

## EXAMPLE ONLY

Prepared for:  
 Consultant:  
 Property:  
 Description:

The Negative Gearing Calculator is designed to give residential property investors an estimate of the net income effect of owning an investment property. The calculator combines the cash operating revenue, rent, and the cash operating expenses, with the change in the amount of income tax paid to measure the net change in the investor's income due to the investment property.

19-Jan-2015

### SUMMARY

Assumptions		Projected results over 10 yrs	
Property value	\$415,000	Property value	\$614,301
Initial investment	\$0	Equity	\$183,531
Gross rental yield	5.16%	After-tax return /yr	??????%
Net rental yield	3.65%	Net present value	\$145,969
Cap. growth rate	4.00%	<b>IF SOLD</b>	
Inflation rate	3.00%	Selling costs & CGT	\$72,120
Interest rate	4.90%	Equity	\$111,412
Taxable income	\$85,000	After-tax return /yr	??????%

### COMPUTER PROJECTIONS

Investment Analysis	Projections over 10 years					
	2013	1yr	2yr	3yr	5yr	10yr
<b>End of year</b>						
Property value	\$415,000	431,600	448,864	466,819	504,911	614,301
Purchase costs	\$14,450					
Investments	\$0					
Loan amount	\$430,770	430,770	430,770	430,770	430,770	430,770
Equity	\$-15,770	830	18,094	36,049	74,141	<b>183,531</b>
Capital growth rate	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Inflation rate (CPI)	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
<b>Gross rent /week</b>	\$420	21,403	22,045	22,707	24,089	27,926
<b>Cash deductions</b>						
Interest (I/O)	4.90%	21,108	21,108	21,108	21,108	21,108
Rental expenses	28.63%	6,253	6,441	6,634	7,038	8,159
<b>Pre-tax cash flow</b>	\$0	-5,958	-5,504	-5,035	-4,057	-1,341
<b>Non-cash deductions</b>						
Deprec.of building	2.50%	6,000	5,850	5,704	5,422	4,777
Deprec.of fittings	\$30,000	12,000	7,200	4,320	3,888	0
Loan costs	\$1,320	264	264	264	264	
<b>Total deductions</b>		45,625	40,863	38,030	37,720	34,045
<b>Tax credit (single)</b>	\$85,000	8,549	6,738	5,668	5,248	2,356
<b>After-tax cash flow</b>	\$0	2,591	1,234	633	1,191	1,015
<b>Rate of return (IRR)</b>	?????					
Pre-tax equivalent	?????	(50)	(24)	(12)	(23)	(20)

*Disclaimer: Note that the computer projections listed above simply illustrate the outcome calculated from the input values and the assumptions contained in the model. Hence the figures can be varied as required and are in no way intended to be a guarantee of future performance. Although the information is provided in good faith, it is also given on the basis that no person using the information, in whole or in part, shall have any claim against Silverhall - Sydney, its servants, employees or consultants..*

## Detailed Notes on Spreadsheet Items

## PROPERTY VALUE

The property (or market) value refers to how much the property is worth (i.e. how much you could sell it for). Its book value, on the other hand, refers to how much you have paid for it plus the cost of any immediate renovations.

Property price:	415,000
Renovation costs:	0
Total book value:	415,000
<b>Property market value:</b>	<b>\$415,000</b>

## PURCHASE COSTS

These include your solicitor's conveyancing fees and, where applicable, State Government stamp duty charges. In Australia, stamp duty varies from State to State and is a function of purchase price whereas, in New Zealand, it has been abolished on all property transfers since May 1999. Conveyancing costs may also be dependent on purchase price and may be negotiable. In some States of Australia (e.g. A.C.T.), purchase costs are tax deductible in the first year of the investment, though normally they will only be taken into account in Capital Gains Tax calculations in the year of sale.

Conveyancing costs:	1,500
Stamp duty:	12,950
<b>Total Purchase costs:</b>	<b>\$14,450</b>

## INVESTMENT &amp; LOAN

Your initial investment is usually just the total of all monies outlaid at the time of purchase. These may include contributions toward any, or all, of the costs listed below. The remainder will largely determine the size of the loan. If you have sufficient equity in other property, it is possible to outlay nothing, and actually borrow the lot (i.e. the purchase price, purchase costs, loan costs, any renovation costs, and even additional monies to cover such things as fittings). If you are modelling an investment from some point in time after purchase (e.g. to assess the return on major renovations), your investment might also include the equity you already have built up in the property.

	<b>Investments</b>	<b>Loan</b>	<b>Total Cost</b>
Property costs:	0	415,000	415,000
Renovation costs:	0	0	0
Purchase costs:	0	14,450	14,450
Furniture costs:	0	0	0
Loan costs:	0	1,320	1,320
<b>Totals:</b>	<b>\$0</b>	<b>\$430,770</b>	<b>\$430,770</b>

## CAPITAL GROWTH &amp; INFLATION RATES

Rate of capital growth is your anticipated annual compound rate of increase of the property value. It will undoubtedly vary substantially over the short term, but over the longer term (10 years or more), it has generally been about 2 to 3% above the rate of inflation.

Average rate of inflation (%):	3.00
Average rate of capital growth (%):	4.00

## EQUITY

The equity is the difference between the property value and the loan. The equity increases in line with the increasing property value in the case of an interest-only loan. For a principal & interest loan, it also increases with the decrease in the debt.

<b>Projected values over</b>	<b>5 yrs</b>	<b>10 yrs</b>	<b>15 yrs</b>	<b>20 yrs</b>
Property value	504,911	614,301	747,392	909,316
Loan	430,770	430,770	430,770	430,770
<b>EQUITY</b>	<b>\$74,141</b>	<b>\$183,531</b>	<b>\$316,622</b>	<b>\$478,546</b>
<b>Approximate costs if sold.....</b>				
Capital Gains Tax	22,540	51,660	88,459	131,392
Solicitor's fees	2,525	3,072	3,737	4,547
Sales commission	14,380	17,388	21,048	25,501
<b>EQUITY (after sale)</b>	<b>\$34,696</b>	<b>\$111,412</b>	<b>\$203,377</b>	<b>\$317,107</b>

## INTEREST COSTS & TYPE OF LOAN

The type of loan can be either interest-only and/or principal & interest. Repayments for interest-only loans, as the title suggests, consist of interest only. Repayments for principal & interest loans include a component of the principal. Interest-only loans are usually of a shorter term (e.g. 3 to 5 years) at which time they are usually rolled-over.

Loan type:	I/O Yrs 1-40
Interest rate (yr 1) (%)	4.90
Loan:	\$430,770
Loan costs (written off over 5 yrs):	\$1,320
Monthly payment:	\$1,759
<b>Annual payment:</b>	<b>\$21,108</b>

## RENT

The potential annual rent is simply the rent per week times 52. The actual annual rent must account for any period that the property is vacant. Annual rents are assumed to increase in line with inflation.

Rent per week:	420
Potential annual rent:	21,840
Vacancy rate (%):	2.00
<b>Actual annual rent:</b>	<b>\$21,403</b>

## ANNUAL RENTAL EXPENSES

These are all the real operating costs associated with the investment property with the exception of loan interest payments. The first cell of the spreadsheet represents the expenses expressed as a percentage of the potential annual rent. As a guide, expenses could vary anywhere from 13% to 30%, depending on the maintenance and whether a professional property management agent is used. For holiday letting, with higher vacancies, the percentage can be more than 50%.

Normal Expenses:	
Agent's commission (8.80%):	1,883
Letting fees:	420
Rates:	1,500
Insurance:	450
Body corporate:	2,000
Special expenses:	0
<b>Total expenses:</b>	<b>\$6,253</b>
Normal expenses as % of annual rent (%):	28.63
Net yield or Capitalisation rate (%):	3.65

## PRE-TAX CASH FLOW

These are all of the monies that flow out of your pocket before tax is taken into account. Normally, it would represent the gross annual rent less interest and rental expenses. This will vary if interest or expenses are capitalised or rents used directly to reduce the loan.

Year		1yr	2yr	3yr	5yr	10yr
Rent		21,403	22,045	22,707	24,089	27,926
Cash invested	0	0	0	0	0	0
Principal payments		0	0	0	0	0
Interest		21,108	21,108	21,108	21,108	21,108
Expenses		6,253	6,441	6,634	7,038	8,159
<b>Pre-tax cash flow</b>	<b>\$0</b>	<b>\$-5,958</b>	<b>\$-5,504</b>	<b>\$-5,035</b>	<b>\$-4,057</b>	<b>\$-1,341</b>

## DEPRECIATION ON THE BUILDING

This represents the capital allowance on the construction costs.

Property value:	\$415,000
Construction costs:	\$240,000
Depreciation allowance rate (%):	2.50
<b>Depreciation allowance:</b>	<b>\$6,000</b>

**DEPRECIATION OF FITTINGS (diminishing value method)**

Item	Value	Effective Life (yrs)	Depreciation
General fittings	30,000	5.00	12,000
<b>Total</b>	<b>\$30,000</b>		<b>\$12,000</b>

**LOAN COSTS**

In Australia, the loan costs are written off over the term of the loan (or five years, whichever is the lesser).

Mortgagee's solicitor's fees:	500
Valuation fees:	300
Registration of mortgage:	230
Registration of title:	115
Search fees:	175
<b>Total loan costs:</b>	<b>\$1,320</b>

**TOTAL TAX DEDUCTIONS (Cash & Non-Cash Deductions)**

These include both "cash" (e.g. interest, rental expenses) and "non-cash" (e.g. depreciation) deductions.

Year	1yr	2yr	3yr	5yr	10yr
Interest	21,108	21,108	21,108	21,108	21,108
Expenses	6,253	6,441	6,634	7,038	8,159
Deprec.-building	6,000	5,850	5,704	5,422	4,777
Deprec.-fittings	12,000	7,200	4,320	3,888	0
Loan costs	264	264	264	264	0
<b>Total deductions</b>	<b>\$45,625</b>	<b>\$40,863</b>	<b>\$38,030</b>	<b>\$37,720</b>	<b>\$34,045</b>

**TAX CREDITS & AFTER-TAX CASH FLOW**

The after-tax cash flows are all of the monies that flow in or out of your pocket AFTER tax is taken into account. They represent the PRE-tax cash flow LESS any tax credits (or tax refunds). In this analysis, it is assumed that the investor has obtained a tax variation from the Taxation Office and thus the tax refunds are credited for the same year in which they are based.

Year	2013	1yr	2yr	3yr	5yr	10yr
Pre-tax cash flow	0	-5,958	-5,504	-5,035	-4,057	-1,341
Tax credits		8,549	6,738	5,668	5,248	2,356
After-tax cash	0	2,591	1,234	633	1,191	1,015
<b>Cost /(income) per week</b>		<b>(50)</b>	<b>(24)</b>	<b>(12)</b>	<b>(23)</b>	<b>(20)</b>

**INTERNAL RATE OF RETURN**

The internal rate of return (IRR) is the method of calculating the return on a series of cash flows where the time factor is taken into account. To understand it, think of the money you are outlaying on your investment property as being deposited in a bank account, with interest added each year. In this case the "deposits" are represented by the after-tax cash flows

Year	2013	1yr	2yr	3yr	5yr	10yr
After-tax cash flow	\$0	\$2,591	\$1,234	\$633	\$1,191	\$1,015
Equity						\$183,531

The total amount in your "account" (including interest) at the end of the period is the equity (\$183,531) in the investment property. The IRR (?????) represents the effective "interest rate" that you have received, but with one important difference - because the interest remains in the property, it is not taxed. To receive an equivalent return from bank interest, you need to get ?????% before tax.

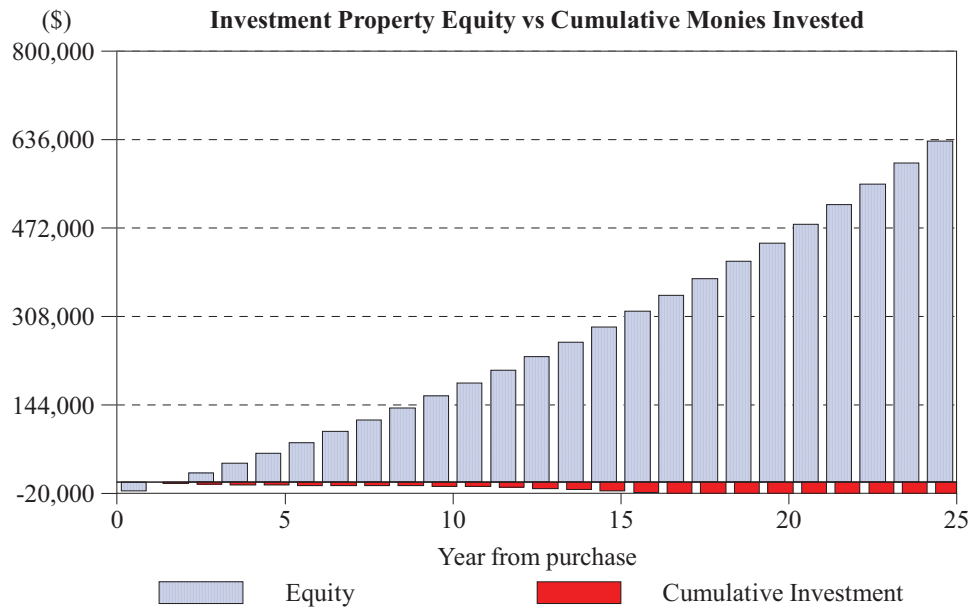
If the property were to be sold at the end of the period, the after-sale equity would be reduced to \$111,412 after taking account of selling costs and capital gains tax and the IRR after the sale would be ?????%.

**TAX BENEFITS**

These are shown below for the given taxable incomes and are based on the specified tax scale.

Number of properties: 1

	<b>Investor</b>
Current taxable income:	85,000
Rental income:	21,403
Total income:	106,403
Rental deductions:	45,625
New taxable income:	60,778
Current tax (on 85,000):	20,672
New tax (on 60,778):	12,123
Tax saving:	8,549
<b>Total tax credits:</b>	<b>\$8,549</b>

**Projected total investment and equity over 25 years**

Year	After-tax cash flow	Cumulative investment	Property value	Amount owing	Equity
	\$0	\$0	\$415,000	\$430,770	\$-15,770
1yr	\$2,591	\$-2,591	\$431,600	\$430,770	\$830
2yr	\$1,234	\$-3,825	\$448,864	\$430,770	\$18,094
3yr	\$633	\$-4,458	\$466,819	\$430,770	\$36,049
4yr	\$436	\$-4,894	\$485,491	\$430,770	\$54,721
5yr	\$1,191	\$-6,085	\$504,911	\$430,770	\$74,141
6yr	\$-145	\$-5,940	\$525,107	\$430,770	\$94,337
7yr	\$128	\$-6,068	\$546,112	\$430,770	\$115,342
8yr	\$413	\$-6,481	\$567,956	\$430,770	\$137,186
9yr	\$707	\$-7,188	\$590,674	\$430,770	\$159,904
10yr	\$1,015	\$-8,203	\$614,301	\$430,770	\$183,531
11yr	\$1,334	\$-9,537	\$638,873	\$430,770	\$208,103
12yr	\$1,664	\$-11,201	\$664,428	\$430,770	\$233,658
13yr	\$2,007	\$-13,209	\$691,006	\$430,770	\$260,236
14yr	\$2,363	\$-15,572	\$718,646	\$430,770	\$287,876
15yr	\$2,732	\$-18,303	\$747,392	\$430,770	\$316,622
16yr	\$3,114	\$-21,417	\$777,287	\$430,770	\$346,517
17yr	\$3,510	\$-24,928	\$808,379	\$430,770	\$377,609
18yr	\$3,920	\$-28,848	\$840,714	\$430,770	\$409,944
19yr	\$4,345	\$-33,193	\$874,342	\$430,770	\$443,572
20yr	\$4,783	\$-37,976	\$909,316	\$430,770	\$478,546
21yr	\$5,238	\$-43,214	\$945,689	\$430,770	\$514,919
22yr	\$5,708	\$-48,923	\$983,516	\$430,770	\$552,746
23yr	\$6,195	\$-55,117	\$1.023m	\$430,770	\$592,087

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24yr	\$6,698	\$-61,815	\$1.064m	\$430,770	\$633,001
25yr	\$7,217	\$-69,031	\$1.106m	\$430,770	\$675,552