													
9													
10													
11		Age when RRIF set up				66			DPSP - Convert to RRIF				
12													
13		66											
14		Age	% Paid	PMT	INT %	INT	BAL		AGE	DEP	INT %	INT	BAL
15							130,972						60,000
16		50	0.00%	-	5.00%	-	130,972		50	-	5.00%	3,000	63,000
17		51	0.00%	-	5.00%	-	130,972		51	-	5.00%	3,150	66,150
18		52	0.00%	-	5.00%	-	130,972		52	-	5.00%	3,308	69,458
19		53	0.00%	-	5.00%	-	130,972		53	-	5.00%	3,473	72,930
20		54	0.00%	-	5.00%	-	130,972		54	-	5.00%	3,647	76,577

and further to the right enter:

	BM	BN	BO	BP	BQ	BR	BS	BT	BU	BV	BW	BX	BY	BZ
7														
8														
9														
10														
11		Age when RRIF set up				66				SPOUSAL RRSP - Convert to RRIF				
12					One pays tax on WD		NB: 3 YR Rule			Two claims Deposits				
13		66												
14		Age	% Paid	PMT	INT %	INT	BAL			AGE	DEP	INT %	INT	BAL
15							94,282							50,000
16		53	0.00%	-	5.00%	-	94,282	-		53	-	5.00%	2,500	52,500
17		54	0.00%	-	5.00%	-	94,282	-		54	-	5.00%	2,625	55,125
18		55	0.00%	-	5.00%	-	94,282	-		55	-	5.00%	2,756	57,881
19		56	0.00%	-	5.00%	-	94,282	-		56	-	5.00%	2,894	60,775

Since Two earns more than One, Two has set up a Spousal RRSP; Two contributes into this RRSP and gets the tax deduction, but when it is converted into a RRIF, One receives the payments and pays the tax owed on those payments.

Compare the RRIF payments for Two, column BP, for years 2037 to 2042:

	A	B	C	BM	BN	BO	BP	BQ	BR	BS	BT	BU	BV	BW	BX	BY	BZ
10																	
11					Age when RRIF set up				66				SPOUSAL RRSP - Convert to RRIF				
12			Total				One pays tax on WD			NB: 3 YR Rule			Two claims Deposits				
13		Year	Received		66												
14					Age	% Paid	PMT	INT %	INT	BAL			AGE	DEP	INT %	INT	BAL
15										94,282							50,000
25		2033	-		62	0.00%	-	5.00%	-	94,282	-		62	-	5.00%	3,878	81,445
26		2034	-		63	0.00%	-	5.00%	-	94,282	-		63	-	5.00%	4,072	85,517
27		2035	-		64	0.00%	-	5.00%	-	94,282	-		64	-	5.00%	4,276	89,793
28		2036	-		65	0.00%	-	5.00%	-	94,282	-		65	-	5.00%	4,490	94,282
29		2037	-		66	4.17%	3,932	5.00%	4,616	94,967	-		66	-	5.00%	-	-
30		2038	-		67	4.35%	4,131	5.00%	4,645	95,481	-		67	-	5.00%	-	-
31		2039	-		68	4.55%	4,344	5.00%	4,665	95,802	-		68	-	5.00%	-	-
32		2040	5,462		69	4.76%	4,560	5.00%	4,676	95,918	-		69	-	5.00%	-	-
33		2041	5,739		70	5.00%	4,796	5.00%	4,676	95,798	-		70	-	5.00%	-	-
34		2042	6,035		71	5.28%	5,058	5.00%	4,663	95,403	-		71	-	5.00%	-	-

to One's Pension tab (column H - One will receive the Spousal RRIF payments and pay the tax):

Year	Age	One Employed	One Other	One CPP	CF
2030	59	54,000	-	-	
2031	60	55,000	-	-	
2032	61	56,000	-	-	
2033	62	57,000	-	-	
2034	63	58,000	-	-	
2035	64	-	-	-	
2036	65	-	-	11,999	
2037	66	-	3,932	16,319	
2038	67	-	4,131	16,645	
2039	68	-	4,344	16,978	
2040	69	-	4,560	17,317	
2041	70	-	4,796	17,664	
2042	71	-	5,058	18,017	

Compare Two's payments from their DPSP (column AH):

	A	B	C	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ
10																
11					Age when RRIF set up				66			DPSP - Convert to RRIF				
12			Total													
13		Year	Received		66											
14					Age	% Paid	PMT	INT %	INT	BAL		AGE	DEP	INT %	INT	BAL
15										130,972						60,000
28		2036	-		62	0.00%	-	5.00%	-	130,972		62	-	5.00%	5,388	113,139
29		2037	-		63	0.00%	-	5.00%	-	130,972		63	-	5.00%	5,657	118,796
30		2038	-		64	0.00%	-	5.00%	-	130,972		64	-	5.00%	5,940	124,736
31		2039	-		65	0.00%	-	5.00%	-	130,972		65	-	5.00%	6,237	130,972
32		2040	5,462		66	4.17%	5,462	5.00%	6,412	131,923		66	-	5.00%	-	-
33		2041	5,739		67	4.35%	5,739	5.00%	6,453	132,637		67	-	5.00%	-	-
34		2042	6,035		68	4.55%	6,035	5.00%	6,481	133,083		68	-	5.00%	-	-
35		2043	6,335		69	4.76%	6,335	5.00%	6,496	133,244		69	-	5.00%	-	-
36		2044	6,662		70	5.00%	6,662	5.00%	6,496	133,078		70	-	5.00%	-	-
37		2045	7,026		71	5.28%	7,026	5.00%	6,478	132,529		71	-	5.00%	-	-
38		2046	7,157		72	5.40%	7,157	5.00%	6,448	131,820		72	-	5.00%	-	-
39		2047	7,290		73	5.53%	7,290	5.00%	6,409	130,939		73	-	5.00%	-	-

To Two's Pension tab, column H:

E	F	G	H	I	J	K	L	M	N	O
		Two	Two	Two	Two	Two	Two	Two	Two	Two
Year	Age	Employed	Other	CPP	CPP-Surv	PRB	Sub-Total	OAS	GIS	Allowance
2033	59	64,000	-	-	-	-	64,000	-	-	-
2034	60	65,000	-	-	-	-	65,000	-	-	-
2035	61	66,000	-	-	-	-	66,000	-	-	-
2036	62	67,000	-	-	-	-	67,000	-	-	-
2037	63	-	-	-	-	-	-	-	-	-
2038	64	-	-	-	-	-	-	-	-	8,023
2039	65	-	-	-	-	-	-	953	366	6,796
2040	66	-	5,462	1,905	-	-	7,367	11,660	4,453	-
2041	67	-	5,739	23,320	-	-	29,058	11,889	3,583	-
2042	68	-	6,035	23,786	-	-	29,821	12,127	1,399	-
2043	69	-	6,335	24,262	-	-	30,596	12,373	-	-
2044	70	-	6,662	24,747	-	-	31,409	12,619	-	-
2045	71	-	7,026	25,242	-	-	32,268	12,874	-	-

Go to the Input tab and select 2036 as One's year of death. Two's Pension tab:

E	F	G	H	I	J	K	L	M	N	O
		Two	Two	Two	Two	Two	Two	Two	Two	Two
Year	Age	Employed	Other	CPP	CPP-Surv	PRB	Sub-Total	OAS	GIS	Allowance
2033	59	64,000	-	-	-	-	64,000	-	-	-
2034	60	65,000	-	-	-	-	65,000	-	-	-
2035	61	66,000	-	-	-	-	66,000	-	-	-
2036	62	67,000	2,500	-	10,733	-	80,233	-	-	1,137
2037	63	-	3,932	-	10,948	-	14,879	-	-	1,548
2038	64	-	4,131	-	11,167	-	15,298	-	-	11,607
2039	65	-	4,344	-	11,290	-	15,634	953	574	9,821
2040	66	-	10,022	1,905	9,525	-	21,451	11,660	6,986	-
2041	67	-	10,535	23,320	-	-	33,854	11,889	5,737	-
2042	68	-	11,093	23,786	-	-	34,879	12,127	2,296	-
2043	69	-	11,487	24,262	-	-	35,748	12,373	-	-
2044	70	-	11,910	24,747	-	-	36,657	12,619	-	-

Two's "Other" income for:
2036 = > $2,500 lump sum benefit + $10,733 CPP Survivor Benefit + $1,137 OAS Survivor's Allowance

2037 => $3,932 what would have been One's payment from Two's Spousal RRSP + $10,948 CPP Survivor Benefit + $1,548 OAS Survivor's Allowance

2040 => $4,560 what would have been One's payment from Two's Spousal RRSP + Two's DPSP/RRIF $5,462 + $9,525 CPP Survivor Benefit

The Spousal RRSP/RRIF payments which would have been paid to One is paid to Two after One's death because Two is named beneficiary.

We'll skip the comparing Scenarios with transfers of extra cash between chequing and TFSAs or TSAs because it works the same way in the PensionPlanner for Couples as it does for Singles.

But we will revisit zeroing in on the best years to take CPP and OAS … this time for <u>both</u> spouses.

First, what if both spouses took their CPP and OAS at age 65? We will look at the expected Net worth when Two is age 85.

Set up the Base Scenario:

	921,897	584,120	(426,933)	-	334,845	636,776	1,620,141	-							4,173,766
	CPP/PRB	AS/GIS/Allo	TAX	ER–CPP	RSP/RIF IN	SA INT	TFSA INT	Loan INT	CPP/PRB	AS/GIS/Allo	TAX	ER–CPP	INT	Total	Net Worth Diffe
Base	921,897	584,120	(426,933)	-	334,845	636,776	1,620,141								4,173,766

In the CPP/OAS section for Singles we saw a grid of <u>66</u> potential scenarios and zeroed in on the one year for CPP and the one year for OAS which would give the highest Net Worth number. With two people each having 66 possible options, we now have 4,356 (66 x 66) potential scenarios to explore. The PensionPlanner can easily handle this for you.

After picking the year to take CPP and OAS for both partners and then projecting transfers between the accounts to arrive at a projected Net Worth as in the Base Scenario above … 4,356 times … we have the preset **<u>Optimal CPP and OAS for Couples</u>** report which will give 4,356 4 year sets with projected Net Worth for the Target year.

Here is the top one:
CPP for One = 2041 OAS for One = 2036 CPP for Two = 2041 OAS for Two = 2043

Compare this Scenario with the Base scenario:

	1,001,279	663,848	(469,471)	-	334,845	617,677	1,614,342	-						4,265,439	
	CPP/PRB	AS/GIS/Allo	TAX	ER–CPP	RSP/RIF IN	SA INT	TFSA INT	Loan INT	CPP/PRB	AS/GIS/Allo	TAX	ER–CPP	INT	Total	Net Worth Difference
Base	921,897	584,120	(426,933)	-	334,845	636,776	1,620,141							4,173,766	
1	1,001,279	663,848	(469,471)	-	334,845	617,677	1,614,342		79,382	79,728	(42,538)	-	(24,899)	91,673	4,265,439	91,673

$79K more CPP
$80K more GIS
$43K more Tax
$25K less Interest
For a total improvement of $92K

Recap: After entering our income numbers and investment account balances and their IRR, we would try various scenarios to find the combination of fund transfers, and taking CPP and OAS at the optimal years, which would give the biggest boost to our projected Net Worth in our selected year. If there was a mortgage along with RRSPs, TFSAs, and TSA accounts, we would try splitting the extra cash among them in different ways like we did in the examples for Singles.

What about a younger couple where one spouse makes significantly more money; can we use the PensionPlanner to find the best percentage of RRSP contributions for Two to put into a spousal RRSP?

For this exercise, our test subjects are both 20 years younger than the example above. Two's income is about 40% more than One's income. Expenses are $60K in 2024 increasing 2.5% per year.

Without Spousal RRSP:
If we run through the calculations of One contributing from 0% to 18% of salary to their RRSP and Two doing the same – giving a grid of 19 x 19 – we see the best combination is for One to contribute 15% of salary and Two to contribute 18% of salary. The projected Net Worth is $5,493K.

With Two's Spousal RRSP:
If we run through the calculations of One contributing from 0% to 18% of salary to their RRSP and Two doing the same but splitting the 18% between Two's RRSP and the Spousal RRSP – giving a grid of 19 x 19 – we see the best combination is for One to contribute 10% of salary to their RRSP and Two to contribute 15% of salary to their RRSP and the remaining 3% to the Spousal RRSP. The projected Net Worth is $5,500K. preset Report: **Optimal Spousal RRSP Contributions.**

The resulting projected Net Worth is essentially the same with both scenarios. This doesn't address the question of whether or not the final balances in the retirement accounts fit the couple's plans. Again, there is more than math involved in financial decisions.

Let's look at one more feature that is different about the PensionPlanner for Couples.

CHAPTER 10 - Pension Splitting

If one spouse has significantly more income, maximizing RRSP contributions for both spouses would mean a large difference in RRSP funds and more combined tax paid without a way to transfer income to the spouse with lower income and lowering the total tax bill. Up until a few years ago, there was basically only one way to split pension income: Spousal RRSPs.

If one partner has significantly more pension income than the other, it is worthwhile to look into the three pension splitting opportunities now available:

1 Spousal RRSPs
2 CPP Splitting
3 Eligible Pension Income Splitting

Spousal RRSPs.

Spouse “A” (Contributor) would open a Spousal RRSP for spouse “B” (Owner) and spouse “A” would receive the tax break for any contributions. When the Spousal RRSP is converted to a RRIF (for example) spouse “B” would receive the pension income and pay the tax. We have covered an example of how the Spousal RRSP/RRIF works so it won't be repeated here.

Take note of the rules related to Spousal RRSPs, especially Attribution Rules, to ensure you don't have to pay penalties. Again, consult a professional.

CPP Splitting (also called CPP Sharing).

One or both CPP pensions can be shared. You must apply for it to start and/or to end, it cannot be backdated, and can save you tax if one spouse is in a higher tax bracket. The government calculates the CPP amount to be split.

Calculation of CPP Split: YT/CP x 50% x BD
YT => Number of years lived together
CP (Contributory Period) => Year both spouses receive CPP minus Year oldest spouse turned age 18
BD => Difference in CPP Benefits

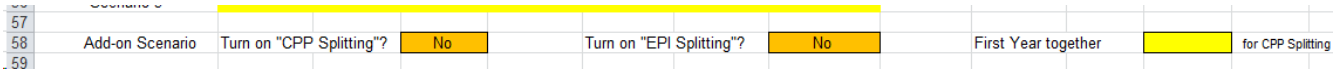
Eligible Pension Income Splitting.

“Eligible Pension Income” (EPI) does not include CPP or OAS. EPI can be pension income from a company pension plan (or from a RRSP or DPSP via a RRIF or annuity if the recipient is age 65 or over). Pension splitting may affect: OAS Benefit if your income will exceed the threshold; Spouse Amount or Age Amount to be claimed on your tax returns; other Federal/Provincial programs. Obviously there are many rules surrounding EPI, pension plans, etc. which cannot be covered in this short manual, so **consult a professional**.

Time for an example. We will use the data from the previous Chapter (with some changes).

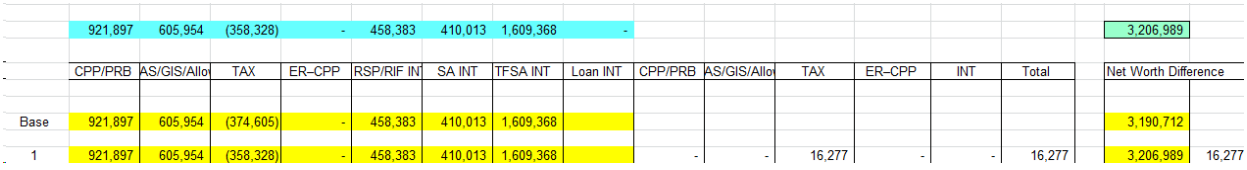
We will delete the Spousal RRSP. Two contributes 18% of annual income into their RRSP.

After the transfers, the total projected taxes are $375K.



57							
58	Add-on Scenario	Turn on "CPP Splitting"?	No	Turn on "EPI Splitting"?	No	First Year together	for CPP Splitting
59							

We turn on CPP Splitting and EPI Splitting at 50%:



	921,897	605,954	(358,328)	-	458,383	410,013	1,609,368	-						3,206,989	
	CPP/PRB	AS/GIS/Allo	TAX	ER–CPP	RSP/RIF INT	SA INT	TFSA INT	Loan INT	CPP/PRB	AS/GIS/Allo	TAX	ER–CPP	INT	Total	Net Worth Difference	
Base	921,897	605,954	(374,605)	-	458,383	410,013	1,609,368								3,190,712	
1	921,897	605,954	(358,328)	-	458,383	410,013	1,609,368		-	-	16,277	-	-	16,277	3,206,989	16,277

Turning on CPP Splitting and EPI Splitting projects about $16K less tax.

This example assumes a 50% split each year. You can pick different percentages from 0% to 50%, each year, and see the projected difference in total tax.

At 0% Taxes are $374K; At 10% $367K; At 20% $365K; At 30% $362K; At 40% $360K; At 50% $358K

This example shows less tax as the split percentage increases; this won't always be the case.

Again, this is just an example; your numbers will be different.

The goal of including this feature is to bring awareness of the potential tax savings; it is up to you to take a look at each year on its own and run the calculations. Let us know if you want us to perform these calculations on a one-time or regular basis (as a **Custom Report**).

The PensionPlanner can help you zero in on opportunities for tax savings via pension income sharing but it is always up to you to perform your due diligence.

* * *

Recap of Reports introduced in PART II – FOR COUPLES:
Optimal CPP and OAS for Couples
Optimal RRSP Contribution % for Couples
Optimal Spousal RRSP Contributions

PART III – FOR BUSINESS OWNERS

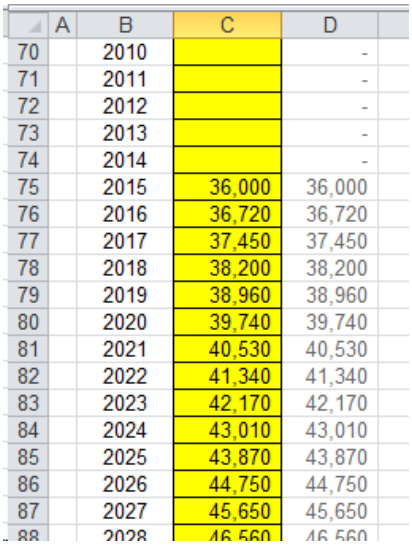
CHAPTER 11 - Optimal Salary/Dividend Mix

Have you ever wondered if you should incorporate? If your business is incorporated, what is the best Salary/Dividend mix to pay yourself?

This section of the PensionPlanner Manual is a deep dive into helping you answer those very questions.

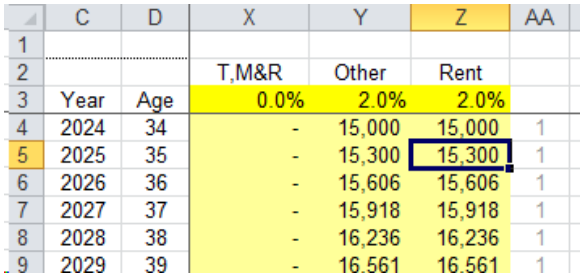
We will use the example data from the Singles section.

Income section when entering your data as an employee:



	A	B	C	D
70		2010		-
71		2011		-
72		2012		-
73		2013		-
74		2014		-
75		2015	36,000	36,000
76		2016	36,720	36,720
77		2017	37,450	37,450
78		2018	38,200	38,200
79		2019	38,960	38,960
80		2020	39,740	39,740
81		2021	40,530	40,530
82		2022	41,340	41,340
83		2023	42,170	42,170
84		2024	43,010	43,010
85		2025	43,870	43,870
86		2026	44,750	44,750
87		2027	45,650	45,650
88		2028	46,560	46,560

And Expenses:



	C	D	X	Y	Z	AA
1						
2			T,M&R	Other	Rent	
3	Year	Age	0.0%	2.0%	2.0%	
4	2024	34	-	15,000	15,000	1
5	2025	35	-	15,300	15,300	1
6	2026	36	-	15,606	15,606	1
7	2027	37	-	15,918	15,918	1
8	2028	38	-	16,236	16,236	1
9	2029	39	-	16,561	16,561	1

Here's where we change gears. Instead of income as an employee, we want to set up the income as self-employed income from year 2024 on.

You enter your data in this section of the Data Entry Form:

	W	X	Y	Z	AA	AB	AC	AD	AE	AF
109										
110		**BUSINESS**								
111										
112										
113		Enter Business Income			Enter Non-cash items				Enter Corp Costs	
114										
115						Home Office	CCA			
116		Year	Income		Year	Amount	Amount		Year	Amount
117		2024	43,010		2024				2024	
118		2025	43,870		2025				2025	
119		2026	44,750		2026				2026	
120		2027	45,650		2027				2027	
121		2028	46,560		2028				2028	
122		2029	47,490		2029				2029	
123		2030	48,440		2030				2030	

We enter that data in the "Business" tab:

	A	B	C	D	E
3	Salary - % of Gross Income		0%	0%	0%
4	Dividend - % of Corp Income		0%	0%	0%
5	YEAR		2024	2025	2026
6	WD in Salary/Dividends		100%	100%	100%
7					
8	Business Net Income		43,010	43,870	44,750
9					
10	Non-Cash Deductions				
11	Home Office				
12	CCA				
13	To be added to Proprietor Cash		-	-	-
14					
15	Proprietor income		43,010	43,870	44,750
16	Self-employed CPP - ER		2,371	2,422	2,475
17	Proprietor income before tax		40,639	41,448	42,275
18					
19	Corp - CCA		-	-	-
20					
21	Corp Fees		-	-	-
22	Corp – CPP ADJ		-	-	-
23			-	-	-

24					
25	Salary - Corp		-	-	-
26	Salary - Corp CPP - ER		-	-	-
27					
28	Corp Income before taxes		-	-	-
29					
30	Corp Taxes	11%	-	-	-
31					
32	Corp Income after taxes		-	-	-
33					
34	Dividends		-	-	-
35					
36	Corp Income after Dividends		-	-	-
37	Corp Cash after Dividends		-	-	-
38					
39					
40	Self-employed Income		43,010	43,870	44,750
41					
42	Self-employed ADJ to Cash		(2,371)	(2,422)	(2,475)
43					
44	Cash Increase/(Decrease)		40,639	41,448	42,275

Now we take a look at the Cash tab:

	A	B	D	E	AM	AN	AO	AP	AQ	AR	AS
1				2000		Proprietor - CASH			CORP		Net Worth
2	Year	Age	Other			DEP/(WD)	BAL		CASH		Total
3							-		-		
4											
5	2024	34		(34,297)			40,639		-		8,343
6	2025	35		(71,266)			82,087		-		10,821
7	2026	36		(109,007)			124,362		-		15,355
8	2027	37		(147,536)			167,483		-		19,947
9	2028	38		(186,869)			211,460		-		24,590
10	2029	39		(227,024)			256,310		-		29,286
11	2030	40		(268,019)			302,054		-		34,035
12	2031	41		(309,873)			348,709		-		38,837
13	2032	42		(352,604)			396,295		-		43,691
14	2033	43		(396,232)			444,831		-		48,598
15	2034	44		(440,777)			494,334		-		53,557
16	2035	45		(486,258)			544,825		-		58,567

All the cash is sitting in the Business account. For these example exercises, we will transfer all available cash out of the Business account into our personal chequing account to keep our example exercises consistent with the exercises earlier in this Manual. You would probably have a "Proprietorship Balance" in your company (Total Assets), instead of $0 shown, and keep some percentage of cash in the business, instead of - "100% of Cash WD per YR" (stay tuned).

For Business Owners:			
Proprietorship Net Assets	-	Return on Assets (ROA)	
Corporate Net Assets			
% of Income as Salary		% Salary Increase/YR	
% of Cash WD per YR	100.0%	Sell Business in Year	

	A	B	D	E	AM	AN	AO	AP	AQ	AR	AS
1				2000		Proprietor - CASH			CORP		Net Worth
2	Year	Age	Other			DEP/(WD)	BAL		CASH		Total
3							-		-		
4											
5	2024	34		5,703		(40,000)	639		-		8,343
6	2025	35		10,734		(42,000)	87		-		10,821
7	2026	36		14,993		(42,000)	362		-		15,355
8	2027	37		19,464		(43,000)	483		-		19,947
9	2028	38		24,131		(44,000)	460		-		24,590
10	2029	39		28,976		(45,000)	310		-		29,286
11	2030	40		33,981		(46,000)	54		-		34,035
12	2031	41		38,127		(46,000)	709		-		38,837

Now we are ready to transfer the excess cash from our chequing account to RRSP, TFSA, etc. as detailed in earlier exercises. Again, to keep our results consistent, we will put extra cash into the TFSA in each Scenario; we want to keep the focus of this section on answering the questions regarding incorporating.

	A	B	D	E	F	J	K	L	M	N
1				2000		Tax Free Savings Account				
2	Year	Age	Other			Dep/(WD)	Room	INT %	INT	BAL
3							81,000			0
4										
5	2024	34		2,003		3,700	84,300	5.0%	93	3,793
6	2025	35		2,034		5,000	86,300	5.0%	315	9,107
7	2026	36		2,093		4,200	89,100	5.0%	560	13,867
8	2027	37		2,064		4,500	91,600	5.0%	806	19,173
9	2028	38		2,031		4,700	93,900	5.0%	1,076	24,950
10	2029	39		2,076		4,800	96,100	5.0%	1,367	31,117
11	2030	40		2,081		5,000	98,600	5.0%	1,681	37,798
12	2031	41		2,027		4,200	101,900	5.0%	1,995	43,993
13	2032	42		2,096		5,200	104,200	5.0%	2,330	51,522
14	2033	43		2,068		4,400	107,300	5.0%	2,686	58,608
15	2034	44		2,023		5,500	109,300	5.0%	3,068	67,176
16	2035	45		2,042		4,500	112,300	5.0%	3,471	75,148
17	2036	46		2,005		5,600	114,700	5.0%	3,897	84,645
18	2037	47		2,092		4,500	118,200	5.0%	4,345	93,490
19	2038	48		2,081		5,600	120,600	5.0%	4,814	103,904
20	2039	49		2,050		5,600	123,000	5.0%	5,335	114,840
21	2040	50		2,077		4,500	126,500	5.0%	5,854	125,194
22	2041	51		2,039		5,500	129,000	5.0%	6,397	137,091
23	2042	52		2,017		5,400	131,600	5.0%	6,990	149,481
24	2043	53		2,018		5,300	135,300	5.0%	7,607	162,387
25	2044	54		2,023		5,200	139,100	5.0%	8,249	175,837
26	2045	55		2,098		6,000	142,100	5.0%	8,942	190,779
27	2046	56		2,022		6,000	145,100	5.0%	9,689	206,468
28	2047	57		2,069		5,700	148,400	5.0%	10,466	222,633
29	2048	58		2,013		5,600	151,800	5.0%	11,272	239,505

You can picture the rest ...

Next we enter our Base Scenario – Sole Proprietorship:

	675,600	621,113	(274,676)	(102,871)	-	-	750,940	-							794,624
	CPP/PRB	OAS/GIS	TAX	ER-CPP	RSP/RIF IN	Savings Int	TFSA INT	Mort INT	CPP/PRB	OAS/GIS	TAX	ER-CPP	INT	Total	Net Worth Diffe
	675,600	621,113	(274,676)	(102,871)	-	-	750,940	-							794,624

For Scenario 1 we will assume the business gets incorporated and pays out all available cash as Salary.

For Business Owners:			
Proprietorship Net Assets		Return on Assets (ROA)	
Corporate Net Assets	-		
% of Income as Salary	100.0%	% Salary Increase/YR	
% of Cash WD per YR	100.0%	Sell Business in Year	

The cash is not in the Sole Proprietorship account but paid into the personal chequing account via Corporate Payroll; as in previous examples, taxes are calculated and paid, and then living expenses.

The Business tab, as a Sole Proprietorship, showed that CPP employer portion has to be paid, so that leaves $40,600 in 2024 to be salary although $43K is taxable.

But as a corporation, instead of the full $43K in 2024 as taxable salary, now $40.8K is taxable salary, because $2.2K employer CPP premiums is deducted from corporate income.

As before, now we transfer extra cash from the chequing account into the TFSA, and then back into the chequing when needed.
Enter the Scenario numbers:

	647,074	634,201	(241,595)	(96,698)	-	-	920,845	-							988,346	
	CPP/PRB	OAS/GIS	TAX	ER-CPP	RSP/RIF IN	Savings Int	TFSA INT	Mort INT	CPP/PRB	OAS/GIS	TAX	ER-CPP	INT	Total	Net Worth Difference	
	675,600	621,113	(274,676)	(102,871)	-	-	750,940	-							794,624	
	647,074	634,201	(241,595)	(96,698)	-	-	920,845	-	(28,526)	13,088	33,081	6,172	169,905	193,720	988,346	193,722

By incorporating and paying all available cash as salary, we project:
$29K less CPP;
$13K more GIS;
$33K less Tax;
$6K less Employer CPP;
and $170K more Interest.
For a total projected improvement of $194K over Sole Proprietorship

For the next Scenario, we will assume 50% of available cash will go to Salary and the rest to dividends.

	A	B	C	D
3	Salary - % of Gross Income		50%	50%
4	Dividend - % of Corp Income		100%	100%
5	YEAR		2024	2025
6	WD in Salary/Dividends		100%	100%
7				
8	Business Net Income		43,010	43,870
9				
10	Non-Cash Deductions			

This screenshot shows the 50% Employment Income and the 50% Dividend Income (grossed up) paid after corporate taxes:

Year	Age	Employed	Other	CPP
2024	34	20,948	21,440	
2025	35	21,366	21,868	
2026	36	21,793	22,306	
2027	37	22,231	22,753	
2028	38	22,673	23,206	

This screenshot shows the Federal Dividend Tax Credit included in the T1 calculation (Provincial Dividend Tax Credit is not shown here):

		2024	2025
Donations CR		-	-
TFNTC		2,700.27	2,780.17
Federal Tax		**6,358.23**	**6,485.08**
Fed Dividend Tax CR		1,936.05	1,974.67
TFNTC + FDTC		4,636.32	4,754.84
Federal Tax Payable		1,721.91	1,730.24
Form BC428:			

Transfer extra cash from the chequing account into the TFSA, and then back into the chequing when needed. You know what that looks like so we will skip the screenshot.

Enter the Scenario numbers:

398,944	779,541	(192,518)	(48,349)	-	-	1,239,526	-							1,301,662	
CPP/PRB	OAS/GIS	TAX	ER-CPP	RSP/RIF IN	Savings Int	TFSA INT	Mort INT	CPP/PRB	OAS/GIS	TAX	ER-CPP	INT	Total	Net Worth Difference	
675,600	621,113	(274,676)	(102,871)	-	-	750,940	-							794,624	
647,074	634,201	(241,595)	(96,698)	-	-	920,845	-	(28,526)	13,088	33,081	6,172	169,905	193,720	988,346	193,722
398,944	779,541	(192,518)	(48,349)	-	-	1,239,526	-	(276,656)	158,428	82,159	54,521	488,586	507,038	1,301,662	507,038

By incorporating and paying all available cash split 50/50 between salary and dividends, we project:
$277K less CPP;
$158K more GIS;
$82K less Tax;
$55K less Employer CPP;
and $489K more Interest.
For a total projected improvement of $507K over Sole Proprietorship

We will look at one more Scenario: pay all available cash in dividends.

	A	B	C	D
3	Salary - % of Gross Income		0%	0%
4	Dividend - % of Corp Income		100%	100%
5	YEAR		2024	2025
6	WD in Salary/Dividends		100%	100%
7				
8	Business Net Income		43,010	43,870

Transfer extra cash from the chequing account into the TFSA, and then back into the chequing when needed.

Enter the Scenario numbers:

136,551	955,670	(164,711)	-	-	-	1,489,770	-							1,541,797	
CPP/PRB	OAS/GIS	TAX	ER-CPP	RSP/RIF IN	Savings Int	TFSA INT	Mort INT	CPP/PRB	OAS/GIS	TAX	ER-CPP	INT	Total	Net Worth Difference	
675,600	621,113	(274,676)	(102,871)	-	-	750,940	-							794,624	
647,074	634,201	(241,595)	(96,698)	-	-	920,845	-	(28,526)	13,088	33,081	6,172	169,905	193,720	988,346	193,722
398,944	779,541	(192,518)	(48,349)	-	-	1,239,526	-	(276,656)	158,428	82,159	54,521	488,586	507,038	1,301,662	507,038
136,551	955,670	(164,711)	-	-	-	1,489,770	-	(539,049)	334,556	109,966	102,871	738,830	747,173	1,541,797	747,173

By incorporating and paying all available cash in dividends, we project:
$539K less CPP;
$335K more GIS;
$110K less Tax;
$103K less Employer CPP;
and $739K more Interest.
For a total projected improvement of $747K over Sole Proprietorship

The difference in projected Net Worth (broken down by CPP Benefit, GIS, Tax, CPP Employer Premiums, and Interest) has been presented in a ‘by row’ format. There is another way to look at it (by column):

Salary/Dividend Mix Analysis

		Incorporated		
	Sole Pro	All Salary	50% Salary	All Dividend
Personal Tax	(172,663)	(145,335)	(48,571)	35,820
Corporate Tax			(97,606)	(200,531)
Total Income Tax	(172,663)	(145,335)	(146,177)	(164,711)
CPP (ER)	(102,871)	(96,698)	(48,349)	-
TOTAL TAX + CPP	(275,534)	(242,033)	(194,526)	(164,711)
CPP INCOME	675,600	647,074	398,944	136,551
OAS/GIS INCOME	621,113	634,201	779,541	955,670
INVEST. INCOME	750,940	920,845	1,239,526	1,489,770
Total Nominal $	1,772,119	1,960,087	2,223,485	2,417,280
DCF (@ 5%)	200,683	245,814	329,949	396,106
	Base	45,131	129,266	195,423

The increase or decrease in cash for each year is discounted back to current dollars at 5%. The difference between “All Dividend” and “Sole Pro.” in Total Nominal dollars is $645K but $195K in Discounted Cash Flow (DCF).

This specific example shows a clear pattern of improvement as we move closer to 100% dividends pay to the owner.

Note: These projections assume that the extra cash will be invested – not spent!

In your situation, this will probably look different.

When you purchase your **Custom Report**, you can select difference in Net Worth by row or by column (or both); just let us know.

We will take a little side trip before continuing.

CPP Revisited

At this point, an explanation of why the CPP is such a poor investment (in the above example) may be in order.

To explain, I will put the numbers from the example into another spreadsheet (yes, another one!).

Year of birth	Select Year	1990
Year to start receiving CPP	Select Year	2055
Your age when you start CPP (must be 60 to 70)		65
Expected Age at Death	Select Age	85

Before Enhancement:			
Your estimated monthly CPP will start at:	**$ 1,723.13**	**Your estimated IRR:**	**5.5%**
Total Contributions	**$ 100,706**	**Total Pension Benefit**	**$ 533,137**

After Enhancement:			**EE Only**	**ER + EE**
Your estimated monthly CPP will start at:	**$ 2,191.02**	**Your estimated IRR:**	**5.8%**	**3.6%**
Total Contributions	**$ 118,872**	**Total Pension Benefit**	**$ 677,903**	

This employee paying their 6% into the CPP and then collecting for 20 years can expect their IRR on their CPP contributions to be about 5.8%

A self-employed person, on the other hand, paying 12% into the CPP and then collecting the same amount of pension income, would get a IRR of about 3.6% (in this example). This brings us to another preset report: **CPP IRR**. Your report will be in table format and look like this:

	Estimated IRR on CPP for Employee & Self-Employed													
Death at >>>	Age 70		Age 75		Age 80		Age 85		Age 90		Age 95		Age 100	
Take CPP at	EE	ER + EE	EE	ER + EE	EE	ER + EE	EE	ER + EE	EE	ER + EE	EE	ER + EE	EE	ER + EE
Age 60	2.7%	0.0%	4.3%	0.8%	5.1%	2.2%	5.7%	3.0%	6.0%	3.5%	6.2%	3.9%	6.4%	4.1%
Age 61	2.7%	0.0%	4.3%	1.1%	5.2%	2.4%	5.7%	3.2%	6.1%	3.7%	6.3%	4.1%	6.5%	4.3%
Age 62	2.5%	0.0%	4.3%	1.2%	5.2%	2.5%	5.8%	3.3%	6.2%	3.8%	6.4%	4.2%	6.6%	4.5%
Age 63	2.3%	0.0%	4.3%	1.2%	5.2%	2.6%	5.8%	3.4%	6.2%	3.9%	6.4%	4.3%	6.6%	4.6%
Age 64	2.0%	0.0%	4.1%	1.3%	5.2%	2.7%	5.8%	3.5%	6.2%	4.0%	6.5%	4.4%	6.6%	4.7%
Age 65	0.0%	0.0%	4.1%	1.3%	5.2%	2.7%	5.8%	3.6%	6.3%	4.1%	6.5%	4.5%	6.7%	4.8%
Age 66	0.0%	0.0%	3.9%	1.2%	5.1%	2.7%	5.8%	3.6%	6.3%	4.2%	6.5%	4.6%	6.7%	4.8%
Age 67	0.0%	0.0%	3.7%	1.0%	5.1%	2.7%	5.8%	3.6%	6.3%	4.2%	6.5%	4.6%	6.7%	4.9%
Age 68	0.0%	0.0%	3.5%	0.8%	5.0%	2.6%	5.8%	3.6%	6.2%	4.2%	6.5%	4.6%	6.7%	4.9%
Age 69	0.0%	0.0%	3.1%	0.5%	4.8%	2.5%	5.7%	3.6%	6.2%	4.2%	6.5%	4.6%	6.7%	4.9%
Age 70	0.0%	0.0%	2.7%	0.1%	4.7%	2.4%	5.6%	3.5%	6.1%	4.2%	6.5%	4.6%	6.7%	4.9%

Note: "0.0%" indicates a Negative IRR

Back to Salary/Dividend Mix

In the example above we assume that all the cash is taken out of the business each year. This will match reality in some cases but certainly not all. Now we will expand on the example and assume that 80% of available cash is taken out in Salary/Dividends leaving 20% before taxes.

Also, if you re-invest cash into your business you expect to make a return on your investment. In this scenario, we will assume that the owner will get paid in 100% Dividends and that we can get a Return on Assets (ROA) of 10% on money re-invested:

	A	B	C	D	E
3	Salary - % of Corp Income		0%	0%	0%
4	Dividend - % of Corp Income		100%	100%	100%
5	YEAR		2024	2025	2026
6	WD in Salary/Dividends		80%	80%	80%
7					
8	ROA	10%		387	785
9	Business Net Income		43,010	44,257	45,535
10			43,010	43,870	44,750
25					
26	Salary - Corp		-	-	-
27	Salary - Corp CPP - ER		-	-	-
28					
29	Corp Income before taxes		43,010	44,257	45,535
30					
31	Corp Taxes	11%	4,731	4,868	5,009
32					
33	Corp Income after taxes		38,279	39,389	40,527
34					
35	Dividends		34,408	35,406	36,428
36					
37	Corp Income after Dividends		3,871	3,983	4,099
38	Corp Cash after Dividends		3,871	3,983	4,099

Next we project the transfers between the chequing and the TFSA, and then enter the Scenario (the $240K business income – an income source not in the previous exercises – is included in “Interest”):

								Biz Income						
136,551	963,430	(198,133)	-	-	1,148	1,390,400	-	239,545						1,657,457
CPP/PRB	OAS/GIS	TAX	ER-CPP	RSP/RIF IN	Savings Int	TFSA INT	Mort INT	CPP/PRB	OAS/GIS	TAX	ER-CPP	INT	Total	Net Worth Difference
675,600	621,113	(274,676)	(102,871)	-	-	750,940	-							794,624
647,074	634,201	(241,595)	(96,698)	-	-	920,845	-	(28,526)	13,088	33,081	6,172	169,905	193,720	988,346 193,722
398,944	779,541	(192,518)	(48,349)	-	-	1,239,526	-	(276,656)	158,428	82,159	54,521	488,586	507,038	1,301,662 507,038
136,551	955,670	(164,711)	-	-	-	1,489,770	-	(539,049)	334,556	109,966	102,871	738,830	747,173	1,541,797 747,173
136,551	963,430	(198,133)	-	-	1,148	1,390,400		(539,049)	342,317	76,544	102,871	880,153	862,835	1,657,457 862,833

As in an earlier Chapter, the exercises above assumed a relatively low income.

Let's double the income and increase the expenses by 33%. We will want to find the best RRSP contribution rate so we will run the scenarios for RRSP contributions from 0% to 18% and the final scenario will be "all available cash up to the RSP contribution limit". We will plan on withdrawing 80% of cash in Salary/Dividends. We will vary the Salary/Dividend mix from 100% Salary to 100% Dividends, by increments of 5%. The business regularly makes a Return on Assets of 10%. We will assume a 3% annual salary increase. Lastly, we will assume that the business will be sold upon retirement in 2054 for the asset value in a share sale and the entire amount will be claimed free of tax under the Lifetime Capital Gains Exemption (LCGE).

For Business Owners:				
Proprietorship Net Assets			Return on Assets (ROA)	10.0%
Corporate Net Assets	-			
% of Income as Salary	0.0%	to 100%	% Salary Increase/YR	3.0%
% of Cash WD per YR	80.0%		Sell Business in Year	2054

The rules re the LCGE are complex; it is strongly recommended that you **consult a professional** before incorporating and several years before you plan on selling your business. The PensionPlanner will assume that you, and your business, meet any and all requirements related to share structure, TOSI, etc.; the PensionPlanner can only take care of the math involved.

We can set this up in our preset "**Optimal Salary/Dividend Mix For Singles**" report which provides a 20 x 21 grid of 420 scenarios giving the projected Net Worth numbers (000s).

The top result: 100% Salary and Maximum RRSP Contribution (not shown in this partial screenshot)

OPTIMAL SALARY/DIVIDEND MIX - SINGLES

Salary % / RRSP %	0%	5%	10%	15%	20%	25%	30%	35%	40%	45%	50%	55%	60%	65
0%	4,609	4,683	4,711	4,739	4,767	4,797	4,827	4,859	4,893	4,927	4,962	5,002	5,050	5,10
1%	4,698	4,770	4,796	4,822	4,849	4,878	4,908	4,939	4,971	5,005	5,040	5,079	5,126	5,18
2%	4,774	4,844	4,869	4,893	4,920	4,948	4,978	5,008	5,039	5,072	5,107	5,145	5,190	5,24
3%	4,848	4,916	4,939	4,964	4,990	5,018	5,045	5,075	5,106	5,139	5,172	5,209	5,253	5,30
4%	4,911	4,985	5,009	5,034	5,060	5,085	5,113	5,142	5,173	5,203	5,235	5,271	5,316	5,36
5%	4,944	5,040	5,079	5,103	5,127	5,153	5,180	5,209	5,237	5,268	5,298	5,333	5,376	5,42
6%	4,974	5,073	5,123	5,171	5,194	5,220	5,246	5,272	5,301	5,330	5,360	5,393	5,436	5,48
7%	4,996	5,100	5,155	5,206	5,255	5,286	5,310	5,336	5,363	5,391	5,421	5,453	5,495	5,54
8%	5,015	5,122	5,180	5,237	5,289	5,338	5,372	5,398	5,424	5,452	5,481	5,513	5,552	5,60
9%	5,030	5,139	5,200	5,259	5,315	5,369	5,419	5,460	5,486	5,512	5,540	5,570	5,610	5,65
10%	5,043	5,153	5,216	5,277	5,337	5,394	5,448	5,498	5,546	5,571	5,598	5,628	5,667	5,71
11%	5,052	5,164	5,228	5,292	5,354	5,412	5,470	5,525	5,578	5,626	5,654	5,683	5,721	5,76
12%	5,060	5,174	5,239	5,304	5,366	5,427	5,488	5,545	5,601	5,654	5,704	5,738	5,774	5,81
13%	5,067	5,181	5,247	5,313	5,377	5,439	5,500	5,561	5,619	5,676	5,729	5,782	5,827	5,87
14%	5,072	5,187	5,254	5,321	5,385	5,448	5,511	5,573	5,633	5,692	5,749	5,806	5,865	5,91
15%	5,075	5,191	5,258	5,325	5,391	5,455	5,518	5,581	5,643	5,704	5,763	5,822	5,886	5,95
16%	5,077	5,193	5,261	5,328	5,394	5,459	5,523	5,587	5,650	5,712	5,772	5,834	5,900	5,96
17%	5,077	5,194	5,262	5,329	5,395	5,461	5,525	5,590	5,654	5,717	5,779	5,842	5,910	5,97
18%	5,076	5,194	5,262	5,329	5,396	5,461	5,526	5,590	5,655	5,718	5,781	5,846	5,914	5,98
MAX	5,039	5,160	5,235	5,315	5,397	5,465	5,530	5,594	5,658	5,721	5,784	5,845	5,910	5,97

Below is the screenshot of the Cash tab.

				2,000	Savings		Tax Free Savings Account					HBP/LLP	RRSP/RRIF		CORP	Net Worth
	Year	Age	Other		Dep/(WD)	BAL	Dep/(WD)	Room	INT %	INT	BAL	(Loan)/PMT	Dep/(WD)	BAL	CASH	Total
								88,000			0				-	
5	2024	34		2,049	-	-	3,600	91,400	5.0%	90	3,690		12,200	12,505	14,776	33,020
6	2025	35		2,030	-	-	3,800	94,600	5.0%	280	7,770		13,500	26,968	30,113	66,880
7	2026	36		1,971	-	-	4,100	97,500	5.0%	491	12,360		14,600	43,281	46,027	103,639
8	2027	37		1,979	-	-	4,400	100,100	5.0%	728	17,488		15,600	61,435	62,534	143,436
9	2028	38		1,970	-	-	4,700	102,400	5.0%	992	23,180		16,800	81,727	79,653	186,530
10	2029	39		1,952	-	-	5,000	104,400	5.0%	1,284	29,464		18,100	104,366	97,399	233,181
11	2030	40		1,979	-	-	5,400	106,500	5.0%	1,608	36,473		19,300	129,367	115,791	283,609
12	2031	41		2,041	-	-	5,700	108,300	5.0%	1,966	44,139		20,700	157,052	134,846	338,079
13	2032	42		1,989	-	-	6,200	109,600	5.0%	2,362	52,701		22,100	187,558	154,584	396,832
14	2033	43		1,972	-	-	6,600	110,500	5.0%	2,800	62,101		23,500	221,023	175,024	460,119
15	2034	44		2,032	-	-	7,000	111,000	5.0%	3,280	72,381		24,900	257,597	196,186	528,195
16	2035	45		1,951	-	-	7,500	111,000	5.0%	3,807	83,687		26,500	297,639	218,089	601,366
17	2036	46		1,952	-	-	7,900	111,100	5.0%	4,382	95,969		28,000	341,221	240,753	679,895
18	2037	47		2,009	-	-	8,300	110,800	5.0%	5,006	109,275		29,600	388,622	264,199	764,105
19	2038	48		2,015	-	-	8,800	110,000	5.0%	5,684	123,759		31,300	440,135	288,450	854,359
20	2039	49		2,031	-	-	9,300	108,700	5.0%	6,420	139,479		33,000	495,967	313,527	951,005
21	2040	50		2,043	-	-	9,800	106,900	5.0%	7,219	156,498		34,800	556,436	339,453	1,054,430
22	2041	51		2,022	-	-	13,900	101,000	5.0%	8,172	178,571		31,700	616,750	366,250	1,163,592
23	2042	52		1,981	-	-	23,000	86,000	5.0%	9,504	211,074		21,700	669,830	393,943	1,276,828
24	2043	53		2,000	-	-	24,400	70,600	5.0%	11,164	246,638		22,400	726,281	422,556	1,397,476
25	2044	54		1,968	-	-	25,900	53,700	5.0%	12,979	285,517		23,200	786,375	452,115	1,525,976
26	2045	55		2,019	-	-	27,400	35,300	5.0%	14,961	327,878		23,900	850,192	482,645	1,662,734
27	2046	56		2,046	-	-	29,000	15,300	5.0%	17,119	373,997		24,700	918,019	514,172	1,808,234
28	2047	57		1,969	6,400	6,560	24,300	-	5.0%	19,307	417,605		25,500	990,057	546,723	1,962,913
29	2048	58		1,815	23,200	30,668	9,000	-	5.0%	21,105	447,710		26,400	1,066,620	580,324	2,127,137
30	2049	59		1,791	24,500	57,314	9,000	-	5.0%	22,610	479,320		27,200	1,147,831	615,005	2,301,262
31	2050	60		1,863	25,300	86,112	9,500	-	5.0%	24,204	513,024		28,100	1,234,025	650,794	2,485,818
32	2051	61		1,754	26,900	117,990	9,500	-	5.0%	25,889	548,413		29,000	1,325,451	687,721	2,681,329
33	2052	62		1,804	28,100	152,692	9,500	-	5.0%	27,658	585,571		29,900	1,422,372	725,816	2,888,255
34	2053	63		1,744	29,600	190,667	9,500	-	5.0%	29,516	624,587		30,800	1,525,060	765,111	3,107,169
35	2054	64	805,638	1,877	830,000	1,050,950	9,500	-	5.0%	31,467	665,554		31,800	1,633,908	-	3,352,289
36	2055	65		1,898	(34,000)	1,068,648		9,500	5.0%	33,278	698,831			1,715,603	-	3,484,980
37	2056	66		1,884	-	1,122,080	17,800	1,200	5.0%	35,387	752,018		-	1,728,054	-	3,604,036
38	2057	67		1,835	8,000	1,186,384	10,700	-	5.0%	37,868	800,586		-	1,737,408	-	3,726,212
39	2058	68		1,846	9,400	1,255,338	10,000	-	5.0%	40,279	850,865		-	1,743,250	-	3,851,300
40	2059	69		1,838	10,100	1,328,458	10,000	-	5.0%	42,793	903,659		-	1,745,359	-	3,979,313
41	2060	70		1,828	10,900	1,406,053	10,000	-	5.0%	45,433	959,092		-	1,743,177	-	4,110,150
42	2061	71		1,794	11,900	1,488,553	10,000	-	5.0%	48,205	1,017,296		-	1,735,995	-	4,243,639
43	2062	72		1,814	10,900	1,574,153	10,000	-	5.0%	51,115	1,078,411		-	1,726,708	-	4,381,087
44	2063	73		1,844	9,900	1,663,009	10,000	-	5.0%	54,171	1,142,582		-	1,715,169	-	4,522,604
45	2064	74		1,818	7,900	1,754,256	11,000	-	5.0%	57,404	1,210,986		-	1,701,246	-	4,668,307
46	2065	75		1,873	6,700	1,848,837	11,000	-	5.0%	60,824	1,282,810		-	1,684,821	-	4,818,340
47	2066	76		1,896	6,400	1,947,839	11,000	-	5.0%	64,415	1,358,225		-	1,665,791	-	4,973,751
48	2067	77		1,836	5,200	2,050,561	11,000	-	5.0%	68,186	1,437,412		-	1,643,731	-	5,133,540
49	2068	78		1,856	3,600	2,156,779	11,000	-	5.0%	72,146	1,520,557		-	1,618,763	-	5,297,955
50	2069	79		1,874	2,100	2,266,770	11,000	-	5.0%	76,303	1,607,860		-	1,590,524	-	5,467,028
51	2070	80		1,891	500	2,380,621	11,000	-	5.0%	80,668	1,699,528		-	1,558,864	-	5,640,904
52	2071	81		1,952	-	2,499,652	9,700	2,300	5.0%	85,219	1,794,447		-	1,523,681	-	5,819,732
53	2072	82		1,928	-	2,624,635	8,000	6,300	5.0%	89,922	1,892,369		-	1,484,606	-	6,003,538
54	2073	83		1,939	-	2,755,866	6,000	12,300	5.0%	94,768	1,993,138		-	1,441,512	-	6,192,455
55	2074	84		1,927	-	2,893,660	3,900	20,400	5.0%	99,754	2,096,792		-	1,394,201	-	6,386,580
56	2075	85		1,993	-	3,038,343	1,600	30,800	5.0%	104,880	2,203,272		-	1,342,299	-	6,585,906

Reminder: any of the other reports of interest are also available. Also, most reports can be easily modified to suit your requirements; for example, the "Optimal Salary/Dividend Mix" report can be modified to:

- vary the Return on Assets (ROA)
- vary the Withdrawal percentage
- vary the annual salary increase
- and much more; just let us know!

BTW: the amount you get for your business can have a significant effect on your optimal remuneration strategy re salary/dividend mix and RRSP contributions.

Keep reading as we ramp up the complexity to match the requirements of a married business owner.

Optimal Salary/Dividend Mix For Couples

If you are married, the number of possible scenarios increases dramatically compared to someone who is single. As discussed with the preset report "Optimal CPP & OAS" for couples vs singles (66 x 66 scenarios for couples vs 66 scenarios for singles), the preset report "Optimal Salary/Dividend Mix for Couples" has several options to vary.

The report options available to you will depend on if just one spouse works in the business or if both spouses work in the business.

Just one spouse owns shares and works in the business:

PensionPlanner partial screenshot of spouse "One" business income; 70% Cash Withdrawal, Salary/Dividend Mix of 50/50, 5% Return on Assets invested, salary starting at $34K and increasing by 3% per year:

One		0	0	0	0	0
		1	1	1	1	1
Salary - % of Corp Income		50%	50%	50%	50%	50%
Dividend - % of Corp Income		100%	100%	100%	100%	100%
YEAR		2024	2025	2026	2027	2028
WD in Salary/Dividends		70%	70%	70%	70%	70%
Business Net Income		100,000	104,087	108,326	112,720	117,276
ROA	5%		1,087	2,236	3,448	4,726
Corp Fees		-	-	-	-	-
Corp – CPP ADJ		1,905	1,986	2,069	2,156	2,246
		1,905	1,986	2,069	2,156	2,246
Salary - Corp	3%	34,333	35,363	36,424	37,517	38,642
Salary - Corp CPP - ER		1,905	1,986	2,069	2,156	2,246
Corp Income before taxes		63,762	66,739	69,832	73,047	76,388
Corp Taxes	11%	7,014	7,341	7,682	8,035	8,403
Corp Income after taxes		56,748	59,397	62,151	65,012	67,985
Dividends		35,000	36,431	37,914	39,452	41,047
Corp Income after Dividends		21,748	22,966	24,237	25,560	26,938
Corp Cash after Dividends		21,748	22,966	24,237	25,560	26,938

Your options are very similar to the options for "Optimal Salary/Dividend Mix For Singles". You can vary the number of options for Salary/Dividend Mix and then we add several options for RRSP Contribution % for both spouses.

You can also vary: Withdrawal %; ROA; and annual Salary Increase %.
You can add any of the preset reports, and/or get a custom report.

Both spouses own shares and work in the business:

Now things get more interesting!

Screenshot of the Data Entry Form's "Business" section:

For Business Owners:					
Proprietorship Net Assets		Return on Assets (ROA)	5.0%		Sell Busin
Corporate Net Assets					
% of Income as Salary	50.0%	% Salary Increase/YR	3.0%		
% of Cash WD per YR	70.0%	Split Income % - "ONE"	50.0%	If BOTH spouses own/wor	

PensionPlanner partial screenshot of spouse "One" business income when both spouses work in the business and split the income 50/50; 70% Cash Withdrawal, Salary/Dividend Mix of 50/50, 5% Return on Assets invested, salary starting at $17K and increasing by 3% per year:

Team Split %		50%	50%	50%	50%	50%	50%
Team Business Net Income		100,000	103,000	106,090	109,273	112,551	115,927
One		0	0	0	0	0	0
		1	1	1	1	1	1
Salary - % of Corp Income		50%	50%	50%	50%	50%	50%
Dividend - % of Corp Income		100%	100%	100%	100%	100%	100%
YEAR		2024	2025	2026	2027	2028	2029
WD in Salary/Dividends		70%	70%	70%	70%	70%	70%
Business Net Income		50,000	52,045	54,165	56,363	58,642	61,005
ROA	5%		545	1,120	1,727	2,367	3,041
Corp Fees		-	-	-	-	-	-
Corp – CPP ADJ		918	958	1,000	1,044	1,089	1,135
		918	958	1,000	1,044	1,089	1,135
Salary - Corp	3%	17,179	17,694	18,225	18,772	19,335	19,915
Salary - Corp CPP - ER		918	958	1,000	1,044	1,089	1,135
Corp Income before taxes		31,903	33,392	34,940	36,548	38,219	39,955
Corp Taxes	11%	3,509	3,673	3,843	4,020	4,204	4,395
Corp Income after taxes		28,394	29,719	31,096	32,528	34,015	35,560
Dividends		17,500	18,216	18,958	19,727	20,525	21,352

In addition to the options which apply when the business is owned by one spouse, we have options to vary:

- split of income between Spouses when both work in the business
- Salary/Dividend Mix for both Spouses

Here is a table summarizing the preset report options for the "Optimal Salary/Dividend Mix For Couples" report:

One Spouse Owns & Works in the Business	Both Spouses Own & Work in the Business
11 options for RRSP Contribution % for both spouses; 11 options for Salary/Dividend Mix	5 options for RRSP Contribution % for both spouses; 6 options for Salary/Dividend Mix for both spouses
11 options for RRSP Contribution % for both spouses; 21 options for Salary/Dividend Mix	6 options for RRSP Contribution % for both spouses; 6 options for Salary/Dividend Mix for both spouses
20 options for RRSP Contribution % for both spouses; 11 options for Salary/Dividend Mix	5 options for RRSP Contribution % for both spouses; 11 options for Salary/Dividend Mix for both spouses
20 options for RRSP Contribution % for both spouses; 21 options for Salary/Dividend Mix	6 options for RRSP Contribution % for both spouses; 11 options for Salary/Dividend Mix for both spouses

As the number of scenarios increase, the time required to run the report increases, therefore the cost will increase accordingly. (e.g. 20 options for RRSP % for both spouses and 21 options for Salary/Dividend Mix will process 20 x 20 x 21 = 8,400 Scenarios)

Reminder: you are not stuck with choosing from among these preset reports; you can "design" your own Custom Report – let us know what you have in mind.

What kind of Scenarios do you want to explore?

* * *

Recap of Reports introduced in PART III – FOR BUSINESS OWNERS:
Optimal Salary/Dividend Mix
CPP IRR

CONCLUSION

Congratulations, you made it to the end!

When I first put this spreadsheet together, it was just for my wife and I. Over the past few years I kept adding to it with the idea of offering it to the public. I quickly realized that even though there was a lot of interest in personal finance and a custom financial plan, selling this spreadsheet wasn't the answer due to the very simple reason that most people are not accountants (Duh!). That is, most people are not comfortable, or are not used to, working with spreadsheets.

Okay, I identified the problem, but what is the solution?

Pay us a modest fee to produce your customized report(s). Here are some options:
1.1 We produce the "Base Scenario" standard report (the "Early Warning System" showing if and when you will run out of money). There are no optional Scenarios to compare.
1.2 Custom Scenarios to compare to the Base Scenario and/or Custom Reports
1.3 Preset Reports: CPP by Year & Month, Optimal CPP & OAS, etc. List provided on our website: MyPensionPlanner.ca

(Rates subject to change without notice.)

The PensionPlanner is not an attempt to predict the future. It is a projection. You tell it what your assumptions are and, combining those assumptions with what is currently known (but will change), it will do a bunch of math and give you some numbers. We can be almost certain that one year from now the numbers will be fairly accurate because we don't anticipate any big changes between now and then. Five years from now is less certain. The further out we go, the more uncertainty exists. Anything could happen in the next 10 years, as we have seen during the last few years. Expand that by five for a 50 year projection and we know that there will be a **lot** of changes ahead.

Remember the sailing to Lisbon analogy? We make our Plan (or Projection) knowing full well that we will have to revise it on a regular basis. As I mentioned at the beginning, just knowing you have a Plan will be a huge relief. You will have an "Early Warning System" in place which will allow you to sleep at night not anxious about your financial future. You can compare a wide array of possible scenarios to find the one that gives you the "biggest bang for your buck". If you are in your late 50s you can quickly zero in on the best years to take your CPP and OAS. Married couples can plan/arrange the pension income splitting setup that is best for them. Business owners can quickly find the optimal salary/dividend mix (with the option of adding any of the other reports).

I look forward to working with you to produce your custom PensionPlanner Report!

Ivan