

# Cash Flow Maximizer



## *Calculator Tutorial*

## CASH FLOW MAXIMIZER STRATEGY

The "Cash Flow Maximizer calculator" is an Excel 2003 file that is used to demonstrate the power of the Cash Flow Maximizer Strategy of paying off a mortgage versus the Conventional Method. The following is a description of each line item on the software.

### Loan Information

#### Loan Amount

This is the dollar amount that has been borrowed on your loan. If you enter the current balance of your loan, make sure you adjust the "Number of Monthly Payments" to be the amount of months you have left on your loan.

#### Annual Interest Rate

This is the loan interest rate quoted by your loan lender. The annual interest rate can normally be found on your monthly loan statement. *Note:* that the value is not the same as "APR". Most U.S. loans are usually quoted based on a monthly compound period.

#### Number of Monthly Payments

The total number of months it will take to pay off the loan. Typical loan terms are 120, 240, and 360. If you are not sure of the remaining length, the Loan Information Calculator can help with that calculation.

#### Monthly Payment Amount

This is the exact dollar amount of the monthly loan payment.

### Extra Payments

#### Extra Monthly Payment

If you wish to make regularly scheduled monthly prepayments to the principal of your loan (extra monthly payments in addition to your normal monthly payment), enter the monthly dollar amount in this field.

#### Extra Annual Payment

If you wish to make regularly scheduled annual prepayments to principal of your loan (one extra payment per year), enter the annual dollar amount in this field.

#### Month of Annual Payment

This allows you to specify which month of the year you want to make your extra annual payment. For example, it might be the month after you file your tax return, or when you get your annual bonus. Enter a number between 1 (January) and 12 (December)

#### Total Extra Payments

This is the total amount of the Extra Monthly Payments (**Cell E12**) and the Extra Annual Payments (**Cell E13**) that you will end up making over the lifetime of the loan.

## **CASH FLOW MAXIMIZER STRATEGY**

### **Loan Summary**

#### Total of All Payments

The total dollar amount of payments made over the course of the loan, including interest and principal.

#### Total Interest Paid

The total amount of interest paid over the course of the loan.

#### Years Until Paid Off

This is the exact number of years it will take to pay off your loan. If extra payments have been elected, your loan may be paid off earlier than the original amortization period.

#### Interest Savings

This is the total amount of reduced interest associated with making extra payments (prepayments) over the period of the loan. When you make extra payments on the principal, then your total interest cost will be less. This calculation does not include any tax deductions.

### **Loan Information Calculator**

#### Current Principal Balance

Enter the principal balance that remains on your existing loan. This amount can normally be found on the monthly loan statement.

#### Annual Interest Rate

This is the loan interest rate. The annual interest rate can normally be found on your monthly loan statement. *Note:* The value is not the same as "APR. Most U.S. loans are quoted based on a monthly compound period.

#### Monthly Payment Amount

This is the monthly dollar amount of your loan payment. This amount can normally be found on your monthly loan statement. *Note:* If your loan is a mortgage, the dollar amount of this entry should not include any payments to an escrow account, such as for taxes and insurance, if your loan servicer makes these payments for you.

#### Number of Payments Remaining

This number should reasonably represent the number of payments remaining on your existing loan.

## CASH FLOW MAXIMIZER STRATEGY

### Investment Summary

#### Current Age

Enter the individual's current age here.

#### Retirement Age

Enter the individual's anticipated retirement age here.

#### Investment per Year

Enter the anticipated annual dollar amount of investment above and beyond any additional "extra payment" (Cell E12+ Cell E13) applied to the loan (under "Extra Payments").

#### Rate of Return

Enter the projected rate of return for the period of years until retirement.

#### Years Until Paid in Full

This is the exact number of years it will take to pay off your loan. This number should be exactly the same number as in "LOAN SUMMARY - Years Until Paid in Full" in **Cell E20**.

#### Value of Investment @ Paid in Full

This represents the total dollar amount of the additional investment per year (**Cell I14**) from your current age until your anticipated retirement age (**Cell I16**), at the determined rate of return (**Cell I15**)

#### Number of Years Until Retirement

This represents the number of years until retirement, once the loan is paid in full.

#### Extra Payment per Year

This represents the sum of the "Investment per Year" (**Cell I14**) that will be made from your current age to the loan paid-off date, plus the annualized dollar value of all additional payment amounts (**Cell E12+ Cell E13**) that have been applied to the loan before pay-off. All extra payments once applied to the loan can now be invested, since the loan is now paid in full.

#### Monthly Loan Payment

This is the exact dollar amount of the monthly loan payment (**Cell E9**) that can now be invested also, since the loan is now paid in full.

#### Balance at Retirement

This represents the total dollar value available at retirement from the reinvestment of the "Value of Investment @ Paid in Full" (**Cell I17**) + the value of the "Extra Payments per Year" (**Cell I19**) at retirement + the value of the "Monthly Loan Payment" (**Cell I20**) at retirement. These are calculated from the date the first loan is paid-off in full until retirement.

## **Cash Flow Maximizer Calculator (Example Cases)**

## CASH FLOW MAXIMIZER STRATEGY

### Example 1: Conventional Payment of a Mortgage

Loan Information	
Loan Amount	\$316,500
Annual Interest Rate	6.50%
Number of Monthly Payments	360
<b>Monthly Payment Amount</b>	<b>\$2,000.50</b>
Extra Cash Flow	
Extra Monthly Cash Flow	\$0
Extra Annual Cash Flow Contribution	\$0
Month of Annual Cash Flow Contribution	1
<b>Total Extra Cash Flow</b>	<b>\$0.00</b>
Loan Summary	
Total of All Payments	\$720,178.31
Total Interest Paid	\$403,678.31
Years Until Paid Off	30.00
<b>Interest Savings</b>	<b>\$0.00</b>

Loan Information Calculator	
Current Principal Balance	\$1
Annual Interest Rate	0.00%
Monthly Payment Amount	\$1.00
<b>Number of Payments Remaining</b>	<b>1.00</b>
Investment Summary	
Current Age	40
Retirement Age	65
Investment per Year	\$0
Rate of Return	0.00%
Years Until Paid in Full	30.00
<b>Value of Investment @ Paid in Full</b>	<b>\$0.00</b>
Number of Years Until Retirement	0.00
Extra Payment per Year	\$0
Monthly Loan Payment	\$0.00
<b>Balance at Retirement</b>	<b>\$0.00</b>

#### Loan Information

In this example a 40 year old individual who wants to retire at age 65 has a new conventional \$316,500 mortgage with a fixed rate of 6.5% over 30 years (360 monthly payments). The monthly payment is \$2,000.50.

#### Loan Summary

The total dollar amount of the 360 payments you will make under a normal amortization (conventional method) is \$720,178.31 and the total dollar amount of interest you will pay over this 30 year period is \$403,678.31.

#### Investment Summary

The individual is currently 40 years old and wants to retire at age 65.

## CASH FLOW MAXIMIZER STRATEGY

**Example 2:** The Cash Flow Maximizer Method using one extra \$12,000 payment per year

Loan Information	
Loan Amount	\$316,500
Annual Interest Rate	6.50%
Number of Monthly Payments	360
<b>Monthly Payment Amount</b>	<b>\$2,000.50</b>

  

Extra Cash Flow	
Extra Monthly Cash Flow	\$0
Extra Annual Cash Flow Contribution	\$12,000
Month of Annual Cash Flow Contribution	1
<b>Total Extra Cash Flow</b>	<b>\$156,000.00</b>

  

Loan Summary	
Total of All Payments	\$463,224.30
Total Interest Paid	\$146,724.30
Years Until Paid Off	12.83
<b>Interest Savings</b>	<b>\$256,954.00</b>

  

Loan Information Calculator	
Current Principal Balance	\$1
Annual Interest Rate	0.00%
Monthly Payment Amount	\$1.00
<b>Number of Payments Remaining</b>	<b>1.00</b>

  

Investment Summary	
Current Age	40
Retirement Age	65
Investment per Year	\$0
Rate of Return	5.00%
Years Until Paid in Full	12.83
<b>Value of Investment @ Paid in Full</b>	<b>\$0.00</b>
Number of Years Until Retirement	12.17
Extra Payment per Year	\$12,000
Monthly Loan Payment	\$2,000.50
<b>Balance at Retirement</b>	<b>\$595,663.12</b>

### Loan Summary

Using the Cash Flow Maximizer Method and one extra \$12,000 payment per year will allow this individual to pay off this mortgage in 12.83 years, instead of the conventional method of 30 years. The total dollar amount of the payments using the Cash Flow Maximizer method is now \$463,224.30 and the total dollar amount of interest you will pay over this 30 year period is only \$146,724.30 – for a total interest savings of \$256,954.00 over the period of the loan.

### Investment Summary

The individual is currently 40 years old and wants to retire at age 65. Therefore, after paying off the 30 year loan in only 12.83 years, the individual now has 12.17 years left until age 65. If that individual invests that same \$12,000 extra payment plus the normal monthly payment of \$2,000.50 at a rate of return of 5% until they reach age 65 (in 12.17 years), they will have a total of \$595,633.12.

## CASH FLOW MAXIMIZER STRATEGY

**Example 3:** The Cash Flow Maximizer Method using an extra payment of \$1,000 per month

Loan Information	
Loan Amount	\$316,500
Annual Interest Rate	6.50%
Number of Monthly Payments	360
<b>Monthly Payment Amount</b>	<b>\$2,000.50</b>

  

Extra Cash Flow	
Extra Monthly Cash Flow	\$1,000
Extra Annual Cash Flow Contribution	\$0
Month of Annual Cash Flow Contribution	1
<b>Total Extra Cash Flow</b>	<b>\$157,000.00</b>

  

Loan Summary	
Total of All Payments	\$470,537.67
Total Interest Paid	\$154,037.67
Years Until Paid Off	13.08
<b>Interest Savings</b>	<b>\$249,640.64</b>

  

Loan Information Calculator	
Current Principal Balance	\$1
Annual Interest Rate	0.00%
Monthly Payment Amount	\$1.00
<b>Number of Payments Remaining</b>	<b>1.00</b>

  

Investment Summary	
Current Age	40
Retirement Age	65
Investment per Year	\$0
Rate of Return	5.00%
Years Until Paid in Full	13.08
<b>Value of Investment @ Paid in Full</b>	<b>\$0.00</b>
Number of Years Until Retirement	11.92
Extra Payment per Year	\$12,000
Monthly Loan Payment	\$2,000.50
<b>Balance at Retirement</b>	<b>\$585,167.93</b>

### Loan Summary

Using the Cash Flow Maximizer Method and an extra payment of \$1,000 per month will allow this individual to pay off this mortgage in 13.08 years, instead of the conventional method of 30 years. The total dollar amount of the payments using the Cash Flow Maximizer method is now \$470,537.67 and the total dollar amount of interest you will pay over this 30 year period is only \$154,037.67 – for a total interest savings of \$249,640.64 over the period of the loan.

### Investment Summary

The individual is currently 40 years old and wants to retire at age 65. Therefore, after paying off the 30 year loan in only 13.08 years, the individual now has 11.92 years left until age 65. If that individual invests that same \$1,000 per month extra payment plus the normal monthly payment of \$2,000.50 at a rate of return of 5% until they reach age 65 (in 11.92 years), they will have a total of \$585,167.93.



## CASH FLOW MAXIMIZER STRATEGY

**Example 4:** The Cash Flow Maximizer Method – splitting the one extra \$12,000 payment per year - \$6,000 per year to pay down the loan and investing the other \$6,000 per year.

Loan Information	
Loan Amount	\$316,500
Annual Interest Rate	6.50%
Number of Monthly Payments	360
<b>Monthly Payment Amount</b>	<b>\$2,000.50</b>

  

Extra Cash Flow	
Extra Monthly Cash Flow	\$0
Extra Annual Cash Flow Contribution	\$6,000
Month of Annual Cash Flow Contribution	1
<b>Total Extra Cash Flow</b>	<b>\$108,000.00</b>

  

Loan Summary	
Total of All Payments	\$529,605.51
Total Interest Paid	\$213,105.51
Years Until Paid Off	17.58
<b>Interest Savings</b>	<b>\$190,572.79</b>

  

Loan Information Calculator	
Current Principal Balance	\$1
Annual Interest Rate	0.00%
Monthly Payment Amount	\$1.00
<b>Number of Payments Remaining</b>	<b>1.00</b>

  

Investment Summary	
Current Age	40
Retirement Age	65
Investment per Year	\$6,000
Rate of Return	5.00%
Years Until Paid in Full	17.58
<b>Value of Investment @ Paid in Full</b>	<b>\$162,936.60</b>
Number of Years Until Retirement	7.42
Extra Payment per Year	\$12,000
Monthly Loan Payment	\$2,000.50
<b>Balance at Retirement</b>	<b>\$553,835.62</b>

### Loan Summary

Using the Cash Flow Maximizer Method and an extra payment of \$6,000 per year will allow this individual to pay off this mortgage in 17.58 years, instead of the conventional method of 30 years. The total dollar amount of the payments using the Cash Flow Maximizer method is now \$529,605.51 and the total dollar amount of interest you will pay over this 30 year period is only \$213,105.51 – for a total interest savings of \$190,572.79 over the period of the loan.

### Investment Summary

The individual is currently 40 years old and wants to retire at age 65. During the 17.58 years that this individual is paying down the mortgage, they split the \$12,000 per year extra cash flow, making a \$6,000 per year extra payment to the mortgage and investing \$6,000 per year at a 5% rate of return. Then after paying off the 30 year loan in only 17.58 years, the individual now has 7.42 years left until age 65. This individual can now invest the full \$12,000 per year extra payment plus the normal monthly payment of \$2,000.50 at a rate of return of 5% until they reach age 65 (in 7.42 years). By doing this they will have a total of \$553,835.62 at retirement.

Note: All formulas used in this calculation uses a 30/360 basis. The above information is not intended to give financial or investment advice.