



Module 2.1 Study Guide

HUD Housing Counselors Training



**U.S. Department of Housing and
Urban Development**

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MODULE 2.1 HOUSING AFFORDABILITY/RENTING VS. BUYING

MODULE INTRODUCTION

MODULE INTRODUCTION

Housing counselors play a crucial role in assisting clients in determining the most suitable housing option for their specific circumstances. In this module, you will learn to calculate two ratios. The Front-end/Housing ratio and the Back-end/Debt-To-Income ratio. These calculations pertain directly to the client's income and credit.

LESSON OBJECTIVES

By the end of this module, you'll be able to:

1. Determine annual and monthly income for clients with different pay schedules and incomes. Additionally, determine expenses based on the documentation provided and a credit report.
2. Calculate a client's maximum housing payment, including PITIA for mortgages and rent/insurance for renting.
3. Calculate a client's back-end ratio to determine if high debt is an obstacle to meeting housing goals.
4. Apply knowledge of the Four C's of Credit to inform clients of what can affect their mortgage or rental housing application.
 - Character
 - Capacity
 - Capital
 - Collateral
5. Evaluate various housing options for a client when summarizing the costs and benefits of renting versus purchasing a home.
6. Reiterate information about the funds a home owner needs at close of escrow for a home purchase and the funds a renter must have to sign a lease.

BENEFITS OF RENTING VS. BUYING

INTRODUCTION TO A HOUSING COUNSELING SESSION

Recall from Module 1 how Rebecca, an experienced housing counselor, coached her client, Stella, on financial management strategies.

In this module, we will look at a subsequent session with Rebecca and Stella.

Before doing so, take a moment to review the notes in Stella's file from a prior session with Rebecca.

Stella

- She owns a cleaning business.
- She lives with her uncle and his family in their small apartment.
- She was denied a loan from a lender once and is now trying to improve her credit.

Client Action Plan

File #: 000HUD123	Counselor: Rebecca	Client Name: Stella		
Date: January 10, 2022	Purpose of Visit: Financial Counseling			
Housing Goal(s):				
<ol style="list-style-type: none">1. Pay off debt in six months2. Save for a down payment to buy a house in about a year3.				
Obstacle(s):				
<ol style="list-style-type: none">1. Minimal savings2. No money left in budget to contribute to down payment fund3. Credit card debt				

Financial Snapshot:		Income Summary:
Current Credit Score	---	<input type="radio"/> Full Time Employment
Current Savings	\$0	<input type="radio"/> Part Time Employment
Gross Monthly Income (GMI)	\$2,000	<input checked="" type="radio"/> Self-Employment
Net Monthly Income	\$2,000	<input type="radio"/> Child Support
Current Monthly Expenses	\$1,975	<input type="radio"/> Spouse/Partner Employ
Monthly Debt Obligations	\$358	<input type="radio"/> Pension
Discretionary Income Left Over	\$25	<input type="radio"/> Retirement/Soc Sec
Current Mortgage/Rent	\$150	<input type="radio"/> Other
Front-end Ratio	$(\$150/\$2,000)*100= 7.5\%$	
Back-end Ratio	$(\$358+\$150/ \$2000)*100= 25.4\%$	
Housing Preferences:		<i>Needs</i> <i>Wants</i>
<i>Types & Features</i>	n/a	n/a
	n/a	n/a
Counselors Actions/Tasks and Time Frames:		
<ol style="list-style-type: none"> 1. Discuss strategies to reduce spending and save for a down payment. 2. Follow up with Stella to review progress by February. 		
Client Actions/Tasks and Time Frames:		
<ol style="list-style-type: none"> 1. Make budget adjustments to save \$325/month, using strategies to increase income and reduce spending ASAP. 2. Save tax refund toward fund for down payment. 3. Pay down \$300 of credit card debt ASAP to avoid high interest payments. 4. Save \$5,000 for down payment on home (within one year) 		
Referrals:		
<ol style="list-style-type: none"> 1. Financial Management course—800.123.SAVE 2. 3. 		
Next Appointment:		
Client Signature: <i>Stella</i>		Date: January 10, 2022
Counselor Signature: <i>Rebecca</i>		Date: January 10, 2022

RENTING VS. BUYING

During the first part of this session, we will observe how Rebecca:

- Assists a client in evaluating housing options.
- Summarizes the benefits, responsibilities, and drawbacks of renting and buying.
- Outlines the upfront costs and recurring costs associated with renting and buying.

Let's enter their session.

REBECCA: I'm glad to see you again, Stella. Last time we met, we determined a few strategies for increasing your income and decreasing your expenses. Have you been able to apply those strategies?

STELLA: Well, after our last session, I started receiving child support; that increased my income and my savings. I did apply the strategies we discussed to decrease my spending. So, I am on track with paying off my debt and saving for a down payment.

REBECCA: Great! Let's begin filling out a new Client Action Plan and record the changes in your income due to the child support. Then, we can begin to figure out if you can afford to buy a home.

REBECCA: We'll look at two options to prepare you for moving out of your uncle's home; renting and buying.

STELLA: Well, I'd like to buy instead of rent. I want to decorate the place how I want, and have a more permanent home for us to settle in and a more permanent school for my kids.

REBECCA: While there are many benefits to buying, there are other factors to consider. Let's take a closer look at the benefits, responsibilities, drawbacks, and costs associated with buying and renting.

STELLA: Okay.



Stella, a Client, and Rebecca, a Counselor

Renting Benefits

- Most repairs, maintenance, and yard work responsibilities and expenses defer to the landlord.
- Renters may not be responsible for utilities such as electricity, water and gas; unless specified in the rental agreement.
- Maintain a higher level of flexibility to relocate in case circumstances change, such as uncertainty about a neighborhood, fluctuations in income, or other reasons.

Responsibilities

- Pay rent on time.
- Comply with the rules and guidelines that govern your lease.
- Tenants should take reasonable care of the property like changing light bulbs, testing fire alarms, and other tasks as outlined in the rental agreement.

Drawbacks

- Limited control over the property: decorating and changes to home systems.
- Potential rent increases
- If the landlord decides to sell or terminate the lease, you have to move.
- Renting does not provide the opportunity to build equity or benefit from potential property value appreciation.
- Forfeit the opportunity for tax benefits, such as deductions for mortgage interest, mortgage insurance premiums, loan discount points or origination fees, and state or local property taxes, among other potential benefits.

Upfront Costs

You may incur the following expenses upon signing a lease to rent a home/apartment:

- Application fee- a non-refundable fee for credit and background check.
- Security deposit- one-time payment which may be returned to the tenant at the end of the rental period or cover any possible loss or damage to the property.
- First and last month's rent- landlords don't usually require first and last months rent and a security deposit; but are within their right to do so.
- Pet deposit for pet owners- this may include a monthly pet rent detailed in your lease.

Recurring Costs

As a tenant, you may incur most, if not all, of the following recurring expenses:

- Rental payment
- **Renters insurance**
- Monthly internet, cable/streaming service and utility charges

Buying Benefits

- Freedom to modify and personalize the property.
- Home buyers can settle into the community and school system long term.
- Greater sense of privacy.
- Home buyers build equity, which can be used for future home improvements or other investments.
- Owning a home can provide tax benefits, such as deducting mortgage interest, property taxes, and other potential deductions.

Responsibilities

- Make monthly mortgage payments to avoid the risk of **default** and **foreclosure**.
- Uphold standards and rules set forth by communities or homeowner associations.
- Carry out or fund home repair projects, maintenance tasks, and yard work.

Drawbacks

- Owning a home comes with significant financial commitment. You'll need to pay for the down payment, monthly mortgage payments, property taxes, insurance, and maintenance costs.
- Home ownership makes moving difficult if you need to for work or personal reasons.
- Property values may fluctuate with the housing market, causing some financial risk involved.

Upfront Costs

You may incur the following expenses during the purchase

Equity

The value of ownership interest in a property. Determined by the difference between the fair market value of a property and the remaining mortgage balance owed. Current appraised value - Mortgage balance = Home equity

Foreclosure

A legal process in which mortgaged property is sold to pay the loan of a defaulting borrower. Foreclosure laws are based on the statutes of each state.

Renters Insurance

An insurance policy that provides coverage for damages within a rental property, renters' belongings, and liability. Additionally, it can offer protection to renters for losses resulting from liability claims for accidents occurring on the property that are not caused by property structural problems.

Discount Points

Refer to a charge from the lender for the interest rate chosen, paid at closing and generally calculated to be equivalent to 1% of the total loan amount. The borrower pays discount points to reduce the interest rate on a loan. You can purchase a lender-determined number of discount points to give you a lower rate and lower monthly mortgage payment.

Default

The inability to make timely payments or fulfill legal obligations of loan terms. Mortgage loans are typically considered in default when a payment has not been made after 60 to 90 days.

process or at the close of **escrow**:

- **Down payment**
- **Closing costs**
- Lender fees
- Discount points
- Title insurance
- Home inspection fees
- Escrow deposit
- Property taxes
- Private mortgage insurance
- Attorney's fees
- Transportation and placement fees for new or existing manufactured home.

Escrow

The placement of upfront payments towards the home-buying process with a third party until the conditions of the sale are met. Escrow protects all parties in the real estate transaction. Commonly used by lenders to allocate funds for a homeowner's property taxes, insurance premiums, or other fees when they become due.

When calculating closing costs, there are various factors to consider. Some of these costs are based on the property's purchase price, such as title insurance and realty transfer tax. While other costs derive from the loan amount, origination fees and prepaid interest. Typically, closing costs range from 2% to 6% of the home's purchase price and are subject to national, state, and local tax rates, which fluctuate. For example, a \$200,000 home would typically have closing costs ranging from \$4,000 to \$12,000.

Recurring Costs

As a homeowner, you may incur most, if not all, of the following recurring expenses:

- Mortgage payment
- Property maintenance
- Home system repair/replacement
- Property taxes
- **Homeowners insurance**
- Monthly Internet, **cable/streaming services** and utilities

Down Payment

A payment that homebuyers are typically required to pay when closing on a home loan, which represents a percentage of the total price of the home.

Closing Costs

Fees for final property transfer that are not included in the price of the property. Typical closing costs can include loan origination fees, discount points, appraisal fee, survey, title insurance, legal fees, real estate professional fees, prepayment of taxes and insurance, etc.

Homeowners Insurance

An insurance policy that can provide coverage for damages to a dwelling and contents that belong to the homeowner. Additionally, it can offer protection to homeowners against losses resulting from liability claims from accidents occurring on the property. Homeowners Insurance is mandatory for most homeowners with mortgages.

KNOWLEDGE CHECK 1

Based on the simple information you are given about each of Rebecca's clients, determine which housing option appears best for them. In the space before each line, write "A" for renting and "B" for buying.

- 1. Bob is averse to financial risks.
- 2. Jan has saved consistently to afford a down payment and closing costs easily.
- 3. Jenny really enjoys interior design and would like to make her home exactly how she wants it.
- 4. Rachel takes great satisfaction in doing home repairs.
- 5. Jimmy has a nine-month contract with his current job.
- 6. Eva has heard that the neighborhood where she is looking at houses could have better schools, and she wants to move immediately.
- 7. Ben is meticulous in his taxes and strives to get any tax deduction possible.

KNOWLEDGE CHECK 2

If Rebecca's client, Ben, obtains a mortgage for a home that costs \$90,000, what is the most that he will pay for closing costs?

- A. \$1,000
- B. \$5,400
- C. \$7,000
- D. \$10,000

KNOWLEDGE CHECK 3

Review each statement to determine if it is true or false based on what you know about the upfront costs of renting and buying. For true statements, place a "T" next to it. For false statements, write an "F" in the space next to it.

- A. Renters generally pay a security deposit upon signing a lease.
- B. The average cost due upon signing a lease for a rental is typically 20% of the monthly rent.
- C. Closing costs usually include lender fees, discount points, title insurance, home inspection fees, escrow deposit, property taxes, private mortgage insurance, and attorney's fees.
- D. A client who desires to purchase a home that costs \$150,000 could be required to pay \$9,000 in standard closing costs.

CALCULATING FRONT-END RATIOS

CALCULATING FRONT-END RATIOS

Let's return to the counseling session with Stella to see how Rebecca:

- Determines if a property is affordable for a client to purchase.
- Figures out a client's monthly income.
- Estimates a client's potential monthly housing expenses.
- Calculates a client's housing affordability using front-end ratios.

STELLA: I don't have any home repair skills or enough savings for a down payment and closing costs. I also have been considering moving closer to my sister in Florida. So, I can see how renting could be a better fit for me now. However, I already have my heart set on buying a unit in the new townhome complex being built down the street from me.

REBECCA: I suggest we first determine if the townhome complex is affordable for you. Do you know what the average price of a unit will be?

STELLA: I think it was somewhere around \$95,000.

Rebecca then helps Stella calculate her front-end ratio if she bought a townhome in the new community. The front-end ratio represents the percentage of gross monthly income a client spends or plans to spend on monthly rent or mortgage payments. You calculate a front-end ratio using the following formula:

$$\text{Front-end ratio} = \frac{\text{Monthly housing expenses}}{\text{Gross monthly income}}$$

Let's learn about each component of the formula; then, we'll see the calculations for Stella's front-end ratio.

Front-End Ratio

Homeowners

Typically, a front-end ratio of 28% is considered affordable for homeowners obtaining a **conventional loan**. A front-end ratio guideline for homeowners obtaining an FHA loan is 31%, though exceptions are possible if clients meet certain criteria. Clients who are considering buying can focus their home search on properties that allow them to maintain a front-end ratio equal to or less than 28%, or 31%, depending on their loan type.

Renters

Typically, a front-end ratio of 30% is considered affordable for renters. Clients who currently rent and have a Housing ratio higher than 30% could benefit from relocating to less expensive rental property.

Monthly Housing Expenses

Homeowners

Monthly housing expenses for homeowners, commonly referred to collectively as PITIA, include:

- **Principal**
- **Interest**
- **Taxes**

Front-End Ratio

The front-end ratio calculates a borrower's housing expenses as a percentage of their gross monthly income. Used by counselors to measure client housing affordability, and lenders to qualify borrowers for a mortgage. Front-end Ratio is also called a Housing Ratio.

Conventional Mortgage Loan

A mortgage loan backed by private lenders. Conforming conventional loans follow lending rules set by the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac). Non-conforming conventional loans fall outside the guidelines, so they cannot be sold to Fannie Mae or Freddie Mac. Though not insured by any government program, loans with a down payment of less than 20% of the purchase price may require private mortgage insurance.

Principal

The amount of money borrowed to buy a house or the amount of the loan that has not been paid back to the lender. This does not include the interest paid to borrow that money. The principal balance is the amount owed on a loan at any given time. It is the original loan amount minus the total repayments of principal made.

Interest

The cost of borrowing money from a lender to purchase a home or a property. Interest is calculated as a certain percentage of the entire mortgage loan.

- Insurance (homeowners insurance and **mortgage insurance premiums or private mortgage insurance**, as applicable)
- **Association dues** and special assessments

Monthly housing expenses may also include:

- **Ground rent**
- Payments for any acceptable secondary financing

Renters

Monthly housing expenses for renters include:

- Monthly rent
- Renters Insurance

Gross Monthly Income

Gross income refers to money earned before taxes and other deductions. Clients may have a variety of pay schedules and sources of income. To determine a client's gross monthly income:

1. Identify the client's pay schedule for each source of income. These sources may include employment, Supplemental Security Income (SSI) and/or Social Security Disability Insurance (SSDI), pension or other retirement benefits, family support, including child support and alimony, public assistance, or income from a second job.
2. Select the appropriate calculation for gross monthly income for each source of income based on its pay schedule.
3. Perform the calculation for gross monthly income for each source of income.
4. Add all products together to determine a client's gross monthly income.

Taxes

Property taxes charged by the municipality in which your home is located. Proceeds pay for education, law enforcement, and other services. These are mandatory and typically cost 1% of the value annually, though the tax rate can vary depending on geographic region.

Mortgage Insurance Premium

A monthly payment, usually part of the mortgage payment for FHA loans paid by a borrower for mortgage insurance.

Private Mortgage Insurance

An Insurance policy that protects a lender from potential risks when a homebuyer pays less than 20% for a down payment. Although the policy protects the lender and is typically selected by the lender, the homebuyer is responsible for the monthly payment.

Ground Rent

Money paid by a tenant to a landlord when the tenant owns the dwelling or structure but does not own the land on which the residence is situated. In such cases, the tenant may take out a loan to purchase the dwelling, but must also pay rent for the land. Also called lot rent.

Association Dues

Charged by community or Homeowners Association to pay for repairs, upkeep, landscaping, improvements, and property management.

Gross Monthly Income		
Pay Schedule	Calculation for Gross Monthly Income	Example (rounded to the dollar)
Hourly	Total hourly pay before deductions \times hours per week \times 52 weeks per year \div 12 months	$\$10/\text{hr} \times 35 \text{ hrs} \times 52 \text{ weeks} \div 12 \text{ months} = \$1,517$
Weekly	Total weekly pay before deductions \times 52 weeks \div 12	$\$750 \times 52 \text{ weeks} \times 12 \text{ months} = \$3,250 \text{ monthly}$
Bi-weekly	Total bi-weekly pay before deductions \times 26 pay periods \div 12	$\$1,000 \times 26 \text{ pay periods} \div 12 = \$2,167 \text{ monthly}$
Semi-monthly	Total semi-monthly pay before deductions \times 24 pay periods \div 12	$\$1,200 \times 24 \text{ pay periods} \div 12 = \$2,400 \text{ monthly}$
Monthly	Total monthly pay before deductions	No calculation needed
Self-employed	Average adjusted gross income , or AGI, from tax returns, Profit and Loss Statement, or P&L, as applicable \div the number of months of income counted (See below for further information on determining income for self-employed clients.)	$\$70,587 \div 24 = \$2,941 \text{ monthly}$

Note: Some clients receive irregular income from a seasonal or part-time job. For these clients, you can calculate the average monthly income or utilize the appropriate pay schedule based on their pay stubs. For example, if a client is paid every week but the number of hours worked per week varies, it is helpful to calculate gross income based on the hourly rate instead of the weekly rate. To do this, determine the average number of hours worked each week and then use the hourly pay schedule calculation to determine the gross monthly income.

CALCULATING INCOME FOR SELF-EMPLOYED CLIENTS

Let's take a closer look at determining gross monthly income for borrowers who are self-employed. Lenders determine income for self-employed borrowers based on income history. In these cases, income is calculated using average **adjusted gross income**, or AGI, from the previous two years of tax returns. In certain circumstances, calculations also include income from **profit and loss statements**, or P&L statements.

For FHA loan underwriting purposes, a borrower with a 25% or greater ownership interest in a business is considered self-employed. Basic types of business structures include sole proprietorships, corporations, limited liability or "S" corporations, and partnerships. The following criteria apply to self-employed borrowers.

Adjusted Gross Income

Gross income minus adjustments, or reductions that one is eligible for, such as deductions for unreimbursed business expenses, tuition and fees, and contributions to certain retirement accounts.

Profit and Loss Statements

A summary of revenue, costs, and expenses incurred during a defined period, such as a fiscal year.

Period of Self-Employment

- If two years or more, then income is considered stable and effective.
- If between one and two years, the borrower must have at least two years of documented previous employment in an equal or similar line of work.
- If less than one year, then income may not be considered.

Documentation Required

- Most recent two years of individual tax returns, with all applicable tax schedules.
- Year-to-date P&L statement and balance sheet.
- Self-employment borrowers may also need to submit business income tax returns, as applicable. Corporations and "S" corporations may need to submit a business credit report.

P&L Statement Details

- If a borrower files quarterly tax returns, the income analysis may include income through the period covered by the tax filings. If not, then the income shown on the P&L statement may be included in the analysis, provided the income stream based on the P&L is consistent with previous earnings.
- If the current P&L statements show income considerably greater than what is supported by the previous year's tax returns, the lender must base the income analysis solely on the income verified through the tax returns.

- If the borrower's earnings trend for the previous two years is downward and the most recent tax return of P&L is less than the prior year's tax return; the counselor must use the most recent year's tax return or P&L to calculate their income.

EXAMPLE FRONT-END RATIO CALCULATION

During their first meeting, Rebecca calculated Stella's front-end ratio based on the rent she pays to her uncle and documented it in the Client Action Plan on page 5, using the formula below:

To determine what Stella's front-end ratio would be if she purchased the \$95,000 townhome, Rebecca uses Stella's updated financial information and makes a few assumptions about the loan Stella might obtain.

In Rebecca's example, Stella will try to qualify for a 30-year fixed-rate FHA loan with a 4.2% interest rate. She will make a down payment of 3.5%, leaving a loan amount of nearly \$92,000. Stella and Rebecca take the following steps to calculate Stella's front-end ratio.

Front-end ratio = \$150 (Monthly housing expense) / \$2,000 (Gross monthly income)
 Front-end ratio = .075
 Front-end ratio = .075 x 100
 Front-end ratio = 7.5%

Calculating Stella's Front-End Ratio

Step 1—Calculate Stella's Monthly Housing Expenses

Add all monthly expenses for townhome

\$450	princial and interest (calculated using an online mortgage loan calculator)
\$110	property taxes
\$65	MIP (factored from 0.55% rate)
\$25	homeowners insurance
+ \$60	homeowners association dues
<hr/>	
= \$710	monthly housing expense

Note: Mortgage insurance premium, or MIP, rates may change. Visit the FHA Resource Center at HUD.gov to find current rates. See Module 2.2 for more in-depth information about MIP.

Step 2—Calculate Stella's Gross Monthly Income

Documentation needed:

- Stella's tax returns for the previous two years. As the owner of a sole proprietorship, Stella has not filed business returns.
- Stella's year-to-date P&L statement for the current year.
- Child support deposit slips and court orders outlining that child support will be required for no less than five years.

Note: After securing child support, Stella stopped pursuing efforts to make and sell jewelry for extra income. She does earn more after increasing her rates at her cleaning business, but she does not yet have the income history to support the higher earnings amount.

Step A

Calculate Stella's average gross monthly income from her self-employment earnings.

Formula: **Average gross monthly income** = **Adjusted gross income** \div **number of months of income counted**

$$\text{Average gross monthly income} = (\text{AGI 2022} + \text{AGI 2023}) \div 24$$

$$\text{Average gross monthly income} = (\$25,050 + \$22,950) \div 24$$

$$\text{Average gross monthly income} = \$2,000$$

Step B

Calculate Stella's average monthly income from her child support.

Formula: **Average gross monthly income** = **Monthly amount**

$$\text{Average gross monthly income} = \$350$$

Step C

Calculate Stella's total gross monthly income by adding the totals of both income sources together.

Formula: **Total gross monthly income** = **Self-employment** ÷ **Child support**

$$\text{Total gross monthly income} = \$2,000 \div \$350$$

$$\text{Total gross monthly income} = \$2,350$$

Step 3—Calculate Stella's Front-End Ratio

Step A

Calculate Stella's front-end ratio.

Formula: **Front-end ratio** = **Monthly housing expenses** ÷ **Gross monthly income**

$$\text{Front-end ratio} = \$710 \div \$2350$$

$$\text{Front-end ratio} = 0.302$$

Step B

Convert the integer into a percentage by multiplying it by 100.

Formula: **Front-end ratio percentage** = **Integer** × **100**

$$\text{Front-end ratio percentage} = 0.302 \times 100$$

$$\text{Front-end ratio percentage} = 30.2\%$$

Result

If Stella were to purchase the townhome, her front-end ratio would be 32%, which qualifies under the FHA maximum guideline of 31%. A conventional loan may not be an option for her, as these loans often have a 28% maximum front-end ratio. For those borrowers who qualify under FHA's Energy Efficient Homes (EEH), the ratio is 33%.



KNOWLEDGE CHECK 4

The Smiths recently scheduled a meeting with Rebecca. They have been proud homeowners for seven years and have accumulated valuable equity in the property. However, they are having difficulties paying their mortgage because Mrs. Smith cares for their new baby full-time and cannot return to work outside the home. Her husband's salary is paid in installments of \$900 a week, which are subject to deductions and other withholdings. Each month, they pay \$1,000 in principal and interest, \$110 for taxes, \$130 for insurance, and \$20 in homeowners assessments.

What is their current front-end ratio?

- A. 32%
- B. 30%
- C. 28%
- D. 26%

MAXIMUM MONTHLY HOUSING PAYMENT

REBECCA: After reviewing your income, your front-end ratio would be 30.2%. So, the townhome should be affordable with an FHA loan. However, since you are not sure you want to accept the responsibilities of homeownership, let's determine what you can afford to pay for a rental.

STELLA: That's a good idea. I could search online to see if there are any rentals in my price range that I like as much as the townhome.

To determine how much monthly rent Stella can afford to pay, Rebecca uses the following formula:

$$\text{Maximum monthly housing expense} = \frac{\text{Total monthly debt expenses}}{\text{Gross monthly income}}$$

Calculating Stella's Maximum Affordable Monthly Housing Expense

Step 1—Calculate Stella's Gross Monthly Income

Recall earlier steps taken to calculate Stella's gross monthly income. Rebecca adds Stella's self-employment earnings and her monthly child support for a total gross monthly income of \$2,350.

Step 2—Calculate Stella's Maximum Affordable Monthly Housing Expense

Step A

Convert the front-end ratio for renters from a percentage to an integer. Remember, that the maximum front-end ratio for renters is 30%.

Formula: $\text{Front-end ratio (rental)} = \% \div 100$

$$\text{Front-end ratio (rental)} = 30\% \div \$100$$

$$\text{Front-end ratio (rental)} = 0.30$$

Step B

Calculate the maximum affordable monthly housing amount using the maximum front-end ratio and Stella's gross monthly income.

Formula: $\text{Maximum affordable monthly housing expense} = \text{Front-end ratio (rental)} \times \text{Gross monthly income}$

$$\text{Maximum affordable monthly housing expense} = 0.30 \div \$2350$$

$$\text{Maximum affordable monthly housing expense} = \$705$$

Result

Rebecca determines that Stella's maximum affordable monthly housing expense is \$705 a month.

KNOWLEDGE CHECK 5

One option Rebecca suggests to the Smiths is to sell their home and rent a smaller and more affordable home. If the Smiths decide to do this, they will no longer have a mortgage that builds equity. What is the maximum amount the Smiths can afford to pay for rent and renters insurance each month?

- A. \$870
- B. \$1,092
- C. \$1,152
- D. \$1,170

KNOWLEDGE CHECK 6

If the Smiths sell their home and purchase a more affordable property, what is the maximum amount that is affordable for the Smiths to pay in PITIA each month if they obtain a conventional loan?

- A. \$870
- B. \$1,092
- C. \$1,152
- D. \$1,170

CALCULATING BACK-END RATIOS

CALCULATING BACK-END RATIOS

Now, we will return to the session with Stella where Rebecca:

- Calculates a client's back-end ratio.
- Introduces factors to determine the approval process for a mortgage or rental housing application.
- Rebecca. Based on our calculations, you can afford to spend up to \$705 a month on a rental property or up to \$728.50 monthly on an FHA mortgage if you choose to buy. If you are interested in qualifying for a conventional mortgage, you might consider a home with a lower purchase price, review opportunities to increase your income, or save for a larger down payment.

STELLA: I'm glad I had your help calculating my front-end ratios. That was very informative.

REBECCA: If you decide to buy a home and begin to shop around for a loan, lenders will also calculate your front-end ratio to make sure you can afford the loan.

STELLA: During our last session, we talked about credit and the importance of improving my credit to get approved for a loan. So, lenders look at both my credit score and the front-end ratio? Is there anything else they look at?

REBECCA: Yes. Lenders will also calculate what is called a **back-end ratio**, or **debt-to-income ratio**, and will assess additional details of your credit history—specifically the Four C's of Credit.

STELLA: First, can you explain what a back-end ratio is?

REBECCA: Sure. It is a ratio that compares the total of all pertinent monthly debt payments (e.g., mortgage, real estate taxes and insurance, car loans, and other consumer loans) to gross monthly income. Let's see what yours would be if you bought the townhouse.

Rebecca helps Stella calculate her back-end ratio, a calculation lenders will do if she applies for a loan using the following formula:

$$\text{Back-end ratio} = \frac{\text{Total monthly debt expenses}}{\text{Gross monthly income}}$$

Let's learn about each component of the formula and then determine Stella's back-end ratio.

Back-End Ratio

Homeowners

Though the maximum back-end ratio for conventional loans was traditionally 36%, limits can increase to 45% depending on the loan product. Eligible clients who meet specific criteria may even qualify for certain mortgage products with back-end ratios as high as 50%.

Back-end ratio guidelines for clients with an FHA loan or Energy Efficiency Mortgage loan can stretch to 43% and 45%, respectively. However, lenders can make exceptions provided that clients meet specific criteria and demonstrate the ability to repay the loan.

Back-End Ratio

The Back-End ratio calculates a borrower's total monthly debt, including housing and other debt obligations, as a percentage of gross monthly income. Frequently used by lenders to qualify borrowers for a mortgage. The Back-End ratio is also called a debt-to-income ratio.

Renters

Rental agencies or landlords may deny potential renters if the monthly rent creates a back-end ratio greater than 36%, though it is very common to allow a higher ratio.

Total Monthly Debt Expense

Typically, the expenses included in the back-end ratio calculation are loan payments, recurring debt payments, and housing expenses.

Examine a client's credit report to identify critical information, such as debt obligations or other debt expenses, including:

- Monthly car loan obligations
- Monthly student loan payments
- Minimum credit card payments
- Monthly alimony obligations (outgoing)
- Monthly child support payments (outgoing)
- Estimated monthly housing expenses (PITIA) or rent and renter's insurance

Add all debt obligations and housing expenses together.

Note: The regulations defining the type of loan product that a client obtains will determine which of the loan obligations an underwriter will consider when calculating monthly debt expenses. For example, when reviewing applications for FHA loans, underwriters will only consider:

- *Estimated monthly housing expenses (PITIA)*
- *All debt payments that are on revolving or open-ended accounts*
- *All closed-ended debts with recurring payments that extend ten months or more*
- *All debt payments that will affect the borrower's ability to pay the mortgage during the months immediately after loan closing*

Gross Monthly Income

Remember the earlier steps taken to calculate gross monthly income. Also, refer to the Gross Monthly Income Formulas chart in the Resources section of this module. Remember to identify all sources of income.

Now, using the back-end ratio formula, let's calculate Stella's back-end ratio.

CALCULATING STELLA'S BACK-END RATIO

Step 1—Calculate Stella's Monthly Debt and Housing Expenses

Identify the following debt expenses on Stella's credit report and estimated housing expenses and add them together.

\$308 monthly car loan obligation
\$27 minimum credit card payment for card #1
\$23 minimum credit card payment for card #2
+ \$710 monthly PITIA

= \$1,068 monthly debt and housing expenses

Step 2—Calculate Stella's Gross Monthly Income Calculation

Recall the earlier steps taken to calculate Stella's gross monthly income. Rebecca adds Stella's self-employment earnings and her monthly child support for a total gross monthly income of \$2,350.

Step 3—Calculate Stella's Back-End Ratio

Step A

Plug Stella's figures into the back-end ratio formula.

Formula: **Back-end ratio** = Total monthly debt and housing expenses ÷ **Gross monthly income**

$$\text{Back-end-ratio} = \$1,068 \div \$2,350$$

$$\text{Back-end-ratio} = 0.454$$

Step B

Convert the integer into a percentage by multiplying it by 100.

Formula: **Back-end ratio percentage** = Integer x **100**

$$\text{Back-end-ratio percentage} = 0.454 \times 100$$

$$\text{Back-end-ratio percentage} = 45.4\%$$

Result

If Stella were to purchase the townhome, her back-end ratio would be 45.4%, which exceeds the qualifying FHA limit of 43%. Given Stella's limited funds for a down payment, she would not likely qualify for a conventional loan with her back-end ratio exceeding 45%.

KNOWLEDGE CHECK 7

The Smiths explain to Rebecca that they've already found a smaller, more affordable home they've considered buying. It would cost them \$990 each month in PITIA. Considering they pay \$210 in car loan obligations, \$50 in student loan payments, and a minimum of \$80 total in credit card payments each month, and assuming all of these loan payments will be recurring for more than ten months, what would their back-end ratio be if they purchased the home?

- A. 40%
- B. 38%
- C. 36%
- D. 34%

KNOWLEDGE CHECK 8

Under special circumstances, what is the highest possible maximum back-end ratio that could qualify for a conventional mortgage?

- A. 50%
- B. 45%
- C. 43%
- D. 36%

ROLE OF CREDIT

FOUR C'S OF CREDIT

Now let's return to the session to observe how Rebecca addresses the Four C's of Credit.

REBECCA: Unfortunately, Stella, your back-end ratio is too high for conventional and FHA loans.

STELLA: Oh, no! So even if I decided to buy the townhome, I can't qualify? I thought I saw something earlier about debt payments. It said that FHA does not consider recurring payments for closed-ended loans if there are less than ten months of payments remaining. I think I can pay off my car in only nine months.

REBECCA: I didn't realize it was almost paid off. In that case, if you were to apply for an FHA loan now, a lender would not have to consider your car payment, and your back-end ratio would fall to 32.3%.

However, if you wait to buy a home until after the car is paid off, you will have an extra \$308 each month to handle unexpected expenses.

STELLA: Well, that's much better news. I need to save more money for a down payment and other costs anyway, so I definitely want to wait until the car loan is completely paid off. What will determine if my credit history is favorable?

REBECCA: The Four C's of Credit are the factors lenders and landlords use to judge whether you are likely to pay your mortgage and eligible for loan approval. Let's take a look at each of these factors.

Character

Lenders will review a borrower's credit history, employment history, and housing stability to determine the likelihood that the borrower will repay their debts.

Capacity

Lenders may consider the following indicators to determine a borrower's ability to repay outstanding debt:

- Consistency of employment and income
- Adequacy of income to repay debt
- Recurring debts
- Frequency and type of wages

Capital

Lenders will inquire how much money a borrower has saved for a deposit or down payment for the home they intend to purchase.

Collateral

Lenders often request a borrower to pledge specific property or assets as collateral to a lender to secure loan repayment. For a homebuyer, the collateral is the home they are purchasing.

Rebecca explains to Stella that if she decides to obtain an FHA loan, references to the Four C's factors will differ slightly, as follows:

- Credit history
- Capacity to repay
- Cash assets available to close the mortgage
- Collateral

After discussing the Four C's, Stella and Rebecca created a new Client Action Plan containing previous information and relevant updates. For example, Stella added the goal: "Decide whether to rent or buy." Rebecca added a client action/task which will help Stella decide whether to rent or buy: "Attend a First-time Homebuyers Education Course in April." By attending this course, Stella will have the opportunity to understand further the responsibilities of homeownership and determine if it is the right choice for her.

Client Action Plan		
File #: 000HUD123	Counselor: Rebecca	Client Name: Stella
Date: March 10, 2022	Purpose of Visit: Renting vs. Buying	
Housing Goal(s):		
1. Pay off debt in six months *See January notes		
2. Save for a down payment to buy a house in about a year		
3. Decide whether to rent or buy		
Obstacle(s):		
1. Limited savings		
2. Limited money left in budget to contribute to down payment fund		
3. Credit card debt		

Financial Snapshot:		Income Summary:
Current Credit Score	---	<input type="checkbox"/> Full Time Employment
Current Savings	\$600	<input type="checkbox"/> Part Time Employment
Gross Monthly Income (GMI)	\$2,350	<input checked="" type="checkbox"/> Self-Employment
Net Monthly Income	\$2,350	<input type="checkbox"/> Child Support
Current Monthly Expenses	\$1,850	<input type="checkbox"/> Spouse/Partner Employ
Monthly Debt Obligations	\$358	<input type="checkbox"/> Pension
Discretionary Income Left Over	\$500	<input type="checkbox"/> Retirement/Soc Sec
Current Mortgage/Rent	\$150	<input type="checkbox"/> Other
Front-end Ratio	6.4%	
Back-end Ratio	21.6%	
Housing Preferences:		<i>Needs</i> <i>Wants</i>
<i>Types & Features</i>	n/a	n/a
<i>Location</i>	n/a	n/a
Counselors Actions/Tasks and Time Frames:		
1. Follow up with Stella to review progress by May		
2.		
3.		
Client Actions/Tasks and Time Frames:		
1. Save tax refund (\$1,200 anticipated) towards a down payment by April.		
2. Pay \$50 monthly toward a \$300 credit card debt by July.		
3. Save \$5,000 for 5% down payment on home within one year.		
4. Attend a First-time Homebuyers Education Course in April *see previous meeting notes		
Referrals:		
1. First-time Homebuyers Education Course—800.222.3444		
2.		
3.		
Next Appointment: May 10, 2022		
Client Signature: <i>Stella</i>	Date: March 10, 2022	
Counselor Signature: <i>Rebecca</i>	Date: March 10, 2022	

KNOWLEDGE CHECK 9

If the Smiths decide to apply for a new loan to buy the more affordable home, which would support the approval of their application?

- A. Insufficient capital to cover the down payment
- B. Poor credit history
- C. Inconsistent employment
- D. High gross annual income

SUMMARY

In this module, you learned to:

1. Determine annual and monthly income for clients with different pay schedules and incomes. Additionally, determine expenses based on the documentation provided and a credit report.
2. Calculate a client's maximum housing payment, including PITIA for mortgages and rent/insurance for renting.
3. Calculate a client's back-end ratio to determine if high debt is an obstacle to meeting housing goals.
4. Apply knowledge of the Four C's of Credit to inform clients of what can affect their mortgage loan or rental housing application:
 - Character
 - Capacity
 - Capital
 - Collateral
5. Evaluate various housing options for a client when summarizing the costs and benefits of renting versus purchasing a home.
6. Reiterate information about the funds a home owner needs at the close of escrow for a home purchase and the funds a renter must have to sign a lease.

APPENDIX

KNOWLEDGE CHECK ANSWER KEY

1. Correct matched items:

(A) Renting	(B) Buying
1. Bob is adverse to financial risks.	2. Jan has saved consistently to afford a down payment and closing costs easily.
5. Jimmy only has a nine-month contract with his current job.	3. Jenny enjoys interior design and wants to personalize her home.
6. Eva has heard that the neighborhood where she is looking at houses could have better schools, but she wants to move immediately.	4. Rachel takes great satisfaction in doing home repairs.
	7. Ben is meticulous in his taxes and strives to get any tax deduction possible.

2. (B) \$3,500

Closing costs range from 2% to 6% of the home's purchase price and are subject to national, state, and local tax rates, which fluctuate.

Correct Answer

$$\$90,000 \times 0.06 = \$5,400$$

(B.) \$5,400

Incorrect answers: (A) \$1,000 (C) \$7,000 (D) \$10,000

3. Correct true or false items:

True	(False)
A. Renters generally pay a security deposit upon signing a lease.	B. The average cost due upon signing a lease for a rental is typically 20% of the monthly rent.

True	(False)
C. Closing costs usually include lender fees, discount points, title insurance, home inspection fees, escrow deposit, property taxes, private mortgage insurance, and attorney's fees.	
D. A client who desires to purchase a home that costs \$150,000 could be required to pay \$9,000 in standard closing costs.	

4. (A) 32%

Incorrect answers: (B) 30% (C) 28% (D) 26%—Use the following formulas to arrive at the correct answer:

$$\text{Gross monthly income} = \text{Total weekly pay before deductions} \times 52 \div 12$$

$$\text{Front-end ratio} = \frac{\text{Monthly housing expenses}}{\text{Gross monthly income}}$$

$$\text{GMI: } 900 \times 52 \div 12 = 3,900$$

$$\text{Monthly housing expenses: } 1,000 + 110 + 130 + 20 = 1,260$$

$$\text{Front-end ratio: } 1,260 \div 3,900 = 0.323 \times 100 = 32\%$$

5. (D) \$1,170

Incorrect answers: (A) \$870 (B) \$1,092 (C) \$1,152—An affordable front-end ratio for renters is 30%. Use the following formulas to arrive at the correct answer:

$$\text{Gross monthly income} = \text{Total weekly pay before deductions} \times 52 \div 12$$

$$\text{Maximum monthly housing expense} = \text{Front-end ratio} \times \text{Gross monthly income}$$

$$\text{GMI: } 900 \times 52 \div 12 = 3,900$$

Maximum monthly housing expense

$$0.3 \times 3,900 = 1,170$$

6. (B) \$1,092

Incorrect answers: (A) \$870 (C) \$1,152 (D) \$1,170—The standard affordable front-end ratio is 28% for homebuyers with a conventional loan. Use the following formulas to arrive at the correct answer:

$$\text{Gross monthly income} = \text{Total weekly pay before deductions} \times 52 \div 12$$

$$\text{Maximum monthly housing expense} = \text{Front-end ratio} \times \text{Gross monthly income}$$

GMI

$$900 \times 52 \div 12 = 3,900$$

Maximum monthly housing expense

$$0.28 \times 3,900 = 1,092$$

7. (D) 34%

Incorrect answers: (A) 40% (B) 38% (C) 36%—Use the following formulas to arrive at the correct answer:

$$\text{Gross monthly income} = \text{Total weekly pay before deductions} \times 52 \div 12$$

GMI

$$900 \times 52 \div 12 = 3,900$$

Total monthly debt and housing expenses

$$990 + 210 + 50 + 80 = 1,330$$

$$\text{Back end Ratio} = \text{Total monthly debts + housing cost} / (\text{divided by}) \text{ gross monthly income}$$

Back-end ratio

$$1,330 \div 3,900 = 0.341 \times 100 = 34\%$$

8. (A) 50%

Incorrect answers: (B) 45% (C) 43% (D) 36%—Though the maximum back-end ratio for conventional loans was traditionally 36%, limits can increase to 45% depending on the loan product. Eligible clients who meet specific criteria may even qualify for certain mortgage products with back-end ratios as high as 50%.

9. (D) High gross annual income

Incorrect answers: (A) Insufficient capital to cover the down payment—Lenders may request to know how much money a client has saved to pay a deposit or down payment for the home they intend to purchase; (B) Poor credit history—Lenders will review a borrower’s credit history, employment history, and housing stability to determine the borrower’s financial steadiness; and (C) Inconsistent employment—Lenders may consider the following indicators to determine a client’s capacity to repay outstanding debt: consistency of employment and income; adequacy of income to repay debt; recurring debts; as well as frequency and type of wages.

RESOURCES

FHA SINGLE FAMILY HOUSING POLICY HANDBOOK

<https://www.hud.gov/sites/dfiles/OCHCO/documents/4000.1hsgh-glossary-011823.pdf>

HUD WEBSITE

<https://www.hud.gov/>

MONTHLY (PERIODIC) MORTGAGE INSURANCE PREMIUM CALCULATION

https://www.hud.gov/program_offices/housing/comp/premiums/sfpcalc

GROSS MONTHLY INCOME FORMULAS

Pay Schedule	Calculation for Gross Monthly Income	Example (rounded to the dollar)
<i>Hourly</i>	Total hourly pay before deductions \times hours per week \times 52 weeks per year \div 12 months	$\$10/\text{hr} \times 35 \text{ hrs} \times 52 \text{ wks} \div 12 \text{ months} = \$1,517 \text{ monthly}$
<i>Weekly</i>	Total weekly pay before deductions \times 52 \div 12	$\$750 \times 52 \text{ wks} \div 12 \text{ months} = \$3,250 \text{ monthly}$
<i>Bi-weekly</i>	Total bi-weekly pay before deductions \times 26 \div 12	$\$1,000 \times 26 \div 12 = \$2,167 \text{ monthly}$
<i>Semi-monthly</i>	Total semi-monthly pay before deductions \times 2	$\$1,200 \times 2 = \$2,400 \text{ monthly}$
<i>Monthly</i>	Total monthly pay before deductions	No calculation needed

HOUSING AFFORDABILITY FORMULAS

Result	Formula	Examples from Stella's Counseling Session	Notes
Front-end Ratio Use when the monthly housing expense and GMI are known to find the client's front-end ratio	Monthly housing expenses ÷ GMI	$\$710 \div \$2,350 = .302$ Convert to percentage: $.302 \times 100 = 30.2\%$	Stella's Information Gross Monthly Income (GMI): \$2,350 Estimated monthly PITIA: \$710 Total monthly debt: \$358
Back-end Ratio Use when the total monthly housing, debt expenses, and GMI are known to find the client's back-end ratio	$(\text{Total monthly housing} + \text{debts}) \div \text{GMI}$	$\$710 + \$358 \text{ debt obligations} = \$1,068$ $\$1,068 \div 2,350 = .454$ Convert to percentage: $.454 \times 100 = 45.4\%$	
Maximum Monthly Housing Payment Use when the front-end ratio and GMI are known to find the Maximum Monthly Housing Payment a client can afford	Front-end ratio x GMI	Rental Example Convert from percentage: $30\% \div 100 = .30$ $.30 \times \$2,350 = \705 FHA Mortgage Example Convert from percentage: $31\% \div 100 = .31$ $.31 \times \$2,350 = \710	Typical Front-end Ratio Maximums Rent: 30% Conventional mortgage: 28% FHA mortgage: 31%
Maximum Monthly Housing Payment After Debt Use when the back-end ratio, debt payments, and GMI are known to find the Maximum Monthly Housing Payment a client can afford with their debt factored in	$(\text{Back-end ratio} \times \text{GMI}) - \text{total monthly debt}$	FHA Mortgage Example Convert from percentage: $43\% \div 100 = .43$ $.43 \times \$2,350 = \$1,010.50$ $\$1,010.50 - \$358 = \$652.50$	Typical Back-end Ratio Maximums Rent: 36% Conventional mortgage: 36% FHA mortgage: 43% EEM: 45% Note: Lenders will qualify borrowers using the LESSER of the maximum monthly housing payment and the maximum monthly housing payment after debt