## Mortgage Acceleration Plans

## Introduction

In the Equity Harvesting (EH) material, you will learn why it is financially beneficial to never pay down a mortgage. EH works on the premise that for the "right" client, it is always more financially beneficial to invest the maximum amount of money in a tax-favorable vehicle while keeping a tax-deductible loan on a personal residence. EH is a terrific way for many clients to build wealth. Having said that, the reality is that many clients will not like the idea of having debt on their personal residence (no matter how financially beneficial EH is or can be). A large number of clients will maintain the mindset that they would do anything to pay their mortgage off early. If there was a magic wand that could be waived over a home loan to make it pay off more quickly, wouldn't many of your clients like to know about it? Many clients know, in a basic sense, that the only way to pay off a mortgage early is to figure out a way to send additional money to their lender.

As you read through this module, you will learn how a mortgage is amortized, how interest is charged, how interest accrues, and, with that knowledge, how to structure a plan for your clients that will give them the opportunity to reduce the amount of time it takes them to pay off their traditional mortgage.

The accounting principals of a mortgage are fairly simple. Money is borrowed from a lender and repaid over a preset time period. Each payment has an interest component and a principal balance re-payment component. The interest rate charged can be the same for the entire term (fixed) or it can fluctuate with market conditions (adjustable). By calculating the amount of the loan, the term of the loan, and the interest rate charged, a monthly payment can be determined.

Generally speaking, each residential mortgage payment is due on the first day of each month. When a client makes this payment, it is first applied towards the interest that accrued since the last payment was received and whatever is left over is applied to the overall balance (principal) due.

What many people either don't understand or don't think about is that the interest charged on a mortgage is always paid in arrears (after it has been charged). In other words, the payment a client makes in July will be paying for the interest that had been charged and accrued in the previous month of June. The longer the amortization period of a loan, the more money from monthly payments is allocated to the interest part of the loan in the early years (meaning in the first several years of a traditional home loan, the client is not reducing the size of the initial loan balance by very much). Towards the end of the loan
period, the majority of each monthly payment will be allocated towards the principal pay down and less will be allocated to interest due.

For example, the following spreadsheet represents the first 6 payments of a $\$ 200,000$ mortgage with an interest rate of $6.25 \%$ and a 30-year term.

| Amortization <br> Schedule |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| Payment Month | Payment | Principal | Interest | Balance |
| Month 1 | $\$ 1,231.43$ | $\$ 189.76$ | $\$ 1,041.67$ | $\$ 199,810.20$ |
| Month 2 | $\$ 1,231.43$ | $\$ 190.75$ | $\$ 1,040.68$ | $\$ 199,619.50$ |
| Month 3 | $\$ 1,231.43$ | $\$ 191.75$ | $\$ 1,039.68$ | $\$ 199,427.70$ |
| Month 4 | $\$ 1,231.43$ | $\$ 192.74$ | $\$ 1,038.69$ | $\$ 199,235.00$ |
| Month 5 | $\$ 1,231.43$ | $\$ 193.75$ | $\$ 1,037.68$ | $\$ 199,041.20$ |
| Month 6 | $\$ 1,231.43$ | $\$ 194.76$ | $\$ 1,036.67$ | $\$ 198,846.50$ |

As you can see from this chart, paying six payments, or $\$ 7,388.58$, the principal balance of the loan has only been reduced by $\$ 1,153.30$. It's actually rather depressing for many clients to look at these numbers.

## Daily Interest

Most clients don't think about the fact that interest on their residential loans is charged on a daily basis. Many clients think of a home loan as a monthly loan not a daily loan due to the fact that only one payment a month is made from the client to the lender.

If you want to roughly calculate the daily or monthly interest charges, you would use the following formula:

Balance $\times$ interest $/ 365=$ daily interest $\times 30.42=$ monthly interest charge.
(Authors note, 30.42 is an average number of days in a month -365 days / 12 months. Actual calculations will be a couple of pennies different as amortization calculators use a few more decimal points. Actual charges in a mortgage would be daily and so each month may be slightly different.)

By using the calculation of:

## \$200,000 X . 0625 / 365 X number of days

You will see that the first payment in example above is $\$ 1,231.43$ of which $\$ 1,041.67$ is the interest component. The leftover amount of $\$ 189.76$ is what is applied toward principal. The new balance is then used to calculate the interest
charges for month two. The balance of the loan decreased by a measly $\$ 189.76$ which means the following month the client increased his/her amount being applied towards the principal balance by 99 cents (\$190.75-\$189.76). It's amazing how slow the pay down of a 30-year mortgage is in the early months.

It is fairly simple to determine the amount of interest that will be paid over the next 30 years. In our example, \$1,231.43 X $360=\$ 443,314.80-\$ 200,000=$ $\$ 243,314.80$. (In this case, as with every mortgage, the final payment made will be slightly different so the actual amount of interest paid will be $\$ 243,316$ which you will see in our charts later).

If you look at a further breakdown of the amortization schedule, you can see how over time the principal balance reduces due to the fact that the interest component from each payment is reduced

| Payment \# | Interest Applied | Principal Applied | Balance |
| :---: | :---: | :---: | :---: |
| 1 | $\$ 1,041.67$ | $\$ 189.77$ | $\$ 199,810.23$ |
| 60 | $\$ 973.61$ | $\$ 257.83$ | $\$ 186,674.48$ |
| 240 | $\$ 574.65$ | $\$ 656.79$ | $\$ 109,675.22$ |
| 360 | $\$ 6.38$ | $\$ 1,225.05$ | $\$ 0.00$ |

Question, Why would a mortgage company not want a client to pay the mortgage off early? Especially in the first few years?

Looking at the amortization schedule above, after 60 payments of $\$ 1,231.43$, the balance of the mortgage is $\$ 186,674.48$. This means that the client has paid $\$ 73,885.80$ in payments and has only reduced the debt by $\$ 13,325.52$. This is why mortgage companies do not want the customer to pay this debt early. In five years they have earned \$60,560.28 in interest (income) on the money they have loaned out.

This high rate of return on the loan in the first few years is why some companies have instituted pre-payment penalties or charges. These companies are lending money to create income and they are trying to prevent that income stream from being reduced; and a pre-payment penalty will offset some of the income lost if the loan pays off early.

Let's look at the schedule above again and consider the client's reaction to the fact that after $\$ 73,885.80$ in payments their loan balance has only been reduced by a little over $\$ 13,000$. This reaction is why many people search to find a program that will help them reduce that balance quicker (in addition to the goal of some day having their home loan paid off).

For many people, the thought of having a debt for thirty years is mindboggling. A mortgage taken out at 35 wouldn't be paid until 65 . Think about that
for a minute, take out a mortgage the day a child is born and pay it off when they have children of their own.

Although we mentioned pre-payment penalties above, most mortgages can still be pre-paid at any time without penalty. This means that if a person wins the lottery, they can write a check for the balance of the mortgage and pay it off. But how likely is it to win the lottery? Not very. So, in turn, many people make small additional payments to their mortgage each month in hopes of knocking a couple of years off the end of the loan. Even loans with pre-payment penalties can have additional payments applied up to a certain percentage without incurring the penalty. The mortgage and note would typically have a rider attached to it that will identify how much can be pre-paid without the penalty. Often it is a percentage. For example you could pay up to $10 \%$ additional per year without penalty.

As an $\mathrm{MMB}^{\text {TM }}$, it is important to fully understand how a mortgage amortizes and also how to structure plans that meet or exceed the client's goal. If that goal is to pay off their mortgage in a shorter period of time within their budget, then the advisor can utilize any of the following plans that will be discussed. Having a complete understanding of what each plan is and how it works will help you as an advisor to match the right plan with the client.

## Acceleration Plans

This section will cover four types of acceleration plans, all of which will reduce the term of a mortgage. Although there are more than four, many of the other plans are simply hybrids of another. The four types of plans are: Rounding Up, Applying the Bonus, Bi-weekly Payments, and H.E.A.P. The first three plans are very well known in the industry; the fourth one is not as well known but is a phenomenal plan.

For all four plans, we will use the following mortgage scenario:

| Original Loan Amount $-\$ 200,000$ |
| :---: |
| First Payment Date - February 1 |
| st, 2007 |
| Interest Rate $-6.25 \%$ |
| Term $-30-$ Year Fixed |
| Payment $-\$ 1,231.43$ |

All of the plans will achieve the goals of mortgage term reduction (some more than others). The calculations to determine the exact months and years that will be saved are very long and would take several hours to calculate by hand. That being said, we will not detail the calculations and instead will refer you to a web site that will calculate for you and your clients. A link to these calculators can be found at: www.thewpi.org

## 1) Rounding Up

Possibly the most common way people try to accelerate their mortgage is by rounding up their payment to the nearest denomination of $\$ 10$, $\$ 50$, or $\$ 100$. Although, this plan is both easy and affordable for most people, it is the least structured of all acceleration plans.

When structuring the plan, remember that, after the interest from the previous month is paid, the balance of the payment made is applied to principal. Therefore, any extra payment amount would directly reduce the principal of the loan, which in turn reduces the amount of interest that will accrue and be charged the next month. This means that more and more of a client's payment will be applied toward principal earlier in the loan term and, as you will see with the math, paying extra towards a mortgage early in the life of the loan significantly affects the total amount of interest paid over the life of the loan.

Assuming the same mortgage scenario as mentioned earlier, a payment of $\$ 1,231.43$ on a $\$ 200,000$ loan would pay off as scheduled in 30 years. By simply rounding up, to $\$ 1,240, \$ 1,250$ or $\$ 1,300$, the borrower would be applying an additional amount from $\$ 8.57$ to $\$ 68.57$ per month. This amount will apply directly to principal thereby reducing interest charged in subsequent months and reducing the ultimate term of the loan. The chart below will show what the additional payments would do to that term. Remember, for calculation purposes, this loan would have a first payment due February 1, 2007.

| Payment | Additional <br> Principal | Payoff Date | Total Interest <br> Paid | Interest Saved |
| :---: | :---: | :---: | :---: | :---: |
| $\$ 1,231.43$ | $\$ 0.00$ | $2 / 1 / 2037$ | $\$ 243,316.00$ | $\$ 0.00$ |
| $\$ 1,240.00$ | $\$ 8.57$ | $7 / 1 / 2036$ | $\$ 237,514.00$ | $\$ 5,802.00$ |
| $\$ 1,250.00$ | $\$ 18.57$ | $11 / 1 / 2035$ | $\$ 231,139.00$ | $\$ 12,177.00$ |
| $\$ 1,300.00$ | $\$ 68.57$ | $2 / 1 / 2033$ | $\$ 204,368.00$ | $\$ 38,948.00$ |

As you can see, simply rounding up the payment each month reduces the loan term and total interest charged. If the borrower chose to round up to a $\$ 1,300$ payment, the annual cost would be approximately $\$ 822.84$. However, this cost spread out over the period of a year is affordable and easy to budget.

While the additional amounts paid each month are not significant, you can see the power of paying just a few extra dollars each month and how that affects a long-term loan. In the example, the client who paid just $\$ 68.57$ a month over the life of the loan paid off the loan four years early and saved nearly \$40,000. Once this is explained to your clients, many will choose to pay the extra amounts even if they have to forego some of their wants of life.

## 2) Applying the Bonus

Annually, millions of people receive some type of cash bonus. This could be from an employer, from a rich uncle, a parent who has passed away, or even from the Federal Government (an income-tax refund). Although a tax refund isn't truly a bonus, to many clients it feels like one. For this example, we will use the tax refund scenario, although never guaranteed, we can typically peg approximately when it would be received. Most people who are entitled to a refund prepare their return rather timely in hopes of receiving the refund quickly.

For this example, we will use the same numbers from our previous example: a $\$ 200,000$ mortgage with a rate of $6.25 \%$, a 30 -year term, and a payment of \$1,231.43 with the first one being due February 1' 2007.

Let us also assume the client earns \$60,000 a year and as a savings plan has the maximum withheld from his/her paycheck knowing that there will be a sizable tax-refund the following year. Assume the refund for this example is $\$ 1,000$ a year and will continue to be a similar amount for the life of the loan. Assume that the client will receive a similar refund each year for the next 30 years (even though this is not a likely assumption).

Although the customer would love to spend the entire amount on new electronic equipment, they are dedicated to using a their check each year to help reduce the term of their mortgage and that the client will apply that $\$ 1,000$ towards the mortgage as an extra payment and that it is paid to the lender on May 1 of every year.

Look what happens to the mortgage when you apply the extra payment.

| Payment | Additional <br> Annual Pmt | Payoff Date | Total Interest <br> Paid | Interest Saved |
| :---: | :---: | :---: | :---: | :---: |
| $\$ 1,231.43$ | $\$ 0.00$ | $2 / 1 / 2037$ | $\$ 243,316.00$ | $\$ 0.00$ |
| $\$ 1,231.43$ | $\$ 1,000.00$ | $5 / 1 / 2032$ | $\$ 196,968.00$ | $\$ 46,348.00$ |

Uncle Sam has helped the client reduce the term of the loan by almost five years (which helped the client save over \$46,000 over the life of the loan).
$-\$ 1,000 \times 25$ years $=\$ 25,000$ additional paid
$-\$ 1,231.43(p m t) \times 57$ months (term reduced by) $=\$ 70,191$ savings
-Savings of \$70,191-\$25,000 additional paid = \$45,191 actual savings.

Now here is an added kicker to this program. What if the borrower could conceivably "round up" and apply the bonus? For this, we'll assume the same $\$ 1,000$ annually and a monthly payment of $\$ 1,250$ which is an additional $\$ 18.57$ each month.

| Payment | Additional <br> Monthly | Additional <br> Annually | Payoff <br> Date | Total Interest <br> Paid | Interest <br> Saved |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\$ 1,231.43$ | $\$ 0.00$ | 0 | $2 / 1 / 2037$ | $\$ 243,316.00$ | $\$ 0.00$ |
| $\$ 1,250.00$ | $\$ 18.57$ | 1000 | $5 / 01 / 2031$ | $\$ 189,355.00$ | $\$ 53,961.00$ |

By combining two simple ways of term reduction and keeping it affordable for the customer, the term would be reduced to 24 years and 4 months and the total interest saved would be $\$ 53,961$. While the Bonus Plan seems simple and certainly can work, what would be better advice for the client? Assuming the client has the discipline to do so, it would be better for the client to take as much money home as possible from their $\mathrm{W}-2$ paycheck from work and pay down the mortgage with that extra money each month (even if this causes the client to owe money to the IRS when the tax return is filed).

Why would anyone want to use the IRS tax refund as a savings plan (and hundreds of thousands of clients do this knowingly or unknowingly each year)? The IRS does not pay interest on the refund, and letting the IRS keep your money throughout the year is not a good financial decision.

Think of the following example.
Assume our \$60,000 a year W-2 client instead of missing out on additional income of $\$ 83.33$ a month that is being withheld from his check receives that money each month. Further, assume that he changes his withholding at work so that at the end of the year he will actually owe $\$ 1,000$ extra when filing his tax return. Therefore, the client now has an additional $\$ 166.66$ in his paycheck after taxes.

Now apply that $\$ 166.66$ to the mortgage each month. By restructuring the withholding amount, the client currently has and applies that amount directly to the mortgage monthly. The interest savings will be $\$ 75,483!!!$

| Payment | Additional <br> Monthly | Additional <br> Annually | Payoff <br> Date | Total Interest <br> Paid | Interest Saved |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\$ 1,231.43$ | $\$ 0.00$ | 0.00 | $2 / 1 / 2037$ | $\$ 243,316.00$ | $\$ 0.00$ |
| $\$ 1,250.00$ | $\$ 18.57$ | $1,000.00$ | $5 / 1 / 2031$ | $\$ 189,355.00$ | $\$ 53,961.00$ |
| $\$ 1,398.09$ | $\$ 166.66$ | 0.00 | $2 / 1 / 2029$ | $\$ 167,832.93$ | $\$ 75,483.45$ |

You may be saying to yourself that the client has to find the money to pay the income taxes at the end of the year of $\$ 1,000$ ? That's right, and this material will show you how to find that money for the client using the H.E.A.P.

## 3) Bi-weekly Plans

As stated earlier, most mortgage payments are due on the first day of every month. When this payment is made, the previous month's interest that has accrued is paid. So, if the previous month had 30 days, the interest would have been accruing for 30 days.

Simple math would equate this to twelve mortgage payments every year. Using our example, 12 payments of $\$ 1,231.43$ would be annual payments of \$14,777.16.

Today, many homeowners are utilizing a program that is offered through many loan servicers (and also through many private companies). This program is most commonly known as the bi-weekly payment program. This program allows the borrowers to make one half of their required monthly payment every two weeks. So, on February 1' instead of paying \$1,231.43, a payment of $\$ 615.71$ is made. Then, two weeks later another payment of $\$ 615.71$ is made.

Let us revert to our basic math skills to help us determine how this program works. How many weeks are there in a year? 52. If a payment is made every two weeks, how many payments are made a year? 26 . Since the payment amount is half of the full amount, how many full payments per year? 13 (one more than a client would normally pay each year by making "monthly" payments). Hopefully, you are starting to see how it works.

Most of these programs require direct withdrawal from a bank account, therefore, making it easier on the customer and making sure that mail times don't conflict with dates that payments are to be posted. This makes the program work for many people because, although they are paying on an annual basis, they can easily budget the plan based on the automatic withdrawal schedule.

Let's compare the numbers.

|  | Payment | Principle at 5 <br> Years | Total Interest 30 <br> Years | Interest Saved |
| :---: | :---: | :---: | :---: | :---: |
| Standard Monthly | $\$ 1,231.45$ | $\$ 186,674.48$ | $\$ 243,316.00$ | $\$ 0.00$ |
| Bi-weekly | $\$ 615.22$ | $\$ 179,195.95$ | $\$ 187,475.00$ | $\$ 55,841.00$ |

The chart details the total interest saved over the entire term of \$55,841 and the length of the term, which on the bi-weekly plan ends up being just over 24 years or almost a 6-year reduction.

The chart also details the balance after year 5. The reason this number was included is that, although most people want to aggressively pay off their mortgage, they will in all likelihood sell or refinance. The national average of pre-
payment shows a three- to five-year period that a mortgage is likely to be kept. With this in mind, it is just as important to identify the five-year savings as it is to identify the savings of the entire term. In this example, the customer owes $\$ 179,195$ after the $60^{\text {th }}$ month by utilizing bi-weekly payments. This means that the client would have about $\$ 7,500$ (not including appreciation) of additional equity.

If you get a calculator out, you will see that 26 payments of $\$ 615.22$ totals annual payments of $\$ 15,995.72$ or an additional $\$ 1218.56$. This equates to almost one additional payment per year. However, the bi-weekly program works better because the client would be applying principal twice a month, which reduces the interest paid every time a payment is posted.

Using the example, the interest on the original $\$ 200,000$ would be accruing at approximately $\$ 34.25$ per day. By paying $\$ 615.22$ on the $15^{\text {th }}$, the accrued interest of $\$ 513.75$ (34.25 X 15) would be paid and $\$ 101.47$ (615.22 513.75) would be applied to the principal. This means that for the remaining days of the month, interest would only be charged on $\$ 199,898.53$ reducing the per day interest charged. Although that amount is minimal, it compounds over time reducing the overall interest charges by thousands of dollars.

## Applying the funds

Earlier it was mentioned that there are many private companies who offer this service (most at a minimal charge). These companies handle the setup and the general accounting for customers who want to take advantage of it. SOME of these companies will not apply funds immediately to the mortgage account and will wait until the end of the year and then apply the extra payment. This will shorten the term of the loan as well, however, not as much as if the payments were applied immediately. Why? Because interest accrues daily on the remaining principal balance, which means, if extra payments aren't applied immediately, the interest will continue to accrue until the principal reduction is made.

The point we are making here is, if the client opts for a program like this, they should know when the company applies the payments and even go as far as to ask for an amortization schedule and an annual accounting from the company. This annual accounting should show their account activity for the most recent periods. Having this information will aid them in making sure that the payments are being applied immediately.

It is good to know that there are several variations of this program; some even have set the program to run weekly. What you'll find interesting to know is that there is virtually no difference between making weekly vs. bi-weekly payments. If you make weekly payments, you would make 52 payments annually of $\$ 307.86$, which annualizes out to $\$ 16,008.85$. Since the payment is $1 / 4$
of the total monthly payment, the client is still only making 13 full payments (52 / 4); and the annualized amount is only a few dollars more than the bi-weekly annual payment of $\$ 15,995.72$. Therefore, the term would only be reduced a few more months than the bi-weekly plan.

As an $\mathrm{MMB}^{\text {TM }}$, it is important to identify which lenders offer the bi-weekly program and which ones don't. Lenders can and will identify, either on their web site or through their sales people, if they offer the program directly or indirectly in which case a third-party company would be involved.

So far we have covered the rounding up method in which the customer adds a few extra dollars each month on their payment, which reduces the mortgage term by a few years. We have also covered how applying a one-time payment per year (applying the bonus) utilizes a lump sum approach to reduce the term once again by a few years. The bi-weekly method also reduces the term by essentially making an extra payment throughout the course of the year by paying every two weeks. All of these plans, although easy to budget, will only reduce the term of the mortgage by $2-10$ years. While 20 years is better than 30, what if there was another plan that allowed the customer to cut the term in half (or more) without altering their spending habits?

## 4) H.E.A.P. (Home Equity Acceleration Plan)

H.E.A.P. is not new but is relatively unknown. As an $\mathrm{MMB}^{\text {™ }}$, you want to be familiar with the best way to help your clients pay down their mortgages when appropriate; and in order to provide the best advice, you must become familiar with the H.E.A.P. program.

Ask any homeowner the following question. If you could pay off your mortgage substantially sooner than 30 years and you wouldn't have to alter your spending habits - would you? The question is one advisors like to ask clients because they already know the answer. The answer would be yes, followed up with - can you show me how to do that? How in the world can a homeowner pay off their mortgage "substantially sooner" and not change their spending habits? It can be done through a creative use of a home equity line of credit.

A home equity line of credit (HELOC) is similar to a revolving line of credit (credit card). A client goes to a lender and uses the equity in their home to receive a "line of credit." Besides a small annual fee in some cases, if the client is not paying off an existing second mortgage the beginning balance on the HELOC is \$OSince the payment amount is based on the outstanding balance, a HELOC with a $\$ 0$ balance will have a $\$ 0$ payment.

A client is literally given checks that can be used to access the line of credit. In the traditional use of a HELOC, a client who is fixing up his/her house might go down to the local hardware store to buy fixer-upper supplies and would use a check from the HELOC to pay for the supplies. When the checks are used, interest starts on the HELOC.

If the balance is $\$ 10,000$, the monthly payment is calculated by using the current rate and the number of days in the period to determine the interest charges. If the rate is $8.25 \%$, the payment would be calculated as $\$ 10,000 \mathrm{X}$ $.0825=825 / 365 \times 30$ (days in current month) $=\$ 67.81$. This would be the interest due. Some accounts have a $1 \%$ minimum, which would require a payment of $\$ 100.00$. ( $\$ 10,000 \times .01$ ). In this case if $\$ 100.00$ were paid, $\$ 32.19$ would be applied to principal leaving a remaining balance of $\$ 9,967.81$.

The "available credit" offered by a lender through a HELOC may be drawn when needed. Like a traditional home loan, the client must pay monthly payments and is required to pay off the balance over a specified period of time. And like a mortgage, the interest accrues daily on the balance owed. When a payment is made, it is applied first to the interest due and then any additional payment is applied directly to the principal balance.

Many of these accounts are set up with "interest only" payment requirements with a limited "draw period" followed by a repayment period. Typical lines have a ten-year draw period after which normal payments are calculated with which to pay the balance over the remainder of the term. The interest rate for a line of credit is usually going to be a variable (adjustable) rate. The measuring index or variable portion of the loan will often be the current Prime rate. The margin, or the fixed portion, will be a number that the lender adds to the rate in accordance with the risk factors associated with the loan.

For example, a Line of Credit that leaves the client with little or no equity will have a higher margin than a line that leaves a large equity position. Generally speaking, a client with bad credit will have a higher margin charged to the loan, and someone with good credit can sometimes find a HELOC at Prime with no margin (and sometimes Prime minus percentage points).

If the Prime rate is $8.25 \%$ and the margin is zero, the rate on a HELOC at Prime +0 would be $8.25 \%$. The rate on a HELOC is usually higher than that of a conventional fixed-rate mortgage (which does not use Prime as a basis for the lending rate).

The following chart represents the historical data of Prime in the 2000's. As you can see, the rate has been as high as $9.5 \%$ and as low as $4 \%$ in the period of six full years. There is no limit as to how long the rate can stay at one point or how often it can change. The prime rate is defined by The Wall Street

Journal (WSJ) as "The base rate on corporate loans posted by at least 75\% of the nation's 30 largest banks." It is not the 'best' rate offered by banks.

| Date of <br> Change | Prime <br> Rate | Date of <br> Change | Prime <br> Rate |  |
| :---: | :---: | :---: | :---: | :---: |
| 3-Feb-00 | $8.75 \%$ | 11-Aug-04 | $4.50 \%$ |  |
| 22-Mar-00 | $9.00 \%$ | 22-Sep-04 | $4.75 \%$ |  |
| 17-May-00 | $9.50 \%$ | 10-Nov-04 | $5.00 \%$ |  |
| 4-Jan-01 | $9.00 \%$ | 14-Dec-04 | $5.25 \%$ |  |
| 1-Feb-01 | $8.50 \%$ | 2-Feb-05 | $5.50 \%$ |  |
| 21-Mar-01 | $8.00 \%$ | 22-Mar-05 | $5.75 \%$ |  |
| 19-Apr-01 | $7.50 \%$ | 3-May-05 | $6.00 \%$ |  |
| 16-May-01 | $7.00 \%$ | 30-Jun-05 | $6.25 \%$ |  |
| 28-Jun-01 | $6.75 \%$ | 9-Aug-05 | $6.50 \%$ |  |
| 22-Aug-01 | $6.50 \%$ | 20-Sep-05 | $6.75 \%$ |  |
| 18-Sep-01 | $6.00 \%$ | 1-Nov-05 | $7.00 \%$ |  |
| 3-Oct-01 | $5.50 \%$ | 13-Dec-05 | $7.25 \%$ |  |
| 7-Nov-01 | $5.00 \%$ | 31-Jan-06 | $7.50 \%$ |  |
| 12-Dec-01 | $4.75 \%$ | 28-Mar-06 | $7.75 \%$ |  |
| 7-Nov-02 | $4.25 \%$ | 10-May-06 | $8.00 \%$ |  |
| 27-Jun-03 | $4.00 \%$ | 29-Jun-06 | $8.25 \%$ |  |
| 1-Jul-04 | $4.25 \%$ |  |  |  |

If you mention a HELOC to your clients, they will usually think of it as a $2^{\text {nd }}$ mortgage. In fact, that is the way most of them are set up; however, some lenders now do offer first lien Lines of Credit.

Generally speaking, so long as the HELOC loan balance does not exceed $\$ 100,000$ and the client has no other home equity debt on the property, the interest on the loan is tax deductible.

Before securing a HELOC, the client needs to be educated on one important factor. By securing a HELOC, they are using available equity of the house. When funds are drawn from the HELOC, the equity of the house is reduced, sometimes to $\$ 0.00$. For example, if the first mortgage is $\$ 80,000$ and the HELOC balance is $\$ 20,000$, there would be a $\$ 100,000$ of lien against the home. If the home is valued at $\$ 105,000$, the client would only have $\$ 5,000$ in available equity. This is not necessarily a negative thing; however, if the client's goal is to list and sell the house within a year, it could potentially cost them money to sell the house (meaning that the house is sold in a negative equity
situation when taking into account realtor fees and other closing costs). After you learn the following material, you will see how beneficial using a HELOC can be in reducing debt.

In general, a HELOC is a type of mortgage that gives the client the flexibility to use available equity when they need it and only pay for what they are using. With a better understanding of how a HELOC works, it is easier to understand the concept of H.E.A.P.

## Here is how H.E.A.P. works in conjunction with a HELOC

First a client sets up a HELOC utilizing the client's equity in their home. The HELOC is usually a $2^{\text {nd }}$ lien on the personal residence. For our example, we will assume the line of credit is $\$ 25,000$.

The repayment terms are interest only, and the rate is variable tied to Prime. Although it is not a realistic assumption, we will assume that Prime remains at $8.25 \%$ for the term. We only assume this to make the premise easier to understand. Once you fully understand how it works, you could vary Prime in your calculations and still come up with similar results. As noted in the chart above, the Prime rate can fluctuate several times per year. In the past several years, it has been as low as $4 \%$ and as high as $9.5 \%$.

Here is the other basic information about our example client you will need to keep in mind while reading through this example and explanation:
-Monthly income (after taxes) $=\$ 5,000$
-First Mortgage Balance - \$200,000
-First Payment Feb 1, 2007
-Payment at $6.25 \%=\$ 1,231.45$
-All other payments (bills (credit card), utilities) $=\$ 789$
-Misc. Monthly expenditures (dinners, movies, fuel.) $=\$ 800$
-Total Monthly Outlay = \$2,820.45
For our example, we are NOT going to consolidate the client's other bills. Once clients are fully educated on this plan, most will want to consolidate other debt using the HELOC. Why? Because interest payments on credit cards are NOT deductible where when set up correctly, interest payments on a HELOC are.

Once the line of credit is opened, a comfortable amount of emergency cash amount is determined. This is the amount of money that the client should have available at ALL times in the line of credit. This amount will then always be available to the customer in case of emergency.

We have established in this scenario that the client should have $\$ 15,000$ available at all times. This amount was determined by taking three months of the client's salary. There is no standard amount that is required as a reserve. You will need to discuss this with your client. Having said that, many clients will use three times their after-tax income (in our example, that is $\$ 15,000$ ). Understanding that the client will not exceed the HELOC lending limit by $\$ 15,000$, (leaving the $\$ 15,000$ cushion available for emergencies), the client will then draw from the HELOC $\mathbf{\$ 1 0 , 0 0 0}$ and pay it directly towards the first mortgage.

By paying $\$ 10,000$ down on the $1^{\text {st }}$ mortgage, the client obviously reduced the principal of the $1^{\text {st }}$ mortgage and, thereby, the interest paid on the loan over the long term and shortened the length of their primary mortgage (assume it is a 30-year fixed).

Having made this payment, the client now has to pay at least the minimum payment on the $\$ 10,000$ HELOC. The key, as you will see, with the H.E.A.P. is how quickly a client is able to pay down the $\$ 10,000$ HELOC. Remember, the client will NOT have to change their spending habits, which is another key to why this is such a useful program. The "total" debt on the home is still the same the day the HELOC is accessed ( $\$ 190,000$ from the primary mortgage and $\$ 10,000$ from the HELOC that was applied to pay down the $1^{\text {st }}$ mortgage).

## Checking accounts

It is fair to say that most clients keep a balance in their personal checking accounts. Absolutely. Depending on the client, the average checking account balance will be anywhere from $\$ 500$ to as much as $\$ 5,000+$. This money is used to pay the monthly bills of the client and his/her family.

What's the problem with a checking account? The interest paid on such accounts is very low, and it is taxable every year.

Getting back to our example - assume the client currently has his paycheck direct deposited into a normal checking account that accumulates little or no interest. The client, after bills, maintains a decent balance in the account and accumulates most of his/her savings for retirement through vehicles provided from work. (401k, etc...)

How H.E.A.P. works to constantly have a client's money at work in the most productive manner

With H.E.A.P., the client, after the HELOC is established, will have their paycheck direct deposited into the line of credit account (not their normal checking account).

How will the client pay bills?
Remember that any portion of the HELOC that is not used (available credit) can be withdrawn at any time. The client will utilize the check-writing ability of the HELCO to pay their bills.

In our example, the $\$ 800$ in miscellaneous bills is paid for from the HELOC by writing a check just as the client would from a normal checking account. The client can choose to write one $\$ 800$ check to the primary checking account or using separate checks for all the bills paid from the HELOC.

Let's look at the running balance for the first few months of the line of credit. Assume the client gets paid on the $15^{\text {th }}$ and $30^{\text {th }}$ of each month. Remember, with this example, the client started out by accessing the HELOC in the amount of $\$ 10,000$, which was used to pay down the mortgage balance on the primary home loan. This would start the program with a balance "owed" of $\$ 10,000$ and available funds of $\$ 15,000$. Remember, our goal is to keep a minimum of $\$ 15,000$ available at all times. Also, remember that the client is earning income above what is spent on the normal bills in the household.

| Date | Activity | Amount | HELOC <br> Balance | Available Credit |
| :---: | :--- | :---: | :---: | :---: |
| 2/1/2007 | First Mortgage <br> Reduction | $-\$ 10,000.00$ | $\$ 10,000.00$ | $\$ 15,000.00$ |
| $2 / 15 / 2007$ | Payroll Deposit | $\$ 2,500.00$ | $\$ 7,533.90$ | $\$ 17,466.10$ |
| $2 / 28 / 2007$ | Payroll Deposit | $\$ 2,500.00$ | $\$ 5,059.44$ | $\$ 19,940.56$ |
| $3 / 1 / 2007$ | Bills | $-\$ 2,820.45$ | $\$ 7,879.89$ | $\$ 17,120.11$ |
| $3 / 15 / 2007$ | Payroll Deposit | $\$ 2,500.00$ | $\$ 5,406.61$ | $\$ 19,593.39$ |
| $3 / 30 / 2007$ | Payroll Deposit | $\$ 2,500.00$ | $\$ 2,924.94$ | $\$ 22,075.06$ |
| $4 / 1 / 2007$ | Bills | $-\$ 2,820.45$ | $\$ 5,745.39$ | $\$ 19,254.61$ |
| $4 / 15 / 2007$ | Payroll Deposit | $\$ 2,500.00$ | $\$ 3,264.87$ | $\$ 21,735.13$ |
| $4 / 30 / 2007$ | Payroll Deposit | $\$ 2,500.00$ | $\$ 775.94$ | $\$ 24,224.06$ |
| $5 / 1 / 2007$ | Bills | $-\$ 2,820.45$ | $\$ 3,596.39$ | $\$ 21,403.61$ |
| $5 / 15 / 2007$ | Payroll Deposit | $\$ 2,500.00$ | $\$ 1,108.58$ | $\$ 23,891.42$ |
| $5 / 30 / 2007$ | Payroll Deposit | $\$ 2,500.00$ | $-\$ 1,387.66$ | $\$ 26,387.66$ |

In four months, without changing any spending habits, and without using extra money, the client just paid off the $\$ 10,000$ balance on their line of credit.

Besides smiling due to the fact that the HELOC has been paid off, what does the client do next? You guessed it - the client will access the line of credit in the amount of $\$ 10,000$ and pay down the debt on the primary mortgage, and the client will start the pay down cycle again.

## The numbers

Understand the exact numbers is not that important. It's the concept that either does or does not work. This concept will work for clients who have the discipline to use it. Sure clients are going to have unexpected expenses or expected expenses that will change the numbers in any given period of time. The key is that the client is using his/her money in its best use, and having money sitting in a checking account earning very little interest (which is taxable each year) is NOT in the client's best interest.

Back to the example
Let's go back to the original first mortgage and realize that the client in our example could pay an additional $\$ 30,000$ per year. This is probably not realistic since other expenses always come up. And it is extremely important in order to make the program a success that you, as an $\mathrm{MMB}^{\text {™ }}$, anticipate the "other" expenses the client may incur and consider that in your calculations.

Therefore, let's assume it takes the client six months to pay down the line of credit instead of four (which would allow them to apply $\$ 20,000$ per year directly to the first mortgage). After applying the $\$ 20,000$ per year, the new calculated payoff date of the first mortgage is $2 / 1 / 2014$. That's twenty-three years early. Remember, this can be done WITHOUT changing spending habits so long as the client has the discipline to stay with the plan.

Would your clients have an interest in such a program? Of course they would.

Let's go back and make sure you understand the calculations from the table above. With a starting balance of $\$ 10,000$ and a rate of $8.25 \%$, the daily interest $(10,000 \times .0825 / 365)$ is $\$ 2.26$ per day. The balance on Feb 15 is calculated as Daily Interest x Number of Days + Balance - Payment or \$2.26 (per diem interest) $\times 15$ (days) $+\$ 10,000$ (outstanding balance) $-\$ 2,500$ (payment amount) $=\$ 7,533.90$.

The biggest critics or skeptics of the program will key in on one fact - that our client is not depositing ANY money into any savings account or investment. And although the statement may be correct, the sentiment is certainly misguided.

The goal for the client was to pay off the home as quickly as possible, and they did - in seven years. The client saved $\$ 199,917$ in interest over the life of
the plan. The client also always had at least $\$ 15,000$ in available cash and is still saving for retirement through a company-sponsored retirement plan.

If the client still wants to have an additional savings/retirement plan outside of work, then that amount needs to be budgeted into the monthly expenses of the client (which would reduce the amount that could be allocated to pay down the HELOC). You need to always keep in mind that the client's goal is to pay off their home loan as soon as possible. Clients who want to build the largest possible pre- and post-tax retirement nest egg are NOT candidates for the H.E.A.P. and instead are candidates for equity harvesting. One of the best tax-favorable plans you can help the "right" client implement revolves around the client never paying off a home. Instead, the money used to pay down the debt flows into a tax-free retirement vehicle. (See the equity harvesting module for more information).

The WPI's position is clear on one main point - that point being that a client is either a candidate to NEVER pay off their home, have maximum debt so their money can be used to grow in a tax-free manner for retirement purposes, OR, if a client insists on paying towards the house, the client should use the H.E.A.P. to pay it down as quickly as possible.

The great thing about H.E.A.P. is that you can tailor it to meet the needs of most any client. The client can use $\$ 5,000$ chunks or set up a first lien line of credit, they can have partial direct deposits, and the list goes on and on. Every case will be slightly different; and while the term reduction will vary per client, the results will be the same in that the original term of the loan on the primary residence is reduced, and the client will save thousands of dollars in interest all while not having to alter their spending habits.

## Example

Let's take a look at another real life example.
T and E live in a nice new home and maintain a fairly strict budget. Their current mortgage, taken out in November of 2006, is an interest only mortgage with a $\$ 236,000$ balance and a $\$ 1,700$ per month interest only payment (this payment includes property taxes and homeowners insurance of $\$ 498$ per month). They also have a second mortgage with a $\$ 39,000$ balance and a $\$ 300$ payment. Their other monthly bills include a car payment, two credit cards, a gym membership, and insurance. These total $\$ 850$ per month. Their miscellaneous spending is budgeted to $\$ 250$ per week and pays for groceries, fuel, and fun. E stays at home and T works full time and brings home $\$ 1,200$ per week after taxes and deductions.

| Creditor | Balance | Payment |
| :--- | :---: | :---: |
| First Mortgage | $\$ 236,000$ | $\$ 1,700$ |
| Second Mortgage | $\$ 39,000$ | $\$ 300$ |
| Auto | $\$ 11,000$ | $\$ 300$ |
| Credit Card | $\$ 5,500$ | $\$ 120$ |
| Utilities |  | $\$ 200$ |
| Gym Membership |  | $\$ 80$ |
| Insurance |  | $\$ 150$ |
| Fun Money |  | $\$ 1,000$ |
|  |  |  |
|  |  | $\$ 3,850$ |
| Total Monthly Outlay |  | $\$ 5,200$ |
| Total Monthly Income - Take Home |  |  |

Currently at the end of 10 years, the first mortgage will transition from an interest only to a fully amortizing mortgage at which time the payment would increase to $\$ 1,724$ principal and interest, which would equate to a $\$ 500$ increase.

The following are the steps the client would need to take in order to implement H.E.A.P.

## Step 1. - Establish a HELOC

The current second mortgage of $\$ 39,000$ is a closed-end second. An appraisal verified that the home is currently worth $\$ 320,000$. A $\$ 60,000$ HELOC is established ( $93 \%$ CLTV). The interest rate is Prime $+.25 \%=8.5 \%$. For the example, we will assume this stays the same. Once the HELOC is established, it replaces the current second mortgage of $\$ 39,000$ leaving them with other total monthly expenses of $\$ 3,550$ ( $\$ 3,850$ (current expenses) $-\$ 300$ (the old $2^{\text {nd }}$ mortgage).

Step 2 - Start the plan
The following chart will show the weekly running balance of the HELOC. The first transaction would be a mortgage principal reduction of $\$ 11,000$, and our emergency fund is set at $\$ 10,000$.

| Date | Transaction | Transaction <br> Amount | HELOC Balance | Available Credit |
| :---: | :---: | :---: | :---: | :---: |
| $4 / 1$ | Mtg Reduction | $-\$ 11,000.00$ | $\$ 50,000.00$ | $10,000.00$ |
| $4 / 6$ | Payroll | $\$ 1,200.00$ | $\$ 48,881.51$ | $11,118.49$ |
| $4 / 13$ | Payroll | $\$ 1,200.00$ | $\$ 47,761.19$ | $12,238.81$ |
| $4 / 20$ | Payroll | $\$ 1,200.00$ | $\$ 46,639.05$ | $13,360.95$ |
| $4 / 27$ | Payroll | $\$ 1,200.00$ | $\$ 45,515.08$ | $14,484.92$ |
| $5 / 4$ | Payroll | $\$ 1,200.00$ |  |  |
| $5 / 4$ | Bills | $-\$ 3,550.00$ | $\$ 47,939.28$ | $12,060.72$ |
| $5 / 11$ | Payroll | $\$ 1,200.00$ | $\$ 46,817.43$ | $13,182.57$ |
| $5 / 18$ | Payroll | $\$ 1,200.00$ | $\$ 45,693.75$ | $14,306.25$ |
| $5 / 25$ | Payroll | $\$ 1,200.00$ | $\$ 44,568.24$ | $15,431.76$ |
| $6 / 1$ | Payroll | $\$ 1,200.00$ |  |  |
| $6 / 1$ | Bills | $-\$ 3,550.00$ | $\$ 46,990.89$ | $13,009.11$ |
| $6 / 8$ | Payroll | $\$ 1,200.00$ | $\$ 45,867.49$ | $14,132.51$ |
| $6 / 15$ | Payroll | $\$ 1,200.00$ | $\$ 44,742.26$ | $15,257.74$ |
| $6 / 22$ | Payroll | $\$ 1,200.00$ | $\$ 43,615.20$ | $16,384.80$ |
| $6 / 29$ | Payroll | $\$ 1,200.00$ | $\$ 42,486.30$ | $17,513.70$ |
| $7 / 6$ | Payroll | $\$ 1,200.00$ |  |  |
| $7 / 6$ | Bills | $-\$ 3,550.00$ | $\$ 44,905.56$ | $15,094.44$ |
| $7 / 13$ | Payroll | $\$ 1,200.00$ | $\$ 43,778.76$ | $16,221.24$ |
| $7 / 20$ | Payroll | $\$ 1,200.00$ | $\$ 42,650.13$ | $17,349.87$ |
| $7 / 27$ | Payroll | $\$ 1,200.00$ | $\$ 41,519.66$ | $18,480.34$ |
| $8 / 3$ | Payroll | $\$ 1,200.00$ |  |  |
| $8 / 3$ | Bills | $-\$ 3,550.00$ | $\$ 43,937.34$ | $16,062.66$ |
| $8 / 10$ | Payroll | $\$ 1,200.00$ | $\$ 42,808.96$ | $17,191.04$ |
| $8 / 17$ | Payroll | $\$ 1,200.00$ | $\$ 41,678.74$ | $18,321.26$ |
| $8 / 24$ | Payroll | $\$ 1,200.00$ | $\$ 40,546.68$ | $19,453.32$ |
| $8 / 31$ | Payroll | $\$ 1,200.00$ | $\$ 39,412.78$ | $20,587.22$ |
| $9 / 7$ | Payroll | $\$ 1,200.00$ |  |  |
| $9 / 7$ | Bills | $-\$ 3,550.00$ | $\$ 41,827.03$ | $18,172.97$ |
| $9 / 14$ | Payroll | $\$ 1,200.00$ | $\$ 40,695.21$ | $19,304.79$ |
|  |  |  |  |  |

In five-and-a-half months, the available credit is back to $\$ 20,000$, and a principal reduction of another $\$ 10,000$ can be made again. Assuming this scenario is accurate -

T and E could pre-pay $\$ 20,000$ per year on their interest-only first mortgage. However, E likes to take vacations and spend quite a bit on the kids for Christmas and Birthdays. So we have them currently set up for only one principal reduction per year $(\$ 10,000)$ until the balance of the HELOC (remember we started with a $\$ 39,000$ balance due to the $2^{\text {nd }}$ mortgage) reaches $\$ 0.00$ at which time they will make $\$ 20,000$ reductions annually until the mortgage is paid off.

## Abnormal Expense Months

Although many clients will be able to easily maintain their current spending levels, some clients seem to always have a variety of unexpected expenses pop up. - expenses such as an appliance breaking, a car needing repair/replacing, kids begging to go somewhere warm for spring break. Most families will find that a few times per year their "normal" monthly expenses are actually rather abnormal. Christmas is also a good example of this.

When the plan is set up, these abnormal months need to be considered. Although an amount needs to be set aside for emergency, these higher cost months shouldn't be considered an emergency.

If you look back at the first example, our client was able to repay the initial $\$ 10,000$ in four months utilizing the plan. This would allow them to make three large principal reductions each year. As you recall, the plan only had the client doing two reductions per year. This was set up to compensate for some months where costs were not normal.

In the second example, two reductions of $\$ 10,000$ could be taken every year; however, the client decided to only do one until the balance of the HELOC $(\$ 50,000)$ is reduced to $\$ 0,00$. Until the balance of the HELOC reaches zero, the client will make one reduction in the primary mortgage and will pay down an additional $\$ 10,000$ of the HELOC. Therefore, after the first year, the HELOC balance will reduce to $\$ 30,000$ at which time the client will access another $\$ 10,000$ from the HELOC and apply that towards the primary mortgage. Following suit the following year, the client will only make one reduction of the primary mortgage and a $\$ 10,000$ additional reduction of the HELOC which will bring the balance of down to $\$ 20,000$. This will continue until the HELOC reaches zero at which time the client will continue to make two reductions of the primary mortgage a year. This decision is a direct result of the fact they had to roll over a balance from another second lien $(\$ 39,000)$ to start the program.

In both of these cases, an emergency fund was established and, hopefully, would never have to be dipped into. By taking the abnormal months into consideration, the client should not have to take from that emergency fund to buy a new washer or dryer.

## What happens when the client pays off the entire debt on their property?

There will come a point in the plan at which the client's mortgage balance reaches $\$ 0.00$. What should the client do next?

At this point, the client has proof positive that they can eliminate their debt rather quickly because they just did it. Now would be a great time to re-introduce
equity harvesting to them as a means to invest for retirement. As an $\mathrm{MMB}^{\mathrm{TM}}$, you should have counseled your client on both the H.E.A.P. and on equity harvesting. As you will or have already learned from the equity harvesting module, for some clients, the best financial decision they can make is to NOT pay down the debt on their homes and instead use the money allocated to paying down the debt to invest in a tax-favorable manner.

Equity harvesting is based on the assumption that a client can borrow $X$ amount of money from their home, write off the interest (up to the allowable limits), and invest that money in something that will grow tax free and come out tax free in retirement.

If the client is in the $30 \%$ tax bracket as an example and takes out an interest-only loan at $7 \%$ on his/her house that is debt free, the interest expense would be $\$ 7,000$ a year before getting a deduction and $5.25 \%$ after taking the deduction. The question for the client is: Would you borrow $\$ 100,000$ if it costs you $5.25 \%$ if you could invest the money in a tax-free environment earning 7$8 \%$ ? The answer of the client should be yes.

One caveat with equity harvesting never counsel your clients to borrow money against their homes and invest it in something with a variable rate of return which includes $100 \%$ risk of loss. This will be discussed in more detail in the equity harvesting module.

## What if a client has other debt?

Many of the clients who implement this plan will have additional revolving debt (credit cards) and possibly some additional installment debt (auto loans). Often the interest that is charged on these accounts is the same or higher than that of a regular mortgage; therefore, it would make sense to eliminate that debt prior to paying off mortgage debt where the interest is deductible.

Let's consider the following example: Dan and Jessica, married with no children, are in their early thirties. Both have graduated from law school with degrees and a substantial amount of student loans and credit card debt that was accumulated during their educations.

| Creditor | Balance | Monthly Payment |
| :---: | :---: | ---: |
| US Dept Educ | $\$ 97,007.00$ | $\$ 311.00$ |
| SLMA | $\$ 34,793.00$ | $\$ 176.00$ |
| SLMA | $\$ 28,337.00$ | $\$ 143.00$ |
| US Dept Educ | $\$ 37,000.00$ | $\$ 509.00$ |
| Key SL | $\$ 13,226.00$ | $\$ 133.00$ |
| Key SL | $\$ 13,226.00$ | $\$ 133.00$ |
| Key SL | $\$ 12,686.00$ | $\$ 123.00$ |
| Citicard | $\$ 8,031.00$ | $\$ 321.00$ |
| B of A | $\$ 7,644.00$ | $\$ 285.00$ |
| Chase | $\$ 5,535.00$ | $\$ 211.00$ |
| Keybank | $\$ 5,462.00$ | $\$ 52.00$ |
| Citicard | $\$ 871.00$ | $\$ 67.00$ |
| Leath | $\$ 4,805.00$ | $\$ 109.00$ |
| USAA | $\$ 4,354.00$ | $\$ 95.00$ |
| GM Mtg | $\$ 97,821.00$ | $\$ 858.00$ |
|  |  | $\$ 3,526.00$ |
| TOTAL | $\$ 370,798.00$ |  |

They purchased a home about two-and-a-half years ago with a small down payment and with some appreciation and they have accumulated about $\$ 18,000$ of equity in the property.

They both have secured good paying jobs; however, their monthly bills and the corresponding finance charges are not allowing them to reduce their debt. They have opted to have $\$ 1,000$ per month from her paycheck to be direct deposited into normal checking for their utilities and miscellaneous spending and will have $\$ 3,536.50$ direct deposited twice a month into the HELOC to be used solely for debt reduction.

Step 1: The Setup
Their current equity allowed them to set up a $\$ 15,000$ HELOC. Because they have dual incomes, an emergency reserve fund of only $\$ 5,000$ is established. They will also keep the first two credit cards open after they are paid off which will offer them approximately $\$ 10,000$ more in emergency reserves. This is primarily done until they have built up enough cushion to comfortably sustain a potential loss of one income.

A $\$ 10,000$ withdrawal is made from the HELOC, which pays off Chase $(\$ 5,535)$ and Leath $(\$ 4,805)$ ( $\$ 340$ from savings was used to pay off the entire Leath balance). This immediately reduces the debt by $\$ 320$ per month and the total monthly payments become $\$ 3,206$ (the HELCO rate is $8.5 \%$ ).

The following chart shows the account activity for the first three months:

| Date | Transaction | Amount | Balance | Available Balance |
| :---: | :---: | ---: | ---: | :--- |
| June 1st | Debt Reduction | $-\$ 10,000.00$ | $\$ 10,000.00$ | $\$ 5,000.00$ |
| 15-Jun | Payroll | $\$ 3,536.50$ | $\$ 6,498.43$ | $\$ 8,501.57$ |
| 1-Jul | Payroll | $\$ 3,536.50$ |  |  |
| 1-Jul | Bills | $\$ 3,206.00$ | $\$ 6,190.63$ | $\$ 8,809.37$ |
| 15-Jul | Payroll | $\$ 3,536.50$ | $\$ 2,675.75$ | $\$ 12,324.25$ |
| 1-Aug | Payroll | $\$ 3,536.50$ |  |  |
| 1-Aug | Bills | $\$ 3,206.00$ | $\$ 2,354.60$ | $\$ 12,645.40$ |
| 15-Aug | Payroll | $\$ 3,536.50$ | $-\$ 1,173.68$ | $\$ 16,173.68$ |
| 16-Aug | Debt Reduction | $-\$ 10,000.00$ | $\$ 11,173.68$ | $\$ 5,000.00$ |

On June 1' they eliminated two credit cards using the plan. On August 15' they are able to reduce the debt by another $\$ 11,173.68$. These funds are used to pay off Citicard $(\$ 8,031)$ and reduce $B$ of $A$ to $\$ 4,501$, which reduces the monthly payment on that account to $\$ 180$. This reduces the total monthly payments to $\$ 2,780$.

By reducing the monthly payments, the $\$ 10,000$ HELOC balance would be paid off more quickly. So after another reduction, they would pay down the balance again and by November 1 have enough available to make another \$9,232 debt reduction.

| Date | Transaction | Amount | Balance | Available Balance |
| :---: | :---: | ---: | ---: | :--- |
| 16-Aug | Debt Reduction | $\$ 11,173.68$ | $\$ 10,000.00$ | $\$ 5,000.00$ |
| 1-Sep | Payroll | $\$ 3,536.50$ |  |  |
| 1-Sep | Bills | $\$ 2,780.00$ | $\$ 9,278.43$ | $\$ 5,721.57$ |
| 15-Sep | Payroll | $\$ 3,536.50$ | $\$ 5,774.34$ | $\$ 9,225.66$ |
| 1-Oct | Payroll | $\$ 3,536.50$ |  |  |
| 1-Oct | Bills | $\$ 2,780.00$ | $\$ 5,038.01$ | $\$ 9,961.99$ |
| 15-Oct | Payroll | $\$ 3,536.50$ | $\$ 1,519.11$ | $\$ 13,480.89$ |
| 1-Nov | Payroll | $\$ 3,536.50$ | $-\$ 1,173.68$ |  |
| 1-Nov | Bills | $\$ 2,780.00$ | $\$ 767.92$ | $\$ 14,232.08$ |

Because of the massive amount of debt, many components were considered in setting up the plan. For example, the credit cards with the highest payments are the first bills eliminated; then the student loans will follow. The current goal is to have everything but the mortgage eliminated within eight years. After that, the mortgage should quickly follow suit. However, their focus is their other debt that is putting the largest burden on them.. They also realize that life changes could occur (children, additional job opportunities) and eliminating the high-cost "bad" debt makes better financial sense.

Side Note: Student loans sometimes have a very low interest rate. If that is the case, you need to run the numbers to make sure it makes sense to use the HELOC to pay them down. Variables that will affect this calculation are the
client's income tax bracket, the HELOC rate, the student loan interest rate, and the amortization schedule of the student loans. If the client is in a low tax bracket and the interest on the student loans is low, then it is likely that you would recommend that the client not pay off the student loans until after the HELOC and primary home loan is paid off.

## When would HEAP not work?

Currently, the most common examples of the program not working contain at least one of the three following components: Bruised Credit, Limited Equity, and Irregular Income.

1) Bruised Credit limits the program's effectiveness as it is predicated on obtaining a Home Equity Line Of Credit. These loans often require a higher credit standard than some closed-end mortgage programs. Lenders will reserve these accounts to people who have managed their credit well. One of the major components of HEAP is the client's ability to manage credit, so the two go hand in hand.

Sometimes there are clients who have had some bruised credit in the past but have been working very hard to clean it all up. In these cases, some simple counseling and direction of how to best repair their credit will help them get to the point where the program can be set up.
2) Limited Equity also poses a problem for the program. In this case, the client may not have enough available equity to start the program. This may be a result of a recent home purchase with little or no money down. It may also be the result of a recent refinance where cash was obtained to pay off some debt or do improvements. If this is the case, one of the other acceleration programs could be utilized until the equity position is substantial enough to enlist the program. The client would also keep a watchful eye on their local housing market for upward trends that may help improve their value, which would increase their equity position.
3) Irregular income can also reduce the effectiveness of the program. As you have learned, the key component of the program reduces daily interest charges by regular deposits. This reduction of interest charges helps reduce principal more rapidly making the program work. Consider a self-employed individual, like a builder, who may get large sums every couple of months. Although the program may still show a benefit, if the income is irregular, interest charges may accrue for longer periods of time or regular monthly payments may not be made. Since the HELOC is a loan, if regular payments are not made to service the loan, the lender may limit the ability to draw more funds from the HELOC until the late payments are made.

Although these three examples are the most common variables that make the program ineffective, for some clients it may just not work. For example, a high-income, high-net worth client: While the program would work for this type of client; the chances are significant that the client would be better off financially by implementing the equity harvesting concept.

A few things to watch for.

1. There is more than one kind of equity line. Some are "closed end" and do not make the unused or paid portion available for withdrawal to the client. This form of loan will NOT work. The account must be a revolving or open-ended HELOC and the balance must be available for withdrawal at any time
2. The institution that provides the line of credit must be able to accept direct deposit, have unlimited check writing against the account, not limit the transactions each month, and, hopefully, could have some sort of debit card available for weekend emergencies.
3. The client needs to be able to budget themselves to the plan. The reason it works is that the spending habits or miscellaneous spending is budgeted. Although this budget is based on their current spending habits, a stricter budget if enforced could speed up the plan even more.
4. The client needs to keep in mind his/her goals. The goal with the H.E.A.P. is to pay off the mortgage on a primary residence as quickly as possible. It is not necessarily the best plan for a client to build wealth in the quickest or most tax-favorable nature. The goal of paying down the house will help a client be disciplined enough to stay on track with the plan.
5. The "emergency cash fund" needs to be carefully considered and should be at least several months of bills in case of a loss of income.
6. If there is a loss of income and the payments are not made, draws may be unavailable. This is why the emergency fund needs to be established and may need to be drawn upon before any payments are missed.

Some limitations of the program:

1. Client needs to have equity in their home.
2. Typical lines of credit are harder to acquire with bruised credit.
3. Local institutions may have limitations on transactions (writing checks), and costs are associated with exceeding the limit.
4. Some "national lenders" may not take direct deposit.
5. If the home is sold, the equity line would not automatically transfer to the new property. In order to continue the
plan on the new home, a new line of credit would need to be obtained and secured by the new property
6. Many lines of credit have a limited "draw period" or time in which money can freely be taken out. Often it is as much as ten years. This period should be clearly identified and a plan put in place to replace the line after the draw period ends. If the plan is maintained, there should always be plenty of available equity; and if scheduled payments are on time, many institutions will roll the line over into a new one with little or no cost.

Take a few minutes and run some different scenarios. In most cases, like ours, the term is significantly reduced. This program, if completely understood by the advisor and the client, and set up correctly, will make many clients very happy.

## Summary

As with any thing in life, a game plan is only as good as the followthrough. Certainly most homeowners, if asked, would jump at the chance to pay their home off early. Many homeowners are already using one or two of these plans in their current budget. Your job as an MMB ${ }^{\text {TM }}$ is to structure the plan for them that makes the most sense, to make sure they understand exactly how it will work, and to help them to implement the plan into their monthly budget.

