

An Investigation of Real Estate Investment Decision-Making Practices

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Focus

This teaching case provides students with an array of financing choices that can be used to raise money for the purpose of buying property. Most undergraduate students think too locally and in too straightforward a fashion when it comes to financing real estate purchases. All information obtained in this case is from an actual land purchase and the financing decision surrounding it. The actual names of the buyers have been changed for the sake of anonymity.

Setting

Robert and Tina Harper have lived in the Diamond Head area for the last six years. They love Hawaii and all it has to offer, but lament not being closer to family in Granite Falls, North Carolina. Robert is a college professor at the University of Hawaii and Tina is a freelance graphic designer. Since Tina can perform her work from anywhere, the couple is considering building a dream home on a lake in Granite Falls and spending their summers there.

On a recent trip to North Carolina, the couple found a vacant lake lot that is a perfect first step towards fulfilling their dream of a second home. At issue is how to best finance the purchase. A secondary issue is whether such a purchase is a wise investment choice.

Exhibits

Eight exhibits are included in the case.

- Exhibit 1: Riverbend's Location within North Carolina
- Exhibit 2: Map of the Overall Community of Riverbend
- Exhibit 3: Riverbend's Restrictive Covenants
- Exhibit 4: Typical Homes in Riverbend
- Exhibit 5: Plot Plan for the Harpers' Vacant Land Lot (#3)
- Exhibit 6: Lake View from Vacant Lot
- Exhibit 7: View of Neighbor's House to the East
- Exhibit 8: The Couples' Current Budget

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Availability

This case study is available through the editor of the *Journal of Real Estate Practice and Education*.

Teaching Notes

Accompanying teaching notes are also available. Specific analyses supported by spreadsheets are available from the editor.

Background

Robert Harper grew up in the foothill country of western North Carolina. He has fond childhood memories of winter ski trips, summer time on the lake, camping with his friends, and hiking in the mountains. Now, all grown up, Robert is a college professor at the University of Hawaii. His wife, Tina, is a freelance graphic designer. She works from home for clients located both in and outside Hawaii. All she requires, in many cases, to serve her existing clients is access to the Internet.

For the last six years, the couple has been saving their money and trying to determine a way to be closer to Robert's family in Granite Falls, North Carolina. With summers off, Robert could spend three months a year there. And because Tina's work is all freelance, she has complete flexibility to work wherever she wants. With an adventurous spirit, the couple recently took a trip to the Carolinas in search of their dream vacation home on Lake Hickory.

In addition to doing an extensive Internet search before they left home, the couple retained the services of a local Granite Falls real estate agent named Donna Jones. Donna also grew up in the area, and knows the residential market inside and out. Days passed, and while the couple was able to see several existing waterfront properties, no single property jumped out at them. It was becoming clear that the Harpers had very specific home designs in mind.

After learning more about their wants and needs, the couple decided to shift the search from existing homes to vacant lake lots. This way, they could custom design their dream home. This also would buy them the time they needed to truly think through what they really wanted out of a second home. Acquiring a lot, however, will require the couple to evaluate a number of financing options that are not typically used in the acquisition of an existing property.

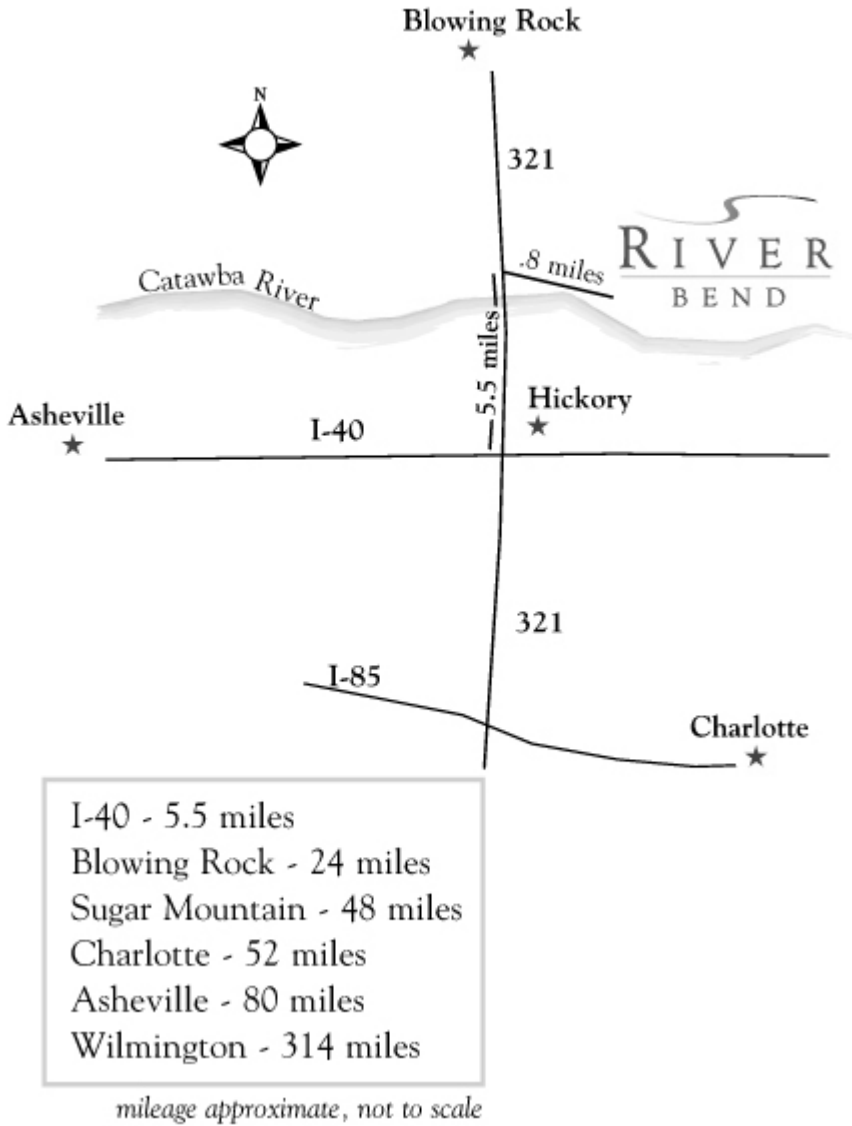
Riverbend

The Harpers found a development called Riverbend (<http://riverbendnc.com/>). Riverbend is located off of Highway 321. It is 60 minutes north of Charlotte, 45 minutes south of Boone—a famous skiing town, and 90 minutes east of Asheville. It rests in the foothills of the Blue Ridge Mountains on Lake Hickory (Exhibits 1 and 2).

Riverbend sells vacant land lots where buyers bring in their own builder from the local area to construct the home. Every homeowner has certain restrictions relating to the size, dimensions, set-backs, etc. This is done to ensure the beauty of the neighborhood once it is completed. This is also the standard practice for many second home communities and is enforced via deed restrictions and the subdivision's homeowners' association (Exhibits 3 and 4).

To give Riverbend a sense of community, the association has a common area that includes a clubhouse, pool, tennis courts, boat dock, and fishing area. Homeowner

**Exhibit 1
Riverbend's Location in North Carolina**



Source: <http://riverbendnc.com/location.html>.

Association (HOA) fees are \$30 per month. This is an amount everyone must pay to keep the streets clean and the common grass maintained. An extra \$50 per month represents an optional payment that allows access to the pool and clubhouse. The Harpers see these as nominal fees when compared to such fees charged in Hawaii.

Exhibit 2 Map of the Overall Community of Riverbend



Source: http://riverbendnc.com/master_plan.html.

Exhibit 3
Riverbend's Restrictive Covenants



OVERVIEW OF PROTECTIVE COVENANT

LAND USE AND BUILDING TYPE

1. Single family residential dwelling
2. Only one single family residential dwelling not exceeding 2.5 stories in height above ground
3. No mobile homes, modular homes, shell homes, or log homes may be erected or permitted to remain on lot
4. Private garages, outbuildings, fixed piers and floating boat dock facilities effecting residential use of any lots permitted subject to ACC approval. Fences cannot be erected between the road and the front face of dwelling

MINIMUM DWELLING SIZE: WATERFRONT

1. One story dwelling 2,000 square feet; multi-level home 2,400 square feet with 1,400 square feet minimum on ground level
2. Basement square footage does not apply toward square footage minimum; off water and water access
3. Any one story dwelling 1,800 square feet; any multi-level home 2,000 square feet with 1,200 square feet minimum on ground level

BUILDING CONSTRUCTION AND QUALITY

1. No building shall be erected unless it is completely underpinned with solid brick, brick/stone covered block or stucco foundation
2. Roofs (Except dormers) of not less than 8-inch pitch and not less than 12-inch overhang
3. Exterior of all homes and other structures must be completed with one (1) year after the commencement of construction
4. Exterior surfaces of asbestos shingle siding, aluminum siding, imitation brick, stoneroll siding, exposed concrete, cement blocks or log **SHALL NOT BE PERMITTED**

ARCHITECTURAL GUIDELINES

Architectural Control Committee approval is required before house construction begins. Fees for ACC review may be required

MINIMUM BUILDING SETBACK LINES

1. Setbacks from Lake Hickory are 50 feet. Roadway setbacks are 35 feet. Side lot setbacks are 15 feet. For non waterfront lots the rear setbacks are 35 feet. Confirm individual lot setbacks on final plat

The Lakefront Lot

The Harpers were able to find a vacant lakefront lot in Riverbend covering 0.55 acres—one of the smallest in the development. But, since this will be a summer home for them, it seemed to be the perfect fit given the implied lower lawn care maintenance (Exhibit 5).

Exhibit 4 Typical Homes in Riverbend



Source: <http://riverbendnc.com/homes.html>.

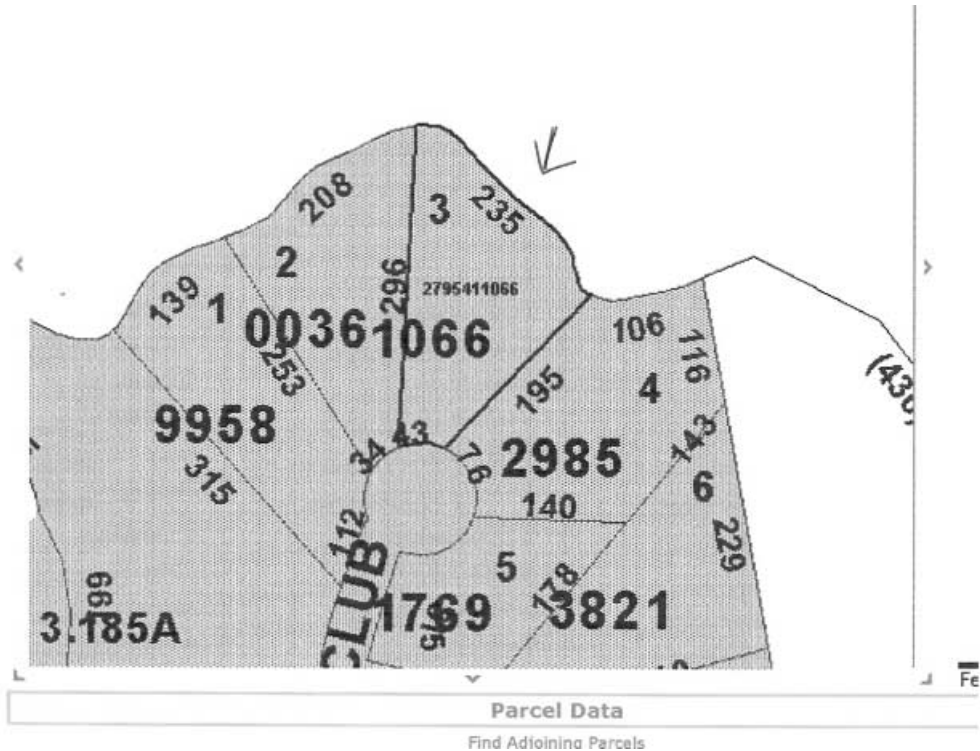
What made this lot especially attractive is that it is nestled in between two very expensive homes. The owners of the home just to the west were offered \$1 million to sell, and they flatly refused. The home to the east of the Harpers' lot has a 9,000 square foot mansion on it recently valued at \$2.6 million (Exhibit 6). The Harpers figure it is a good idea to buy a lot surrounded by valuable homes. Not that they plan on selling, but it is always a good idea to be prepared just the same. It is also very pleasant to see such beauty right outside your window—when you are not looking at the lake that is (Exhibit 7).

The vacant lake lot property was originally listed at \$220,000. On the advice of Donna Jones, Robert and Tina offered \$190,000. Their offer was counter-offered at \$200,000. This is the final purchase price set in the contract to purchase. The lot is small, but the Harpers felt it was a good price given other comparable lots in the immediate area. With the lot under contract, at issue now is how to best finance the purchase.

The Financing Decision

The Harpers have yet to decide when they plan to build on the lot, but with the property under contract, the couple once again turned to their realtor to ask about financing possibilities. Having heard this request before, Donna Jones was prepared with the names and phone numbers of several local lending institutions. In addition to local lenders, Donna suggested the couple consider the lenders who held the mortgage on their primary home as well. With so much to learn about the financing decision, the couple reviewed numerous borrowing possibilities and searched the Internet. What they learned is outlined below.

Exhibit 5
Plot Plan for the Harpers Vacant Land Lot (#3)



Source: Caldwell County, NC Spatial Data Explorer.

Financing and Time to Maturity

One characteristic of any loan that has to be discussed is whether the loan is a (1) principal and interest fully amortizing loan or if it is an (2) interest-only loan. An example will help clarify.

Example 1. For an interest-only loan, the borrower makes a monthly payment that only covers the interest charged on the loan; therefore, the balance of the loan never decreases. So if you borrow \$200,000 at a rate of 8% per year with monthly compounding, the loan payment will be \$1,333.33. After two years of making these \$1,333.33 payments, you will still owe the bank \$200,000 because all you have done is pay interest. You have not paid down any principal.

Example 2. With a principal and interest loan (which is like your traditional fixed rate mortgage loan), you make a repayment of both principal and interest each month. So using the same example, an 8% loan on \$200,000 for say, 30 years, would result in an initial payment of \$1,467.52 per month. But after 30 years, you will own the land outright. No more payments will be due.

Exhibit 6
Lake View from Vacant Lot



Exhibit 7
View of Neighbor's House to the East



Example 3. One can also have a fully amortizing 15-year mortgage. Using the same numbers, an 8% loan on \$200,000 for only 15 years would result in a payment of \$1,911.30 per month. But again, after 15 years, you will own the land outright.

In sum, a nice way to think about an interest-only loan is that it is a loan with an infinite time to maturity. So the longer the life of the loan, the lower the payments will be because you get to spread out those payments over a longer period of time. With an interest-only loan, that period of time is infinite. Therefore, an interest-only loan will result in the lowest payment when compared to any other time to maturity. People like this type of loan because affordability can certainly be an issue within an overall budget. The downside, of course, is that the homeowner never truly owns the home on an unencumbered basis because the principal balance remains the same over time. The borrower also may face maturity risk as the entire amount will be due when the loan matures. If the borrower cannot pay off the loan balance from other assets or refinance, the lender will call the loan in default and foreclose. The only way to lower the loan balance on an interest-only loan is to make a separate payment to the bank. This is definitely allowed, but rarely done.

Adjustable and Fixed Rate Mortgages

A fixed rate loan is what most people think of when they hear the word “mortgage.” With a fixed rate mortgage, you make the same payment each month during every month the loan is in existence. The interest rate never changes, and therefore, the payment never changes. The payment is based on the initial balance, initial interest rate, and initial amortization term. An adjustable rate mortgage (ARM) is very different. With an ARM, the interest rate agreed upon today is fixed for a set number of years, but can then change periodically as the prime rate or other index rate changes. For example, a three-year ARM at 5% is fixed at a 5% interest rate for three years, but the rate can change afterwards. Once the interest rate changes, so too will the loan payment. Each month, the lender will send you a statement conveying how much you owe that period. While some ARMs allow negative amortization, the ones the Harpers are interested in do not allow such a provision. Negative amortization occurs when the loan payments do not even cover the interest on the loan.

Getting a Loan to Purchase the Lot

Many lenders do not offer special rates for individuals building their own homes. Many traditional lenders also require a 50% downpayment on a vacant land loan. This makes financing difficult, as most people do not have \$100,000 ($\$200,000 \times 50\%$) lying around. After signing a contract to buy the lot, the Harpers pursued financing options in the local area and looked at both fixed rate loans and variable rate loans with and without amortization. The two financing options below are offered by NationsBank, which has more favorable vacant lot financing programs than most lenders in the area.

NationsBank's three-year ARM. NationsBank is one of the few lenders who offer reasonable vacant land financing. As with most home loans, a minimum of a 10% downpayment is required. Because it is expected that building will take place within

a reasonable length of time, the bank makes interest-only adjustable rate mortgages (ARMs) for vacant lot purchases. NationsBank is offering a three-year interest-only ARM at a rate of 7.5%. After the three-year period, the loan can adjust upward to 9%. Subsequently, the loan rate can change monthly based on the Prime Rate minus 0.5%.

NationsBank's one-year ARM. NationsBank also offers a one-year interest-only ARM with an interest rate of 7.0%. Between years one and three, the loan rate will be based on the Prime Rate minus 0.5% with a maximum rate of 9%. So, it can be assumed that Harpers will only prefer the one-year ARM if they plan to build their dream home within 1 year. If they expect to wait between one and three years, the three-year ARM is likely preferred. Note that the 10% downpayment equaling \$20,000 ($\$200,000 \times 10\%$) is still required as is the case with the three-year loan.

Refinancing their Primary Residence and Paying Cash for the Lot

The Harpers bought their home in Diamond Head two years ago before the run-up in Hawaiian real estate prices. As a result, they are also considering pulling equity out of their primary residence and using the money to buy the North Carolina lake lot in cash. There are several ways to do this.

The Harpers could simply refinance their house. Doing so would replace their 5.5%, 30-year fixed rate loan with a new 30-year fixed rate loan at 6.5%. This would free up more than the \$200,000 while still allowing them to keep a 20% equity position in their primary residence. The details are as follows: the home was purchased 2 years ago at a price of \$750,000. A 20% downpayment of \$150,000 was made to result in an initial loan balance of \$600,000 (80%). Considering amortization, an additional \$16,620.99 in principal reduction occurred over the last two years leaving a remaining loan balance of \$583,379.01.

The value of the home skyrocketed to \$1,050,000 over this time; 80% of this value is \$840,000. So the Harpers need to be sure they leave the remaining \$210,000 in the home. The couple currently has a 55.6% loan-to-value ratio ($\$583,379.01 / \$1,050,000$). They are easily allowed to have up to an 80% loan-to-value ratio ($\$840,000 / \$1,050,000$). Therefore, they can afford to cash out up to \$256,620.99 ($\$840,000 - 583,379.01$).

Paying for the Lot Using Some Type of Home Equity Loan

Because of the equity in the couple's home, this option is open to them. They appear to be able to refinance their home and pull out the needed \$200,000—the price of the lake lot. The disadvantage here is that the Harpers would no longer have the opportunity to borrow money for the next 28 years at the low rate of 5.5%. Instead, the loan would be replaced with a loan with a higher interest rate. This will cost the couple more money each month when they make their mortgage payment (\$5,309.37 vs. \$3,406.73). It will also result in an additional 24 payments that would be added to the life of the loan. Finally, there will be traditional closing costs involved in any

refinancing choice. It can be assumed to cost an up-front fee of 0.5% of the new loan amount.

Having value in the home also opens the door to the possibility of a home equity line of credit (HELOC). A HELOC usually has an introductory fixed rate, then changes to reflect the prime rate plus some additional percentage—usually no more than 1%. The advantage of a HELOC is that there is minimal paperwork to be done and no closing costs required; therefore, it is very inexpensive to set up. The disadvantage is that after the low introductory rate, the loan ends up having a much higher interest rate than a typical second mortgage.

In order to apply for a HELOC, the borrower needs to provide the following items: (1) most recent pay stub, (2) proof of insurance on the primary residence, since this is the collateral used for the new loan, and (3) an appraisal of the home to verify the value of the collateralized asset. A most recent tax appraisal will often suffice. Finally, (4) it must be verified that no other HELOC is currently open on the home. Of course, a personal credit check will be performed as well. Credit scores over 700 usually open the door to much better rates.

The University of Hawaii is currently advertising a special HELOC rate of 6%. This rate is good for exactly one year from the date of the start of the HELOC. After the first year, the rate increases to Prime + 1%. Currently, the Prime Rate is 8%. Since the time to maturity makes a big difference in the payment amount, it is important to ask the lender on what time frame the payment will be based. At UH, a 20-year repayment period is required. Therefore, the resulting first year payment equals \$1,432.86 per month ($PV = \$200,000$, $i = 6\%/12$, $n = 240$; solve for PMT). If you do the math, \$1,000 ($6\%/12 \times \$200,000$) of this payment will represent interest during the first month, while the remaining \$432.86 represents a reduction in principal. After the first year, the interest rate will definitely jump up to a much higher rate resulting in a much higher payment that will potentially change every month as the Prime Rate changes.

Oahu One Credit Union is offering a 6.25% introductory rate, which is also good for just one year. After that, the rate would go to Prime + 1% as well. Oahu One has a strange way to calculate the payment amount needed. They equate the payment to 1% of the loan amount. So for the \$200,000 loan, the payment would be \$2,000 per month over the first year. But, even though the payment is higher, it does not necessarily mean it is a worse loan because the borrower will pay down the outstanding balance faster.

Based on a \$2,000 payment and an interest rate of 6.25%, the interest paid during the first month of the loan would be \$1,041.67 ($6.25\%/12 \times \$200,000$). This leaves the remaining \$958.33 ($\$2,000 - \$1,041.67$) to go towards a reduction in principal during that first month. After the first year, however, the interest rate would almost certainly increase substantially to reflect the Prime Rate + 1%. Given the fixed payment of \$2,000 and much higher interest rate, the life of the loan would be

stretched 142 periods. And this is only true if the Prime Rate remains at 8%. The higher the Prime Rate goes, the longer the life of the loan—given the fixed payment.

A lending vehicle that is very close in concept to a HELOC is a Home Equity Loan (HEL). Like a HELOC, a HEL is based on the equity built up in your primary residence. The same proof is required to demonstrate this equity. One main difference between a HELOC and a HEL is that a HEL is fixed for the life of the loan. In this sense, it is more like the traditional mortgage. It is a principal and interest fully amortizing loan.

American Airlines Federal Credit Union (AAFCU) offers various HELs. The good news is that AAFCU is celebrating their 70th year as an organization. As such, they are offering great interest rates to consumers. One example is the 5.79% rate on a 10-year principal and interest loan. 5.79% is a great loan rate, but since it has to be fully paid off in 10-years, this causes the payment amount to be a whopping \$2,199.38 per month; \$965 will go towards interest in the first month of the loan and the remaining \$1,234.38 will go towards principal reduction. So while the borrowing rate is much lower than the UH and Oahu One credit unions, it results in a higher payment. Of course, the good news is that if the couple can afford this payment, they will owe nothing on the loan in 10 years.

Building Now or at Some Point in the Future

At Riverbend there is no specified time period in which a vacant land buyer has to start building, but once they do, a construction-perm loan is required (unless, of course, the buyer has cash to build the entire home). Here is how it typically works. Assume the home takes nine months to build. Most builders require a 3% downpayment to start. After that, they will want to get paid as they make progress on the home. Over the nine months it takes to complete the home, the builder will make six “draws” of money from the lender. These draws will take place every 45 days (9 months/6 draws). Before the lending institution is willing to shell out money to the builder, they will first verify that substantial progress has been made towards the completion of the home. This makes sense because if the buyer defaults on the loan, the bank will want to be sure they have a true asset underlying, or securing, the loan.

Most construction-perm loans are set at a higher interest rate than a traditional 30-year fixed rate mortgage. At the current time, the rate on a construction-perm loan is 8.75% during construction. It is typical that once the home is complete, the buyer can roll this type of loan right into a traditional mortgage at the prevailing rate, thus avoiding paying double closing costs and other associated fees. The traditional 30-year fixed rate mortgage is *currently* priced at 6.5%. Who can say what the rate will be in the future? But, most economists feel interest rates will rise somewhat moderately in the next five years.

The Harper's Budget

To help determine which financing alternative is the best, the Harpers put together a preliminary budget of their current expenses. This budget is shown in Exhibit 8. As with many buying second homes, they may have left some important things out. It is up to the reader to include expenses he or she thinks they will incur once they start traveling back and forth between their two homes. It might also help you to know that the average price to build a home in this area is currently \$115 per square foot.

Questions

The Harpers have already signed the contract to buy a vacant lake lot. All that is at issue now is how to finance the purchase. Be sure to incorporate the Harper's budget into the analysis.

1. Should the Harpers get an interest-only ARM through NationsBank?
2. Should the Harpers refinance their primary residence by getting a new 30-year fixed rate mortgage?
3. Should the Harpers set up a HELOC through any one of several lenders?
4. Should the Harpers borrow through the AAFCU HEL?
5. Can the Harpers afford to build a home right away?
6. If they cannot afford to build right away, how long should they wait until they can afford to build their dream home?
7. Given the Harper's financial situation, is this an aggressive acquisition?
8. Does it matter when the Harpers plan to build there second home?
9. What might taxes and insurance be on the new property?

Exhibit 8 The Couples' Current Budget

Monthly

Amounts Sources of Income

\$5,700 Robert's take home pay (after federal & state taxes and after health insurance payments)
\$4,500 Tina's take home pay (after federal & state taxes and after health insurance payments)

Source of Expenses

\$4,200 Primary residence mortgage payment plus insurance and taxes
\$750 Primary residence cable, phone, electric, insurance, water, sewer, etc.
\$60 Car insurance
\$30 Car title and registration renewal on both vehicles
\$60 Car maintenance
\$2,000 Credit card spending (including food, clothes, gas, etc.)

\$3,100 Net Monthly Cash Inflows

Current Account Balances

\$10,000 Bank
\$5,000 Credit Union CD balance
\$35,000 Stocks
\$20,000 Bonds