NaviPlan
Financial Planning Software

NaviPlan Extended
Case Study I

Copyright

NaviPlan Extended

Version 8.3

General (Canada)

Build 2373-112

NaviPlan Extended – Level one **Canada**
Agenda

Morning

Introduction to NaviPlan Extended

- Overview of cash flow–based planning
- The planning process
- The desktop and the Help system

Building the plan

- *Plan Analysis* window and assistants
- Deficit coverage – automatic asset redemption
- Data entry – creating the Base Plan

Afternoon

Planning

- Data verification
- Analyzing and comparing scenarios
- Creating the Recommended Plan

Insurance analysis

- Life insurance analysis
- Disability insurance analysis

Review of reports, graphs, and presentations

- Including Custom and Comparison reports and graphs
- On-screen presentation of the Recommended Plan
- Creating Comprehensive client reports

Question and answer period

Table of Contents

1. Using asset classes

When using the asset classes method for assigning return rates, you can establish up to 30 asset classes with corresponding returns and up to 15 model portfolios. Return rates for each asset class can be defined according to interest, dividends, capital gains (realized annually), and deferred growth (unrealized until redemption). All return rates are given the appropriate tax treatment based on these classifications.

For this case study we will use the asset classes method as a means of calculating default return rates.

Defining asset classes

Procedure

1. Go to the **Edit** menu, and then select **Preferences.**
2. Go to the **Asset Classes** tab – **Classes** subtab.
3. Select the **Use asset class weightings for setting asset return rates** check box.

   This check box ensures this method is used as the default method for calculating asset return rates for all future plans.
4. Click the **New Asset Class** button four times to create four blank rows.
5. Enter the asset classes and their corresponding returns, as listed below:

	Interest	Dividends	Capital Gains	Deferred Growth	Standard Deviation
Cash	**3.00%**	0.00%	0.00%	0.00%	0.00%
Fixed Income	**3.50%**	0.00%	0.00%	**1.50%**	**3.00%**
Canadian Equity	0.00%	**2.00%**	**2.00%**	**4.00%**	**10.00%**
Foreign Equity	0.00%	**0.00%**	**5.00%**	**5.00%**	**15.00%**

Defining model portfolios

Procedure

1. Go to the **Portfolios** subtab.
2. Click the **New Portfolio** button four times to create four blank rows.
3. Enter the corresponding asset class weightings, as listed on the following page:

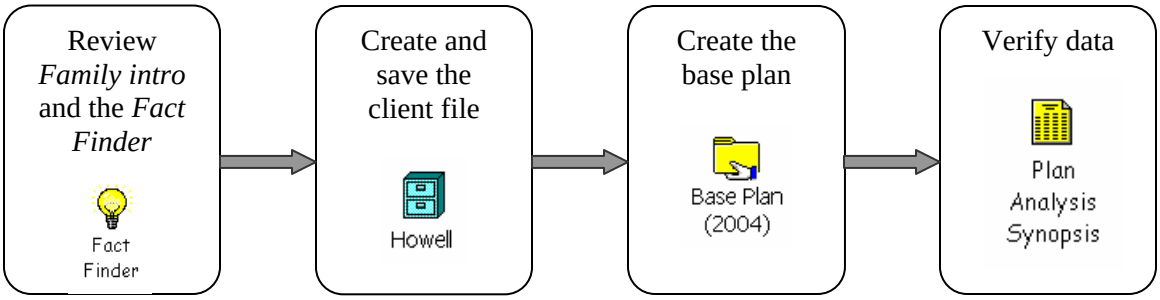
	Cash	Fixed Income	Canadian Equity	Foreign Equity
Aggressive	0.00%	0.00%	**65.00%**	**35.00%**
Growth	**5.00%**	**25.00%**	**45.00%**	**25.00%**
Balanced	**10.00%**	**40.00%**	**40.00%**	**10.00%**
Conservative	**15.00%**	**60.00%**	**25.00%**	0.00%

4. From the *Default Portfolio* list, select **Balanced.**
5. Click **OK** to save the new default asset classes and model portfolios.

2. Case study instructions

Now that we have established all of the necessary defaults, we can proceed with the analysis of the Howell case study. An initial meeting was conducted with the family and as a result, financial goals and objectives were established. All current financial information was documented using the *Fact Finder* available in NaviPlan.

Case study process model



Review *Family introduction* and the *Fact Finder*

Review the chapter entitled *Family introduction* to get a sense of the clients' financial objectives. Then, refer to the *Fact Finder* found in this guide to become familiar with the Howell's current financial situation.

Create and save the client file

Go to the **File** menu, and then select **New – Client** to create a new client file for the Howell family.

Be sure to enter all information from the *Fact Finder* using correct spelling and punctuation, as this data will appear in reports.

Create the base plan

Once you have created and saved the client file, you will be prompted to create a new plan. If you miss this prompt, go to the **File** menu, and then select **New – Plan.**

Name the new plan **Base Plan,** and then enter all financial data from the *Fact Finder*.

Verify data

Verify data using the *Plan Analysis Synopsis* report.

Compare this report with the *Plan Analysis Synopsis* report found in the chapter titled *Verifying data*. If data entry errors are found, go back into the Base Plan to correct the data.

3. Family introduction

The following case study provides an example of how you can use NaviPlan to help your clients meet their financial goals and objectives.

Personal information

Mason and Natalie Howell have approached you to review and comment on their financial situation. Until now, Mason and Natalie have been overseeing their own financial affairs. However, their financial goals have become too complex for their knowledge and are requiring too much of a time commitment. They need the assistance of a financial planner.

Client	Age	Health	Relationship
Mason	41	Excellent	Husband
Natalie	40	Excellent	Wife
Karen	14	Excellent	Daughter
Joshua	11	Excellent	Son

Employment

Mason is an accountant for an accounting firm and has been employed there for the past 11 years. Mason's base salary is $85,000. The company consistently rewards their employees with an annual bonus, which increases each year by approximately 1%.

Natalie rejoined the work force after the birth of their second child (Joshua) and works as an occupational therapist. Natalie's base salary is $48,000.

Natalie's company has a registered pension plan for their employees. In this case it is a defined benefit plan.

Financial position

Mason and Natalie's major asset is their home, which they purchased in 1995 and is currently valued at $230,000. They saved $25,000 for a down payment on their home and incurred a mortgage of $180,000. They expect the value of their home to increase in value annually. After Karen and Joshua complete their university education, Mason and Natalie are planning to use a portion of Mason's annual bonus to pay off the mortgage more rapidly.

Mason and Natalie have managed to save $12,000 in a savings account and would like to use these proceeds to set up an emergency fund.

The entire family loves to travel and they usually plan for a major trip every five years. They do not foresee another family vacation until 2006 due to a family reunion that is scheduled for 2004. The expenses for the family reunion will be covered with existing

cash flow, and since it will take place in their hometown of Winnipeg, there is no need for a savings plan. If possible they would like to continue their vacations until they are 80, at which point it may be more difficult for them to get insurance for traveling.

The family currently spends $3,800 per month on regular household expenses such as food, utilities, transportation, and other discretionary spending. They also pay $350 per month in property taxes.

Goals and objectives

Risk tolerance

Mason and Natalie feel that the current asset mix for their entire portfolio is quite conservative. Both of them are willing to invest for growth and are eager to devote more of their assets to equity funds, including international markets.

Education

Mason and Natalie are concerned that their children's university education expenses are not adequately funded. They both excel academically and all indications point to continuing education at the post-secondary level. A main worry is the projected costs of tuition in comparison to what they have saved thus far.

Insurance

Another concern is their insurance needs. Are they adequately insured against an untimely death or an unforeseen incident that would cause short- or long-term disability?

Natalie has term life insurance coverage under a group plan naming Mason as the beneficiary. However, neither client has existing disability benefits at this time.

Other

Mason and Natalie want to ensure that they do not have to sacrifice their current lifestyle when they retire.

Estate planning

Mason and Natalie have complete wills detailing their wishes upon death. Their wills name each other as primary beneficiaries, and their children as secondary beneficiaries. The wills were last updated on August 1, 2002.

4. Fact Finder

NaviPlan Extended Fact Finder

Client Name: **Mason Howell**

Client Name: **Natalie Howell**

Advisor Name: **Jane Planner**

Date (mm/dd/yy): **January 1 – Current Year**

Overview

This *Fact Finder* is designed to help you gather the required information for your client's customized financial plan. The questionnaire's easy-to-follow format will allow you to enter your client's required personal data and financial details. These items are necessary for you to create a complete and thorough picture of your client's *current* and *future* financial situation.

The following sources will provide you with most of this information:

- Latest investment statements from trust companies, brokers, investment companies and banks
- Latest mortgage and other loan statements
- Budget of personal and living expenses
- All life insurance and disability insurance policies
- Pension statement from employer
- Tax returns
- Latest will, power of attorney
- Other relevant documentation

Client Information

Base Family

		(co-client if different)
Last Name:	Howell	
Marital Status *(e.g., married, divorced, single)*:	Married	
Number of Dependants:	2	
Address:	123 Crescentwood Place	
City:	Winnipeg	
Province:	Manitoba	
Country:	Canada	
Postal Code:	R3P 0W3	
Home Phone Number:	(204) 888-8888	

Basic

	Client	Co-client
Given Name:	Mason	Natalie
Gender:	Male	Female
Date of Birth *(mm/dd/yy/)*:	May 24, 1962	September 2, 1963
Social Insurance Number *(optional):*	123-456-789	987-654-321
Occupation	Accountant	Occupational Therapist
Fax # *(co-client if different)*:		
Business # *(co-client if different)*:	(204) 944-5432	(204) 943-1234
E-mail:		

Name of Child or Dependant	Gender	Date of Birth
Karen	Female	October 4, 1989
Joshua	Male	March 10, 1992

Advisors

Advisory Type *(Accountant, etc.)*	Full Name	Address	Business #
Lawyer	Ken Legal	123 Main Street	(204) 944-2323

Will Information

	Client	Co-client
Is there a Will? *(yes or no)*:	Yes	Yes
What date was the Will last updated on?:	August 2002	August 2002
Where is the Will located? *(safety deposit box, etc.):*	Safety Deposit Box	

Additional Notes *(Use this section to enter any other Client information that you feel would be relevant to your client's financial plan.)*

Assumptions

Risk Profile

Model Portfolio *(if applicable)*:	**Balanced**

Milestones

	Client	Co-client
Retirement Date *(age or date) (mm /yy)*:	**58 - May 2020**	**56 - May 2020**
Life Expectancy *(age / year)*:	**Age 90**	**Age 90**
Disabled *(age or year) (if applicable):*	**N/A**	**N/A**
Critical Illness *(age or year) (if applicable):*	Start: **N/A** End: **N/A**	Start: **N/A** End: **N/A**

Historical Data

RRSP Contribution Data

	Client	Co-client
Previous Year's Earned Income:	**$82,450**	**$46,560**
Previous Year's Pension Adjustment:	**$6,800**	**$4,966**
RRSP Overcontribution Balance:		
RRSP Deduction Carryforward:	**$21,000**	**$11,000**

General (Start of Year Account Balances)

	Client	Co-client
Cash Surplus or Deficit:		
RRSP Cash:		
RRIF Cash:		

General (Other Start of Year Account Balances)

	Client	Co-client
Capital Gains Deduction Used:		
Cumulative Net Investment Loss:		
Alternative Minimum Tax Carryover:		
Total Income From Previous Year:		

RRSP (RRSP Contribution Data)

	Client	Co-client
Homebuyer's Loan Balance:		
Years Left to Repay:		

RESP (Contributions as of the End of the Previous Year) - As Beneficiary

	Karen	Joshua
Total RESP Contributions:	$10,000	$10,000
CESG Eligibility Carryforward:		
Total CESG Payments Received:	$2,400	$2,400

Capital Loss Carryovers

	Client	Co-client
Before May 23, 1985:		
After May 22, 1985 and before 1988:		
In 1988 and 1989:		
After 1989 and before 2000:		
In 2000:		
After 2000:		
Year 2000 inclusion rate:		

Economic Factors

Base Inflation Rate: % 3% Return on Surplus Fund: % 0% Cost on Deficit Funds: % 0%

Additional Notes *(Use this section to enter any other Assumptions that you feel would be relevant to your client's financial plan.)*

Assets

House & Mortgage

(Non-income producing property only - income producing property is entered under Real Estate.)

House

Description	Purchase Amount	Ownership *(client, co-client, joint)*	Purchase Date	Market Value	Growth Rate
House	$205,000	Joint	Sept. 1, 1995	$230,000	2%

Mortgage *(Non-income producing property only - income producing property is entered under Real Estate.)*

	Mortgage 1	Mortgage 2	Mortgage 3
Description *(e.g., first mortgage on 123 Main St.):*	Mortgage		
Original Principal:	$180,000		
Ownership *(client, co-client, joint):*	Joint		
Start Date:	Sept. 1, 1995		
Interest Rate:	7.50%		
Amortization *(years):*	25		
Payment Frequency *(e.g., weekly, monthly):*	Bi-weekly		
Outstanding Principal Amount *(if available):*			
Outstanding Principal Date *(relates to above):*			
Insured *(life on mortgage. both or none):*	Yes		
Insured *(disability on mortgage. both or none):*	No		

Real Estate

(Income producing property - use a separate sheet to enter additional information.)

	Real Estate 1	Real Estate 2	Real Estate 3
Name *(identify property):*			
Ownership *(client, co-client, joint):*			
Purchase Date:			
Purchase Amount:			
Market Value:			
Adjusted Cost Base:			
Property Growth Rate:			
Rental Income *(monthly amount):*			
Rental Expenses *(monthly amount):*			
Annual Rental Growth Rate *(amount or percent):*			

Additional Notes *(Use this section to enter any Real Estate information that you feel would be relevant to your client's financial plan.)*

Incorporated Entities

(Income producing property - use a separate sheet to enter additional information.)

	Incorporated Entity 1	Incorporated Entity 2	Incorporated Entity 3
Name *(identify property)*:			
Type *(OpCo, HoldCo):*			
Owner *(Client, Co-Client):*			
Purchase Date:			
Adjusted Cost Base:			
Growth Rate:			
Market Value:			
Business Income:			
Portfolio Dividends:			
Capital Gains *(Gross):*			
Closely Held Dividends:			
Business Expenses:			
Small Business Deduction (*%):*			
Dividend Policy (*%):*			

Additional Notes *(Use this section to enter any incorporated Entity information that you feel would be relevant to your client's financial plan.)*

Non-Registered

(Use a separate sheet to enter additional assets.)

*(Under Market Value enter each asset type's **aggregate** value as of the start of the year. Break down each asset's expected return rate based on its return component - e.g., if a Mutual Fund asset is earning 2% **Interest**, 2% **Dividends**, 4% **Capital Gains** and 4% **Deferred Growth**, you would enter **2-I, 2-D, 4-CG, 4-DG**. Or, you may prefer to include investment statements for any or all of this section.)*

Name *(identify investment)*	**Ownership** *(client, co-client, joint)*	**Market Value** *(start of year)*	**Adjusted Cost Basis**	**Reinvest** *(reinvest all, don't reinvest)**	**Rate of Return*** (interest = I, dividend = D, capital gains = CG, deferred growth = DG, tax free = TF)	**Standard Deviation** *(if applicable)*	**Bond or T-Bill Face Amount** *(if applicable)*
Investment Account (Investment Portfolio)	Joint	$18,000	$16,000	Reinvest All	50% - Cash 50% Fixed Income		
Savings (Investment Portfolio)	Joint	$45,000	$38,000	Reinvest All	20% - Cash 80% - Fixed Income		

** Return rates* **are assigned by default. To change the rates select the override feature.**

Additional Notes *(Use this section to enter any other Non-Registered Asset information that you feel would be relevant to your client's financial plan.)*

Registered *(Use a separate sheet to enter additional assets.)*

Name *(identify investment)*	Ownership *(client, co-client)*	Type *(e.g., RRSP, RESP, other)*	Purchase Date	Market Value	Adj. Cost Base	Rate of Return*	Standard Deviation *(if applicable)*
Mason's RRSP (Mutual Fund)	Mason	RRSP		$35,000		30% - Cash 30% - F.I. 20% - C.E. 20% - F.E.	
Natalie's RRSP (Mutual Fund)	Natalie	RRSP		$28,000		20% - Cash 40% - F.I. 20% - C.E. 20% - F.E.	
Karen's RESP (Investment Portfolio)	Mason	RESP		$16,000	$12,400	20% - Cash 80% - Fixed Income	
Joshua's RESP (Investment Portfolio)	Natalie	RESP		$17,000	$12,400	20% - Cash 80% - Fixed Income	

** Return rates* **are assigned by default. To change the rates select the override feature.**

***Dividend income that does not qualify for the dividend tax credit should be entered as interest income.**

Additional Notes *(Use this section to enter any other Non-Registered Asset information that you feel would be relevant to your client's financial plan.)*

Mason's RRSP: Classification – MF Balanced RIF Setup: Conversion – as old as possible; Pmt. Frequency – Monthly; Use younger spouse's age

Natalie's RRSP: Classification – MF Balanced RIF Setup: Conversion – as old as possible; Pmt Frequency – Monthly; Use younger spouse's age

Fixed Term Annuities *(Use a separate sheet to enter additional annuities.)*

Annuity #1 **Annuity #2**

Annuity #1	Annuity #2
The annuity pays: **$** _____ Annually ❑ Monthly ❑ The annuity ceases payments on: _____ *(mm/dd/yy)* Is this a registered annuity? Yes ❑ No ❑	The annuity pays: **$** _____ Annually ❑ Monthly ❑ The annuity ceases payments on: _____ *(mm/dd/yy)* Is this a registered annuity? Yes ❑ No ❑

Annuity #3 **Annuity #4**

Annuity #3	Annuity #4
The annuity pays: **$** _____ Annually ❑ Monthly ❑ The annuity ceases payments on: _____ *(mm/dd/yy)* Is this a registered annuity? Yes ❑ No ❑	The annuity pays: **$** _____ Annually ❑ Monthly ❑ The annuity ceases payments on: _____ *(mm/dd/yy)* Is this a registered annuity? Yes ❑ No ❑

Life Annuities *(Use a separate sheet to enter additional annuities.)*

Annuity #1	**Annuity #2**
The annuity pays: **$** _____ Annually ❑ Monthly ❑	The annuity pays: **$** _____ Annually ❑ Monthly ❑
The payments are guaranteed for: _____ years	The payments are guaranteed for: _____ years
Is this a registered annuity? Yes ❑ No ❑	Is this a registered annuity? Yes ❑ No ❑
Is this a prescribed annuity? Yes ❑ No ❑	Is this a prescribed annuity? Yes ❑ No ❑

Annuity #3	**Annuity #4**
The annuity pays: **$** _____ Annually ❑ Monthly ❑	The annuity pays: **$** _____ Annually ❑ Monthly ❑
The payments are guaranteed for: _____ years	The payments are guaranteed for: _____ years
Is this a registered annuity? Yes ❑ No ❑	Is this a registered annuity? Yes ❑ No ❑
Is this a prescribed annuity? Yes ❑ No ❑	Is this a prescribed annuity? Yes ❑ No ❑

Additional Notes *(Use this section to enter any other Annuity information that you feel would be relevant to your client's financial plan.)*

Lifestyle Assets *(Enter as a Lifestyle asset under the **Detailed** tab.)*

	Asset 1	Asset 2	Asset 3	Asset 4
Name:				
Ownership *(client, co-client, joint):*				
Type *(personal use property, collectibles, residence):*				
Purchase Date:				
Purchase Amount:				
Growth Rate:				
Market Value:				

Additional Notes *(Use this section to enter any other Lifestyle Asset information that you feel would be relevant to your client's financial plan.)*

Incomes

Standard

Description	Member (client, co-client)	Amount (annual)	Index Rate	Applicable Period (while working, while retired, during LTC, both, other - *e.g., Jan. 2000 - Dec 15 2002*)	% While Retired*	% While Disabled*	% While Survivor*
Employment Salary:	Mason	$85,000	Inflation	While Working	0%	0%	100%
	*Mason is paid Bi-weekly.						
Employment Salary:	Natalie	$48,000	Inflation	While Working	0%	0%	100%
	*Natalie is paid Monthly.						
Employment Bonus:	Mason	$4,250	1.00%	While Working	0%	0%	100%
				*Bonus occurs Annually			
Taxable Benefits:							
Net Self-employed earned:							
Net Self-employed commission:							
Professional Fees:							
Tax-Free Income:							
Royalty Income Received:							
Alimony Payments Received:							

**** Include both Employment Salaries for Disability Insurance**

** The **Percent While Retired**, **Percent While Disabled**, and **Percent While Survivor** designations allow you to specify the percentage of **Pre-retirement** incomes the client will receive during each of these life stages.*

CPP/QPP & OAS Benefits

CPP/QPP Benefits

Split CPP? Yes ✓ No ❑ *(Choose **Yes** if CPP/QPP benefits are to be shared between both spouses when benefit payments begin)*

Owner *(client, co-client)*	Benefits Start Age	Start at Retirement? *(yes / No)*	CPP/QPP Benefit Eligibility *(e.g. 100%)*	Estimated Monthly Benefit *(if not known leave blank)*
Mason	**65**	**No**	**100%**	
Natalie	**65**	**No**	**100%**	

*** Ensure the benefits are indexed to inflation**

Applicable Benefits to be included in plan:

Retirement Benefits:	Yes ✓	No ❑
Survivor Benefits:	Yes ✓	No ❑
Disability Benefits	Yes ✓	No ❑

(The OAS Clawback will be automatically calculated by the program)

OAS Benefit

	Client	Co-client
OAS Benefit Eligibility (%):	**100%**	**100%**
Monthly Benefit (if not known, leave blank):		

Defined Benefit Plans - Benefit Formula

*(Attach pension statements or obtain information from the client's company pension administrator. The calculations may be overridden and the pension benefits may be entered under the **Benefit Payments** tab.)*

General

	Pension 1	Pension 2	Pension 3
Owner *(client, co-client):*	Natalie		
Description:			
Linked Incomes *(income to which the pension applies):*	Employment Salary		
Pension Participation Date*:*	January 1, 1994		
Number of Years Average Salary:	5		
Pension Formula *(Contribution amount is entered under tax related expenses):*	1.3% before YMPE 2.0% above YMPE		
Indexed to Inflation? *(yes / no)*	No		
Is Pension integrated? *(with CPP/QPP, OAS):*	Yes		

Benefit Calculation

	Pension 1	Pension 2	Pension 3
Benefits Begin *(age, date, at retirement or when disabled):*	At Retirement		
Percent Payable to Survivor *(If applicable):*	67%		
Benefit Reduction for Survivor Coverage *(if applicable):*	15%		
Benefit Indexing *(specify maximum indexing if applicable):*	No		
Normal Retirement Age *(as specified by the pension plan):*	60		
Qualifying Factor *(as specified by the pension plan):*	90		
Percent Penalty for Early Retirement *(per year);*	5%		
Pension Type *(Regular Pension, Notched or Bridged with CPP/QPP)*:	Regular Pension		

Defined Benefit Plans - Estimate Benefit

*(Attach pension statements or obtain information from the client's company pension administrator. The calculations may be overridden and the pension benefits may be entered under the **Benefit Payments** tab.)*

General

	Pension 1	Pension 2	Pension 3
Owner *(client, co-client):*			
Description:			
Linked Incomes *(income to which the pension applies):*			
Benefit Amount Option *(% of final salary or est. amount):*			
Benefits Begin *(age, date, at retirement or when disabled):*			
Percent Payable to Survivor *(If applicable):*			
Benefit Indexing*:*			

Retiring Allowances *(Use a separate sheet to enter additional Retiring Allowances)*

Owner *(client, co-client)*	Amount	Indexed to Inflation? *(Yes /No)*	Eligible Amount *(e.g. 50%)*	When Received *(e.g. Upon retirement, Dec 1, 2020)*	Roll into RRSP *(Name of asset to receive rollover, e.g. ABC funds)*

Additional Notes *(Use this section to enter any other Income information that you feel would be relevant to your client's financial plan.)*

Expenses

Standard

(If you share your common lifestyle expenses, just enter the total for one person.)

Periodic *(Expenses may be combined or broken down into sub-categories.)*

Description	Member (client or co-client)	Amount and Frequency	Index Rate	Start Date	End Date	% While Retired*	% While Disabled*	%While Survivor*
Total Lifestyle Expenses	Mason	$3,800 Monthly	Inflation	Jan. 1 - Current Year		100%	100%	75%
Housing								
Food								
Transportation								
Entertainment								
Personal								
Rental Estate & Property Taxes	Mason	$350 Monthly	Inflation	Jan. 1 - Current Year		100%	100%	100%
Medical								
Alimony								

* *The **Percent While Retired**, **Percent While Disabled**, **Percent While Survivor** designations allow you to specify the percentage of Pre-**retirement** expenses the client will receive during each of these life stages.*

Semi-Regular *These expenses will automatically be set to Targeted Deficit Coverage.*

Expense Description	Member (client or co-client)	Annual Amount	Frequency (specify in years)	Index Rate	Start Date	End Date	% While Retired*	% While Disabled*	% While Survivor*
Vacation	Mason	$25,000	Every 5 years	Inflation	Jan. 1, 2006	Deceased date minus 10 years	100%	100%	100%
Auto Purchase	Mason	$10,000	Every 3 years	Inflation	Jan. 1, 2004	Deceased date minus 10 years	100%	100%	100%

* *The **Percent While Retired**, **Percent While Disabled**, **Percent While Survivor,** and **Percent While in LTC** designations allow you to specify the percentage of **Pre-retirement** expenses the client will receive during each of these life stages.*

Lump Sum

Expense Description	Member (Client or Co-Client)	Tax Deductible (Yes/No)	Amount	Index Rate	Date Effective

Education

(Education expenses should only be entered in this tab if specific assets are designated to cover them.

*If an education expense is to be funded from cash flow, enter it under the **Standard** tab.)* Note, Create a new Expense Tab for each child.

Member (For whom the expense is incurred)	Type (e.g., Tuition fees, room and board)	Description (e.g., Billy's College Fund)	Amount and Frequency	Index Rate	Start Age (When student begins education)	Years (Number of years expense will be incurred)	Linked Assets (Asset(s) used to fund this expense)
Karen	Tuition Fees		$7,500 Annually	6.00%	18 (Sept 1, 2007 - Jun 1, 2011)	4	RESP (Karen)
Joshua	Tuition Fees		$6,000 Annually	6.00%	18 (Sept 1, 2010 - Jun 1, 2014)	4	RESP (Joshua)

Major Purchase

(Major Purchase expenses should only be entered in this tab if specific assets are designated to cover them.

*If a major purchase expense is to be funded from cash flow, enter it under the **Standard** tab.)*

Description (e.g., Wedding)	Future Growth Rate	Owner (For whom the expense is incurred)	Amount	Indexed by (%)	Transaction Date	Funding Assets (Asset(s) used to fund this expense)

Emergency Fund

(The Emergency Fund expense is intended to meet short-term cash flow needs.

A general guide should replace three months of employment income)

Target Amount (Number of months expenses or specific $ amount)	Type of Asset to Fund Goal (Typically short term investments)	Current Savings Amount	Savings Frequency	Index Rate	Savings Start Date	Savings End Date

Additional Notes

(Use this section to enter any other Income information that you feel would be relevant to your client's financial plan.)

Liabilities

Detailed

(Use a separate sheet to enter additional liabilities)

	Liability 1	Liability 2	Liability 3	Liability 4	Liability 5
Description:	Renovation Loan				
Owner *(client, co-client, joint):*	Joint				
Life Insured *(yes / no):*	Yes				
Disability Insured *(yes / no):*	No				
Amortization Period *(or end date):*	June 1, 2005				
Start Date:	June 1, 2002				
Principal Amount:	$15,000				
Principal Date *(as of):*	June 1, 2002				
Payment Type *(e.g., interest only, PI):*	P & I				
Payment Frequency *(e.g., weekly, monthly):*	Monthly				
Interest Rate:	7.00%				

Additional Notes *(Use this section to enter any other Liabilities information that you feel would be relevant to your client's financial plan.)*

Asset Links – House 100%; Compound Monthly

Insurance

Death Benefit Reinvestment Settings *(Indicate how to invest the proceeds received from a life insurance policy.)*

Which investment vehicle would you like to use when investing Life Insurance proceeds?: **Mutual Fund**
(e.g., Mutual Funds, Stocks, Bonds)

What rate of return do you expect the invested Life Insurance proceeds to earn?: **5% Interest**

Life Insurance *(Use a separate sheet to enter additional policies.)*

	Policy 1	Policy 2	Policy 3
Description:	Natalie's Term Policy		
Premium Payer *(e.g., client, co-client, joint, or other):*	Natalie		
Type *(e.g., term, universal):*	Term 10 Life		
Insured *(e.g., client, co-client, joint 1st to die, other):*	Natalie		
Effective Date:	Dec. 31, 2003		
Policy Owner *(e.g., client, co-client, joint, or other):*	Natalie		
Beneficiary *(e.g., client, co-client, joint 1st to die, other):*	Mason		
Premium Frequency *(e.g., monthly):*	Annual		
Premiums*:	$380		
Death Benefit*:	$150,000		
Coverage Ceases *(age or date)*:	75		
Cash Surrender Value*:	N/A		

***** *If the Death Benefits, Premiums, or CSVs are not level, attach the appropriate schedules.*

Additional Notes *(Use this section to enter any other Insurance information that you feel would be relevant to your client's financial plan.)*

***Premiums cease – Age 75**

Disability Insurance

(Use a separate sheet to enter additional policies.)

	Policy 1	Policy 2	Policy 3
Description *(group LTD, group STD, individual disability):*			
Insured Member:			
Owner:			
Effective Date:			
Monthly Benefit:			
Taxable *(yes / no):*			
Index for Benefit Amount:			
Waiting Period:			
Benefit Paid Until *(years or age):*			
Monthly Premium:			
Index Rate for Premium Amount:			

Additional Notes *(Use this section to enter any other Insurance information that you feel would be relevant to your client's financial plan.)*

Critical Illness Insurance

Critical Illness Expenses

Member	Expense Type *(medical, lifestyle, etc)*	Lump Sum Expense Amount	Expenses indexed to Inflation **(Yes / No)**

Coverage Owned (Existing Critical Illness Insurance Policies)

	Policy 1	Policy 2	Policy 3
Description *(cash to insured, medical coverage):*			
Insured Member:			
Owner:			
Effective Date:			
Lump Sum Benefit:			
Taxable *(%):*			
Premium payer*:*			
Monthly Premium:			
Premium refund percentage:			

Additional Notes *Use this section to enter any other Critical Illness Insurance information that you feel would be relevant to your client's financial plan.*

Other Tax

Misc. Credits & Deductions

		Miscellaneous Deductions		Miscellaneous Credits	
Owner	**Description**	**Total Income**	**Net Income**	**Refundable**	**Non-refundable**

Additional Notes *(Use this section to enter any Other Tax information that you feel would be relevant to your client's financial plan.)*

Strategies

Use this section to tell us about any planning strategies that you are currently applying (e.g., regular savings to an investment, additional payments toward a loan's principal, etc). Use a separate sheet to enter additional strategies.

Savings

*(Use the following section to list **Savings** plans that are currently in place.)*

Regular

(Savings made on a regular, periodic basis.)

	Strategy 1	Strategy 2	Strategy 3	Strategy 4
Asset Name:	Karen's RESP	Joshua's RESP		
Amount:	$2,000	$2,000		
Frequency *(e.g., monthly, weekly):*	Annual	Annual		
Index Rate:	Inflation (from 2004)	Inflation (from 2004)		
Savings Period *(while I'm working, while I'm retired, both, until LTC, other - e.g., Jan. 1990 - Dec 2025):*	Jan. 2004 - Aug. 2007	Jan. 2004 - Aug. 2010		

Lump Sum

(Savings made in one or more lump sums.)

	Strategy 1	Strategy 2	Strategy 3	Strategy 4
Asset Name:				
Amount:				
Index Rate:				
When is this Transaction Applicable? *(upon retirement, upon disability, upon death, other - e.g., Jan. 15, 2003):*				

Surplus

(Savings put toward an asset using surplus cash at year-end.)

	Strategy 1	Strategy 2	Strategy 3	Strategy 4
Asset Name:				
Percent Of Surplus *(e.g., half or 50%):*				
Savings Period *(while I'm working, until age 71, other - e.g., Jan 1, 1995 to Dec 31, 2011):*				

Employer-Sponsored Pensions

(Savings put into plans that are established by the employer.)

	Plan 1	Plan 2	Plan 3	Plan 4
Asset Name:				
Employee Pre-tax Amount:				
Employee Post-tax Amount:				
Employer Amount:				
Frequency *(e.g., monthly, weekly):*				
Index Rate:				
Savings Period *(while I'm working, until age 71, other - e.g., Jan 1, 1995 to Dec 31, 2011):*				

Additional Notes

(Use this section to enter any Strategy information that you feel would be relevant to your client's financial plan.)

Debt Reduction

*(Use the following section to list **Debt Reduction** plans in which your client is already taking part.)*

Regular

(Any payments made directly toward the principal of an existing loan.

These are over and above the required payments that are automatically defined for the liability.)

	Strategy 1	Strategy 2	Strategy 3	Strategy 4
Liability Name:	Mortgage			
Amount:	$2,000			
Frequency *(e.g., monthly, weekly):*	Annual			
Index Rate:	N/A			
Payment Period *(while I'm working, while I'm retired, both, other - e.g., Jan. 1990 - Dec 2011):*	Sept. 1 2015 – Jan. 1 2020			

Lump Sum

(Payments made in one or more lump sums toward the principal of an existing loan.

These are over and above the required payments that are automatically defined for the liability.)

	Strategy 1	Strategy 2	Strategy 3	Strategy 4
Liability Name:				
Amount:				
Index Rate:				
Payment Date *(upon retirement, upon disability, upon death, other - e.g., Jan. 15, 2003):*				

Surplus

(Savings put toward the principal of an existing loan using surplus cash at year-end.)

	Strategy 1	Strategy 2	Strategy 3	Strategy 4
Liability Name:				
Percent Of Surplus *(e.g., half or 50%):*				
Payment Period *(while I'm working, until age 71, other - e.g., Jan 1, 1995 to Dec 31, 2011):*				

Redemptions

(*Use the following section to list asset **Redemption** plans which your client has already established.)*

Regular

(Any redemptions from an asset made on a periodic basis.)

	Strategy 1	Strategy 2	Strategy 3	Strategy 4
Asset Name:				
Amount:				
Frequency *(e.g., monthly, weekly):*				
Index Rate:				
Redemption Period *(while I'm working, while I'm retired, both, other - e.g., Jan. 1990 - Dec 2011):*				

Additional Notes *(Use this section to enter any Strategy information that you feel would be relevant to your client's financial plan.)*

Lump Sum *(Redemptions from an asset in one or more lump sums.)*

	Plan 1	Plan 2	Plan 3	Plan 4
Asset Name:				
Amount:				
Index Rate:				
Redemption Date *(fixed date, or upon retirement, disability or death):*				

Complete Regular *(Redemptions from an asset that will completely deplete it at the end of a defined period.)*

	Strategy 1	Strategy 2	Strategy 3	Strategy 4
Asset Name:				
Frequency Of Sells *(e.g.,annually, monthly):*				
Index Rate:				
Redemption Period*(while I'm retired, other - e.g., Jan. 1990 - Dec 2011):*				

Transfers *(The transfer of funds from one asset to another.)*

	Strategy 1	Strategy 2	Strategy 3	Strategy 4
Source Asset:				
Destination Asset:				
Amount:				
Transaction Date *(fixed date, or upon retirement, disability, or death):*				

Additional Notes *(Use this section to enter any Strategy information that you feel would be relevant to your client's financial plan.)*

Other Information

(Use this section to enter any other information that you feel would be relevant to your client's financial plan.)

5. Verifying data

Financial planning is an art in many ways. However, there is one variable that remains constant: the client's existing financial data. This data is the foundation upon which plans are developed. It cannot be over-emphasized how important it is to accurately enter current financial data into the base plan. The omission of a key piece of data or the inclusion of erroneous data can cause the financial results to be altered significantly.

The data verification process is a crucial step that should be performed immediately after the creation of the base plan.

Plan Analysis Synopsis report

The *Plan Analysis Synopsis* report contains most of the data that has been entered for the case study. Common data entry errors that can be easily detected using this report include:

- Birth dates
- Milestones such as retirement and deceased dates
- Regular expenses applicable during different periods
- Income and savings amounts
- Index rates

To ensure consistent results and gain familiarity with some of the reporting capabilities of NaviPlan, we will generate this report and compare it to the one listed in this chapter.

Procedure

1. Go to the **Reports** menu, and then select **Synopsis.**
2. Compare the *Plan Analysis Synopsis* report you generated with the *Plan Analysis Synopsis* report on the following pages.
3. Document any differences and change your data to match the *Plan Analysis Synopsis* report on the following pages.

Plan Analysis Synopsis

Howell

Base Plan (2004)

General Information

Detail	Mason	Natalie
Birth Date	May 24 1962	Sep 2 1963
Proposed Retirement Date	May 2020	May 2020
Critical Illness Date	Never	Never
Life Expectancy	Dec 2052	Dec 2053
CPP/QPP Benefits start on	Jun 2027	Oct 2028
OAS Benefits start on	Jun 2027	Oct 2028
Qualify for % of Max. CPP/QPP Benefits	100%	100%
Qualify for % of OAS Benefits	100%	100%
Earned Income (2003)	$82,450	$46,560
Pension Adjustment (2003)	$6,800	$4,966
Unused RRSP Deduction Room	$21,000	$11,000

Assumptions

Detail	
Return on Excess Cash Flow:	0.00%
Interest rate applied to Deficits:	0.00%
Inflation Rate	3.00%

Estate Assumptions

Detail	
Does Mason have a will?	Yes - Revised: Aug 1 2002
Does Natalie have a will?	Yes - Revised: Aug 1 2002
Where are the wills kept?	Safety Deposit Box

Dependants

Name	Birth Date	Age as of Plan Date
Karen	Oct 4 1989	15
Joshua	Mar 10 1992	12

Professional Advisors

Type	Name	Business Phone #	Cell Phone #
Lawyer	Ken Legal		
Accountant			
Financial Advisor			
Power of Attorney			

Regular Income

Income Source	Member	Applicable	Amount	Indexed
Employment Salary	Mason	Jan 1 2004 to Apr 30 2020	$85,000	Inflation
Employment Salary	Natalie	Jan 1 2004 to Apr 30 2020	$48,000	Inflation
Employment Bonus	Mason	Jan 1 2004 to Apr 30 2020	$4,250	1.00%

Defined Benefit Pension Plans - Benefit Formula

Description:	Defined Benefit Pension Plan	**Annual Benefit:**	$18,195
Plan Owner:	Natalie	**Indexed by:**	0.00%
Projected years of service:	26.33	**Formula Integrated with CPP/QPP:**	Yes
Pct. payable to survivor:	67.00%	**Benefits Integrated with CPP/QPP:**	No

Regular Expenses

Expense	Member	Start Date	End Date	While Working	While Retired	While Survivor	Annual Amount	Indexed
Total Lifestyle Expense	Mason	Jan 1 2004	N/A	100%	100%	75%	$45,600	Inflation
Property Taxes	Mason	Jan 1 2004	N/A	100%	100%	100%	$4,200	Inflation

Semi-Regular Expenses

Expense	Member	Start Date	End Date	Every	Amount	Indexed
Vacation	Mason	Jan 1 2006	Dec 31 2042	5 years	$25,000	Inflation
Auto Purchase	Mason	Jan 1 2004	Dec 31 2042	3 years	$10,000	Inflation

Lifestyle Assets

Asset Name	Purchase Date	Purchase Amount	Market Value Date	Market Value	Growth Rate[1]	Standard Deviation
House (Joint/Lifestyle)	Sep 1 1995	$205,000	Jan 1 2004	$230,000	2.0%	0.0%

[1]The growth rate is a pre-tax amount

Portfolio Assets

Asset Name	Market Value Date	Market Value	Cost Base	Int. (%)	Div. (%)	Cap. Gain (%)	Def. Growth (%)	Std. Dev. (%)	Total (%)
Life Insurance Proceeds (Joint/Non-Reg.)	Jan 1 2004	$0	$0	5.00	0.00	0.00	0.00	0.00	5.00
Investment Account (Joint/Non-Reg.)	Jan 1 2004	$18,000	$16,000	3.25	0.00	0.00	0.75	1.50	4.00
Savings (Joint/Non-Reg.)	Jan 1 2004	$45,000	$38,000	3.40	0.00	0.00	1.20	2.40	4.60
Mason's RRSP	Jan 1 2004	$35,000	$0	1.95	0.40	1.40	2.25	5.90	6.00
Natalie's RRSP	Jan 1 2004	$28,000	$0	2.00	0.40	1.40	2.40	6.20	6.20
Joshua's RESP (Natalie)	Jan 1 2004	$17,000	$12,400	0.00	0.00	0.00	4.60	2.40	4.60
Karen's RESP (Mason)	Jan 1 2004	$16,000	$12,400	0.00	0.00	0.00	4.60	2.40	4.60

The *Portfolio Asset* section includes your major investment assets. It contains the market value and cost basis of these assets. Your total pre-tax growth rate is broken down into specific return rate types as some of these items receive special tax treatment. The actual total return rates that you will receive will depend on many factors including inflation, type of investment and market conditions.

Life Insurance Policies

Description:	Natalie's Term Policy		
Policy Type:	Term 10 Life	**Owner:**	Natalie
Effective Date:	Dec 31 2003	**Insured:**	Natalie
Death Benefit:	$150,000	**Beneficiary:**	Mason
Cash Surrender Value (CSV):	$0	**Premium Payer:**	Natalie
Premiums cease on:	Sep 2 2038	**Annual Premium Payments:**	$380
CSV payable with Death Benefit:	No	**Coverage ceases on:**	Sep 2 2038
Death Benefit payable when coverage ceases:	No	**Disability Waiver:**	Yes

Liabilities

Liability Name	Liability Date	End Date	Original Principal	Current Principal	Int. Rate	Payment Type
Mortgage	Sep 1 1995	Aug 28 2020	$180,000	$151,306	7.500%	Principal & Interest
Renovation Loan	Jun 1 2002	Jun 1 2005	$15,000	$7,475	7.000%	Principal & Interest

Regular Savings Strategies

Asset Name	Applicable	Amount	Indexed
Karen's RESP (Mason)	Jan 1 2004 to Aug 1 2007	$2,000/Year	Inflation
Joshua's RESP (Natalie)	Jan 1 2004 to Aug 1 2010	$2,000/Year	Inflation

The table above includes all your periodic (annual or monthly) investment contributions.

Regular Debt Modification Strategies

Liability Name	Applicable	Amount	Indexed
Mortgage	Sep 1 2015 to Jan 1 2020	$2,000/Year	No

A regular debt modification plan will help you reduce your outstanding debt and reduce your interest costs.

Transfer Strategies

Source Asset	Destination Asset	Amount	When
Natalie's Term Policy	Life Insurance Proceeds	100%	Upon Death

Transfers specify a plan for moving your investments from one type of asset to another on specific dates or events such as retirement. Also, transfers will be desirable in some cases to move from one type of investment to another type at a certain point in time. Refer to your **Action Plan** for the years in which transfers are scheduled to view the projected amounts to be transferred.

Deficit Coverage Strategies

Asset Name	Applicable
Investment Account (Joint/Non-Reg.)	Jan 1 2004 to Dec 31 2053
Savings (Joint/Non-Reg.)	Jan 1 2004 to Dec 31 2053

Asset Name	Applicable
Mason's RRSP	While Retired
Natalie's RRSP	While Retired
Life Insurance Proceeds (Joint/Non-Reg.)	Jan 1 2004 to Dec 31 2053

The assets listed are available for redemption to meet cash flow needs. The *Applicable* column indicates the period of time these assets are available. Typically, registered assets are not available during your working years.

Education Expenses

Karen's University Education

Expenses

Expense	Member	Start Date	End Date	Annual Amount	Indexed
Tuition Fees [1]	Karen	Sep 1 2007	Jun 1 2011	$7,500	6.00%

[1] Indexed annually by inflation + 2.00%

Assets Allocated to Education Expenses

Linked Assets	Purchase Date	Purchase Amount	Market Value Date	Market Value	Growth Rate
Karen's RESP (Mason)	Dec 31 2003	$0.00	Jan 1 2004	$16,000.00	4.60%

Joshua's University Education

Expenses

Expense	Member	Start Date	End Date	Annual Amount	Indexed
Tuition Fees [1]	Joshua	Sep 1 2010	Jun 1 2014	$6,000	6.00%

[1] Indexed annually by inflation + 2.00%

Assets Allocated to Education Expenses

Linked Assets	Purchase Date	Purchase Amount	Market Value Date	Market Value	Growth Rate
Joshua's RESP (Natalie)	Dec 31 2003	$0.00	Jan 1 2004	$17,000.00	4.60%

6. Financial planning strategies

Objectives

The clients have indicated that they would like to invest in growth equities, have enough money to fund their retirement goals, pay for their children's education, and establish an emergency fund. They also want to know if they are adequately insured in the event of an untimely death, and how entering disability may affect their goals. By duplicating the Base Plan, which houses their current financial information, you can implement a variety of strategies that will ultimately lead to a recommended plan, and fulfill the clients' objectives without compromising their goals.

Observations

The *Plan Analysis* window allows you to see an instant analysis of the active plan.

Procedure

- From the desktop, double-click the **Base Plan** folder.

  The *Plan Analysis* window opens.

Use the *Plan Analysis* window to analyze the Base Plan. You can see accumulated surpluses in the pre-retirement period, which may indicate that an opportunity exists, and you can also see projected accumulated deficits during the retirement period.

The bottom graph shows that the *Lifestyle Assets* line intersects with the *Total Net Worth* graph. This represents a critical juncture in the plan, where all liquid assets have been fully depleted and the only remaining assets are lifestyle assets.

Planning strategy: Maximize RRSP contributions

The initial observation that came from the analysis of the *Plan Analysis* window is that the Howell's are going to incur deficits during their retirement period. One possible reason for this is that their expenses during retirement exceed the value of assets available to draw upon. Mason and Natalie have agreed that some of the resulting surplus in cash flow should be directed to their RRSP accounts in order to accrue more resources for the retirement period. They want to know how much more they need to save to meet their retirement goal. We can use a report to find the answer.

Procedure

1. From the *Reports* menu select **Retirement – Goal Summary.**

   This report displays the retirement goal the client has established and the progress they are making towards financially achieving their goal.

2. Select **Current Asset Mix.**

   The *Current Asset Mix* calculates the additional monthly savings that would be required to fund the Howell's retirement goal if those savings were directed to

assets currently linked to the goal, such as their RRSPs, Investment Account and Savings Account.

3. Select **Suggested Asset Mix**.

   The *Suggested Asset Mix* calculates the additional monthly savings that would be required to fund the Howell's retirement goal if those savings were directed to the *Balanced* portfolio. The required savings amount using the *Suggested Asset Mix* is lower because it has a higher equity allocation than do the assets currently linked to their goal.

The results

The required monthly savings amount suggested by NaviPlan exceeds the Howells' maximum RRSP allowable contribution limits. In order to begin solving for the Howell's retirement goal, we will first maximize their RRSP contributions using their surplus cash in pre-retirement.

Procedure: maximize RRSP contributions

1. In the *Plan Analysis* window, click the **Duplicate** button.

   When duplicating a warning message will appear asking whether or not you would like to update the duplicated plan with a new asset allocation model. If you select *Yes*, any changes made in *Edit – Preferences* since the creation of the previous plan will carry through to the duplicated plan. If you would like to continue using the asset class weightings defined in the original plan, click **No**.

2. On the *General* tab, rename the new plan **RRSP Maximizer.**
3. Go to the **Strategies** category **– Savings** tab **– RRSP Maximizer** subtab.
4. Click **Insert** and select **Mason's RRSP.**
5. Select the **Yes** option in the *Constrained by Cash Flow* field.

   The *Constrained by Cash Flow* field indicates that the savings amount is limited to the client's available cash flow at the end of the year. Savings will only occur if there is surplus cash that is not being used to offset other deficits in the plan.

6. Change the *Applicable* field to **While Working.**
7. Ensure that **January** is selected in the *Time of Year* field.
8. Click **Insert** and select **Natalie's RRSP.**
9. Enter the same RRSP Maximizer strategy for Natalie's RRSP by repeating steps 5-7.
10. Click **OK** and select **Yes** to complete editing the plan.

The results

With the Plan Analysis windows for the RRSP Maximizer plan and the Base Plan side-by-side, we can see that cash flow in the pre-retirement period has been reduced, as some of it has been directed to the Howell's RRSP accounts and the deficits that

were occurring in retirement have decreased. The RRSP Maximiser strategy has also improved the client's net worth over the planning period.

Procedure

To confirm the years in which savings has been directed from cash flow to the client's RRSP accounts follow these steps:

1. Minimize the *Plan Analysis* windows.
2. Go to the **Reports** menu.
3. Select the Asset & Liability – Single Asset.
4. From the *Single Asset Document Generator* select **Mason's RRSP.**
5. Enter **20** in the Number of years to project field.
6. From the *Reports* drop-down menu, select the **Single Asset Summary** report.

The Results

This report shows that the RRSP Maximizer strategy has been applied to Mason's RRSP account for each year of the plan until retirement. For more detail surrounding these amounts, explore the *Cash Flow Assistant* for the years that show purchases into the RRSP.

Planning strategy: new asset allocation or reduce spending

Despite the extra contributions that have been directed to the Howell's RRSP accounts, they are still short of meeting their retirement goal. After a lengthy discussion with Mason and Natalie on asset allocation and their planning horizon, we have come to the conclusion that they could choose among two retirement strategies. They have the option to explore a different asset allocation for their retirement savings. With retirement almost 20 years in the future, the Howell's would be willing to assume more risk in the hopes of earning better returns over the long term. Alternatively, they could reduce their spending in retirement. Let's perform both strategies and compare.

Procedure: new asset allocation

1. In the *Plan Analysis* window of the RRSP Maximizer plan, click the **Duplicate** button.
2. On the *General* tab, rename the new plan **New Asset Allocation.**
3. Go to the **Assets** category – **Asset Class Weightings** tab.
4. In the fields for *Mason's RRSP* and *Natalie's RRSP*, enter the asset class weightings corresponding to the *Growth* investor profile:

   Cash: **5%** *Canadian Equity:* **45%**

   Fixed Income: **25%** *Foreign Equity:* **25%**.
5. Click **OK,** and then click **Yes** to finish editing the New Asset Allocation plan.

The results

With the RRSP Maximizer and New Asset Allocation *Plan Analysis* windows side-by-side, we can see that we have effectively eliminated the retirement deficits in the New Asset Allocation plan by changing the asset allocation strategy. Cash flow irregularities still exist during the pre-retirement period, but the reallocation has improved the clients' net worth as shown in the bottom graph of the *Plan Analysis* window.

Note that adopting a more growth-oriented investment style may increase the volatility of returns. Once a recommended plan is in place, the *Monte Carlo Sensitivity Analysis* will project the possible return variability for the plan and offer a success rate for the optimal situation that has been recommended to the clients.

Let's explore the Howell's second option, which is to reduce their spending during retirement.

Procedure: reduce spending

1. Minimize both Plan Analysis windows.
2. In the *Plan Analysis* window for the *RRSP Maximizer* plan, click the **Duplicate** button.
3. On the *General* tab, rename the new plan **Reduce Spending.**
4. Go to the **Expense** category – **Standard** tab**.**
5. Edit the Total Lifestyle expense.
6. Set the *When Member's Status is Retired* field to **85%.**
7. Click **OK,** and then click **Yes** to finish editing the Reduce Spending plan.

The results

With the RRSP Maximizer and Reduce Spending *Plan Analysis* windows side-by-side, we can see that we have effectively eliminated the deficits that were occurring in retirement by assuming that our clients will only spend 85% of what they currently spend in pre-retirement.

When comparing the Reduce Spending plan to the New Asset Allocation plan, it is evident that both approaches have yielded positive results for our clients' cash flow and final net worth. Mason and Natalie have indicated that they would prefer to maintain their current spending habits in retirement and feel comfortable in adopting a more growth-oriented investment strategy; therefore, we will proceed with the New Asset Allocation plan.

Planning strategy: emergency fund

Mason and Natalie do not have an emergency fund in place and believe that is it an essential component of any financial plan. They would like to create an emergency fund that will be worth $10,000 in order to ensure that they have adequate funds available if the need should arise. A new asset will be created to house the emergency fund.

Procedure

1. In the **New Asset Allocation** *Plan Analysis* window, select **Duplicate.**
2. On the *General* tab, rename the new plan **Emergency Fund.**
3. Go to the **Assets** category **– Detailed** tab.
4. Click **Insert – Cash Account.**
5. Enter the *Name* **Emergency Fund Account.**
6. Ensure the *Ownership* is **Joint** and the *Opening Date* is **Jan 1, current year.**

   To ensure that the *Cash Account* is reserved for the emergency fund, we must guarantee that it is not redeemed. As a result, it is necessary to delete this asset from the deficit coverage strategy.
7. Go to the **Sells** tab.
8. Click the **Delete** button to remove the deficit coverage record.
9. Click **Yes.**
10. Go to the **Asset Classes** tab**.**
11. Enter **100% Cash** and click **OK.**
12. Go to the **Expenses** category **– Emergency Fund** tab.
13. From the *Target Amount* subtab, select **Specific amount.**
14. Enter **$10,000, inflated.**
15. Go to the **Assets** subtab, and then clear the **Life Insurance CSVs** check box.

    The summary at the bottom of this tab indicates that the emergency fund will contain only the *Emergency Fund Account*. Notice that that account lists $0 as the available amount. This is due to the fact that the account has not yet been funded.

    The Howells have decided to use their tax refund as the basis of the fund, and will start a regular savings strategy to contribute to the fund.
16. Go to the **Savings Plans** tab.
17. Click **Insert** and select the **Emergency Fund Account.**
18. Select **Lump Sum**.
19. Click **OK.**
20. Insert a lump sum savings amount of **$3,000.** This amount will be directed towards the new fund starting at the beginning of the next month. Enter the date of **first day of the next month** in the *Effective* section.
21. Click **OK.**
22. Click **Insert** and select the **Emergency Fund Account.**
23. Select **Periodic**.
24. Click **OK.**

25. Enter an amount of **$300** per month starting at the beginning of the next month.
26. Set the end date to **Jan 1, 2007.**

    The $300 contributions will end on this date.
27. Click **OK.**
28. Go to the **Analysis** tab

    Note when the Howells will achieve the targeted emergency fund amount, with a small cushion. In years where the emergency fund is fully funded the font appears in green. If the fund in under-funded the font appears in red.
29. Click **OK** and then **Yes** to complete editing the Emergency Fund plan.

The results

Assets used to finance the emergency fund must have the deficit coverage sell record removed. If the deficit coverage sell record is not removed for the assets you wish to use, NaviPlan will not consider the asset eligible to finance the emergency fund.

Looking at the *Plan Analysis* window for the Emergency fund we can see that the Howells are not incurring any accumulated deficits in years where the emergency fund is being funded, indicating that they can afford the additional savings amounts required to establish the emergency fund.

1. Minimize the *Plan Analysis* windows.
2. From the **Reports** menu, select **Asset & Liability – Single Asset.**
3. Select the **Emergency Fund Account**.
4. Enter **20** in the *Number of years to project* field.
5. Click the **Reports** button, and select **Single Asset Summary.**

   This report illustrates the start of year market value for an asset, as well as the buys, sells, total reinvested, deferred growth, and end of year market value.
6. Verify the *Buys* for the emergency fund until 2007.

Planning strategy: education

With retirement cash flow resolved, the clients' next objective is to ensure adequate funding of their children's university education. Mason and Natalie are currently contributing to RESP plans for their children however, they fear that this might not be enough to fund their children's education due to rising costs. During our discussions with Mason and Natalie, we learned that they have surplus year-end cash that is accruing and could be used to help fund their children's education.

Procedure: solving for Karen's university education

1. Right-click the **Emergency Fund** plan folder, and then select **Duplicate.**
2. On the *General* tab, rename the new plan **Education Analysis.**

3. Go to the **Expenses** category **– Education** tab **– Karen's University Education – General** subtab.

   The *Needs vs. Abilities* graph indicates that there is not enough capital to fully fund Karen's education.

   Mason and Natalie would like to know how much more they need to save for Karen's education on a monthly and lump sum basis if they were to save to a *Balanced* investment objective.

4. Go to the **Asset Mix** subtab.

5. Click the **View Asset Mixes** button.

   This graph compares the *Current Asset Mix* with the *Suggested Asset Mix*. As noted at the bottom of the window, the *Suggested Asset Mix* is based on the *Balanced* portfolio.

   To print these pie graphs in the side-by-side view, right-click anywhere on the graph, and then select **Print.**

6. Click **Done.**

7. Go to the **Savings Plan** subtab.

8. Under *Estimate how much to allocate to,* select **Suggested Asset Mix** Auto Re-allocate **None**.

9. Click the **Calculator** button to calculate the additional monthly savings required to provide for all education needs based on the *Balanced* portfolio.

   What is the amount of additional savings required, without a 5% cushion?

   _____

   Mason and Natalie would like to direct this additional savings to a non-registered asset which is weighted according to the *Balanced* investor profile.

10. Go to the **Assets** category **– Non-registered** tab

11. Click **Insert – Mutual Fund** and enter the following information:

    Description: **Karen's Education Fund**

    Ownership: **Mason**

    Classification: **MF Balanced**

12. Go to the **Asset Classes** tab, and enter the following information to represent the *Balanced* portfolio:

    Cash: **10%**

    Canadian Equity: **40%**

    Fixed Income: **40%**

    Foreign Equity: **10%**

13. Go to the **Expenses** category – **Karen's University Education – Linked Assets**

14. Click **Link – Karen's Education Fund** to link the newly created asset to the Education goal.

15. Go to the **Savings** tab.

16. Click **Insert – Karen's Education Fund**

17. Select **Periodic** and click **OK.**
18. In the *Amount* field, enter the additional savings amount from step 8, and then click **OK.**
19. Click the **calculator** again to confirm that the funding is adequate.
20. Go to the **General** tab.

    Notice that the *Needs vs. Abilities* graph now shows that Karen's education expenses are fully funded.

Procedure: solving for Joshua's university education

21. Proceed to the **General** tab to review the *Needs vs. Abilities* graph for Joshua's education goal.

    It appears that there is enough capital to fully fund Joshua's education; therefore, no further savings is required.
22. Click **OK** and **Yes** to complete editing the plan.

The results

By placing the Education Analysis plan and the Emergency Fund plan side-by-side, we see that the additional savings to Karen's education fund has not had much effect on the clients existing cash flow. We still have an accumulated surplus and cash flow irregularities in the pre-retirement period that will need to be addressed.

Planning strategy: final recommended plan

We know that Mason and Natalie have surplus cash at the end of each year however, they have indicated that they likely spend more than what they have indicated for their lifestyle expenses. They want the plan to assume that a portion of each year's surplus funds is spent on discretionary items that haven't been accounted for. The Howells also believe it would be advantageous to invest the remaining surplus and earn a potentially higher rate of return, rather than leaving it unallocated.

Procedure

1. In the *Plan Analysis* window for the *Education Analysis* plan, select **Duplicate.**
2. On the *General* tab, rename the new plan **Recommended Plan.**
3. Go to the **Strategies** category **– Surplus Lifestyle Expenses.**
4. Click **Insert** and enter **10%** in the ***Spend What Percentage*** field for Mason and Natalie.

   The time period of this strategy is from January 1st of the current year until the year the last head of the household dies, minus one year (the planning period displayed in the *Plan Analysis* window). The *Surplus Lifestyle Expense* should not be applied in the final year of the plan as the final year involves the distribution of the estate assets.
5. Click **OK.**

Natalie and Mason would like to direct the balance of their surplus savings towards a new asset.

6. Go to the **Assets** category **– Non-Registered**
7. Click **Insert – Investment Portfolio.**
8. Enter a description of **Surplus Account.**
9. Select **Joint.**

   It is important that we designate the newly created asset as Joint because we want both Mason and Natalie's surplus to be directed to this asset. In a surplus savings strategy, NaviPlan allows you to designate joint or solely-owned asset in which to direct surplus however, solely-owned assets will only capture the owner's surplus.

10. Go to the **Asset Classes** tab and enter the following information:

    Cash: **5%** *Canadian Equity:* **45%**

    Fixed Income: **25%** *Foreign Equity:* **25%**

11. Click **OK**.
12. Go to the **Strategies** category – **Savings – Surplus.**
13. Click **Insert,** and then select **Surplus Account (Joint/Non-Reg.)**
14. Leave the percentage at the default value of **100%** of the remaining surplus.
15. Click the **Order of Surplus Cash Usage** button.
16. The *Order of Surplus Cash Usage* dialog box opens. Under *1st*, select **Constrained RRSP Maximizer**, *2nd*, select **Surplus Lifestyle Expenses** and then select **Surplus Savings.** By default the final priority will be **Surplus Debt Reduction.**
17. Click **OK.**
18. Click **OK,** and then click **Yes** to finish editing the plan.

The results

You will notice a cash flow spike (surplus) in year 2010 of the *Plan Analysis* window. This represents Karen's education expense.

The *Accumulated and Current Surplus/Deficit* graph is, by default, based only on the heads of the family, not on all family members. Mason and Natalie are saving toward their children's education, but the expense belongs to the children. This expense is not included in the graph until he graph is based on all family members.

Procedure

1. Click the **Analysis** button at the bottom of the *Plan Analysis* window and select **Criteria.**
2. From the *Analysis Criteria* dialog box, set the *Members to Include* field to **All Family Members,** and then click **OK.**

With the surplus savings strategy in place, it looks like you have a potential optimal plan to present to the clients. The *Plan Analysis* window shows that all cash inflows meet cash outflows across the entire planning horizon, and the clients' net worth continues to grow at a gradual rate.

Based on our assumptions, this plan has sufficient assets to meet the Howells' financial needs over the entire planning period.

Planning strategy: life insurance

Both Mason and Natalie have expressed concerns about their existing life insurance. Is the coverage they already own adequate to maintain a current lifestyle for the surviving spouse? There are several ways to analyze insurance needs in NaviPlan. For our purposes, we are going to use the reports and graphs method to determine whether or not additional insurance is required in the event of Mason's death.

Procedure to generate reports

1. Minimize the **Recommended Plan** *Plan Analysis* window.
2. Right-click the **Recommended Plan** icon, and then select **Duplicate.**
3. On the *General* tab, rename the new plan **Insurance Analysis.**
4. Click **OK,** and then click **Yes** to finish editing the current plan.
5. Go to the **Reports** menu, and then select **Life Insurance – Coverage Needs Detailed – Mason.**
6. In the *Year* field, enter the **current year,** and then click **OK.**
7. Go to the **Reports** menu, and then select **Life Insurance – Coverage Needs Detailed – Natalie.**
8. In the *Year* field, enter the **current year,** and then click **OK.**

The results

This report lists accumulated surpluses and deficits for the remaining lifetime of the survivor. The text at the bottom of the report states whether or not additional life insurance is required. If Mason were to die at the end of the current year, additional insurance would be required to maintain Natalie's lifestyle. The report can be generated using alternative deceased dates to explore what effect dying in different years would have on cash flow.

Procedure to generate graphs

1. Minimize the **Additional Life Insurance Required to Cover Potential Death of Mason** report.
2. Go to the **Graphs** menu, and then select **Life Insurance – If Mason dies**.
3. Go to the **Graphs** menu, and then select **Life Insurance – If Mason dies with Insurance.**
4. Go to the **Window** menu, and then select **Tile Vertical.**

Both graphs appear side-by-side on the desktop.

The results

These graphs illustrate the accumulated surpluses and deficits for the entire lifetime of the survivor (Natalie). From the report we generated in the previous procedure, we determined that in the event Mason were to die at the end of the current year, additional insurance would be required to maintain Natalie's lifestyle.

- In the *If Mason Dies* graph, we can see that if Mason died at the end of the current year without the additional required insurance, Natalie would be faced with accumulated deficits towards the end of her retirement period.
- In the *If Mason Dies with Insurance* graph, we can see that if Mason died at the end of the current year with the additional required insurance, Natalie would not be faced with accumulated deficits.

Planning strategy: disability insurance

Mason and Natalie are completely uninsured in the event of disability and want to know if purchasing individual policies would be prudent. There are several ways to analyze insurance needs for the clients in NaviPlan. For our purposes, we are going to use the reports and graphs method to determine whether or not additional disability insurance would be required.

Procedure

1. Go to the **Reports** menu, and then select **Disability Insurance – Cash Flow Summary if Mason is disabled.**
2. The *Projection Criteria* dialog box appears. Leave all of the default settings, and then click **OK.**

The results

This report simulates the client becoming disabled at the start of the next year and the resulting cash flows until retirement. NaviPlan allows you to include or exclude Canada Pension Plan disability benefits in the *Incomes* category – *CPP / OAS* tab. We have assumed that Canada Pension Plan disability benefits would be applicable.

The disability insurance analysis does not recommend a specific dollar amount. However, it does show the resulting surpluses or deficits that occur based on the loss in income. The Howell's definitely require some level of protection in the event Mason were to become disabled, since accumulated deficits are projected. Erosion of personal capital is evident without the addition of disability insurance.

Procedure

1. Minimize the Cash Flow Summary if Mason is disabled report.
2. Go to the Graphs menu, and then select Disability Insurance – If Mason is disabled.

The results

The graph illustrates the accumulated surpluses and deficits for the lifetime of the clients. From the report we generated in the previous procedure, we determined that in the event Mason became disabled at the beginning of the next year, accumulated deficits are projected. We see the same conclusion occurring in this graph.

The graph also displays a declining net worth for the clients over their lifetime. Assets are being redeemed to cover the cash flow deficits. Clearly, the clients do not have enough assets to maintain their current standard of living in the event Mason became disabled at the beginning of the next year.

We can see from the graph and the report that disability income in the range of $25,000 per year in pre-retirement would help supplement their lifestyle should Mason become disabled. We will enter a disability policy to illustrate.

Procedure-Add Long-term disability coverage

1. Go to the Insurance category - Disability Insurance tab.
2. Click **Insert** and select **Group LTD.**
3. Enter the following information for Mason's new disability policy:

   Description: **Group Policy #1122**

   Insured: **Manson**

   Benefits payable: **$100,000 flat dollar amount**

   Frequendy: **Annual**

   Taxable: **cleared**

   Indexed by: **inflation**

   Waiting period: **12 weeks**

   Benefits paid until: **age 58**

   Premiums: **$100**

   Premium frequency: **monthly**
4. Click **OK** twice and **Yes** to complete the editing of the plan.
5. Go to the **Reports** menu, and then select **Disability Insurance – Cash Flow Summary if Mason is disabled** report**.**
6. Click **OK.**
7. Go to the **Graphs** menu, and then select **Disability Insurance – If Mason is disabled.**

The results

The addition of some disability insurance improves their pre-retirement cash flow if Mason were to become disabled. Note that the amount is not sufficient to accumulate sufficient assets in order to meet their retirement goals. A higher level of disability insurance would be required.

Targeted Deficit Coverage: Pre-retirement

Targeted deficit coverage applies to the pre-retirement period. By default, NaviPlan only redeems assets to cover deficits caused by semi-regular or lump sum expense, however, you have the flexibility to include other expenses in targeted deficit coverage.

To target an expense, select the **Include in Targeted Deficit Coverage** check box found in any *Expense* dialogue box. If targeted deficit coverage is in effect for a particular expense and that expense causes a deficit in pre-retirement, assets are redeemed to cover the deficit.

Procedure: exclude from targeted deficit coverage

8. From the file cabinet open the plan **Simplified Howell for Deficit Coverage**.

   The *Plan Analysis* window opens.

9. Record the amount of annual surplus in **2005**.

   _____

10. In the *Plan Analysis* window, click the **Duplicate** button.
11. On the *General* tab, rename the plan **Boat Purchase 2005.**
12. Go to the **Expenses** category – **Standard** tab.
13. Click **Insert – Lump Sum – Other Lifestyle Expense**
14. Enter the following information for the boat:

    Member: **Mason**

    Source: **Boat Purchase**.

    Amount: **$100,000**

    Inflation rate: **cleared**

    Date effective: **May 1 2005**

    Include in Targeted Deficit Coverage: **cleared**

15. .Click **OK** and **Yes** to complete the editing of the plan.
16. From the *Plan Analysis* window, record the amount of the deficit in 2005.

    _____

The results

With the Simplified Howell for Deficit Coverage and the Boat Purchase 2005 Plan Analysis windows side-by-side, we can see that the difference between the deficits in 2005 is equivalent to $100,000. This corresponds to the boat purchase and illustrates that when the *Include in Targeted Deficit Coverage* check box is cleared, NaviPlan will take the expense amount from the client's cash flow, as opposed to redeeming assets.

Procedure: include in targeted deficit coverage

17. In the *Plan Analysis* window for the Boat Purchase 2005 plan, click the **Duplicate** button.
18. On the *General* tab, rename the plan **Targeted Deficit Coverage.**
19. Go to the **Expenses** category – **Standard** tab.
20. Select the **Boat Purchase** and click **Edit.**

21. Select the **Include in Targeted Deficit Coverage** check box.
22. Click **OK** twice and **Yes** to complete the editing the plan.
23. From the *Plan Analysis* window, record the amount of the deficit in 2005.

    _____

    The amount is equivalent to the surplus shown in 2004.

The results

Targeted deficit coverage in the pre-retirement period makes use of existing assets to meet shortfalls caused by an expense. Before redeeming assets, NaviPlan will first cover the deficit with any available annual or accumulated surpluses. The remainder is drawn from existing assets. In this case, the $100,000 expense was covered by the surplus funds of 2004 and 2005 with the remainder being redeemed from the most liquid non-registered assets. This can be examined in the *Asset Activity* report for 2005.

Procedure

24. Minimize all reports and plans on the desktop.
25. Ensure that the **Boat Purchase 2005** plan is active.
26. Go to the **Reports** menu, and then select **Activity – Asset In – Next Year (2005).**
27. Repeat steps 25-26 for the **Targeted Deficit Coverage** plan using the scale button.
28. Go to the **Window** menu, and then select **Tile Vertical.**

The results

Notice that there are no *Total Sells* records in the *Asset Activity* report for the *Boat Purchase 2005* plan, because we did not specify this expense as a targeted expense. Conversely, there are *Total Sells* for the *Targeted Deficit Coverage* plan as we selected to *Include in Targeted Deficit Coverage* check box. By default, NaviPlan will limit the dollar redemption to the lesser of the current deficit or the amount of the targeted expense(s) in that year. The redemption amount will include any taxes due on the sale of the non-registered asset(s). Notice on the *Plan Analysis* window that including this expense in targeted deficit coverage has negatively impacted our client’s final net worth.