RENTAL APARTMENT BUILDING

USING THE REPLACEMENT RESERVE FOLDER. Canadian Example

INTRODUCTION

Mortgage insurance agencies, conventional lenders and lenders following HUD guidelines often require that Replacement Reserves be established and maintained in an interest-bearing account to aid in funding extraordinary maintenance and repair and replacement of capital items such as the roof.

The contract will restrict how the money in the account will be used and will limit the use to major repairs and replacements and restrict the owner from withdrawing funds from the account for personal use.

Prudent investors may also maintain their own Replacement Reserve Accounts to ensure that they have funds available for major repairs and replacements.

This means that a buyer of an income property where the lender or insurer requires funded Replacement Reserves must make sure that the acquisition costs will include the allocated amount in the Replacement Reserve account. For example, if there is to be \$430,000 in the Replacement Reserve Account the acquisition costs will be increased by \$430,000 to fund the Replacement Reserve Account.

This Investit example illustrates the use of the Replacement Reserve folder using the Investit Example "Rental Apartment Building Yearly" and assumes you are familiar with Investit Pro, how to use the Projection Wizard etc., and focuses on using the "Replacement Reserve Folder"

This practice example consists of three sections;

- 1. The input information for the project related to the Replacement Reserves
- 2. Instructions for entering the data
- 3. Sample reports and discussion

PROJECT INFO. Folder

Same as the Investit Example "Rental Apartment Building Yearly" except:

Change the Description from

"Investment Analysis Rental Units Example" to:

"Example with Replacement Reserves"

INVESTOR Folder

No change. Same as the Investit Example "Rental Apartment Building Yearly"

INVESTMENT Folder

Same as the Investit Example "Rental Apartment Building Yearly" with the following addition;

Roof Replacement Year 3: \$250,000 CCA Claim Setting: Building

Investit Software Inc. www.investitsoftware.com

REPLACEMENT RESERVES Folder

Opening Balance: \$300,000.

(This is the amount in the Replacement Reserve Account on the Analysis Start Date)

Interest Rate: 1.50%

Amounts added to the Replacement Reserve Account

Annual Contributions: Year 1 \$24,000 increasing at 3.00% compounding per year

Amounts withdrawn from the Replacement Reserve Account

Roof Replacement: Year 3 Jan: <\$250,000>

Replace Appliances. 10 sets at <\$1,500> per set for a total of<\$15,000>

Note: Additions to the Replacement Reserve Account are entered as a positive value Withdrawals from the Replacement reserve Account are entered as a negative value

EXPENSES Folder

Add the following:

Replace Appliances Year 4 -- \$15,000

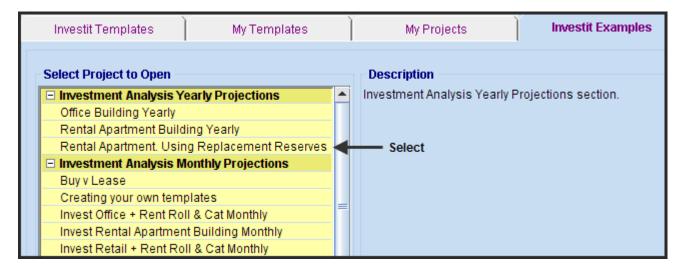
The following Folders are the same as the Investit Example "Rental Apartment Building Yearly"

REVENUE Folder VACANCY Folder FINANCING Folder SALE Folder

INSTRUCTIONS FOR ENTERING THE REPLACEMENT RESERVE INFORMATION

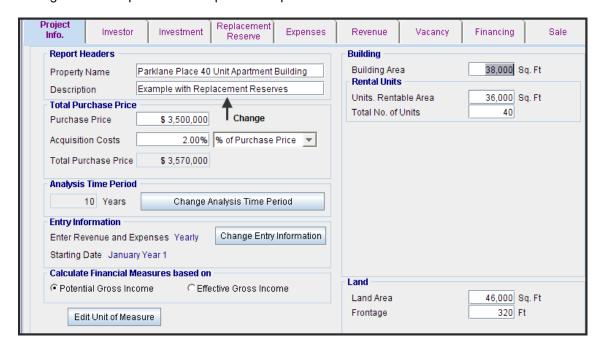
Selecting the Investit Example

The first step is to open Investor Pro and open the Investit Example "Rental Apartment Building. Using Replacement Reserves"



PROJECT INFO Folder

Change the Description to "Example with Replacement Reserves"



INVESTOR Folder

No changes

INVESTMENT Folder

- 1. Add a row
- 2. Enter the Description "Roof Replacement"
- 3. Enter Amount "\$250,000"
- 4. Select Year 3
- 5. Select CCA Class "Building"



REPLACEMENT RESERVE Folder

Interest Rate: 1.50%

Existing Replacement Reserve: \$300,000. (The balance in the account on the Analysis Start Date)

Amounts added to the Replacement Reserve Account

Annual Contribution: Year 1 \$24,000 increasing at 3.00% per year compounding

Amount withdrawn from the Replacement Reserve Account. Enter as negative value

Roof Replacement: Year 3 Jan: <\$250,000>

Enter as a negative number because \$250,000 is being withdrawn from the Replacement Reserve account

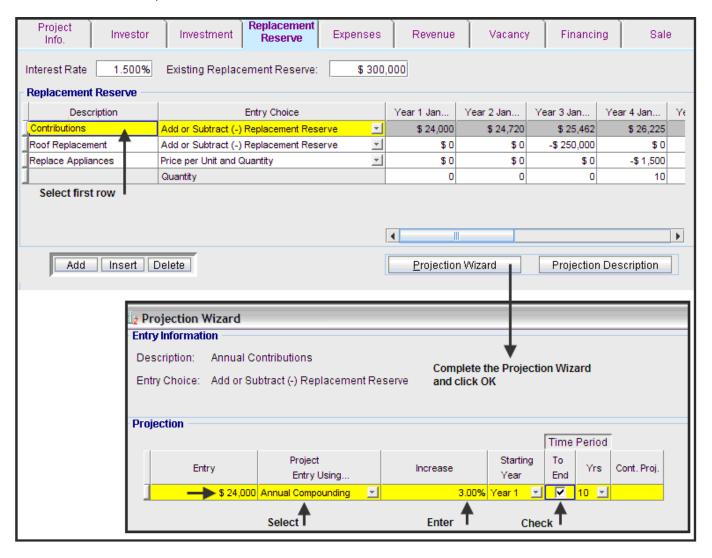
Replace Appliances 10 Sets at <\$1,500> per set

Entries

- 1. Enter the Interest Rate: 1.50%
- 2. Enter the Existing Replacement Reserve on Analysis Start Date: \$300,000
- 3. Add two more rows and enter the Descriptions
- 4. For the "Replace Appliances" row select the Entry Choice "Price per Unit and Quantity"



5. Select Row "Annual Contributions", click on the Projection Wizard button and complete the Projection Wizard as shown below:



- 6. Select the second row "Roof Replacement" and enter -\$250,000 in Year 3
- 7. Select the third row "Replace Appliances" and enter
 - -\$1,500 in Year 4 Quantity row: 10



EXPENSES Folder

Add a row and;

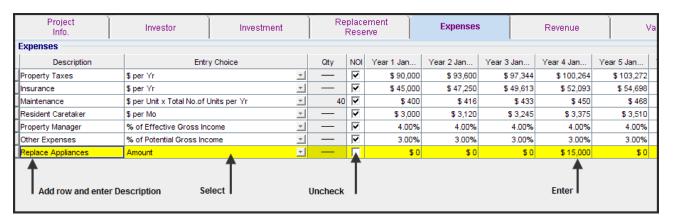
- 1. Enter the Description "Replace Appliances"
- 2. Selected the Entry Choice 'Amount"
- 3. Uncheck the "NOI" box
- 4. Enter \$15,000 in Year 4

Important Note:

Because the replacement of the appliances for \$15,000 is a non recurring expense the "NOI" column is unchecked which means that the \$15,000 won't be included in the Net Operating Income but will be included in calculating the Net Income.

Each year the sale price is calculated using the Net Operating Income for the year and a Cap Rate of 7.00%. If the replacement of the appliances for \$15,000 is included in the Net Operating Income in year 4 the sale value in year 4 will drop in value by \$15,000/7.00% which is \$214,286.

Non recurring expenses should not be included in the Net Operating Income when using Cap Rates to determine the value of the property. Below is the completed Expenses folder.



Replacing the appliances for \$15,000 is excluded from the Net Operating Income calculation.

COMPANY			Income Parklane		October 18, 2010 Investor Pro						
Logo			Examp	le with Repl		Rental Apartment. Using Replacement Reserves					
	Year 1	Үеаг 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
RE VE NUE											
One bedroom Units	270,000	278,100	286,500	294,900	303,900	312,900	322,500	332,100	342,000	352,200	363,000
Two bedroom Units	198,000	205,920	214,200	222,660	231,660	240,840	250,560	260,640	270,900	281,880	293,040
Laundry	7,200	7,680	8,160	8,160	8,640	9,120	9,600	10,080	10,560	11,040	11,520
Parking	24,000	25,200	26,460	27,786	29,172	30,630	32,160	33,768	35,460	37,230	39,096
Potential Gross Income	499,200	516,900	535,320	553,506	573,372	593,490	614,820	636,588	658,920	682,350	706,656
Less: Vacancy & Credit Loss Allowance	14,256	14,751	15,266	15,772	16,326	16,886	17,480	18,085	18,704	19,354	20,027
Effective Gross Income	484,944	502,149	520,054	537,734	557,046	576,604	597,340	618,503	640,216	662,996	686,629
Operating Expenses											
Property Taxes	90,000	93,600	97,344	100,264	103,272	106,370	109,562	112,848	116,234	119,721	123,312
Insurance	45,000	47,250	49,613	52,093	54,698	57,433	60,304	63,320	66,485	69,810	73,300
Maintenance	16,000	16,640	17,320	18,000	18,720	19,480	20,240	21,040	21,880	22,760	23,680
Resident Caretaker	36,000	37,440	38,940	40,500	42,120	43,800	45,552	47,376	49,272	51,240	53,292
Property Manager	19,398	20,086	20,802	21,509	22,282	23,064	23,894	24,740	25,609	26,520	27,465
Other Expenses	14,976	15,507	16,060	16,605	17,201	17,805	18,445	19,098	19,768	20,471	21,200
	221,374	230,523	240,079	248,972	258,293	267,952	277,996	288,422	299,247	310,521	322,249
Net Operating Income	263,570	271,626	279,975	288,763	298,753	308,652	319,344	330,082	340,969	352,475	364,380
Less: Expense not included in NOI 4	_										
Replace Appliances		-	_	15,000	-	-	-	-	-	-	
	-	-	-	15,000	-	-	-	-	-	-	-
Net Income	263,570	271,626	279,975	273,763	298,753	308,652	319,344	330,082	340,969	352,475	364,380
Interest on Mice Reserve Account	4,860	5,304	2,015	2,214	2,652	3,109	3,586	4,082	4,600	5,138	-
Income	268,430	276,930	281,991	275,977	301,405	311,762	322,930	334,164	345,569	357.613	364,380

REVENUE Folder

No changes

VACANCY Folder

No vacancies to be entered

FINANCING Folder

No changes

SALE Folder

No changes

Save the completed project

REPLACEMENT RESERVE REPORT.

The Replacement Reserve Report shows the;

- Opening Balance in the Replacement Reserve Account
- Interest Rate
- Inflows or amounts deposited into the Replacement Reserve Account
- Outflows or amounts withdrawn from the Replacement Reserve Account
- Interest earned
- The amount recovered when the property is sold at the end of the analysis period. Called the "Recovery"

Replacement Reserve "Recovery"

At the end of the Analysis Period the balance in the Replacement Reserve Account is recovered and the account reduced to zero. This provides a positive cash flow to the investor. In this case the "Recovery" is \$347,693

Important Notes:

- 1. Deposits into the account on the report are shown as a negative value
- 2. Amounts withdrawn are shown as a positive value

COMPAN LOGO	Y		Parkk	Replacement ane Place 40 t ample with Re	Jnit Apartmer	nt Building	Ri	ental Apartme	nt. Using Rep	October 15, 2010 Investor Pro placement Reserves
Maintenance Reserve Accounts Opening Balance: \$ 300,000 Interest Rate: 1.500%										
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year8	Year 9	Year 10
Annual Contributions Additions to Mtce Reserves	24,000	24,720	25,462	26,225	27,012	27,823	28,657	29,517	30,402	31,315
Roof Replacement Additions to Mtce Reserves	-	-	(250,000)	Roof Replac	ement -	-	-	-	-	-
Replace Appliances Price per Unit Quantity Additions to Mtce Reserves	-	-	-	(1,500) 10 (15,000)	Appliance I	Replacement	-	-	-	- -
Replacement Reserve Summary			_	(15,000)		_		_		-
Balance. Beginning of Year	300,000	328,860	358,884	136,361	149,800	179,464	210,396	242,639	276,238	311,240
Additions to Mtce Reserves	24,000	24,720	(224,538)	11,225	27,012	27,823	28,657	29,517	30,402	31,315
Balance before Interest Interest	324,000 4.860	353,580 5,304	134,346 2,015	147,586 2,214	176,812 2,652	207,287 3,109	239,053 3,586	272,156 4,082	306,640 4.600	342,555 5.138
Recovery	4,000	3,304	2,013	2,214	2,002	5,103	3,300	4,002	4,000	► (347,693) Recovery
Balance, End of Year	328,860	358,884	136,361	149,800	179,464	210,396	242,639	276,238	311 ,240	-

Using the Replacement Reserve Account. Important Comments

The Replacement Reserve Account is similar to a bank account and care has to be taken that the entries and resulting cash flows are correct. This is best illustrated using the example.

Care has to be taken in using Replacement Reserve Folder to ensure that the cash flows are correct which requires offsetting entries for capital expenditures or major repairs. This is best illustrated using the example.

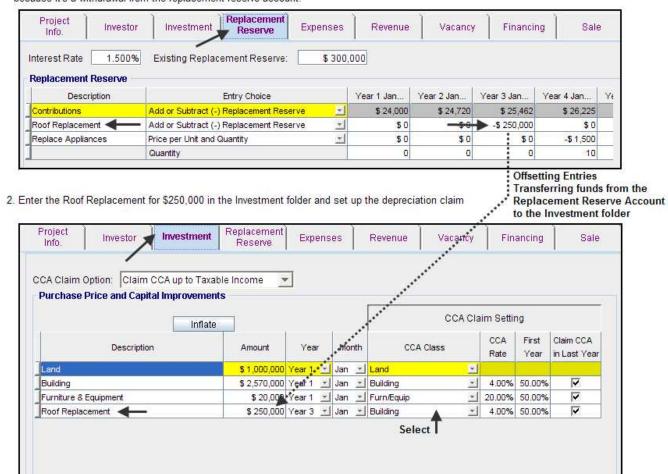
Annual Contribution

The annual amount contributed to the reserve account is \$24,000 increasing at 3.00% compounding. This entry is straight forward.

Replacement of the Roof for \$250,000 in year 3.

Two offsetting entries are required when entering the roof replacement for \$250,000 in year 3;

 Enter the Roof Replacement for <\$250,000> in the Replacement Reserve folder. The entry is negative because it's a withdrawal from the replacement reserve account.



Question.

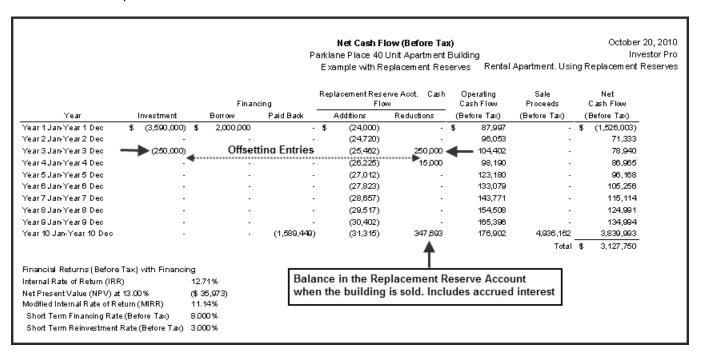
Why is it necessary to set up the replacement of the roof for \$250,000 in both the Replacement Reserve Folder and the Investment folder?

The objective of the Replacement Reserve Account is to build up funds to pay for future replacement of capital items and major repairs. In this example there is an opening balance of \$300,000 in the Replacement Reserve Account with funds are being added to the account every year. Funds added to the account have the effect of reducing the Internal Rate of Return (IRR) to the investor.

The roof replacement in Year 3 for \$250,000 is paid from the Replacement Reserve Account and requires no additional input of cash from the Investor and does not effect the before tax cash flow in year 3 as long as there is an offsetting entry for \$250,000 the Investment folder.

The \$250,000 from the Replacement Reserve Account is used to pay for the roof replacement and is entered in the Investment Folder.

From an investment perspective there are no funds required from the Investor to pay for the roof repair. It is simply an internal transfer of funds from the Replacement Reserve Account to the Investment folder. This can be seen in the Net Cash Flow report where the <\$250,000> Year 3 in the Investment column is offset by the \$250,000 reduction in the Replacement Reserve Account.



Replacement of the Appliances. 10 sets at <\$1,500> per set for a total of <\$15,000>

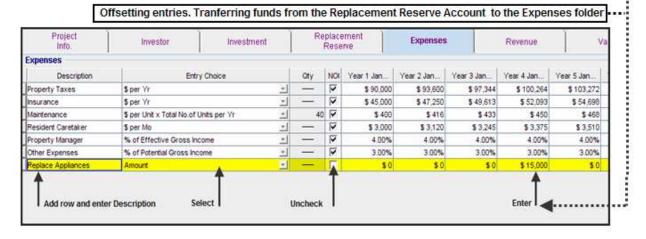
Two offsetting entries are required when entering the replacement of the appliances for \$15,000 in year 4:

 Enter the "Replace Appliances" for <\$1,500> and the Quantity 10 in the Replacement Reserve Folder in year 4. The \$1,500 entry is negative because it's a withdrawal from the Replacement Reserve account.



 Enter the "Replace Appliances" for \$15,000 in the Expenses Folder.
 Uncheck the "NOI" box. We don't want the replacement of the appliances included in the Net Operating Income because it is a non-recurring or extraordinary expense.

The "Expenses Folder" has been used instead of the "Investment Folder" because the partial replacement of the appliances can likely be expensed for tax purposes rather than capitalized.



Question.

Why is it necessary to set up the replacement of the appliances for \$15,000 in both the Replacement Reserve Folder and the Expenses folder?

The replacement of the appliances in Year 4 for \$15,000 is paid from the Replacement Reserve Account and requires no additional input of cash from the Investor.

The \$15,000 is used to pay for the replacement of the appliance and is entered as an expense in the Expenses folder. The partial replacement of the appliance would likely be expensed for tax purposes rather than capitalized and claimed though depreciation.

From an investment perspective there are no funds required from the investor to pay for the replacement of the appliances. It is simple an internal transfer of funds from the Replacement Reserve Account to the Expenses folder.

Replacement Reserve Folder. General Rules

Care has to be taken when using the Replacement Reserve Folder to ensure that the cash flows and the calculation of the Internal Rate of Return (IRR) and Net Present Value are correct.

- 1. Contributions or additions to the Replacement Reserve Account are entered as a positive value
- 2. Withdrawals from the Replacement Reserve Account are entered as a negative value
- 3. Capitalized investments such as replacing a roof, which are funded from the Replacement Reserve account, require offsetting entries and is entered in both the
 - Replacement Reserve folder AND
 - The Investment folder with the appropriate depreciation method selected
- 4. Major repairs or replacements that can be expensed for tax purposes are entered in both the
 - Replacement Reserve folder AND
 - The Expenses folder. The "NOI" box unchecked so that the major repair, which is a non-recurring expenses, is not included in the Net Operating Income.
- 5. Withdrawals or payments to the Investor from the Replacement Reserve account can be made directly in the Replacement Reserve folder and don't involve offsetting entries.

6. Replacement Reserve. Interest calculations

The funds in the replacement Reserve account earn interest based on the interest rate entered in the Replacement Reserve Account. The interest calculations are shown in the Replacement Reserve Report.

'ear 1 24,000	Year 2 24,720	Year 3 25,462 (250,000)	Year 4 26,225	Year 5 27,012	Year 6 27,823	Year 7 28,657	Year 8 29,517	Year 9 30,402	Year 10 31,315
24,000	24,720 -	·	26,225	27,012	27,823	28,657	29,517	30,402	31,315
-	-	(250,000)	_	_					
					-	-	-	-	-
-	-	-	(1,500)	-	-	-	-	-	-
-	-	-	10	-	-	-	-	-	-
-	-	-	(15,000)	-	-	-	-	-	-
300,000	328,860	358,884	136,361	149,800	179,464	210,396	242,639	276,238	311,240
24,000	24,720	(224,538)	11,225	27,012	27,823	28,657	29,517	30,402	31,315
324,000	353,580	134,346	147,586	176,812	207,287	239,053	272,156	306,640	342,555
4,860	5,304	2,015	2,214	2,652	3,109	3,586	4,082	4,600	5,138
									(347,693)
328,860	358,884	136,361	149,800	179,464			•		→ •
3	24,000 24,000	24,000 24,720 124,000 353,580 4,860 5,304	24,000 24,720 (224,538) 124,000 353,580 134,346 4,860 5,304 2,015	24,000 24,720 (224,538) 11,225 124,000 353,580 134,346 147,586 4,860 5,304 2,015 2,214	24,000 24,720 (224,538) 11,225 27,012 124,000 353,580 134,346 147,586 176,812 4,860 5,304 2,015 2,214 2,652	24,000 24,720 (224,538) 11,225 27,012 27,823 124,000 353,580 134,346 147,586 176,812 207,287 4,860 5,304 2,015 2,214 2,652 3,109 128,860 358,884 136,361 149,800 179,464 210,396	24,000 24,720 (224,538) 11,225 27,012 27,823 28,657 124,000 353,580 134,346 147,586 176,812 207,287 239,053 4,860 5,304 2,015 2,214 2,652 3,109 3,586 128,860 358,884 136,361 149,800 179,464 210,396 242,639	24,000 24,720 (224,538) 11,225 27,012 27,823 28,657 29,517 124,000 353,580 134,346 147,586 176,812 207,287 239,053 272,156 4,860 5,304 2,015 2,214 2,652 3,109 3,586 4,082 128,860 358,884 136,361 149,800 179,464 210,396 242,639 276,238	24,000 24,720 (224,538) 11,225 27,012 27,823 28,657 29,517 30,402 124,000 353,580 134,346 147,586 176,812 207,287 239,053 272,156 306,640 4,860 5,304 2,015 2,214 2,652 3,109 3,586 4,082 4,600

The interest accumulates in the Replacement Reserve Account and is not reflected in the cash flows until the property is sold. The balance in the replacement reserve account when the property is sold includes the accumulated interest. At this time the balance in the replacement reserved account which includes accumulated interest is returned to the investor. In the example the "Recovery" at the end of the analysis period is \$347,693

For after tax analysis income tax is paid on the interest earned on the funds in the Replacement Reserve account which is shown on the Operating Cash Report on the next page.

Operating Cash Flow Report

Shows the interest being included in the income tax calculations.

			Parkla	Operating Ca ne Place 40 L		October 19, 2010 Investor Pro					
			Exa	mple with Rep	olacement Re	serves	Rental Apartment. Using Replacement Reserves				
	Year 1	Year 2	Year 3	Year 4	Year 5	Y еаг 6	Year 7	Year 8	Year 9	Year 10	
CASH FLOW BEFORE TAX											
Potential Gross Income	499,200	516,900	535,320	553,506	573,372	593,490	614,820	636,588	658,920	682,350	
Less: Vacancy & Credit Loss Allow	14,256	14,751	15,266	15,772	16,326	16,886	17,480	18,085	18,704	19,354	
Effective Gross Income	48 4,944	502,149	520,054	537,734	557,046	576,604	597,340	618,503	640,216	662,996	
Operating Expenses	221,374	230,523	240,079	248,972	258,293	267,952	277,996	288,422	299,247	310,521	
Net Operating Income	263,570	271,626	279,975	288,763	298,753	308,652	319,344	330,082	340,969	352,475	
Less: Expenses not included in NOI _	-	-	-	15,000	-	-	-	-	-		
Net Income	263,570	271,626	279,975	273,763	298,753	308,652	319,344	330,082	340,969	352,475	
Less: Principal Payments	28,318	30,517	32,886	35,439	38,190	41,155	44,350	47,793	51,503	55,501	
Interest payments	149,040	146,841	144,472	141,919	139,168	136,203	133,008	129,565	125,855	121,857	
CASH FLOW BEFORE TAX	86,212	94,268	102,617	96,405	121,395	131,294	141,986	152,724	163,611	175,117	
Less Income Tax at 35.00%	9,752	12,122	11,674	10,329	20,192	24,855	29,881	35,019	40,309	47,432	
CASH FLOW AFTER TAX	76,461	82,146	90,943	86,076	101,203	106,440	112,105	117,705	123,302	127,686	
INCOME TAX CALCULATIONS											
Net Operating Income	263,570	271,626	279,975	273,763	298,753	308,652	319,344	330,082	340,969	352,475	
Plus: Interest Repl. Reserve Acct	4,860	5,304	2,015	2,214	2,652	3,109	3,586	4,082	4,600	5,138	
Less: Interest Payments	149,040	146,841	144,472	141,919	139,168	136,203	133,008	129,565	125,855	121,857	
Depreciation & Amortization	91,529	95,455	104,164	104,546	104,546	104,545	104,546	104,545	104,546	100,238	
Taxable Income	27,862	34,633	33,354	29,511	57,691	71,013	85,376	100,054	115,168	135,519	
Income Tax at 35.00%	9,752	12,122	11,674	10,329	20,192	24,855	29,881	35,019	40,309	47,432	