

# Disability Needs Calculations

## Functions addressed in this document:

- How is the additional disability insurance coverage amount determined for the Goal and Expense Analysis method?
- After entering the recommended amount of disability insurance coverage and rerunning the disability analysis, why is there still a disability income shortfall?

### Objectives

If David is disabled

Select an insurance analysis method

Goal and Expense Analysis

Income Coverage Analysis

Set Goals — Disability Income — Client Objectives

This topic covers disability income analysis for joint plans where either the client or co-client becomes disabled; NaviPlan® does not perform an analysis where both clients become disabled. When the **If <client/co-client> is disabled** option is selected, as shown above, it is assumed that the client or co-client is currently earning a salary and eligible for disability insurance coverage. If the client or co-client is not working, then this option should not be selected.

**Important!** Unless otherwise indicated, items and locations reference throughout this document are on **Set Goals – Disability Income – Client Objectives**. This document is focused on disability income scenarios in Level 2 plans using the **Goal and Expense** analysis method.

Disability income needs in NaviPlan® are determined by simulating the client or co-client being disabled on January 1 of the year after the plan year. The disability period ends on December 31 of the year before retirement as specified in the plan and is displayed in the **Analyze Disability To** field on the **Assumptions** tab. Using the **Analyze Disability To** field, you can specify the number of years upon which the disability analysis is calculated by modifying either the **Age** or **Date** fields for the respective client. For example, you may wish to analyze disability based on the average duration of disability for someone in your client's age group. For clients aged 40 to 49, the average duration of disability is 42 months.

## How is the additional disability insurance coverage amount determined for the Goal and Expense Analysis method?

Cash flow throughout the disability period is projected. If deficits result, a need for further disability income coverage is reported. In general, all disability income needs and all disability income resources are assessed in the cash flow projection. Salary, bonus, and self-employed income types previously entered for the disabled client cease during the disability period, and are replaced by any disability insurance income specified in the plan. All other income types continue to appear in cash flow during the disability period. Assumptions for the disability analysis cash flow items are listed below, and for the most part, pertain to **Level 1** and **Level 2 Plans**. Where cash flow items mentioned below do not exist in **Level 1 Plans**, they are not accounted for in a **Level 1 Plan** analysis.

Disability needs include the following:

- Expenses entered as **Annual Expenses** on the **Additional Annual Expenses** tab.
- Existing **Annual Expenses** amounts previously entered in the plan at the inclusion rate defined by the **Percentage of lifestyle expenses to cover** field on the **Additional Annual Expenses** tab.
- 100% of insurance premiums entered on the **Enter Financial Data** section – **Insurance Coverage** category – **Insurance Coverage** page. Disability insurance premiums for policies insuring the disabled client cease at disability and are not included in cash flow during disability.
- **Additional Lump Sum Needs** amounts entered on the **Lump Sum Needs** tab.
- Liabilities selected under **Pay Off Outstanding Liabilities** on the **Lump Sum Needs** tab. On this tab, you can choose to have specific outstanding liabilities paid in full upon disability.
- Additional recommended savings for the retirement and education goals.
- For major purchase goals, you have the flexibility to modify the percentage of the goal you wish to cover during the disability period in the **% to Cover** field on the **Lump Sum Needs** tab.

Disability income resources include the following:

- Incomes of the non-disabled client.
- Investment income.
- When using the Goal and Expense Analysis method, accumulated cash flow surplus that is saved according to the percentage defined as **Percent surplus saved** on the **Additional Annual Expenses** tab.
- Short-term disability policy proceeds for the full duration of the specified benefits period.
- Long-term disability policy proceeds for the full duration of the specified benefits period less the waiting period in the first year of disability. For example, if long-term benefits are \$4,000 per month with a waiting period of three months, a total of \$36,000 in long-term disability income is included in disability cash flow in the first year of disability, and \$48,000 in disability income would be included each year after that until the end of the last year of the benefit period.
- CPP/QPP disability benefits, while not included by default, can be entered in **Enter Financial Data – Cash Flow – Cash Flow – Details – CPP/QPP & OAS Details**.

- Redemptions of available assets (only if the above resources are insufficient to meet cash flow needs). In a Level 2 Plan, the asset availability options selected on the **Asset Availability** tab also affect whether assets are used for immediate needs in a disability analysis.

**DID YOU KNOW?** Because savings for other goals can continue throughout the disability period, NaviPlan® assumes these goals are satisfied independently of the disability analysis. This is of particular importance if the disability period ends during retirement. Retirement savings continue during disability, so it is assumed that retirement funding will be adequate to cover needs from the end of the disability period to last death. If the disability cash flow analysis results in cash flow deficits, this can indicate that additional disability income is required to support competing goals and, most importantly, to satisfy ongoing needs once the disability period ends. It is a good practice to perform a disability analysis after you have solved other goals (achieved 100% **Goal Coverage**); otherwise, significant disability cash flow deficits may result, thereby inflating the additional recommended disability coverage.

## Insurance Report

Robert Lee and Sarah Lee  
Plan (2013)

### Disability Insurance Policies

Description:	Group STD		
<b>Policy Type:</b>	Group STD	<b>Insured:</b>	Robert
<b>Company:</b>		<b>Effective Date:</b>	Dec 31 2012
<b>Policy #:</b>		<b>Owner:</b>	Robert
		<b>Premium Payer:</b>	Robert

Benefits are **\$2,000/month (tax-free)**.  
Benefits begin **after 2 weeks** and are paid **until 3 months**.  
Premiums are **\$50/month** and end on **Oct 21 2029**.

Description:	Group LTD		
<b>Policy Type:</b>	Group LTD	<b>Insured:</b>	Robert
<b>Company:</b>		<b>Effective Date:</b>	Dec 31 2012
<b>Policy #:</b>		<b>Owner:</b>	Robert
		<b>Premium Payer:</b>	Robert

Benefits are **\$2,500/month (tax-free)**.  
Benefits begin **after 3 months** and are paid **until age 65**.  
Premiums are **\$50/month** and end on **Oct 31 2029**.

#### Financial Picture – Insurance Coverage – Insurance Coverage – Insurance Coverage Report

**Example:** Robert has a short-term disability policy that pays \$2,000 per month for three months and a long-term disability policy that pays \$2,500 until age 65.

**DID YOU KNOW?** Because the **Analyze Disability To** field determines the number of years upon which the additional disability coverage amount is based, if the disability policy benefit period has an end date prior to the **Analyze Disability To** date, you may be overstating additional disability needs. In contrast, if the disability expenses have an end date prior to the **Analyze Disability To** date, you may be understating additional disability needs.

The disability analysis is based on a cash flow projection for the disability period as displayed in the **Multi-Year Cash Flow Summary if <client/co-client> is Disabled** report shown on the following page. The **Disability Income** amount in the first year of disability (2012) represents three months of Robert's short-term coverage at \$2,000 per month and nine months of long-term coverage at \$2,500 per month, for a total annual income of \$28,500.

The **Surplus/(Deficit)** column reveals substantial projected cash flow deficits, which means that cash inflows from all sources are not sufficient to cover Robert and Sarah's needs throughout the disability period. NaviPlan® calculates the average deficit and states the average as the recommended additional disability coverage in client reports. The additional disability coverage is assumed to be long-term disability coverage and is calculated as follows:

$$\frac{\text{Additional annual disability coverage} = \text{Total projected deficits}}{\text{Number of years in disability period}}$$

<b>Multi-Year Cash Flow Summary If Robert Is Disabled</b>						
Year	Age(s)	Disability Income	Other Cash Inflows	Taxes	Expenses and Savings	Surplus/(Deficit)
2011	44/42	28,500	207,980	32,452	204,082	0
2012	45/43	30,000	192,382	35,676	209,371	(22,665)
2014	46/44	30,000	110,457	30,069	214,938	(104,550)
2015	47/45	30,000	116,721	31,881	220,740	(105,900)
2016	48/46	30,000	140,323	33,778	248,484	(111,938)
2017	49/47	30,000	130,134	35,763	255,874	(131,504)
2018	50/48	30,000	137,313	37,842	263,589	(134,118)
2019	51/49	30,000	144,830	40,020	271,644	(136,833)
2020	52/50	30,000	152,702	42,301	279,778	(139,377)
2021	53/51	30,000	160,947	44,691	261,149	(114,893)
2022	54/52	30,000	169,585	47,197	268,942	(116,553)
2023	55/53	30,000	178,637	49,823	277,077	(118,263)
2024	56/54	30,000	188,124	52,576	285,572	(120,024)
2025	57/55	30,000	198,069	55,463	294,444	(121,838)
2026	58/56	30,000	208,497	58,492	303,712	(123,706)
2027	59/57	30,000	219,433	61,669	313,395	(125,631)
2028	60/58	30,000	230,905	65,003	323,515	(127,613)
2029	61/59	30,000	242,941	68,502	334,093	(129,655)

Quick Actions – Reports – Insurance – Disability Insurance – Multi-Year Cash Flow if Robert is Disabled report

Continuing with our example, total protected deficits are the sum of all deficits in the **Surplus/(Deficit)** column or \$1,985,061. The disability period lasts from January 1, 2010, to December 31, 2029, a period of 18 years. The additional annual disability coverage if Robert is disabled is:

$$\frac{\$1,985,061}{18} = \$110,218/\text{yr } (\$9,190/\text{mo})$$

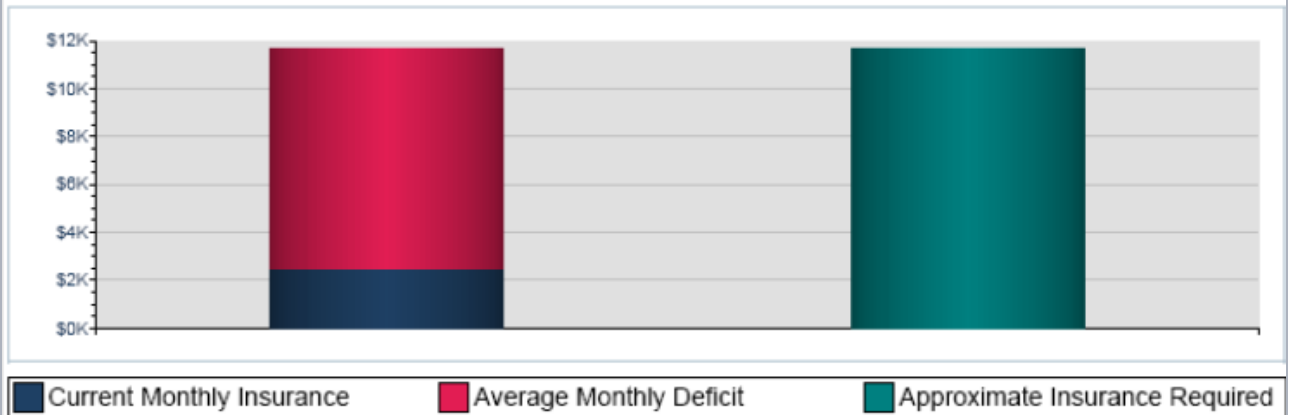
## Analysis

Based on our assessment from now until you retire in the year 2030, you may experience deficits that average \$9,190 per month, with the largest annual deficit being \$139,377.

**Increasing your coverage by \$9,190 per month** can help eliminate these deficits.

Depending on the circumstances, you may or may not be able to purchase this amount of disability insurance.

## If Robert becomes Disabled



## If Robert becomes Disabled

Current Monthly Disability Insurance	\$2,500
Average Monthly Deficit	\$9,190
Approximate Monthly Disability Insurance Required*	\$11,690

## Consider the Following

- You may not want to rely solely on group policies at work. Should you change jobs or your employer change to another insurer, you may no longer be eligible for group benefits.
- Review your existing policy's monthly disability

Results – Client Reports – Legacy Report – Financial Needs Assessment

This amount represents the additional monthly disability insurance required and is shown in the **Financial Needs Assessment**, **Financial Needs Summary**, and **Financial Needs Analysis** legacy client reports. Using the **Financial Needs Assessment** client report, we can see the average monthly deficit amount of \$9,190 per month, which corresponds with the **Multi-Year Cash Flow Summary** report.

Since projected deficits vary year by year (refer to the first sentence in the **Financial Needs Assessment** report above), and as there are limits to the amount of disability insurance coverage that an individual can own, it is at the discretion of the advisor to determine an appropriate amount of additional disability income coverage. To assist the advisor, both the average and highest projected deficits are provided to facilitate discussions with your clients.

## After entering the recommended amount of disability insurance coverage and rerunning the disability analysis, why is there still a disability income shortfall?

The recommended amount of disability insurance coverage is the average amount needed to cover projected cash flow deficits during the disability period. Because the recommended amount of coverage is the average amount needed throughout the disability period, implementing this amount will fully meet disability cash flow needs in some years, will be more than needed in some years, and will be insufficient in other years.

When using the **Surplus Strategy** (that is 100% **Percent surplus saved**) on the **Additional Annual Expenses** tab (using the **Goal and Expense** analysis method), in years where the added disability benefits create a surplus, the surplus will be used in future years where the added benefits are not sufficient so that eventually all needs are met by the end of the disability period.

**DID YOU KNOW?** When using the **Goal and Expense** analysis method, the **Assume surplus is spent** option on the **Additional Annual Expenses** tab creates an extra expense called **Assumed Expenses** in reports. The amount of this assumed expense is equal to the pre-retirement cash flow surplus that would have existed if the client was not disabled. In other words, surplus expenditures not previously defined in the plan that would have occurred had the client not been disabled are expected to continue to occur throughout disability.