# 17. The Transportation Decision: Making it Wisely

## Introduction

One of the challenges consumers face is making wise large-ticket purchases. Besides the decision to purchase a home, one of the next largest financial decisions for many is buying a car. Therefore, you should ask yourself how you can become a wiser steward and make the best automotive decision for yourself and your family. This chapter covers a few ideas you may find helpful regarding the automobile decision.

## Objectives

When you have completed this chapter, you should be able to do the following:

A. Understand key areas and principles of car ownership.
B. Understand how to buy or lease a new car.
C. Understand the lease versus buy decision.
D. Understand and create your auto and adult toy plan.

### Determine the Key Issues and Principles of Auto Ownership

There are a number of important topics you must understand before you buy or lease a new or used vehicle, including the following: choosing a vehicle, steps to take before you go looking, and steps to take after you have found the vehicle.

Buying means you are purchasing the vehicle outright. The advantages of buying include that you are protected against losing your vehicle in case of job loss or change of employment if you have paid cash for the vehicle. If you buy, you can drive unlimited miles each year, and if you pay cash for the vehicle, you have no monthly payments. The vehicle can be used for any purpose, and you can modify the vehicle as you like (e.g., changing the color, rims, or tires). The main disadvantage of buying is that there are higher up-front costs. Buying is also expensive if you want to have a new car every few years.

The advantages of leasing include that the payments are usually lower because you pay for only a portion of the car you are using. When you lease, you pay a depreciation fee and sales tax on a monthly basis instead of making a payment on the total cost of the vehicle. As a result, leasing can be economical if you want to have a new car every two or three years.

However, there are many disadvantages of leasing including higher costs, loss of flexibility, increased costs due to buying new cars every few years, and risks of ownership, which will be included in the next section on the challenges of leasing.

## 1. Choosing a Vehicle

There are four steps to choosing a vehicle. This includes knowing your vision, goals and budget; evaluating safety; estimating total vehicle costs; and estimating insurance costs.

**Know your vision, values, goals and budget.** What is important to you? What is your vision for this vehicle and have you written down your goals? Are you living on a budget? It makes no sense to purchase a vehicle on which you cannot afford to make the payments. It is important that the money you spend on a vehicle does not take away your ability to achieve your other important goals. Make sure you can afford the vehicle by knowing your goals and budget.

If you are planning to finance the vehicle (which I do not recommend), are there sufficient funds to cover the costs of the vehicle and still attain your other personal goals? In addition, are you putting aside money each month to fund the purchase of another vehicle once it is no longer cost effective to run your current vehicle?

**Evaluate vehicle ratings and safety**. As you are making decisions about an automobile, remember to pick a vehicle that is safe for your family. There are a number of good websites that evaluate vehicle safety records. A good place to start is the National Highway Traffic Safety Administration site at www.nhtsa.gov. Other sites include Safer Car at www.safercar.gov and the Insurance Institute for Highway Safety at www.iihs.org. Each of these sites offers information on safety ratings, crash tests, and other important information about specific vehicles.

**Examine total automobile costs**. In addition to looking for a strong safety record, look at overall costs of the vehicle, including maintenance and repair. Repair records can be found on in reviews of the various automobiles. How many miles per gallon does the vehicle get on the highway and around town? With gas prices constantly on the rise, having a fuel-efficient vehicle makes a lot of sense.

Mileage and repair information can be found at a number of different websites, including Consumer Reports at www.consumerreports.org. Consumer Reports gives relatively unbiased information on mileage and repair histories, so you can determine which vehicles have the best track records on repairs and which vehicles will be less costly to operate.

**Evaluate insurance costs.** Pick a vehicle that is inexpensive to insure and drive. The Insurance Services Office (ISO) rates each vehicle on its loss history, a study on how much it costs to repair the vehicle, using a number between 3 and 27. Generally, the higher the number, the more expensive the vehicle is to repair and the more expensive the coverage. Sports cars, high-performance cars, and SUVs are more expensive to insure. Work with your insurance agent when you are considering purchasing a new or used automobile.

## 2. Steps to Take Before You Go Looking

Once you have determined which vehicle you want, there are a few more key issues you should be aware of. These issues include finding new and used vehicle prices, understanding holdbacks, warranties, service contracts, and lemon laws.

**Finding new and used vehicle prices:** There are a number of automobile websites that provide reliable estimates of what a dealership paid the manufacturer for a particular car. There are a number of different prices you should be aware of. The MSRP (manufacturer's suggested retail price) is the amount the dealership hopes to get for the vehicle. This amount is a recommended price only. The dealer invoice is the reported amount the dealership actually paid to the manufacturer for the vehicle. This price is often called the invoice price. Some of the websites that can help you determine the dealer invoice price include www.edmunds.com, www.autosite.com**,** and www.kellybluebook.com**.** It is important to know the dealer invoice price because you should use the invoice price rather than the MSRP as the beginning point when you are negotiating for a vehicle.

You can find pricing information for used cars in the same manner you find pricing for new cars, although the final price of a used car depends on how well the car has been taken care of. Key sources those previously mentioned as well as  www.nada.com and www.vehix.com.

**Understanding holdback:** A holdback is a rebate the manufacturer gives the dealership as compensation for holding the vehicle on the dealer's lot. It is important for you to realize that even when the dealership sells a vehicle at a low cost, or even below invoice, the dealership still makes money because the dealer's profit includes the holdback. The holdback money is not usually negotiable, but it is important to understand. Different manufacturers have different holdback amounts for dealers.

**Warranties:** Companies offer warranties to guarantee a product has the features and capabilities promised at the time of purchase. Warranties guarantee that any problems that arise after the purchase is completed will be resolved within a reasonable period of time.

Full warranties are contracts that promise the following: (1) the product will be fixed at no cost to the buyer within a reasonable time frame after the buyer makes a formal complaint, (2) the buyer will not have to perform an unreasonable task to bring the product back for repair, and (3) if the product cannot be repaired, the defective product will be replaced with a new product, or the buyer's money will be returned.

**Service contracts:** Service contracts are agreements between the contract seller (the dealership, the manufacturer, or an independent company) and the buyer in which the contract seller agrees to provide specific services on the vehicle. These contracts may specify that the contract seller must provide free or discounted repair services or that the contract seller must cover components of the car for a specified length of time or mileage (for example, five years or 70,000 miles) after the original warranties expire. When purchasing a service contract, you should be concerned about what components are covered, the length of the coverage, and the number of miles covered. Generally, service contracts that come from the manufacturer are better because you can get service nationwide, rather than from a single dealer.

**Lemon laws:** Lemon laws are laws to protect the consumer if the vehicle he or she purchased is a "lemon." According to these laws, your car is defined as a lemon if you make at least four attempts to fix a problem and if the car is out of service for at least 30 days during the first 12 months or 12,000 miles following your purchase. These laws give a consumer the right to return a car and request a replacement or a full refund if the circumstances meet the criteria of the lemon law.

### 3. Steps to Take after You Have Found the Vehicle

After you have found a vehicle you are interested in buying, look at a printout of the vehicle's history, have the vehicle checked by a good mechanic, and look at the vehicle's service records.

**Vehicle history:** Before you purchase a vehicle, get its vehicle identification number (VIN) so you can get a printout of its history. The vehicle history is a record of every time a different owner has registered the vehicle with the state; it lists all past owners and their locations. You can get a copy of a vehicle's history for a fee by going to www.carfax.com and typing in the VIN. This record is important because you can see where and when a vehicle was registered, the type of title the vehicle has (i.e., was it salvaged or not), and the mileage listed on previous registrations. Generally, the more times a vehicle has been sold, the more likely it is that one or more of its owners has not done the maintenance required to keep the vehicle in good operating condition.

**Inspection by a good mechanic:** After you have found the vehicle you think you may want, get the vehicle checked by a qualified mechanic, preferably one from a dealer; the mechanic will do a major checkup to make sure there are no hidden problems. While it may cost between $80 and $250, the expense will be worth it if the mechanic finds problems you may not have discovered otherwise.

**Service records:** After you have found a vehicle you are interested in, ask the seller for a copy of the vehicle's service records. Sellers should have kept a record of all services performed, including repairs, oil changes, tire rotation, etc. It is likely that vehicles with good service records were better taken care of than vehicles without such records.

The most important reason for having a car is convenient transportation. Less important reasons for having a car include that cars are fun, they can make a statement about your lifestyle, and they just look cool. If a car fits into your budget and you are achieving your other financial goals, then it may be appropriate for you to have a car for any one of these reasons.

### Principles of Effective Auto Ownership

Keep in mind that buying a car can hurt your financial goals if you must borrow money to pay for it. When you borrow money for a car, you must use your money to pay interest, which means it can't be used to earn interest or build wealth. If you have not considered car expenses in your budget and you purchase a car, it can take the place of more important goals. In addition, if you spend more than you had planned for the car, making payments can become a financial burden and can limit your ability to achieve other goals. Before ever purchasing a vehicle, determine if the purchase fits into your financial plan and if the costs fit into your budget.

There are five key principles of effective car ownership:

**1. Understand yourself, your vision, goals, values and budget**. What are you trying to accomplish and how will transportation help you accomplish those goals.

**2. Seek, receive and act on the Spirit's guidance**. This includes seeking diligently through study and prayer, living worthy of the Spirit's guidance, and then acting on it once it is received.

**3. Understand the key areas of vehicle ownership**. Ideally, the purpose of car ownership should be to provide safe, dependable transportation in a cost effective manner. Realize that a car is a tool to achieve your other goals, not necessarily a goal in itself.

**4. Make your car fit your budget, not your budget fit your vehicle**. Understand the total cost of the vehicle ("the out the door price"), and negotiate this amount.

**5. Understand and minimize your costs**. These costs include the basic purchase price, gas, oil, and insurance. However, it also includes other costs such as scheduled maintenance, repair, taxes (which includes sales tax, registration, licensing, documentation, and in many places, property tax), depreciation, and resale value. Be wise in your choice of vehicle to minimize these costs.

**6. Be a wise steward over your vehicles**. In terms of your car, this means to minimize all costs over the car's effective life. This means that you do the necessary repairs, maintenance, and other activities to ensure the car will last for many years. While skipping a scheduled maintenance may save you money short-term, in the long run it may result in higher maintenance and repair costs.

**Finding Balance**

As you work on developing a transportation plan, finding balance among doctrines, principles and application is important. We have shared some ideas for principles, although I am sure you can find others that are important to you. Below are a few ideas for doctrines on which the principles are based.

| Principles | Doctrines |
|---|---|
| Understand yourself, vision and goals | Identity |
| Seek, receive, and act on the Spirit's guidance | Obedience |
| Understand the key areas of vehicle ownership | Stewardship |
| Make vehicle fit budget | Agency |

Minimize all costs over the car's useful life Stewardship

**From Obedience to Consecration**

From the principles and doctrines, we can see that we are not just working on obtaining a vehicle for transportation, which is an application. From a higher perspective, or with increased vision,

> We are children of a loving Father in Heaven (identity), striving to live worthy of the Spirit (obedience), learning to be a wise stewards over the things God has blessed us with (stewardship). We understand the benefits and costs of vehicle ownership and we use that agency wisely as we choose good vehicles, minimize costs, maintain them well, and keep them our predetermined amount of time (stewardship) so we can accomplish our personal missions and our individual and family vision and goals.

If you think about a car with correct perspective, as a tool to help you achieve other more important goals, you will make better decisions when purchasing your car.

## Understand How to Buy or Lease a New Car

Buying or leasing a new car can be both exciting and frightening—you are looking forward to driving a new car, but you want to make sure you get the best deal possible. The information in this chapter can help guide you through the process of buying or leasing a new car.

Buying a vehicle is a fairly straightforward process. If you pay cash, the vehicle is yours. If you finance, you borrow money from a lending institution and as you make payments, you build equity in the vehicle until it is eventually yours. You can keep the vehicle as long as you like and you can do whatever you want with the vehicle.

Because you are typically paying back the entire cost of the vehicle, your loan's payments are higher than when leasing. And when you are ready to get a new car, you either need to trade in or sell your old vehicle.

Leasing may seem to be more appealing that buying. Your monthly payments compared to financing a purchase will be much lower. You enjoy a trouble-free 2-3 years of the vehicle's life and either lease another vehicle or simply walk away. There is often no down payment, many can get a higher-priced, better equipped vehicle than they might otherwise be able to afford, and they always have a late-model vehicle that's usually covered by the manufactures warranty. However, should you decide to lease a new or used vehicle, the section after this describes the challenges with leasing, which are many and which are not well understood and thought through by most consumers.

Before you buy or lease, there are five general guidelines you should know about the buying and leasing process. The decision to lease or buy comes in guideline four.

**1. Know the Terminology**

Knowing the terminology associated with buying and leasing a car is very important. The following terms are critical to both leasing and buying:

**MSRP** is the price a manufacturer hopes to get for a vehicle. Remember that it is acceptable and expected that you will negotiate for most vehicles. Research has found that those who negotiate generally pay less for their vehicles than those who do not.

**Interest rate** is the rate of interest you will be paying each year on the loan should you choose to finance the loan.

**Loan period** is the period over which you will finance the loan should you choose to finance.

**Capitalized cost** is the agreed-upon or negotiated cost. This amount is often significantly different from the MSRP. Realize that the MSRP is a hoped for amount, and not the negotiated amount.

**Capitalized cost reduction** is the capitalized cost that has been reduced by any rebates, incentives, and/or a trade-in vehicle.

**Net capitalized cost** is the agreed-upon or negotiated cost minus the capitalized cost reduction.

**Residual value** is the bank-determined expected value of the vehicle at lease term end. The actual value at term end may be either higher or lower than the residual value. This value is expressed as a percent of MSRP, such as 55 percent, meaning that the residual value at the end of the term would be 55 percent of the MSRP.

**Lease term** is the number of months the vehicle is leased.

**2. Narrow Your Choices and Select Your Vehicle**

When choosing an automobile, it is critical that you comparison shop. You should compare prices, features, and quality to find out exactly what you want. Be informed. Check the library and the Internet, and look at the alternatives. As you look at different cars, determine what is available in your price range and budget.

After you have looked at what is available, the next step is to choose your vehicle. As you narrow the choices, test-drive the exact vehicles you are considering. Do not buy any car without test-driving it first.

As you make your final decision, it is critical that you remember to make your car fit your budget. Don't make your budget fit your car. If you must finance your car, determine exactly how much you can afford to spend each month and select a vehicle with a payment plan that fits within that limit. Do not spend more on a car than you can afford.

### 3. Determine Your Total Price and Negotiate for This Price

Once you know which car you want to buy and how much you can spend from your budget, you are ready to begin negotiations. Do your homework to find out how much the dealer paid for the car (the dealer invoice), the rebates that are available, how much the holdback from the manufacturer is, the amounts of the total markup, and the MSRP.

Start your negotiations at the dealer invoice. The dealer invoice is the price that appears on the invoice that the manufactures ends to the dealer when the dealer received the car from the factory. Please note that this price is almost always higher than the amount the dealer actually ends of paying to the manufacture, but it is a good starting point. If the company you are working with won't share the dealer invoice, go someplace that will. Most car dealerships will share this information with you. Often you can buy a car for invoice plus \$100–\$500, and sometimes you can negotiate for even less depending on dealer sales quotas and how long they have had the vehicle on the lot.

The dealer's inventory often impacts how much of a difference there is between the invoice price and the price for which the dealer will sell the vehicle. The fewer the number of available cars and the more people who want those cars, the more the dealership will charge—this follows the basic principle of supply and demand. The calendar date may also affect how willing the dealer is to work with you on price. The end of a month or year is a particularly good time to buy because salespeople are trying to reach their quotas and are therefore more willing to negotiate.

Remember that no matter what price you negotiate, there are many other fees you will be expected to pay on top of the sale price. For example, if you and the dealer agree on a price of \$30,000 and a trade-in credit of \$5,000, the difference is \$25,000. But in addition to that \$25,000, you will need to pay for state tax and documentation, registration, and licensing fees. You will either pay for these costs in cash or finance them along with the price of your vehicle. In addition, if you lease a vehicle, you may also have to pay an acquisition and termination fee. Know that most of these fees—except for title, documentation, and licensing fees—are negotiable before you purchase or lease the vehicle.

Be careful in your negotiations, as dealers will try to sell you additional services such as extended warranties, leather or seat protection, tire warranties, additional service contracts for oil changes, theft protection services, vehicle care programs, and gap protection services, which can increase the cost of the vehicle substantially and may not add value. You are not required to purchase any of these programs.

### 4. Make Your Purchase

This is where the leasing versus buying decision comes into play.

<u>Buying.</u> If you must finance your automobile purchase (which is not recommended), remember that banks and credit unions will charge different interest rates than the dealer will charge.

Usually, financing provided through the dealership is the most expensive type of financing, so compare interest rates on auto loans from multiple institutions before you purchase a car. If you choose financing from the dealership, make sure your credit financing is approved before you drive the vehicle off the lot.

When comparing different loans, look at the term of the loan, the interest rate, and the fees. Financial institutions will typically finance newer vehicles for longer periods of time than they will finance older vehicles. Your credit score will have a major impact on the interest rate you will pay on your auto loan, so keep your credit score high. For more information on this topic, refer to the chapters on Understanding and Managing Credit and Consumer and Mortgage Loans.

Calculate the overall costs of the purchase, including down payment, fees, taxes, license, documentation, and any dealer options. Know your total cost for the vehicle before you sign any sales documents so you will know how much you are paying. Realize that many of the dealer-installed options, such as rust coating, leather treatment, special rims and tires, and so on, are not required for the sale, even though the dealer may have done the work beforehand. Also, realize that nearly all costs are negotiable.

Leasing. If you decide to lease, realize that each leasing organization has different rates and programs, depending on your credit worthiness. Keep your credit score high and find the cheapest source of financing for your vehicle. Information on how to calculate your lease cost is given in the next section. Make sure you understand the challenges and costs of leasing before you sign the lease document.

### 5. Enjoy Your Purchase and Keep It Well Maintained

Once you have made your purchase, read the owner's manual carefully and follow the suggested maintenance schedule. One of the best things you can do for your car is to change the oil every 3-5,000 miles. Don't ignore warning signals when your car doesn't work as it should. When problems arise, get them fixed. Find a good garage with well-trained and experienced mechanics, and let the mechanics take good care of your new vehicle.

## Understand the Challenges of Leasing and Calculating Lease Costs

Leasing may at first seem to be more appealing that buying. The payments are usually lower because you pay for only that portion of the car you are using. When you lease, you pay a depreciation fee and sales tax on a monthly basis only on the part of the vehicle used instead of making a payment on the total cost of the vehicle. As a result, leasing can be economical in the short term and allows you to have a new car every two or three years.

In getting a new car every two to three years, think about your perspective, what you are doing longer-term. You are purchasing the vehicle new, which is a major cost. You are developing the habit of buying a new car every 2-3 years, which is perpetual renting. You are paying the most for depreciation and insurance, as these costs are higher with new vehicles. And you are paying higher costs due to higher finance charges and fees that are coming due every few years. Moreover, you are constraining future decisions because of your lease term and mileage allotments. Is this what you want? In short, most consumers only look at the monthly costs and fail to take into account the real costs of leasing which are significant.

**Challenges of Leasing**

While there may be a place for leasing, particularly if your business can expense your lease costs. Monthly costs are cheaper. However, for most people, there are challenges of leasing which should be understood before you make the decision to lease.

**1. Leasing typically costs more than an equivalent loan**. This is in part because of the higher finance charges, which are often difficult to understand unless you know how they are calculated. We will detail those costs below. In addition, assuming similar rates and fees, the total cost of leasing will still be higher due to the way interest and fees are calculated.

**2. Once you get into the leasing habit, monthly payments go on forever**. You are perpetually paying interest, instead of earning it. In contrast, the longer you keep a vehicle after the loan is paid off the more value you get out of it.

**3. There is a fixed-mileage allotment for your lease, generally 10-15,000 miles a year, with a high cost if you go over**. If you go beyond your allotment, you are required to pay a penalty charge for every mile you drive over your predetermined mileage allotment. These costs are substantial (.10-.25 per mile). This may limit flexibility in moving to another location or going on internships because of the possibility of exceeding mileage limits.

**4. You must maintain the vehicle in good condition, or there may be wear-and-tear charges**. If you choose to lease, be sure to find a *closed-end* lease, not an *open-end* one. With a closed-end lease, you simply pay the monthly payments and various fees and then return the car when the lease is over. If you have an open-end lease and the dealer is not able to sell the car for what he or she originally estimated, then you must pay the difference. Open-end leases are generally not a good idea due to the risks involved. An open end lease with your child's messy behavior can have financial consequences later on.

5**. At the end of your contract, you do not own the car.** Your is not an asset; rather, it is a monthly expense. While this may be good if a business is expensing the car payments monthly for tax purpose, for an individual or family this is not the case.

**6. There are many extra fees for leasing and profits are hidden**. These include acquisition and termination fees, and other hidden recurring fees with each new lease. Because leases are generally short-term, dealerships make a lot of money by leasing new cars to buyers every few years. However beneficial to the dealer, it is likely more cost effective to keep your vehicles for more years.

**7. Leasing has early termination penalties and fees**. If you need to get out of the lease before the lease term expires, you may need to pay thousands in early termination fees and penalties which could equal the amount you would have paid had you stuck with the lease in its entire term. Moreover, should you opt for a longer lease than the car warranty or should the vehicle have problems, you will be required to fix these problems at your expense before you can return the vehicle. If you choose to do a longer lease, it is advisable to get an extended warranty to ensure you do not have to pay these additional costs.

**Calculating Lease Costs**

Once you have negotiated the cost of the vehicle with your chosen options, determined your capitalized cost reductions (rebates, and trade in allowances), and added your required additional fees, such as license, registration, and documentation, now is when you begin the determination of whether you will lease or buy.

The first decision is how much you will pay outside the loan versus in the loan. If you can pay cash for the vehicle, this is best. However, if that is not possible, payments outside the loan would include a down payment, and any other fees you decide to cover. The more you pay upfront, the less you will have to finance.

Once you have the total cost you need to finance, the next decision is whether to lease or buy. The key areas are the interest rate and loan term. With that information, you are able to determine the monthly payments.

However, with a lease there are other things you need to determine, including additional costs, lease term, money factor, and residual value.

**Additional Costs**. There are specific costs with a lease that you do not have when you buy and finance through a bank. For example, you may have an acquisition and/or termination costs which are not part of the buy decision. These fees need to be understood and applied up front.

**Lease term**. Generally, most vehicles depreciate more in the early years of a lease than in the later years. As such, you will pay more for newer vehicles than you will pay for older vehicles. Lease terms can be as short as 24 months and as long as 72 months. Remember that if you choose a lease term that is longer than your new vehicle’s warranty (generally three years or 36,000 miles) you will be responsible for any repairs beyond the new vehicle’s warranty period. If you are looking at a longer lease, it may be wise to get an extended warranty or a service contract to minimize the risk of additional costly repairs (See Table 1).

**Residual value.** Your residual value is the bank-determined expected value of the vehicle at lease term end. The actual value at term end may be either higher or lower than the residual value. This value is expressed as a percent of MSRP, such as 55 percent, meaning that the residual value at the end of the term would be 55 percent of the MSRP. If your MSRP is $25,000 and your residual value was 38 percent, the residual value of the vehicle would be $9,500.

**Money Factor.** Your money factor is simply the APR in percentage terms divided by 24. It is an archaic way of showing interest rates, which has led to some confusion by consumers.

**Lease Costs**. Once you have your total amount to finance, there are three parts to the cost of a lease.

*Part 1. Usage or depreciation charge.* Usage is the amount of the value of the vehicle that is used over the lease life. This charge is the difference between your net capitalized cost (which is your negotiated price less any down payment, rebates, or trade in) and your residual value (which is the value the bank estimates the vehicle to be worth at term end). This is the amount you will be charged for the depreciation on the vehicle over the life of the lease.

*Part 2. Interest (or finance costs):* This is your monthly interest cost for leasing the vehicle. It is calculated by determine your average amount borrowed times your average monthly interest rate, which would give you your monthly interest or finance charge.

In a lease, you agree to a specific price for the vehicle now (your negotiated cost less any rebates, down payment and trade in) and a specific price that the vehicle will be worth at the end of the lease (which is your residual value). To determine the average amount borrowed over the lease term, use the following calculation:

If you leased a $20,000 vehicle which has a $10,000 residual value (i.e., the bank-determined value of the vehicle at term end), the average amount borrowed would be $20,000 cost + $10,000 residual divided by two, or $15,000. This is your average amount borrowed. Remember that leases are not like buying where your equity increases the more you pay down the loan. With a lease, you never have equity in the vehicle because you are in essence renting the vehicle in perpetuity. You simply add what you paid, plus the value at term end and divide by two to get the average amount borrowed.

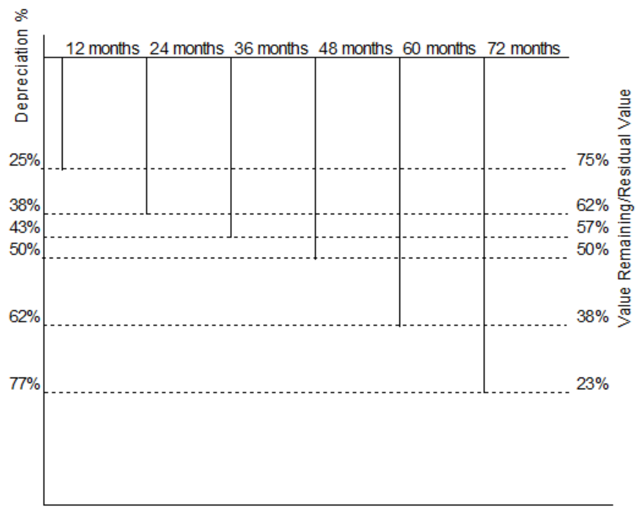
(net capitalized cost + residual value) / 2

The average monthly interest rate is easier to determine. The calculation is simply your annual percentage rate (APR) in decimal form divided by 12, or APR / 12.

Your monthly interest expense is found by multiplying your average amount borrowed by your average interest rate; the result is your monthly interest expense, or your monthly finance charge, on the lease.

In leasing terms, your monthly interest cost is calculated as your net capitalized cost plus the residual value multiplied by the money factor ((NCC + Residual) * MF). This is in essence just the average amount borrowed times your average interest rate.

Table 1: **Depreciation Schedule of a Typical Vehicle**




*Part 3. Taxes (or government costs)*: In addition to paying taxes on the down payment of a lease, you must also pay taxes on your usage or depreciation charge and your interest or finance charge. Taxes are calculated as your usage and interest costs multiplied by your tax rate.

> Calculate the amount of your residual value, usage or depreciation charges, interest or finance charges, taxes, and all the fees you will be paying. It is a good idea to compare the cost of leasing versus the cost of buying over the life of the lease. For an example of how to compare the costs of leasing versus buying, see Lease versus Buy Analysis (LT22).

## Understand and Create your Auto and Adult Toy Plan

Autos and adult toys are expensive and can have a significant impact on the family budget. As such, it is important to develop and auto and toy strategy to ensure these costs are planned for an in the budget.

Having an auto strategy for what you will and will not do for transportation is critical. Without a defined auto strategy, it is easy to succumb to the following challenges.

- You borrow the money for the autos and toys, so instead of earning interest, you pay it.
- You get in the habit of buying or leasing a car on credit, so you pay interest for the rest of your life and find it difficult to fund your other important goals because of the cost of transportation.
- It's not in your budget or is more than you planned, so it relegates more important goals to a lesser position.
- You buy a new car too often, and so you pay too much for expensive depreciation,

insurance and other costs.

What should your Transportation Plan include? It can include a number of different areas, depending on your vision for these vehicles, your goals, and your tactical plans to achieve your vision and goals. Examples include:

- Budget: Ensure the auto fits the budget, not the budget fits the auto; Budget for all costs, including purchase, fuel, maintenance, and insurance before you buy.
- Vehicle age: Keep your cars for 10 years or 200,000 miles whichever comes first; buy new vehicles 1-2 years old with less than 24,000 miles, then buy 100,000 extended warranty at $150 over invoice; spouse gets newer vehicle.
- Maintenance: Be diligent in oil changes every 3-5,000 miles and do the recommended maintenance.
- Financing: Pay cash for all vehicles; save a specific amount each month for purchase of your next vehicle.

**Transportation Plan Example**

Using the creative process, we can put together a Transportation Plan that will guide is in our financial lives. Following is an example of an auto strategy for someone close to me.

**Vision**

- This will likely come from your Plan for Life. It may also include:
    - I will have reliable transportation to meet the needs of my spouse and family and not for pride purposes.
    - Autos will be used for transportation; we will pay cash and take good care of them. We will keep them an extended period of time, thereby reducing overall costs.

**Goals**

- Budget: We ensure the auto fit the budget, not the budget fits the auto.
- Vehicle age: We will keep vehicles for 10 years or 200,000 miles, whichever comes first.
- New car purchases: We will buy used vehicles until our net worth is > $750,000.
- Financing: We pay cash for all vehicles.
- Maintenance: We will be diligent in oil changes every 3-5,000 miles, and do the recommended maintenance.

**Plans and Strategies**

- Before you buy a vehicle, check out the vehicle thoroughly.
- Budget for all costs, including purchase, fuel, maintenance, and insurance.
- Purchase new vehicles 1-2 years old with less than 24,000 miles, then buy the 100,000 extended warranty at $150 over invoice.
- Spouse gets the newer vehicle.

- Once you have a vehicle, save a specific amount each month for purchase of your next vehicle when this vehicle dies.

**Constraints**

- We will buy a new vehicle only after we have a $750,000 in net worth; and spouse gets the newer and safer car.
- The value of vehicles and toys will not exceed 50% of annual income (Dave Ramsey)

**Accountability**

- From your Plan for Life, but may also include:
    - Spouse and family will help with the process of selecting, maintaining, and cleaning the vehicles.

### Adult Toy Strategy

Adult toys are adult motorized vehicles that are not necessary for transportation yet still may be important for some individual and families for recreation. These include boats, motorcycles, all terrain vehicles (ATVs), side by sides (SxSs), jet skis, bikes, trailers, RVs, etc. It is generally anything motorized and not used in the landscaping or yard.

The challenge becomes what happens when you don't have an effective toy strategy. Individuals and families can spend significant amounts of resources on things that are not consistent with their personal and family goals and do it at the wrong time, thereby displacing other important goals.

What can your toy strategy include? These could include different things, such as:

- Age: Purchase good toys which have parts available (and close by) and keep those toys for 20 years. Be careful of no-name vehicles as parts and repair may be difficult to find.
- Maintenance: Do all required maintenance so toys will last--expect toys to last a minimum of 20 years; include toy gas, oil, maintenance and insurance in the family budget.
- Goal Priority: Pay cash for all toys, and only after saving 20% for our other goals. Toys should only be purchased if you are on track for your other goals.
- Usage: Don't allow others to use toys unless they take good care of them so they will last your required age.

### Toy Strategy Example

Following is an example of a Toy strategy which is part of your Transportation Plan. Again, you can be very creative when you put these strategies together.

**Vision**

- Likely from your Plan for Life. May also include:
    - Toys will be used for new experiences and to bring our family closer together. We

will pay cash for good toys that are budgeted for and will take good care of them. We will keep them an extended period of time.

**Goals**

- Our first toys will be bikes, then tents and camping equipment, then later perhaps a small ATV for the kids. As our net worth increases, we may purchase a trailer, and move to larger ATVs consistent with our budget and savings.

**Plans and Strategies**

- Our first toys will be bikes, then tents, camping equipment, then perhaps a small ATV for the kids.
- As net worth increases, we may purchase a trailer and larger ATVs consistent with our budget and savings.
- We will purchase good toys with available parts.
- We will pay cash for all toys, and only after saving 20% for our other goals.
- We will not allow others to use toys unless they take good care of them so they will last our required time.

**Constraints**

- We will keep close to the Spirit so we are not enticed by the traps of the world to spend more.
- We will buy toys only if we are reaching our budget and savings goals.

**Accountability**

- Froom your Plan for Life. It may also include:
    - Spouse and family will help with the process of selecting, maintaining, and cleaning the toys.

While it is not easy to discipline our desire for automobiles and adult toys for recreation and other usage, it is important that we keep our goals in perspective and that we use wisdom in our purchases, particularly those that are not critical to our family responsibilities.

## Summary

Besides the decision to purchase a home, the largest financial decision for many individuals is the decision to buy a vehicle. While it is important to have a car for convenient transportation, having a car can become a significant financial burden if you must borrow money to pay for the purchase, if a car is not in your budget, or if the car costs more than you planned.

There are a number of important topics you must understand before you buy or lease a new or used vehicle. Know your budget and understand safety reports, automobile reports, and insurance. Before you look for a vehicle, understand the pricing on new and used vehicles, holdbacks, warranties, service contracts, and lemon laws. After you have found the vehicle you want to buy, be sure you look at vehicle reports, have the vehicle checked by a mechanic, and review the vehicle's service or maintenance records.

Before you begin the process of buying a vehicle, you should understand five general guidelines for the buying or leasing process:

1. Know the terminology.
2. Narrow your choices and choose your vehicle.
3. Determine the dealer invoice and use it to calculate the vehicle's total price.
4. Finance the vehicle.
5. Enjoy your purchase and keep it well maintained.

While the process of buying a used car is similar to the process of buying or leasing a new car, there are additional challenges to purchasing a used car that are important to consider, including locating, evaluating, negotiating, and financing the used car.

Leasing has become a popular way for many people to have a car because the up-front costs of leasing are lower than the up-front costs of buying. Additional challenges of leasing include negotiating, calculating the costs, and understanding lease warranties.

Finally, we discussed the importance of having an auto and adult toy strategy to ensure that our most important goals are not relegated to a lesser importance because of poor choices for things that are not as important.

## Assignments

### Financial Plan Assignment

Transportation Plan. As you think about your transportation needs, it is important to develop your own transportation strategy. Include this as part of your PFP Education, Mission, Home and Transportation Template (LT01-15).

What auto(s) are you currently driving or using? What monthly expenses and fees are you paying, including gas, maintenance, repair and insurance? Are you within your budget?

What is your transportation strategy for now and in the future? Ideas may include:

- How often you will get a new vehicle?
- Will you buy new versus used?
- Will you pay cash or go into debt?
- What negotiation strategies will you use to obtain your vehicles?
- What are your strategies for extended warranties and repair?
- How long you will keep each of your vehicles?

Adult Toy Plan. What is your adult toy vision and goals for now and in the future? While toys can be enjoyable and fun individually and for the family, they can cause havoc on budgets and other more important long-term goals when not purchased properly. How will you ensure that goals are kept in their proper perspective?

What are your plans and strategy for adult toys, i.e., boats, RVs, ATVs, etc.? Do you have these? How will you ensure these do not take over more important areas of your budget such as saving for retirement, missions, and education?

## Learning Tools

The following Learning Tool may be helpful:

Lease versus Buy Analysis (LT22)
This spreadsheet closely approximates the costs of buying a vehicle versus leasing a vehicle. It includes most of the lease costs and shows how they are calculated.

## Review Materials

## Terminology Review

**Average Amount Borrowed.** This is the average amount borrowed over the life of the loan. In leasing, it is the (Net capitalized cost + residual)/2.
**Average Monthly Interest Rates.** This is the Annual Percentage Rate (APR) divided by 12.
**Capitalized Cost Reduction**: Any reductions in capitalized cost, such as rebates, down payment, dealer incentives, trade-in, etc.
**Capitalized cost**: The cost to which you agree or negotiate when purchasing a vehicle.
**Interest or finance costs**. This is the average amount borrowed times the monthly interest rate. In calculation form, it is the (Net capitalized cost + residual value) / 2 times your average interest rates which is the APR/12.
**Lease Cost**: The total cost of a vehicle's lease. It has three parts:

1. *Usage* (also called *depreciation*): The amount of the value of the vehicle that is used over the lease life. (Net capitalized cost – residual value).
2. *Interest* (also called *finance costs*): The average amount borrowed times the monthly interest rate. (Net capitalized cost + residual value) / 2*average interest rates : APR/12.
3. *Taxes* (also called *government costs*): (Usage + Interest)*tax rate.

**Lease Term**: The number of months the vehicle is leased.
**Lease**: A contractual arrangement calling for the lessee (user) to pay the lessor (owner) for the use of an asset.
**Money Factor**: A way of expressing interest rates, calculated by taking the APR and dividing it by 24.
**MSRP**: The price the manufacturer hopes to get for the sale of a product.

**Net Capitalized Cost** (also called **adjusted capitalized cost**): The final amount paid. Found by taking the capitalized cost and subtracting capitalized cost reduction.
**Residual Value**: Expected value of a vehicle at term end. Often used as purchase price after a lease has ended.
**Taxes** (also called government costs). It is the tax on the usage and interest in a lease. It is calculated as (Usage + Interest) times your tax rate.
**Usage** (also called depreciation). This is the amount of the value of the vehicle that is used over the lease life. It is calculated at the Net capitalized cost – residual value.

## Case Studies

### Case Study #1

Data

Maxine negotiated the price of a car with a dealer and now wants to decide whether she should lease or buy the car.

| | |
|---|---|
| Manufacturers Suggested Price (MSRP) | $25,000 |
| Negotiated cost/Capitalized cost | 22,000 |
| Down Payment | 2,000 |
| Lease Term and residual | 3 Years, 55% |

Fees: Acquisition $500, Registration $150, License $35, Documentation $200, Termination $300

| | |
|---|---|
| Rent charge and Loan rate (APR) | 8.35% |
| Sales tax | 6.25% |

Calculations

Help her decide based solely on costs. She will pay cash for the down payment, taxes on down payment, and fees but will finance the remainder (including other taxes). Assume the value at term end is the residual value

**Case Study #1 Answers**

Solution: Cost of Leasing

| | | |
|---|---|---|
| Down Payment and fees | | $2,000 |
| Taxes on Down Payment (2,000*.0625) | | 125 |
| Fees (Acq + Reg + Lic + Doc+ Term) | | 1,185 |
| Total Paid Outside the Lease | $3,310 | |
| Total Lease Payments: | | |
| 1. Usage: [20,000 – 13,750 (55% of MSRP)] | | $6,250 |
| 2. Interest: (Average outstanding * average rate) | | |
| [(Net Cap. Cost + Residual) * Money Factor] | | |
| (20,000 + 13,750) / 2 * .0835/12 * 36 months) | | 4,227 |
| 3. Taxes: (6,250 + 4,227)*.0625 | | 655 |
| Total lease payments of | | $11,132 |
| Total Cost of Leasing (DPF+LP) | | $14,442 |

Monthly lease cost: 11,132 / 36 = $309.22

Solution: Cost of Buying

| | | |
|---|---|---|
| Down Payment and fees | | $2,000 |
| Taxes on down payment | | 125 |
| Upfront Fees (Reg. + License + Doc.) | | 385 |
| Total Paid Outside the Loan | $2,510 | |
| Remaining Amount | | $20,000 |
| Remaining taxes (20,000)*.0625 | | 1,250 |
| Total Amount to Finance including taxes | | $21,250 |
| Total Payments over holding period | | |
| -21,250 PV, 8.35%, 36 N, PMT=669.33*36 | | 24,096 |
| Total Cost of Vehicle (Financed + DP + fees) | | $26,606 |
| Market value of car at end of the loan (residual) | | (13,750) |
| Total Cost of Buying DP+UF+TP+T-MV | | $12,856 |
| Monthly Purchase Payment | | $669.33 |

Maxine wants to make this decision based only on costs:

They are:

| | |
|---|---|
| Cost to lease | $14,442.01 |
| Monthly Cost | 309.22 |
| Cost to buy | $12,856.03 |
| Monthly Payment | 669.33 |
| Cost savings from buying | |
| $14,442.01 - $12,856.03 = | $1,585.98 |

**Lease versus Buy Analysis (LT22)**

Updated 2019-02-26

This tool helps to compare leasing versus buying as a potential method of acquiring a vehicle. The lease interest charge is a close approximation. This example assumes that down payment, taxes on down payment, and fees are paid outside of the monthly lease payments. Below it gives the reason why either lease or buy is cheaper.

| tual and Negotiated Costs: | | | Finance Charges and Residual : | | |
|---|---|---|---|---|---|
| Manuf. Silly Retail Price (MSRP) | 25,000.00 | | Interest Rate (rent charge) | 8.35% | |
| Capitalized/Negotiated Cost | 22,000.00 | | Sales Tax | 6.25% | |
| Other Taxable Fees/Options | - | | Lease Period (months) | 36 | |
| Gross Capitalized Cost | 22,000.00 | | Residual Value in % | 55.0% | |
| Cap. Cost Reduction. (Down Paym | 2,000.00 | | Residual Value in $ | 13,750.00 | |
| Cap. Cost Reduction. (Rebates/Other) | | | Taxable Fees | | |
| Trade In Allowance | | | Acquisition/Termination | 800.00 | |
| Balance Owed on Trade In (-$) | | | Document Fee | 200.00 | |
| Remaining Amount (Net Cap. Cost) | 20,000.00 | | License & Registration | 185.00 | |

| Lease Analysis (DP & Fees paid outside the lease) | | | uy Analysis (DP, Tax on DP & fees paid outside the loa | | |
|---|---|---|---|---|---|
| **Costs:** | **Overall Costs** | **Monthly Payments** | **Costs:** | **Overall Costs** | **Monthly Payments** |
| Gross Capitalized Cost | $ 22,000.00 | | Negotiated Cost with Fees/Op | $ 22,000.00 | |
| Cap. Cost Reductions (CCRs) | 2,000.00 | | Cap. Cost Reductions (CC | 2,000.00 | |
| Net Capitalized Cost | 20,000.00 | | Net Capitalized Cost | 20,000.00 | |
| Taxable Fees/Options | - | | Taxable Fees/Options | - | |
| Tax on Down Payment | 125.00 | | Tax on Down Payment | 125.00 | |
| **Fees:** | | | **Fees:** | | |
| Acquisition/Termination | 800.00 | | Document Fee | 200.00 | |
| Document Fee | 200.00 | | License & Registration | 185.00 | |
| License & Registration | 185.00 | | Total Paid Outside Loan: | 2,510.00 | |
| Total Paid Outside Lease: | 3,310.00 | | **Total Amount to Finance:** | 20,000.00 | |
| **Total Amount to Finance (NCC):** | 20,000.00 | | Taxes on Net Amount | 1,250.00 | |
| Note: Residual Value | 13,750.00 | | Total Amount to Finance | 21,250.00 | |
| **Lease Payments:** | | | **Loan Payments:** | | |
| Depreciation: (NCC-RV) | 6,250.00 | 173.61 | PV = $21,250, I = 8.35%, | 24,096.03 | $669.33 |
| | | | N = 36, P/Yr = 12, PMT = ? | | |
| Interest (NCC+RV)*MF*LP | 4,227.19 | 117.42 | Note: Loan Interest Paid | 2,846.03 | 1,381.16 |
| Taxes | 654.82 | 18.19 | Note: Taxes Paid | 1,250.00 | (595.18) |
| Total Lease Costs | 11,132.01 | 309.22 | Total Loan Costs | 24,096.03 | |
| Fees Paid outside the Lease | 3,310.00 | | Fees Paid outside the Lease | 2,510.00 | |
| Total Lease Costs | 14,442.01 | | Total Buy Costs | 26,606.03 | |
| | | | Less Residual Value | (13,750.00) | |
| **Total Payments (inc. Trade in):** | $ 14,442.01 | 309.22 | **Total Payments:** | $ 12,856.03 | 669.33 |
| | | | **Savings of buy over lease:** | Buy beats Lease by $1,586 | |

## Case Study #2

Data

Andrea is considering the costs of owning a vehicle valued and sold for $30,000. Auto Loan Amount: $30,000, Duration: 4 years, APR: 8.65%

Property taxes: 2% of the vehicle value per year

Sales Taxes: 3% of the sales price

Title and Tags: $40 per year

Maintenance and Usage Costs: $1,500 per year

Insurance: $2,000 per year

Calculations

Calculate the total first year cost of ownership.

## Case Study #2 Answer

| | |
|---|---|
| $30,000 | 4 years APR 8.65% will have payments of $741.58 x 12 = |
| $8,898.91 | Payments in year 1 |
| $600 | Property Tax |
| $900 | Sales Tax |
| $40 | Title/tags |

| | |
|---|---|
| \$1,500 | Maintenance/usage |
| \$2,000 | Insurance |
| \$13,938.91 | for the total cost for the first year |

Note: If you include your sales tax in the loan, the payment is \$30,000 * (1.03) = PV = \$30,900, N = 48, I = 8.65, PMT ? = \$763.82 * 12 = \$9,165.87

**Case Study #3**

*Please note that this section was originally in the text, but I rarely had enough time to get to this topic. As such, I have included it here in the problem section.*

Bill is thinking about getting a used car. What questions you should he ask before he buys a used car? What advice can you give on each of the questions?

**Case Study #3 Answers**

- Can I afford this car?
- Will this car fit into my monthly budget?
- Is this car a want or a need?
- Does this car meet my current driving needs?
- What type of driving do I do?

Make sure you are shopping for a car that will meet not only your current needs but also your future driving needs. Consider how you will feel about this car a year from now or several years from now. Will your family be growing or shrinking? What extra features do you want your car to have? What about gas mileage? Do you want two doors or four doors? What safety features are important to you?

While the process of shopping for a used car is similar to the process of buying or leasing a new car, this next chapter will address additional aspects of purchasing a used vehicle: locating, evaluating, negotiating, and financing the vehicle.

**Locating Used Cars**

Good sources of used cars include private owners, new- and used-car dealerships, rental car companies, auctions, and auto brokers.

**Private owners:** Many used cars are sold by private parties. Often, these cars are the most reasonably priced, but they don't have warranties. Do your research. Ask friends, neighbors, and relatives about used cars they know are for sale. If you buy from people you know, you should be able to find out more about a vehicle's history. Watch for cars with "for sale" signs in the windows. Look at newspapers, classified ads, and bulletin boards. Keep in mind that cars that are closer to your geographical location are generally easier to inspect and evaluate. Use Internet sites, such as www.autotrader.com, www.classifieds2000.com, and www.usedcars.com to help you. Follow the procedures for buying a new car listed above, including getting a Carfax report on vehicles you are thinking of buying.

**New- and used-car dealerships:** New-car dealerships may also be a source of used cars. Dealerships often keep trade-in vehicles on their lots if they think they can resell them. Dealerships may be an attractive option for buying a used car because they sometimes offer special deals or warranties that are not available from private sellers.

**Rental car companies:** Other used-car lots are run by rental companies that are trying to sell vehicles that have just come off leases. Some of the cars sold on these lots may be backed by warranties as well. For newer used cars, part of the manufacturer's warranty may still be in effect.

**Auctions and auto brokers:** For those who know how to evaluate vehicles, auto auctions are options for purchasing vehicles for a reasonable amount. The risk with auto auctions and auto brokers is that once a vehicle is purchased, there is no warranty or guarantee. The rule of thumb is *caveat emptor,* or "Buyer beware."

You may also want to look into purchasing a used car through auto brokers, who for a fee (usually around $500) will find the make, model, and year of car you are looking for and purchase it at an auto auction.

## Evaluating Used Cars

**Contacting the seller:** Call the seller before you go to see a car. Create a list of questions before calling and then use those questions to decide whether you want to see the car. Ask for the price, because it may have been lowered since the date of the advertisement. Ask about the mileage, the number of previous owners, and how often the oil has been changed. Before you buy, ask to see receipts for oil changes and other major services. If the car doesn't fit your criteria or the seller seems uneasy answering questions, skip the visit and keep looking for other vehicles.

**Verifying the vehicle history:** Ask for and verify information about previous owners. With a $30 two-month subscription to Carfax (www.carfax.com), you can determine how many previous owners a particular car has had and where each owner was located. To obtain this information, you must input the vehicle's VIN number on the site. Carfax will then give you a detailed vehicle history, including mileage listed on the odometer and a title check, to make sure the vehicle was not stolen. Check out the vehicle history of every potential purchase.

**Determining a fair price:** Know the blue book price, or recommended price, for the car you are calling about (pay attention to the specific year and the specific options you want). If possible, come to an agreement with the seller on the quality of the vehicle (fair, good, or excellent) before you go see the car. Coming to this agreement will allow you to determine a fair price beforehand.

**Examining the vehicle:** When you see the car, note your first impressions. Does the car appear to be well cared for? Although you are probably not a mechanic, you should look for potential problems anyway. The following is a list of some of the things you should look at as you evaluate a used vehicle:

**Exterior:**

- Look for rust.
- Examine the paint. New paint may be a cover-up for serious damage.
- Look for dents, mismatched paint areas, or poorly fitting parts.
- Check for ripples in door panels. Ripples may indicate previous accidents.
- Check for body filler, which is a plastic used to fix dents. It can be painted over, so use a refrigerator magnet to test suspicious spots.
- Check the underside of the car for evidence of fluid leaks. Coolant is a greenish color, oil is black, transmission fluid is pink, and gasoline is clear and can be identified by its smell.
- Wipe the inner surface of the tail pipe with a rag—white or gray dust is normal. A thick greasy film means the car burns a lot of oil, which can be a serious problem.
- Check the shock absorbers. Bounce the car up and down at each corner of the car. When you release the car, you should not feel the car bounce back more than twice.
- Examine the tire treads. A tread that is unevenly worn may indicate poor alignment or balance. All tires should be the same size, especially on a four-wheel-drive vehicle.
- Check the CV joint boots on the ends of the front axles. CV joint boots are expensive to replace.
- Push the top of one rear tire toward the car. If it moves too much, there may be bearing problems.

**Under the Hood:**

- Check for mismatched bolts or offset paint. These mismatches may indicate a front-end accident.
- Look at the underside of the hood. A black film on the underside usually means there is an oil leak.
- Check the levels of oil, brake fluid, and transmission fluid. Levels should be adequate, but if it looks like all the fluids have just been changed, this may indicate there is a problem with the car. A low oil level may indicate either a leak or that the owner didn't have the oil changed regularly.
- Take out the transmission dipstick and smell the fluid. Does the fluid smell burned? With a well-maintained transmission, the fluid should not have a burnt smell.

**Interior:**

- Look inside the car for wear and tear on the seats and pedals. Make sure the amount of wear looks consistent with the mileage on the odometer.
- Start the car: it should start right away. Listen for any unusual noises.

- Verify that all gauges report information accurately.
- Examine the emergency lights. Make sure no emergency lights are on when the engine is running.
- Test all lights—brake lights, headlights, reverse lights, turn signals, and so on.
- Check for play in the steering wheel, clutch, and brakes. Play is the amount a part can move before it engages.
- Hold the brake pedal down as far as possible for 45 seconds. If the pedal doesn't hold firm, there may be a leak in the brake fluid. There should be very little play in the pedal.
- Look for a jack and lug wrench in the trunk. If they aren't there, ask the seller to provide them with the vehicle.

**Test drive:**

- Test-drive the vehicle personally. Notice how the vehicle feels and fits you.
- Evaluate how quickly the car accelerates from a complete stop. Does the car hesitate, or does it accelerate as it should?
- Listen to the engine while accelerating. Is it smooth or rough?
- Check for hill-climbing power, braking power, cornering, suspension, and seat comfort.
- Check for rattles and squeaks from interior controls.
- Play the radio and CD player.

**Qualified mechanic inspection:** If you are interested in buying the car, take it to a qualified mechanic for a more complete inspection. Choose a mechanic who regularly works on the type of car you are considering; such a mechanic can generally be found at a dealership that sells that particular make and model. Mechanics that do not specialize in the specific vehicle you wish to buy may be only guessing about potential problems. Dealers may also have the car's history on their computers, which is also helpful.

Have the mechanic do an engine compression check and look for oil leaks and other fluid leaks. For cars with automatic transmission, take the car to a transmission specialist to have the transmission examined.

## Negotiating for Used Cars

Once you are comfortable with the idea of buying a vehicle, negotiate a deal. If you plan to pay in cash, let the seller know this. Cash can do wonders for an agreement.

**Know the fair value of the car beforehand.** Negotiate politely. If you think the price is too high, make a persuasive case to support your argument. For example, you could point out that the vehicle needs some work, that the body or paint doesn't justify the price, or that you have seen lower prices elsewhere. If you want to test the price, you can explain that the car isn't exactly what you're looking for, but at a lower price, you might be interested. You can also let the seller know that the car is worth the price but that you can only afford a lower price because of budgetary constraints. Make an opening offer that is low but in the ballpark of the seller's asking price—do not be unrealistic. Expect to spend about an hour negotiating. Don't be afraid to walk away if you're not getting anywhere: you don't have to buy the car.

**Only enter into negotiations with a salesperson who makes you feel comfortable and who can make a deal.** Before you go to see the vehicle, decide how much you can spend and walk out if the seller cannot meet this price. Leave if you get tired or hungry or if you feel pressured. Don't be hurried into a decision. Don't be distracted by pitches for related items. Expect the salesman to try to improve the deal before you reach a final price.

**Close the deal at the dealership.** At a dealership, the person who deals with financing and insurance will probably try to sell you a number of additional products, including service warranties and other dealer-installed options. Most, if not all, of these products are unnecessary. Review the contract thoroughly before signing. Ask questions about anything that dramatically increases the price. You will be asked to provide proof of insurance before you drive away in your car. Finally, you should inspect the car before you take possession of it. If any work is required or any repairs have been promised by the dealer, get the promise in writing in the form of a due bill—a written acknowledgement that the dealer will provide service at a future date.

**Close the deal with a private owner.** Before any money changes hands, make sure you will be able to register the car in your name. No registration means no deal. Request the title, sometimes called the pink slip, and have it signed over to you. No title also means no deal.

If the seller has not paid for the car in full, the lender still owns the title to the car. One way to deal with a seller who still owes money on the car is to close the sale at the office of the lender, where the title is held. Once all of the paperwork is complete, relax and begin enjoying your new purchase—a good used car.

## Financing Used Cars

If you must finance your used car (I don't recommend doing this), get your financing approved before you look for cars. There are several different lenders who can provide funding for a used-car loan. Banks and credit unions usually offer lower rates than dealerships do, so don't use in-house financing unless you get a special deal or unless the in-house interest rate is very competitive. Also, make sure your credit is approved before you leave the dealership. Banks and credit unions will usually finance a car only if it is less than five years old; however, auto dealerships will finance basically any car.

When looking for a lender, it is important to consider the maximum length of the loan. The good news is that most banks offer 60-month programs for late used car models, or cars that are less than five years old. However, the older the vehicle, the less likely it is to run without problems for the full 60 months. In general, banks offer shorter length loans for older vehicles because older vehicles are not good collateral for loans.

Regardless of which lender you choose, make sure you understand exactly what you are getting into before you sign a loan contract. Once you have signed, you have committed yourself. Once again, you should know your credit score before you attempt to get a loan. If you know whether or not you have a good credit score, a dealer will not be able to insist that you need a higher interest rate because of your poor credit. Knowing your credit score will give you greater freedom to choose a lender that offers a lower interest rate.

## **Final Thoughts on Used Cars**

Even if you follow the pattern explained above when buying a used car, there is still a good chance you will have to make some repairs you did not anticipate. Repairs are one of the risks of buying a used car. However, the more closely you adhere to the process outlined in this chapter, the less likely it is that you will have major problems with your vehicle.