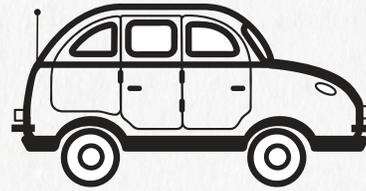


CHAPTER 3: Purchasing a Car



Did You Know?

Consumers in the United States spend an average of \$8,427 per year on their vehicles, including purchase price, gasoline, insurance, maintenance, and licensing.¹

There are many factors to consider when purchasing or leasing a car. Most people don't have enough cash on hand to buy a new vehicle outright, so they must obtain a loan. Because it is a significant expenditure, they must carefully evaluate and compare the many different financing options available in order to select the most cost-effective solution for their particular situation.

Determining Affordability

When buying a car, one of the first decisions you must make is whether to purchase a new or used (pre-owned) vehicle. There are advantages to each, so you need to weigh your own priorities against what you can reasonably afford:

- New cars offer the latest in technology and features, typically have a longer-term warranty, and will need fewer repairs. However, they cost more than used cars, and lose value as soon as they leave the dealer's lot.
- Used cars typically lack some newer technology and features, have limited items covered by warranty, and may need more frequent repairs. In addition, a used car might have been damaged by a previous owner. The dealership can give you a report that shows the car's accident and repair history, collected by a company called Carfax. Some newer used cars were previously leased, and thus have fairly low mileage and have been regularly serviced by the manufacturer's repair shops. This makes them an attractive choice for many people.

Career Link

Car owners are required to carry liability insurance. This insurance is an important factor in determining a vehicle's overall operating cost. In addition, many lenders require collision and comprehensive insurance coverage as a condition of receiving a loan to purchase a car. Actuaries develop car insurance pricing plans to help encourage careful driving. They determine how to adjust car insurance prices to reflect various kinds of risk factors.

Whatever car you decide on, you will need to make a **down payment**. If you have an old car that you need to get rid of, you can trade it in with the dealer to reduce your down payment. While the used car is not worth as much as it was when it was new, it still has some value. The dealer will assign it a **trade-in value**, which is based on its age, model, and condition. Alternatively, you could sell your used car, typically earning a higher price than what the dealer will offer, but with more work. The resale price, or **book value**, can be found through various sources, such as Kelley Blue Book at kbb.com or Edmunds.com.

Next, you should consider any **incentives** being offered by the dealership. These can include discounts, credits, reduced interest rates, or reduced down payment requirements. Because they can significantly reduce your overall costs, you must carefully evaluate and compare each potential deal.

Finally, consider the "hidden" costs of car ownership. The loan and monthly payments are only part of the cost — you will also need to pay for insurance, maintenance, repairs, taxes, and licensing, gasoline, and parking. These expenses can add up to thousands of dollars each year, so you should include them in your calculations when deciding what you can realistically afford.

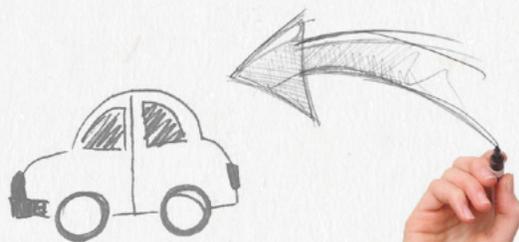


¹ www.bls.gov/opub/ted/2017/consumer-spending-on-vehicles-averaged-8427-in-2016.htm

Leasing vs. Purchasing

If you've decided it's time for a new car, you'll also need to decide whether you want to **lease** or **purchase** it. There are several differences between these options in areas such as ownership, maintenance, payments, and more. The chart below presents some pros and cons of each.

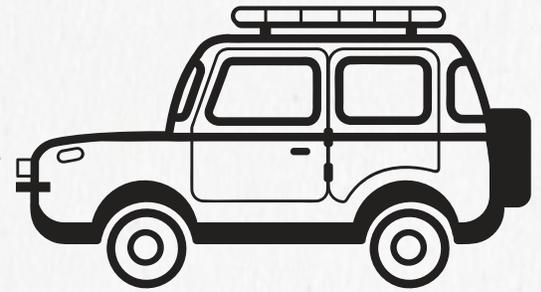
LEASE		PURCHASE/FINANCE	
PROS	CONS	PROS	CONS
<ul style="list-style-type: none"> • Usually little or no down payment required • Fewer up-front, out-of-pocket fees (e.g., sales tax) • Lower monthly payments • New car every few years • No chance of being "upside down," or owing more on the car loan than the car is worth • Allows you to have a more expensive car • Some dealers will cover regular maintenance • Tax advantages if used for a business 	<ul style="list-style-type: none"> • You always have a car payment • You never own the car/ have an asset • Mileage restrictions (usually 12,000-15,000 per year) and fees for overages (usually 15-25 cents per mile) • Higher insurance coverage costs • Charges for excess wear and tear • Higher credit score requirements • Depending on your state, you must be at least 18 to lease a car 	<ul style="list-style-type: none"> • You own the car after you make all the payments (usually 48-60 payments) • Can own the car for as long as you want • Can drive as many miles as you want • Insurance costs are usually lower 	<ul style="list-style-type: none"> • Down payment required • Up-front, out-of-pocket costs (e.g., sales tax) • Higher monthly payments • Can end up "upside down," or owing more on the car loan than the car is worth • May have to pay for vehicle maintenance



Activity 1

AUTO LOANS AND LEASES

Most of us will need to purchase a car at some point in our lives, and the options presented to us can be confusing. Practice making the most financially savvy choice by reading each of the scenarios below and answering the questions.



PART 1: AUTO LOAN BASICS

Suppose you are buying a new car that costs \$20,000. You have a four-year-old vehicle, with a trade-in value of \$7,000. You also have \$1,000 cash to use as a down payment. The manufacturer is offering two incentives.

- Option 1: 1.9% financing over the course of the loan, which is 36 months; OR
- Option 2: A rebate of \$4,500 cash back on the vehicle, applied to the amount due at purchase. You would then take a loan from your bank, at a rate of 6.5% on a 36-month loan.

Use the online calculator at www.edmunds.com/calculators/incentives-rebates.html?sv to compare these two options. (Enter zero for sales tax and title costs.) Then answer these questions.

1. What is the total cost of the car after your down payment and trade-in?

- Option 1: \$ _____
- Option 2: \$ _____

2. What is your monthly payment?

- Option 1: \$ _____
- Option 2: \$ _____

3. Which incentive is the better choice? Why?

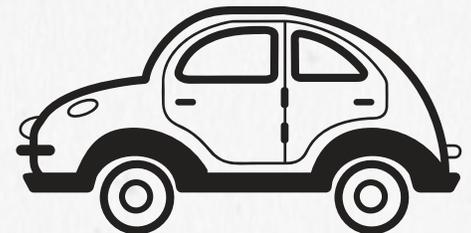


PART 2: TOTAL COSTS

You want to buy a car that costs \$25,000. You do not have a car to trade in, but you have \$2,000 saved for a down payment. The dealer is offering a \$6,000 rebate as an incentive, and you qualify for a first-time-buyer incentive of \$500. You will take a 48-month loan with a 6.5% interest rate. In addition, you will have to pay 7.5% sales tax, and it will cost you \$25 per year for registration, plus \$480 per year in property tax. Your insurance premium will be \$56 per month.

Organize this financial information using the chart below. You can use the loan calculator at <https://tools.finra.org/loan> to determine your monthly loan payment. Then answer the questions.

PRICE	
Vehicle price	\$ _____
Sales tax	\$ _____
Down payment	\$ _____
Incentives	\$ _____
Purchase price/Loan amount	\$ _____
PAYMENTS	
Annual loan payment	Monthly payment: \$ _____ x 12 = \$ _____
Annual insurance premium	Monthly premium: \$ _____ x 12 = \$ _____
Annual registration fee	\$ _____
Annual property tax	\$ _____
Total annual cost	\$ _____



1. What is the total cost of the car over four years? Annual cost \$ _____ x 4 years = \$ _____

2. After you have repaid the loan, what will you pay annually for taxes, insurance, and fees? \$ _____

3. If you keep the car for seven years, how much will it have cost you? \$ _____

PART 3: LEASE OPTION

You decide instead to lease the car for 48 months. You must pay a \$500 security deposit on the car before you leave the dealership. There is an additional fee of \$250 for the cost of completing the dealer lease paperwork. Your total monthly lease payment is \$383 per month. In your lease agreement, it has been determined that the value of the car will be \$14,000 at the end of the lease term. You are allowed 12,000 miles per year for the car, and the mileage fee for overages is \$.25 per mile. You pay \$68 per month for insurance, and it costs you \$25 per year to license the car. There is a \$1,500 early termination fee on the lease. There is a \$500 penalty if you return the car with "excessive wear and tear."

Organize this financial information using the chart below. Then answer the questions.

ONE-TIME COSTS	
• Security deposit	\$
• Paperwork fee	\$
ANNUAL COSTS	
• Annual lease payment	Monthly payment: \$ _____ x 12 = \$ _____
• Annual insurance premium	Monthly premium: \$ _____ x 12 = \$ _____
• Annual registration fee	\$
Total annual cost	\$
PENALTIES AND FEES	
• Mileage fee over 12,000 miles per year	\$.25 x _____ miles = \$ _____
• Early termination fee	\$
• Excessive wear and tear fee	\$

1. What is the total cost of the car over four years, including your one-time costs?

One-time cost \$ _____ + (Annual cost \$ _____ x 4 years) = \$ _____

2. You are in a car accident during the fourth year of the lease and the car is a total loss, thus ending the lease early. How will this affect you?

3. At the end of your lease, you go to the dealer to return the car and lease another one. The dealer notices that the car's odometer reads 59,825 miles. What will happen?

4. When you return the car, you decide you like it and want to purchase it. How much will it cost you?

Now, weigh the options in Parts 2 and 3 and decide which you think you would choose. Why?

Activity 2

YOUR FIRST CAR

Now that you've had some practice evaluating and comparing automobile financing options, imagine that you are ready to purchase your first car. Based on the data below, answer the questions and decide which car to purchase, and which financing option will best suit your needs. Use the loan calculator at tools.finra.org/loan to determine monthly loan payments. After you've made your choices, be prepared to defend your decision in a class discussion.

BUYER DATA:

- High school senior planning to attend college away from home next year
- Has \$1,500 saved for a down payment
- Works part-time earning approximately \$150 per week
- Has a good driving record and has maintained good grades, so qualifies for discounts on insurance, making monthly insurance premiums \$100



CAR A	CAR B
	
<ul style="list-style-type: none"> • New, current model year compact car • Price: \$16,000 • Dealer incentives: <ol style="list-style-type: none"> 1. \$2,000 cash rebate with interest rate of 6.5% on a 48-month loan, OR 2. 3.9% interest rate on a 60-month loan • Dealer offers a first-time buyer discount of \$500 	<ul style="list-style-type: none"> • Used compact car, three years old, 40,000 miles • Price: \$9,000 • Interest rate on a 48-month loan is 7%

1. Determine the monthly and annual financing cost for each option.

	Monthly Cost	Annual Cost
Car A with incentive 1	\$	\$
Car A with incentive 2	\$	\$
Car B	\$	\$

2. What additional costs can you anticipate for each option?

How do these costs factor into your decision?

3. Which car will you purchase? Why?
