Renovate to Riches

Buy, Improve, and Flip Houses to Create Wealth

MIKE DULWORTH
AND
TERESA GOODWIN

WILEY
John Wiley & Sons, Inc.

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Preface

We wrote this book to help people achieve the American dream. What is the dream? Well, we think it actually has two parts: home ownership and financial security. We believe the dream can be realized by spending some of your free time renovating your home. This strategy works because it is simple, straightforward, and almost totally in your control. It's a fact: you can significantly increase the value of your home through a well-executed home renovation strategy. And there is an extremely important added benefit—this home appreciation income is tax free to you.

Many people that we talk to are looking for practical, hands-on, longer-term approaches to wealth creation (as opposed to the get-rich-quick schemes of the 1990s). The fact that an individual or couple can sell their principal household every two years and pay no capital gains tax (individuals can claim up to $250,000 and couples up to $500,000) is one way, if not the best, to accumulate significant wealth. The potential of this opportunity is increased exponentially by following a do-it-yourself home renovation strategy.

This book helps readers:

- Develop a home renovation strategy for creating significant wealth within 5 years.
- Find the right home to renovate.
- Negotiate the best home purchase price.
- Secure the most favorable financing.
- Focus on renovations that add the most value to a home.
- Accomplish renovations without the help of professionals.
- Effectively work with contractors when necessary.
- Sell a home for top dollar.

This book is targeted primarily at individuals who are interested in generating significant wealth through a *part-time* home renovation strategy (in addition to their full-time jobs). Three different individual scenarios are presented:

1. The Dedicated Renovator (time to $1,000,000—less than 5 years).
2. The Recreational Renovator (time to $1,000,000—less than 10 years).
3. The Leisure Renovator (time to $1,000,000—less than 20 years).

You can choose which scenario fits you the best and develop a home renovation wealth creation strategy that is customized to your situation, interests, energy, and skills.

Renovate to Riches includes the following chapters:

1. **Introduction** describes the overall opportunity and includes a brief Home Renovation IQ Questionnaire to help you gauge your interest and capabilities.
2. **A Gift from Uncle Sam** discusses the opportunity to create significant capital-gains-free wealth using U.S. Tax Code Provision 121. It also provides a summary of the parameters of the tax codes.
3. **Creating a Home Renovation Strategy** describes the four ways you can make money by purchasing a house and presents three detailed case studies of home renovations completed by the authors (a Washington, D.C., condominium, a West Virginia farm, and a Sonoma wine-country home).
4. **The Financial Plan** provides financial templates, with detailed explanations, to help the reader create a customized home renovation financial plan. This chapter discusses three scenarios: the Dedicated Renovator, the Recreational Renovator, and the Leisure Renovator.
5. **Buy Low, Sell High** discusses the ins and outs of buying and selling a home and provides strategies and tips for buying a home for below the asking price and selling a home for its maximum value.
6. **Home Financing** discusses the myriad of home financing options available today and describes strategies for buying a home with no money down, attaching a home equity line to a mortgage to fund renovations, and other creative financing options.
7. **Renovations that Add (the Most) Value** discusses which renovations make a home more valuable (such as kitchens and bathrooms). Guidance is presented from contractors, real estate agents, home appraisers, interior designers, landscape architects, and other experts.
8. **Do It Yourself and Save a Huge Amount of Money!** discusses renovations that can be easily accomplished by a home renovator (such as installing a hardwood floor, building a deck, etc.). This chapter provides a chart with a list of basic, intermediate, and advanced renovation jobs and guidance from a master builder on how to accomplish many of these tasks. This chapter also includes a home renovation tool chest and discusses renovation hazards.

9. **Some Thoughts on Interior and Landscape Design** provides guidance on how to make design decisions. It may seem difficult, especially if you haven't experimented with home design and renovation projects before; however, we present a few tricks and techniques you can use to great success in planning and executing your design strategy.
10. **Contractor Management** discusses how to hire, manage, and, if necessary, fire home contractors. Contractors can be our friends and are great sources of information and guidance. But we need to be very careful in our dealings with contractors. One of the top-five consumer complaints in the United States that the Better Business Bureau receives is about the performance of home contractors.

The Appendixes present four additional resources:

A. IRS Publication 523: Selling Your Home
B. A Guide for Healthier Home Remodeling
C. AIA Document A101-1997: Standard Form of Agreement between Owner and Contractor
D. Upgrade or Install an Irrigation System

Enjoy the book, and best of luck creating significant wealth with your own home renovation projects!

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Writing and publishing a book of any kind is a collaborative effort, but this book was even more so because of all the case studies and interviews that are included. We'd like to sincerely thank everyone who contributed to making *Renovate to Riches* a reality. In particular, we'd like to thank two contributors who wrote full chapters for us: Sashi Sabaratnam McEntee, a mortgage consultant, wrote the chapter on home financing, and Patrick Jurgens, a CPA specializing in individual taxes, who wrote the chapter on the IRS tax code related to home buying and selling. Our friend Jason Gesner, an irrigation specialist, and his wife, Lisa, put together Appendix D covering the ins and outs of installing yard irrigation systems. And a few individuals wrote significant sections of chapters for us: J. Matson Heininger wrote portions of the chapter on do-it-yourself home renovations, and Sam Folin contributed a section titled "Riches, Not Rags," which discusses how to create a balanced financial portfolio. We'd also like to thank all of the people who contributed case studies on their home renovations: Cathryn and Jim Bolt, Elena Colombo, Thom and Marcy Currā, Stan and Janas Horner, Kathy Joyce and Thomas Tumick, Denise Milito and Dave Stockwell, Todd and Nancy Moore, Shelly and Bob Moses, Simon Ressner and Moy Pang, and Ed Smith. Additional thanks to Simon Ressner, a structural engineer and New York City firefighter, for the fire safety information included in Chapter 8, and to Elizabeth Olson, of Artemide U.S., for the lighting terminology provided in Chapter 9. Furthermore, we sincerely appreciate and thank our team of experts who agreed to be interviewed for the book: Skip Burck, landscape architect; Rich Deboard, home inspector; Danielle Fraser, real estate agent; Tom Gardner, real estate agent; Fran George, real estate agent; Pat Pitzer, lighting designer; and Aubrey Wallace, real estate agent. Many thanks also to the following groups for allowing us to reprint their materials in support of the book: 3M Corporation, the American Institute of Architects (AIA), the American Lung Association, the Better Business Bureau, the Fair Issac Corporation, the Internal Revenue Service, the National Association of Home Builders, the National Association of Realtors, and the National Association of the Remodeling Industry. And finally, we'd like to thank our editor at John Wiley & Sons, Michael Hamilton; his assistant Kimberly Vaughn; our friend Larry Alexander for passing along our book proposal to Michael in the first place; and Claire Huismann and the Impressions team, who did an excellent job editing this book.

Chapter 1

Introduction

Have you ever dreamed of long-term financial security? Of creating a nest egg that can insulate you from financial worries and possibly free you to pursue your dreams? Well, we have, and *Renovate to Riches* is intended to be a guide to help you achieve this goal. It is a toolbook for turning your sweat (via home improvements) into equity (financial security and independence). *Renovate to Riches* is not a get-rich-quick scheme (which, as we all know, never work). It is about creating a long-term home renovation wealth creation strategy that, if properly planned and executed, is sure to increase the value of your homes and lead to significant profits. By renovating multiple homes part-time over a period of time, you can accumulate a significant net worth and invest your gains so that you begin making money in your sleep—the American dream!

To illustrate the potential of a home renovation wealth creation strategy, let's look at a five-year scenario (Table 1.1). A couple has lived in a house for 1 1/2 years but has not done any significant renovations to date. They then develop a home renovation strategy and begin renovations using the ideas from this book. They sell their house (we'll call it Home #1) in six months and one day, thereby owning the house for the minimum two years necessary in order not to owe any capital gains taxes. The couple

Table 1.1 **Home Renovation Wealth Creation Potential—Five Years**

	Home #1	*Home #2*	*Home #3*
Purchase price	$225,000	$315,000	$380,000
Renovation costs	$25,500	$66,500	$88,700
Net sales price	$415,000	$655,000	$897,000
Net profit	$164,500	$273,500	$428,300
Accumulated investment	(4 years)	(2 years)	
Income (@10% annual return)	$76,344	$57,435	$0
Gain	$240,844	$330,935	$428,300

purchases and renovates two additional houses over a four-year (plus two-day) period. In addition, they invest their proceeds from Home #1 and Home #2 in other types of investments to diversify their portfolio. What's their total profit over five years? *More than $1,000,000!* (Of course, they will owe capital gains taxes on the accumulated investment income derived from stocks, bonds, etc.).

We know that this is an optimistic scenario, but wouldn't you still be interested in pursuing such a path if your profits over five years were $150,000 or $350,000? Based upon the experience of the authors, these targets are easily within your reach.

Can This Strategy Beat the Market?

Most people who have invested in a house have beaten stock index funds and added significantly to their wealth.[1] That lesson comes from a recent examination of home prices. Whether measured over the last 10, 5, or 3 years, the simple act of buying an average home with a standard down payment led to major equity growth. Indeed, the growth was better than experienced when investing the same money in the Vanguard 500 Index Fund. That fund, in turn, did better than the average domestic equity fund—particularly after taxes are considered.

Some other compelling figures follow.

Ten Years (1991–2001)

According to the National Association of Realtors, the median home resale price in 1991 was $97,100. A 20% down payment would have required $19,420, and the mortgage would be $77,680. At the end of 2001, the same home was worth $147,500.

This means the owner's equity grew to $69,820 in those ten years through price appreciation. (We are ignoring equity growth through amortization of the original debt.) Put that number in a financial calculator, and the 10-year annual compound growth rate is 13.7%.

The same sum invested in the Vanguard 500 Index Fund would have grown to $60,593 over the same period, after payment of taxes on dividends and capital gains that were distributed over that time, for a compound annual return of 12.1%. Because the mutual fund investment is subject to taxes on unrealized capital gains but gains in primary residential real estate are tax free up to $500,000, the net advantage of home ownership is even greater.

Five Years (1997–2002)

Over the five-year period 1997 to 2002, the comparison improves. Homeownership equity grew at an 18.8% annual rate, while the index fund investment grew at a 10.1% rate.

Three Years (1999–2002)

Results were better still over the three-year period 1999 to 2002. Over those three years, home equity grew at a 20.5% annual rate, while the index fund investment lost 1.5% a year. If you had bought the median-priced home for $128,400 with a 20% down payment of $25,680 and a mortgage of $102,720 in 1999, you would own a home worth $147,500 in 2002. Your equity would be $44,780, an increase of $19,100.

Because the Vanguard 500 Index Fund did better than most managed equity funds over all three periods—both before and after taxes—we can safely say that the vast majority of people who became homeowners over the last 10 years have done better in their real estate investing than in their financial asset investing. This is important. You can get some idea of *how* important by considering the distribution of net worth. As recently as the 1998 Survey of Consumer Finances, the median net worth of all U.S. households was $71,600.[2] That's only a tad over the $69,820 of equity built by the 10-year homeowner.

In other words, a single investment decision—to buy a home—was enough to take a family into the midrange of U.S. wealth. Add a steady job, modest annual savings, and a typical employer match for a 401(k) plan, and anyone who could balance a checkbook could have vaulted into the top half of all wealth holders over that 10-year period.

Are you interested in generating a possible 50% return on your investment—not even counting the tax break you'll be receiving on your federal taxes via the mortgage tax deduction, plus the fact that if you keep your home for more than two years you will pay no capital gains taxes on your profits? If you answered yes to this question, take the following Home Renovator IQ Test. If you answered no, please give this book to someone you know who is interested in creating significant tax-free wealth.

What is the Home Renovator IQ Test? It is an assessment of your knowledge, skills, and abilities (KSAs) to be a successful home renovator. Your score can range between 15 and 75. If you score high on this test (between 55 and 75), you're ready to begin tackling a home renovation today on your own. If you score in the middle of the range (35–54), you may need ongoing help and guidance from a general contractor or construction professional, especially on your first home renovation. And if you score low on this test (15–34), you may need to create a personal development plan to acquire some of the KSAs necessary to be a successful home renovator.

Home Renovator IQ Test

On a scale of 1 to 5, with 1 = No, 3 = Maybe, and 5 = Yes, please rate yourself on the following statements:

1. Are you interested in attaining financial security and independence?
2. Are you a "hands on" person?

3. Do you possess some basic skills related to fixing up a home (painting, building a deck, installing electrical wiring, etc.)?
4. Are you interested in acquiring greater KSAs in the area of home renovation?
5. Can you live in a construction zone?
6. Are you a good project manager?
7. Are you a good problem solver?
8. Are you good at managing money and budgets?
9. Are you a good negotiator?
10. Are you comfortable with taking some limited financial risks?
11. Do you have time (such as weekends, evenings) to devote to looking at (and researching) homes on the market, accomplishing home renovations, managing contractors, and so forth?
12. Can you spot a good home bargain?
13. Do you like to look at magazines such as *House & Garden*, *Coastal Living*, *Elle Decor*, *Metropolitan Home*, *Country Living*, and *House Beautiful*?
14. Do you like to watch home improvement television programs offered by the House & Garden Channel, *This Old House*, the Gardening Channel, and so forth?
15. Do you have the financial resources to purchase a home and pay for subsequent home renovations?

Renovate to Riches covers all of the steps necessary for you to develop and execute a wealth creation strategy based upon buying, fixing up, and selling your primary home (i.e., the one you live in full time). In the following chapters, we will:

- Provide practical guidance and tools for developing a long-term home renovation strategy that is sure to produce significant profits.
- Cover the federal tax law and code that makes this form of profit (i.e., capital gains) tax-free.
- Help you create a financial plan for creating significant wealth over a 5-, 10-, or 20-year period.
- Provide practical advice on buying a home for well below the asking price and selling it for a high price (maybe even more than your asking price!).
- Discuss the intricacies of financing a home purchase.
- Describe the renovations that can add the most value to a home and offer guidance on interior design, landscape architecture/landscaping, and creating "curb appeal."
- Offer advice on the types of projects to tackle yourself and those that are best left to professionals.

- Provide help on how to effectively work with contractors (they can be your friends!).
- Summarize the practical advice and guidance we received from interviewing dozens of experts that you'll encounter during your home renovation journey (real estate agents, mortgage brokers and bankers, general contractors and carpenters, landscape architects, interior designers, home inspectors and appraisers, etc.).

We will also describe in detail our own home renovations (a condominium in Washington, D.C., a historic farmhouse in West Virginia, and a wine-country home in Sonoma, California) and provide brief case studies from other people that have been bitten by the home renovation bug. These examples will describe various home renovation strategies and the lessons learned from these experiences. You'll see that we've made countless mistakes. We hope that by reading this book, you'll make fewer than we did.

One final point. We have a strong belief that anyone can learn some basic home renovation skills (e.g., painting, demolition, landscaping, etc.) and do a portion of the work themselves (see Chapter 8). Obviously, this sweat equity can add up quickly and put real dollars into your pocket once you sell your home. For example, at our Sonoma house, we got quotes for putting in hardwood floors that averaged about $13,000. We decided to lay the floors ourselves, and although we had never done this before, we completed the job in four days for less than $3,000. It was extremely easy to do once we read a few floor installation guides, got the necessary tools, and talked with our general contractor, who gave us some excellent tips. So we added at least $13,000 in value to the house for less than $3,000—a savings of more than $10,000 (money in our pocket once we sell the house).

Best of luck on your home renovation journey!

Denise Milito and Dave Stockwell, Home Renovators

How Did We Find It? Word of Mouth

Frustrated by the sight of many condos available in our price range, we started to look at streets that appealed to us within our price range. We had always liked Glenwood Avenue, a nice, quiet street lined with trees and multifamily units sporting flower boxes. It's nestled away two and a half blocks west of Lake Michigan in a small area of Chicago known as Rogers Park. We finally asked a friend on Glen-

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wood if she knew of anyone looking to sell. Within two days, we had the phone number of a person who needed to sell. Within two weeks of our first phone call, we had a signed contract, $5,000 below our budget limit. It was too easy. The hitch—it was a mess. Inside were pink walls with salmon trim embossed with a bold layer of nicotine stain. It looked as bad as it smelled, but we could see the potential. The condo association took great care of the common elements, and our unit had a new deck off the back. The unit is 1,650 square feet and has two bedrooms, a den, one bathroom, a kitchen, and a large living room with a bay window.

Closing date: October 15, 2000.
Purchase price: $106,500.
Appraisal 2003: $240,000.
Approximate cost of renovation: $25,000.

List of Repairs/Renovations

New kitchen (all new appliances, cabinets, and floors).
New bathroom (new fixtures and floor).
Plumbing in bath and kitchen redone.
New lighting fixtures installed in all rooms.
New electrical outlets and outlet covers installed.
Floors resanded and sealed.
All walls patched and repainted, including new plasterwork in dining room.
Wallpaper in den removed.
Dummy space in kitchen removed and new wall built to gain space.
Window buried in wall exposed to allow more light in kitchen.
Plaster removed from one wall in front bedroom to expose brick.
Existing bathroom window replaced with glass block.

Where to Start?

First, we tore out the existing elements in the bathroom and kitchen, in a complete gut and removal, followed by the wall removal in the front bedroom.

Every wall in every room was washed, patched, and painted.

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Next, we laid a custom mosaic-tile floor in the bathroom—80 hours of hard labor, but the result was great (more detail follows).

We hired someone to sand the floors because we had no experience and it is a dirty job. We opted to seal the floors ourselves to save $400. This worked out well, although in retrospect it could have used a few extra coats. We followed directions, but we both think two more coats would have done the trick.

Bathroom

We removed one complete wall of tile, took everything down to the studs, took off one layer of flooring, and left the bottom layer for a base.

I designed and installed a custom mosaic-tile floor with my friend Caryn Mitchell and paid only $1,500, including the cost of materials and her fee. Installing the floor took 80 hours, and it is valued at $10,000. We saved a ton by doing a lot of the work. It laid a great foundation for the room and is the showpiece of the house (see Figure 1.1 for a photo of the mosaic floor and the bathroom during renovation; Figure 1.2 shows the completed bathroom).

My (Denise's) brother did the plumbing, installing all new copper pipes and reconfiguring the pipes in the bathroom and kitchen. This improved the water flow. A wall was built at the end of the tub to accommodate the pipes that originally were on the outside wall. (Not a good placement for Chicago!)

Dave dry-walled, puttied, and painted the walls and ceiling. We installed a glass-block window, tile, toilet, and sink. We echoed the mosaic floor pattern in an all-white mosaic around the top of the shower area and finished off the windowsill with the same pattern as the floor. A neutral sage/cool blue paint on the walls sets off the colors of the floor. The trim is all white, as is the tile. We saved a bunch of money by handling the entire renovation on the bathroom. We kept the vintage tub and had it resurfaced. Its shape and depth make it much nicer than the new ones on the market.

Costs:

- Toilet, sink, and faucets: $1,500.
- Floor: $1,500.
- Window: $150.
- Materials: $1,000.
- Lights: $150.

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Figure 1.1 **Mosaic floor tile detail (and the happy renovators!)**

Figure 1.2 **The completed bathroom**

- Tub resurfacing: $300.
- Trim-work contractor: $500.
- Total: $5,100.00.

Kitchen

We ordered all our cabinets from IKEA, and because we assembled them ourselves we saved a lot of money. See Figure 1.3 to see what the kitchen looked like prior to our renovation. We spent about $2,800 on the cabinets and also installed them ourselves with the help of a friend. We hired a contractor to help speed up the process in the kitchen. He rebuilt the wall we had removed, installed the window, puttied, and painted. We decided on a Pergo floor because of its simple design, a natural stone finish. It works well with the cabinet colors. A solid black granite

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Figure 1.3 **Kitchen before renovation**

Figure 1.4 **Kitchen after renovation**

on the counter looks clean and sharp. We bought stainless-steel appliances—Kenmore Elite, nice, and not too pricey. By shopping at Sears we also got one year's free financing. This detail helped us finance the project over time. Figure 1.4 is a photo of our kitchen after the renovation.

Costs

- Cabinets: $2,800.
- Window (installed): $250.
- Free-standing chopping block: $900.
- Granite counters: $1,600.
- Appliances: $3,800.

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- Floor: $600.
- Contractor: $1,000.
- Materials: $700.
- Sink: $300.
- Miscellaneous: $300.
- Total: $12,250.

First finished: Bathroom
Last finished: Kitchen
Timetable: Started in October 2000, finished in December 2001.

Living Room

Painted walls and trim.
Sanded and sealed floors.
Stripped white paint from fireplace brick.
Created mosaic in fireplace using stone from the beach, recycled tile, and natural rocks.
Installed a gas fireplace unit.
Installed lights above shelves surrounding the fireplace.
New ceiling and wall light fixtures installed.

Front Bedroom

Sanded and sealed floors.
Exposed, cleaned, and sealed brick wall.
Extended walls and ceiling to meet the brick.
Installed new crown molding.
Painted.
Installed new ceiling lighting fixture.

Dining Room

Replastered walls.
Painted molding.
Painted walls and ceiling.
Installed new ceiling lighting fixture.
Sanded and sealed floors.

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Back Bedroom

Repaired and painted walls, ceiling, and trim.
Replaced lighting fixture with halogen track lighting.
Sanded and sealed floors.
Installed new electrical outlets and light switches.

Den

Removed wallpaper.
Repaired walls and painted ceiling, walls, and trim.
Sanded and sealed floors.
Installed new electrical outlets and light switches.

Biggest Problems

The biggest problem was finding reliable help. I do not recommend using friends because you move to the bottom of their priority list. Next, we moved very quickly and got a bit burned out. Finally, older homes have bad plumbing and electrical wiring. You need experts to correct these problems.

Best Assets

A strong vision goes along way. This place was the pits, but we recognized the value of its size, layout, and beautiful trim. It had a lot of potential but bringing it out required a lot of time, talent, money, and dedication.

Best Advice

Look through design books to get some ideas of what you like, then be creative.

How-to books are very helpful, and I used them to lay the tile in the bathroom. I was really nervous to start, but I felt like a pro by the time I finished. I only wish I had laid the tiles closer together. The spacers you can purchase give almost too much space.

Use good materials because every penny well spent will be regained in future appraisals.

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Only contract out what you cannot do yourself. Having an expert do the work you can't saves your energy, and you'll get excited when you see an aspect to the job move forward without your having to do it yourself.

Finally, details make all the difference!

Must-Have Tools

- Good-quality cordless drill.
- Electrical meter.
- Miter saw.
- Reciprocating saw—it cuts anything, so it is very versatile.

Notes

1. National Association of Realtors, Morningstar Principia Pro, December 31, 2001, data; (a) assumes 20% down payment on national median-priced home, (b) assumes reduction for income taxes on dividend and capital gains distributions during period.
2. 1998 Survey of Consumer Finances, U.S. Federal Reserve Board, *Federal Reserve Bulletin* 86 (January 2000).

Chapter 2

A Gift from Uncle Sam

Patrick Jurgens, CPA

How often does the federal government provide its tax-paying citizens with a free gift? Never, you say? Well, you're wrong. At present, Section 121 of the Internal Revenue Code (IRC) allows a couple to take up to a $500,000 capital gain on the sale of their primary home without paying a dime of tax if they've held that property for more than two years.[1] The maximum amount for an individual is $250,000.[2] This amounts to a tax savings of 15% (the current long-term capital gains rate) on any appreciation in the value of your home. Typically, state taxation will follow the federal tax treatment and also exclude the gain from tax. For example, if your home appreciated $50,000 over a two-year period and you then sold it, you would *not* have to pay a capital gains tax of 15% on this amount to the federal government *plus* you would have a state tax savings averaging (depending on where you live) an additional 5%—a savings to you of $10,000. Ten grand as a gift from Uncle Sam,[3] unbelievable! If your home appreciated $200,000 in value and you sold it after two years, your gift from Uncle Sam would be $40,000.

"But," you say, "there must be a catch." Well, actually, of course there is—would Uncle Sam provide such a tax break *without* a catch? But those "gotchas" are easy to manage as long as you are armed with the right information and you have a "fact and circumstances" pattern that fits the rules Uncle Sam is looking for. Having said that, U.S. Internal Revenue Code Section 121 is arguably one of the simplest and most straightforward on the books (a rarity, we know).

This wasn't always the case. These rules have only been on the books since 1997,[4] and they were only recently clarified by the IRS, which in 2002 issued guidance on how to interpret the rules for who can take advantage of the gain exclusion on selling a "principal residence."[5] Congress decided to rewrite the rules to make it simpler for average taxpayers to avoid paying tax on the sale of their home. Because the appreciation in the value of your main home is not taxed, this provides you with a significant advantage over most other alternatives to accumulate tax-free wealth.

Following is a summary of IRC Section 121. You can also get up-to-date information by talking to your accountant (we recommend consulting a certified public accountant tax professional), reading IRS Publication 523, or accessing the IRS Web site at www.irs.gov.

Tax-Code Specifics

As with almost all tax rules, there is the general rule, and then there are exceptions to the rule. Let's start with the basic rules first, and then we'll give you some information on the exceptions to the general rules in our Tax FAQs. To claim the exclusion, you must meet both the use test, the ownership test, and must not have claimed the exclusion recently. We will also tell you about reporting requirements and how to compute your taxable gain.

The Two-Out-of-Five-Years Rule

To qualify for the tax-free treatment of the gain on your home sale, you must have owned and used the home as your "principal residence" for an extended period. This is measured by "using" or occupying the home as your main home for at least two out of the last five years prior to the home's sale date. If you have lived in the house for two years or more during that five-year period, you can generally exclude your gain up to $500,000.[6]

Use Test

So, use and live in the property for at least two years and exclude the gain from your taxes, up to $500,000. What counts as "using as a principal residence"? All facts and circumstances are examined by Uncle Sam to determine if you are living in the property. Obvious factors are weighed in judging whether you used the property as your main home:

1. Where you and your family live on a regular or continuous basis.
2. Where mail is delivered.
3. Whether utilities (electricity, gas, oil, and telephone) of the home are in your name.
4. Where your furniture and clothes are stored.
5. Other evidence of where you are living, such as supermarket receipts.

6. The location of bank accounts you use.
7. The address on your driver's license, tax returns, voter registration, car registration, social clubs and churches, and so forth.
8. Where you work.

Another key point regarding use of the home is that if you are married filing jointly, both spouses must meet the two-year-use test in order to claim the full $500,000 exclusion.

Short absences from the home for vacation and other temporary and seasonal absences still generally count as use. How long can the absence be? Two months while on summer vacation is okay, but if you go away on a one-year sabbatical leave, that period of time will not count as use.

If you did not own and use the home for at least two years, or had utilized the exclusion within two years prior to your sale, you may be entitled to a prorated exclusion. You may be eligible for a reduced maximum exclusion if the primary reason for the sale is one of the following:

1. *Change in place of employment*—if you need to move because of a new job location.
2. *Health*—if you need to move to facilitate the diagnosis or treatment of injury or illness, for example, if a physician recommends you move for health reasons.
3. *Unforeseen circumstances*—if you need to sell because of an event that you did not anticipate before purchasing and occupying the main home, such as death, divorce, multiple births, unemployment, natural disasters, war, or terrorism.

Ownership Test

Only one spouse need legally hold title to the property (though both spouses can) for at least two years to satisfy the ownership test and qualify for the full $500,000 exclusion.

Reporting Requirements on Your Tax Return and Other Information Forms / Withholding Taxes

In most cases, you don't even need to disclose the sale of your home on IRS Form 1040 if the gain is less than your allowed exclusion. If your realized gain exceeds the allowable exclusion, then report the net amount as a long-term gain on Schedule D.[7]

In many cases, the buyer will not need to issue a Form 1099-S to report the gross sales proceeds you received. To avoid having to file Form 1099-S, you will need to provide a written assurance to the seller that you will qualify to exclude the entire gain from your sale. Note that special withholding-tax requirements, and of course exceptions to these requirements, apply on the sales proceeds if you are a U.S. nonresident alien taxpayer at the time of sale.[8]

Figuring Your Realized Gain and Your Taxable Gain

Net sales proceeds (the amount left after deducting closing costs, Realtor fees, and related selling costs) is compared to your "adjusted cost basis" to compute the realized gain. You also need to compute the maximum allowable exclusion in your case. If you owned and used the property for less than two years or had excluded gain under Section 121 within the two years, *and* you meet the conditions for an early sale, you may need to prorate the exclusion. Compare the two results to see if any of the gain is taxable.

Keep track of your cost basis by keeping accurate records. The original cost of the property includes the purchase price plus most closing costs. To this you can add the amount you spent to fix up and improve the home, including:

1. Payments to contractors.
2. Architect fees.
3. Building-permit fees.
4. Legal fees relating to the purchase of the home.
5. Construction materials.
6. Municipal charges, such as sewer connection fees.
7. Labor costs for work done to renovate the home.

Any improvements to the home that add to the value of the property and have a useful life of more than one year are added to the cost basis. Normal repairs to maintain your home that do not add to the value or useful life of the home are considered regular personal living expenses and are not added to the cost basis. And remember, the value of your own labor is not part of the home's cost basis. This is your sweat equity!

Also, if you rented or used the property for business since May 7, 1997 (the date these rules went into effect) and you were entitled to claim depreciation on the home since that date, any of the gain attributable to that depreciation isn't eligible for the exclusion. This is called "depreciation recapture," and the portion of the gain attributable to the prior depreciation deductions is taxable—even if you are entitled to the exclusion. Generally, depreciation recapture gain is taxed at a flat 25% federal tax. Table 2.1 is a template for calculating your gain.

Table 2.1 **Sale of Main Residence—Gain Realized**

Selling price of old home	______	______
Less selling expenses[1]	______	______
Amount realized on sale	______	0
Cost basis of old home	______	______
Value of home improvements	______	______
Adjusted cost basis of old home	______	0
Gain realized on sale of old home	______	0
Exclusion[2,3]	______	______
Taxable gain	______	**0**

1. Selling expenses include commissions, advertising, most closing costs, legal fees and points paid by the seller.
2. $250,000 individual, $500,000 joint return.
3. Homeowners who fail to meet the two-year ownership or use requirements, or who have claimed the exclusion in the prior two years because of circumstances such as a change in place of employment, health, or unforeseen circumstances, are eligiblie for a partial exclusion, based on how long the home was owned and used as a principal residence.

Ed Smith, Physician and Home Renovator

I have completed two projects in Laguna Beach, California. I love old cottages and like to see them preserved instead of torn down, which is what is happening all over this once beautiful beach town.

I purchased Project #1 for $360,000 by exhausting every source of money I could get my hands on for the down payment. It was an emotional buy. The 1,200-square-foot cottage sat on a 7,500-square-foot lot with beautiful views of the ocean, but it was a total wreck! I bought it in December 1992 and sold it in December 1998 (yes, just prior to the great real estate boom, when everything here went up 30% in 1999).

I put a lot of sweat into this house, landscaping the yards, slowly remodeling every room, and expanding the kitchen. I put a total of $150,000 into the project and sold the house to move to Europe in 1998 for $650,000. The house was not touched by the new owners, who then sold it for $925,000 in 2001.

The current owner is an interior designer, and the house was featured in a 10-page spread in the April 2003 issue of *Country Home*.

I learned a ton on this project about painters, redoing hardwood floors, and working with different stones for the bathrooms and kitchen. My brother was a

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contractor, and he lived with me at the beginning and did a lot of the work in exchange for rent.

Project #2 was much cleaner and quicker and very intentional. Upon returning from Europe, I purchased a 900-square-foot cottage in the same neighborhood as my first project (just above it, in fact) for the amazing price of $370,000. I partnered with a friend who was a designer in Los Angeles. We tore the place apart and put in French doors to access the back yard, turned a porch into part of the living room, installed an entire new IKEA kitchen, redid the hardwood floors, put in a driveway, and used brick to landscape (including fountains) in the back. The total invested in the renovation was $90,000. I sold the house by myself in two weeks for $670,000 . . . a very successful project that gained me more than $200,000 (on which I paid no capital gains tax!).

I'm currently living in another cottage. A close friend of mine with breast cancer was not doing well, and she was just finishing a beautiful cottage that she totally remodeled, adding 800 square feet to it. I helped her through her dying process and then purchased the house from her brothers. I have returned to private practice. I am a family physician who would prefer to renovate and flip (that is, sell) houses, but I'm financially stuck at the moment. Laguna Beach is a funny homes market right now. Everything is very expensive, although I do think there are projects out there. You would probably need to purchase a house for $800,000, put $300,000 into it, and then try to sell for $1.3 million or so. There are no little cottages left and nothing for under $600,000.

So I am sitting tight for a while, but it's in my blood. I can't wait for another chance.

Lessons Learned

1. KISS—yeah, the old "keep it simple, stupid." You do not have to spend a ton of money to help a property if you just do the right things. Stick with basic paint colors and do not do expensive, personalized details that a new buyer may not like.
2. Have a very explicit blueprint that shows every lighting fixture, electrical outlet, and every other small detail that you plan: types of switches (e.g., dimmer switches) should be specified, as should the location of phone lines and cable outlets.

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3. Review this blueprint with every subcontractor and set time frames. Be very explicit regarding when the jobs should start and end, and have the subcontractors sign a contract that will cost them money for every day they are late in finishing your job.
4. Good painters are tough to find. Get a very strong recommendation from someone you trust.
5. Have all subcontractors sign a contract stating they will obtain their own permits and arrange for their own inspections . . . these procedures can be a nightmare.
6. On a remodel, always have the electrician specify the amount of drywall demolition that will be required to put in the new electric.
7. Always have plumbers draw and sign a routing map showing the location of new pipes when they give you their bid. Miscommunication can be costly.
8. Finish hardwood floors last . . . the subcontractors and appliance installers will almost *always* scratch your new floors.
9. If you paint after your floors are done, make very sure that the painter has completely covered the floors or you will find paint on them.

Tax FAQs

What if I used the home for less than two years?

In this case, you need to see if you are ineligible for *any* exclusion because the ownership and use tests were not met, or you had recently claimed the exclusion on a previous sale, or whether you are eligible to *prorate* the exclusion. If you meet the requirements for a prorated exclusion, you compare the lower, prorated maximum exclusion amount to the realized gain to see if your gain is fully excluded. You do not prorate the gain itself. Generally, you can claim a prorated exclusion if one of the following three conditions is met:

1. You sold because of a change in your job location.
2. You sold because of health issues.
3. You sold because of "unforeseen circumstances."

The interpretation of these conditions is the subject of recently issued IRS regulations, and the IRS is granting significant latitude for taxpayers confused about how to interpret the new rules through the transition period that ended on December 26, 2002.

In fact, if you think you qualify for the exclusion based on the new guidelines for homes sold since 2000 and you already paid tax on the gain, you may be entitled to amend your tax return to exclude the gain and claim a refund.[9]

What if the property was rented during the five-year period?

If you rented your property to someone else during the five-year period prior to sale, you still need to meet the two-out-of-five-years ownership and use tests to exclude the gain. Therefore, you generally cannot rent for more than three years prior to sale and have assurance the full exclusion applies to you. Additionally, you'll need to adjust your calculation of excludable versus taxable gain for any depreciation deductions in prior years since May 7, 1997. Depreciation deductions are recaptured when the home is sold, and the gain up to the prior depreciation is generally taxable as a flat 25% federal tax.

What if I used part of the home for business?

If you use your property partly as a main home and partly for business (e.g., as a home office, a storefront office, or farm land), then only that portion of the gain relating to the main home may be excluded. The total gain was prorated between the business portion and the primary residence portion. The business portion of the gain was taxable, and the personal portion would be eligible for the exclusion. However, based on new IRS regulations, there are circumstances (such as the home office example) that allow you to exclude the entire gain—no proration is necessary. However, if you have deducted depreciation costs since 1997, you will have to pay tax on that portion of the gain.

What if I own more than one property at the time of sale?

Only your "main home" is eligible for the gain exclusion, and the one considered your "main home" during the two-year qualifying period. Your main home is generally the home you live in most of the time. Look at the criteria listed in the Use Test section earlier in this chapter to help you determine which property the IRS will consider your "main home."

What if I sell the home due to divorce or separation?

If you transfer the title to the home to your spouse or former spouse as a result of divorce or separation, you generally do not have any gain or loss. This holds true even if you receive cash or other property in exchange. Transactions between spouses generally do not result in taxable gain or loss.[10] If you sell the property to a third party because of divorce or separation, apply the general rules of the ownership and use tests to see if the gain can be excluded. Both you and your ex-spouse must meet the use test to exclude the full $500,000. The sale of a home due to divorce or separation is one of the specified "unforeseen circumstances" permitting for a reduced exclusion amount if the two-year use or ownership test is not met.

What if the home was vacant while I renovated?

If the property was vacant, you may need to allow additional time after moving in to meet the use test before selling the property. Periods of vacancy generally cannot be counted toward use.

What if the home is outside the United States?

There is no requirement that the main home be located within the United States to take advantage of the exclusion. If both the ownership and use tests are met for a main home located in another country, the gain on the sale of a foreign home is eligible for the exclusion (again provided the exclusion had not been claimed in the previous two years). However, there are two important considerations. First, the U.S. tax computations are made in U.S. currency, so any changes in foreign-currency exchange rates from purchase to sales dates will affect the calculation of realized gain. The cost basis is calculated in dollars at the rate of exchange in effect on the date of purchase (and dates of improvements), and the sales price is calculated in U.S. dollars at the rate of exchange in effect on the date of sale. Thus a portion of the gain is simply attributable to shifts in exchange rates.

Second, if you took out a mortgage in foreign currency to purchase your main home outside the United States, you potentially have a *separate taxable ordinary gain* or nondeductible loss arising from the payoff of the foreign-currency mortgage. This is caused by a shift in foreign-currency exchange rates between the date you took out the mortgage and the date you paid it off. If the exchange rates shifted so that you are paying off the mortgage with "cheaper dollars," you have a taxable ordinary gain. If the rates shifted against you so that you are paying off the mortgage with "more expensive" dollars, then no loss is allowed.[11]

What if I sold a previous home prior to 1997 and deferred the prior tax gain by replacing the old home with my current main home?

If you sold a home prior to May 7, 1997, and "deferred" the gain by replacing the home with your current home, the cost basis of your existing home is *reduced* by the amount of the deferred gain. This will increase the computed gain that is compared to your maximum exclusion to determine how much is taxable. You will need to add any prior deferred gain to the basic gain calculation to see if the entire gain is excludable.

What if I sell the home at a loss?

If market conditions at the time of your home sale are so bad that you realize a loss on the sale, it will not be deductible because the home is your principal residence (vs. a business or investment property). Capital losses realized on the sale of a principal residence are not deductible because the property is not held primarily for investment—it is your main home. This is the flip side of the tax coin and is consistent with the rule excluding the gain.

However, with planning, the loss could be deductible. The key is converting the home to "property held for investment or business" before selling it. Losses from the sale of business or investment property are generally allowed as a capital loss. Your moving out of the home and renting it for an extended period prior to sale would generally be evidence that the property is business property. Additionally, you can take steps contrary with the use-test factors we described (switch your mail, put the utilities in the name of a third party, move out your personal furniture) *and* either rent the property or use it for other business purposes as evidence of your intent to hold the property for business purposes. There is no hard-and-fast rule as to how long you must rent the property before selling it to demonstrate your intent to convert the home to business property, but at least one year is probably reasonable. In any event, your primary purpose in holding the property must be for the production of profit. If you plan ahead of the sale date, you may be able to take advantage of the loss.

What if I have sold another home within the prior two-year period?

If you already sold a home within the last two years and excluded any of that gain, the prior sale will generally preclude you from excluding the gain from the sale of your new main home. You can still claim a reduced maximum exclusion if you can show that your primary reason for selling the new home is one of the three allowable—change in job location, health issues, or unforeseen circumstances.

Can I count sweat equity in my cost basis?

Sorry, but only the amounts you pay for the original purchase; to third-party contractors; and for building materials, equipment-rental fees, and other out-of-pocket expenses can be added to your cost basis when computing your taxable gain. You cannot add the value of your labor hours—your renovation sweat equity—to the cost basis. Of course, that's what this book is all about, right? Creating tax-free value through sweat equity!

Notes

1. We think that most of our renovating readers will be married and typically will file their return using the IRS status Married filing jointly.

2. This includes taxpayers using the filing status (1) Single, (2) Married filing separately, and (3) Head of household.

3. For these purposes, "Uncle Sam" refers to both federal and state tax authorities.

4. The IRC Section 121 laws were substantially rewritten in 1997. Prior to that date, the tax on gains from home sales was *deferred* if a new home was purchased within a two-year period of the old home sales date but were not *excluded* in most cases. Also prior to 1997, only taxpayers over age 55 could *exclude* profits from the sale of a main home from tax liability, and the exclusion was limited to $125,000. Post-1997, there no longer is a requirement to replace the main home in order to take advantage of the new exclusion tax break. The effective date for most of the new rules is May 7, 1997.

5. The IRS issued final regulations for Section 121 on December 26, 2002.

6. This maximum exclusion is $250,000 if you use one of the following tax statuses to file your tax return: Single, Married filing separately, or Head of household.

7. If you owned the home for one year or less, the capital gain is treated as short term. Short-term gains are not eligible for the special 20% capital gains tax rate.

8. If you are a nonresident alien selling U.S. real estate, certain withholding-tax requirements exist to ensure that the transaction is reported for U.S. tax purposes—either a 10% withholding tax is collected on the *gross proceeds of the sale,* or the estimated income tax determined by computing the taxable gain (after deducting the cost basis) is collected. To avoid the withholding tax, nonresident alien sellers of U.S. real estate can apply to the IRS for special exemption certificates prior to the sale date. You are potentially a U.S. nonresident alien taxpayer if on the date of sale you are not a U.S. citizen, do not hold a U.S. green card, and have been in the United States less than 183 days during the year. If you think this situation applies to you, see a qualified tax adviser *prior to sale* to map out a tax plan to avoid having taxes withheld on the home-sale proceeds.

9. There is generally a three-year deadline for claiming a tax refund on an amended return.

10. If your spouse is a nonresident alien at the time of transfer, there may be a recognized gain or loss. See your tax adviser for details.

11. IRC Section 988.

Chapter 3

Creating a Home Renovation Strategy

There are four primary ways you can make a significant profit on the sale of a home:

1. Purchase it for less than its market value (see Chapter 5).
2. Complete renovations that add more value to the home than the renovations themselves cost (see Chapters 7 through 9).
3. Sell it for a high price (see Chapter 5).
4. Through general market appreciation (see Chapter 5).

The combination of these four factors is what your home renovation strategy should be based upon. That is, you should look for homes that are a good deal, concentrate your renovation efforts on those areas that can add significant value to a home (from a buyer's perspective), buy only in an area that is appreciating in value, and make sure that you've done everything possibly to add "curb appeal" to your home prior to putting it on the market. If you do your homework, follow these general guidelines, and stick to your plan, you'll end up with a home that has significantly increased in value.

The basic formula for creating a profit on a renovated home is:

Net sale price after closing costs – (purchase price including closing costs + renovation costs) = profit

A more detailed formula includes the following components:

Sale price (purchase price + value of renovations + market appreciation) – (purchase and sale closing costs) = net sale price – purchase price = profit

The variable that is outside of your control is market appreciation. Values in the housing market can increase, stay the same, or even decrease. Based upon the second formula, you may want to play around with different scenarios and create examples that are: (1) optimistic, (2) realistic, and (3) pessimistic. This way, you can get a feel for the effect of different situations, such as a housing market that suddenly shows a 10% decline in average sale prices.

To illustrate how our simple, four-factor formula can work, in this chapter we present three detailed case studies of home renovations done by the authors. We also present two brief descriptions of the "ones that got away."

Our Home Renovation Story

Over the past 10 years we have renovated three homes. Actually, I (Mike) renovated the first two homes before we were married. I have always been interested in home design, and early in life thought I wanted to be an architect (before I realized how much math is involved!). I had also been building and refinishing furniture since I was about 10. I caught the renovation/builder bug in seventh-grade shop class, where instead of making the standard chessboard or birdhouse I built a dry sink (a freestanding cabinet with doors) from a set of plans purchased by my father that had been sitting in his tool chest for more than a decade. The dry sink turned out very well, I got an A+ in shop, and the piece still proudly sits in my parents' foyer. So the idea of renovating homes came easily to me. I had the interest and some of the basic skills.

Ours was a home renovation marriage made in heaven because Teresa had studied interior design and architecture at a noted school in Chicago (a "second career" move she made in her early thirties). We've made many mistakes over the years, but we've always managed to come out ahead. In these pages, we'll present the detailed descriptions of our three home renovations in order to give you some idea of what to expect if you decide to begin renovating homes. It can be an extremely rewarding experience at many levels (creatively, physically, and financially), but at the end of the day, a home renovation should be approached as a business, with the goal of maximizing profits. That way, you'll bring a critical eye and mind to the many decisions you will face during the renovation process.

Home Renovation #1

Location: Washington, D.C.

Home type: Top-floor condominium (1,100 square feet) in a four-unit townhouse built in 1905.

Ownership period: 2.5 years.

Purchase price: $135,000.

Financing: Loan from parents ($0 down, 8.5% interest).

Cost of renovations: $40,000.

Duration of major renovations: six months.

Sweat equity (estimated): 300 hours.

Sale price: $270,000.

Purchase and sale closing costs: $20,000.

Net profit: $75,000.

Figure 3.1 **Exterior, Washington, D.C., condominium**

When I began looking for a place to buy in Washington, D.C., I had already lived in the city for approximately ten years. I had rented in various sections of the city including Georgetown, Dupont Circle, and Adams Morgan, and these were the areas where I looked for an apartment to buy. A friend of mine was my real estate agent. I looked at more than a dozen condominiums before choosing one on Biltmore Street (see Figure 3.1). The first time I saw the condo, I did not like it at all. It had very small rooms and was dark. But the more I thought about the space and listed its good points, the more I began to realize that I could renovate it into an extraordinary place to live.

To begin with, it had many of the basics going for it. It was on the top floor (I always hate people walking over my head!); it had nice "bones" (hardwood floors, solid moldings, a large skylight over the entranceway, and a private roof deck); it had other positive features such as parking and location on a good street; and it was one of only four condos in a historic, Federal-style townhouse. Once I began my detailed planning on how to transform the condo, I felt that the space could easily be opened up for more of a loftlike feeling (I made sure at this point that I could remove walls that were not load-bearing). In addition, I found out that the condo had been on the market for more than six months (the housing market was down, and it did not show well) and that the seller was motivated (he'd recently dropped the price from $180,000 to $165,000). I found out how much he had paid for the condo ($125,000) and then calculated what he'd need to sell it for to break even (after real estate broker and other closing costs). The seller had not made any significant renovations to the condo during the time he owned it. I then made an offer—$135,000— based upon this calculation, and he accepted it.

One issue I paid close attention to was the condominium owners' association documents (i.e., the rules and regulations for how the condo association managed its affairs). What I learned by reviewing them was that I would need to get permission from the owners of the other condos to do any major renovations on the condo I was purchasing. To ensure that I would not be limited in what I could do to my condo from a renovation perspective, I put a contingency in my purchase contract stating that each owner in the association had to sign a waiver allowing me to make any changes to the interior of my condo I wanted. This put pressure on the seller to get the waiver signed, which he did.

In addition, before we closed, I had the apartment inspected and I had three contractors provide written estimates for the work I wanted to accomplish. I thereby knew whether there were any problems with the condo or the building and what the renovations would cost me. I did make a mistake at this point, however. For some reason, I had decided that I'd finish the major renovations on the living room, dining room, and kitchen before I did the bathrooms. This turned out to be a big mistake. I should have done all the renovations at the same time, because I ended up moving into the condo after the "Phase I" renovations and then had to live in a construction zone while the "Phase II" renovations were being carried out on the bathrooms. Plus, my contractor had to take out and replace my toilet something like 41 times so I could use it when I woke up in the morning! (I took showers at my health club for almost two months.)

Lesson Learned: Carefully consider the impact of home renovations on your day-to-day life. It is probably a good idea to tackle all major renovations concurrently if possible so you're not living in a construction zone for long periods of time. In addition, you may need to move out of (or not move into) your home while major renovations are being done.

Two of the three "Phase I" contractor bids came in at approximately $25,000 and the third bid came in at $13,000. I went with the lower bid even though I knew that I might run into some trouble with the contractor (he seemed to do this type of work "on the side," not full-time). This turned out to be a good decision until the very end of the project. The contractor did an excellent job on the demolition and installing the new walls, a cathedral ceiling, new electrical wiring, a new bedroom closet, and the rough-in work on the new kitchen. When he began laying a new subfloor in the kitchen, he found a major problem: The refrigerator had been leaking for a long time and one of the major beams supporting the floor had rotted. The unanticipated repair cost to fix this problem was $1,000 (which, luckily for me, had to be paid for by the condo association because it involved a structural part of the building!).

> **Lesson Learned:** Once you start tearing things apart during a renovation, you almost always encounter hidden problems that need to be addressed. So budget for it—say an additional 5% to 10% of the contractor's original estimate.

The contractor started having problems when he began installing the kitchen cabinets, appliances, and tile floor. He made some mistakes and began to grumble about the fact that he underbid the job. This led to some major delays in finishing it, plus he tried to get me to pay an additional 10% over his bid price for "taxes." This was not part of the original bid, so I refused to pay it. This argument over money eventually led to my having to fire the contractor, which was not a pleasant thing to do. In the end, I felt that I got a lot of value for the money I paid this contractor, but I then had to find someone else to finish the job.

Luckily, I found a wonderful replacement. He was referred to me by a friend (one of the best ways to find a good contractor). A trained electrical engineer, he was meticulous and a perfectionist (two key attributes of a good contractor). This is very important to someone like me, who can easily see mistakes in workmanship (over time, they can really drive you crazy!). The replacement contractor was not cheap, but he finished the Phase I renovations to my complete satisfaction.

> **Lesson Learned:** In addition to considering the cost of your renovations, make sure you check out your contractor. Get references and follow through on them (see Chapter 10 for questions to ask a contractor and his or her references).

The Phase I renovation transformed the condo from a dark place with a closed-in feeling to a loftlike, open, and bright environment (see Figures 3.2 and 3.3). The open floor plan now included the condo's entranceway, a kitchen, and a large living/dining

Figure 3.2 Interior entryway before renovation

Figure 3.3 Spacious and light entryway after wall removal

room. The key to this transformation was the installation of the cathedral ceiling (which extended into the attic space above the condo, which I owned). The height of the ceiling in the living/dining room went from 9 feet to 15 feet. I also found a very nice brick wall under plaster on one end of the room that I exposed, cleaned, and sealed. This wall added a lot of charm and warmth to the room.

Lesson Learned: With older properties, expect to find some interesting feature (such as a brick wall or beautiful molding under layers of paint) that can be incorporated into your renovation design on the fly. Also, think about underutilized spaces (e.g., attic, closets, etc.) that can be opened up as part of your design.

As I mentioned, I got involved in the Phase I renovation myself by exposing (breaking off the plaster with a small sledgehammer), cleaning, and sealing the brick wall. I also spent a lot of time stripping all of the window and floorboard moldings with a heat gun (removing more than 80 years' worth of paint) and preparing them for repainting. I then sanded the hardwood floors myself and refinished them. These activities were time consuming but very easy to accomplish.

Lesson Learned: Don't pay a contractor to do time-consuming but low-skill renovation activities; they often charge up to $80 an hour. Either do them yourself or hire a semiskilled worker for $10 to $20 an hour to accomplish these tasks.

When it came to choosing kitchen cabinets, a countertop, the kitchen floor, and paint colors for the walls, molding, and so forth, I ended up hiring an interior designer. I met the designer at an architectural antique/salvage warehouse where she worked part-time (I was buying old doors, lighting fixtures, cut-glass windows, etc.). She turned out to be worth every dollar of her $35-an-hour fee. It is not easy to visualize how various wall colors will work together or how the color of kitchen cabinets will go with a countertop or tile floor. She was able to come up with a composition that really worked. We talked a lot about the type of atmosphere I was trying to create, and she worked up a plan from there. Having lived in rental apartments my whole adult life, I was really sick of white walls and wanted color, but the overall effect I was looking for was one of bright-ness and warmth. One of the really cool things she came up with was covering the moldings around the three large windows at the front of the condo with subtle gold dust. She first sprayed glue on the surface of the moldings and then used a small brush to dab the gold dust onto the moldings. It created an effect of richness and warmth. She also used a ragging technique to paint the walls of the master bedroom a warm yellow color that resembled what you might see on the inside of a Tuscan farmhouse. And finally, she chose a rust color for the baseboard moldings that I never would have thought of but that really worked.

Lesson Learned: Unless you have a "designer's eye," it may be a good idea to hire an interior designer to help you decide on a color scheme and make sure that everything you're doing "works together." But remember—for resale purposes, keep it relatively neutral and do not spend a lot of money on special painting techniques or wild designs. You may like them, but prospective buyers may not.

When I purchased the condo, it had one bathroom. I wanted to add a second bathroom so that there would be a master bath and a guest bath (both for convenience and for resale purposes). The problem I faced was that there really was no room for a full second bath. What I came up with, which I was very proud of, was a shared shower with two mirrored doors that could be entered from both bathrooms. So the master bath had a bathtub with a shower head plus access to a stand-alone shower stall (which I prefer), and the guest bath had a shower. The guest bath was very small (with a charming antique corner sink) but extremely functional. My Phase II contractor did an excellent job, but (as I said before) living without a bathroom in a construction zone was not pleasant. A huge snowstorm also hit Washington, D.C., during Phase II, so the work was delayed another three weeks.

Lesson Learned: If you're living in a home while major construction is being done, be sure to seal off the construction zone with plastic to keep down the dust and cover all floors that will be walked on by the workers with paper. It is also a good idea to move breakable items from the workers' path and place cardboard or plywood on surfaces that could be scratched or otherwise damaged.

I mentioned the architectural antique/salvage warehouse. Businesses like this one get their stuff primarily by buying the architectural fixtures of a house or building before it is demolished. They strip out all of the windows, doors, heating units, fixtures, bathtubs, toilets, sinks, and so forth, that they think someone may want. It is a lot of fun to rummage around in these warehouses because it feels almost like a treasure hunt. I found a number of very interesting items for my condo that I believe added a great deal to the value of the property. I did, however, learn a few lessons. When I was converting the single bathroom into two baths, I sold one of these warehouses a claw-foot tub and pedestal sink that were too large for my new bathroom spaces. They gave me $500 for the tub and sink. Later, when I was visiting the warehouse, I noticed that my tub had been sold for $2,000! I also sold this store a set of brass wall sconces that I thought that I wanted to replace with a different design. About six months later, when I was ready to put up new sconces, I repurchased the exact same sconces, reconditioned. (I actually did not realize this at the time because they looked so different from when I last saw them, but a photo I took of the old sconces confirmed it.) This little mistake cost me about $300.

Lesson Learned: Get a few quotes on your architectural treasures before you sell them. Selling this type of thing is quite a business these days, so you will likely find several architectural antique/salvage warehouses in your area.

Finally, once the renovations to my condo were complete, I turned my attention to the condition of the townhouse itself (thinking about curb appeal). My first task was to get myself appointed the president of the condo association (which was easy because nobody else wanted the job!). I then put together a plan for fixing up and updating the building, garden, and other shared spaces. Most of this work I did myself, using money in the association's fund to pay for the supplies. I fixed the concrete on the front steps and walkway leading up to the townhouse where it was cracked; bought and had installed a new common mailbox for all four units; painted the entranceway, hallways, and front doors to each unit; fixed the outside stair railings, which were rusted; and installed new carpet in the common hallways. All of these renovations cost the condo association only about $1,500 (not counting my time—about 20 hours). The building was transformed into a clean, updated environment that I believe added a great deal to the condo's perceived value, thus helping me sell it at a higher price.

I have to conclude with a sad but important story. To keep our insurance on the building after an inspection by our insurer, we needed to repair the wooden porches on the back of the building, which had rotted in some places. I hired my contractor to do the work for the association. One of his workers fell off a second-story deck and was killed. The worker's family sued the condo association for a large amount, larger than what our liability insurance would cover. In the end, our insurance company did settle with the worker's family for an amount covered by our policy. In addition to our sadness over the tragedy itself, the lawsuit kept us up many nights and also prevented us from selling our units (since a sale would not occur with a lawsuit pending). We were even interviewed by the U.S. Occupational Safety and Health Administration (OSHA). OSHA's position was that we were ultimately responsible for the safety of people working on our property, even though our contractor was licensed and insured. Not knowing this, we hadn't checked with our contractor to make sure he was providing his workers with adequate safety equipment and using appropriate safety procedures.

Lesson Learned: Make sure that your contractor is licensed and insured. Find out the limit of his or her insurance liability policy. Make sure you address worker safety with your contractor and be sure you have an adequate liability policy on your property.

When I decided to sell the property two years later, I put it on the market for $290,000 and sold it within two weeks for $280,000. One complication came out of the inspection done by the prospective buyer. The inspector found a few building-related items that needed to be dealt with by the condo association. I had to draw up a letter to the condo members listing these items and ask them to sign a document stating that the association would address these issues during the next year. Luckily for me, these were not high-cost items, and all the condo members signed the document.

Lesson Learned: Any time you buy a condo or cooperative (co-op) or move to a community with an association, be aware of just what you're getting into. Ask for and carefully review the pertinent association documents. These bodies often place restrictions on what you can and cannot do (for example, may be able to block changes you want to make to your unit or even prevent the sale of your property if they don't like the new potential owner), and they have their own peculiar politics.

Figure 3.4 **Historic West Virginia farmhouse**

Home Renovation #2

Location: Wardensville, West Virginia (90 miles west of Washington, D.C.).

Home type: Historic (circa 1778) farmhouse (2,500 square feet) on 25 acres (see Figure 3.4).

Ownership period: 2.5 years.

Purchase price: $142,000.

Financing: Owner financed ($5,000 down, 8.5% interest).

Cost of renovations: $2,000.

Duration of major renovations: Three months.

Sweat equity (estimated): 150 hours.

Sale price: $180,000.

Purchase and sale closing costs: $13,000.

Net profit: $23,000.

I have to admit that the primary motivation behind the purchase of the farmhouse was not to renovate the property and sell it for a profit. But I approached the acquisition and the improvements I ultimately made to the property with the same attention to detail I had applied to the Washington, D.C., condo. My true motivation was that I had always wanted to own a historic property, and for years, when I lived in Washington D.C., I would review the "Historic Properties and Estates" section of the classified ads. Sometimes I'd get in my car and go look at the listed properties. One day I came across a listing for a historic farmhouse on 10 acres in Wardensville, West Virginia. I had no idea where that was, but when I called the real estate agent he assured me that it was only 90 miles from downtown D.C. He then faxed me a 10-page description of the property that included a paragraph from a book on the history of the area stating that George Washington had stayed on the property back in the 1750s. As it turned out, the house was built on the foundation of a fort where Washington stayed when he was a surveyor. Today, the farm property abuts the George Washington National Forest.

The description seemed too good to be true. The farmhouse was 2,500 square feet on four floors, built out of rough-hewn limestone (the walls are two feet thick), with hand-hewn pine floors, beams, and walls. It was built in 1778 (just two years after the Declaration of Independence) by a Swedish immigrant who farmed and raised cattle on more than a hundred acres. The house had three large stone fireplaces, two bathrooms, a large deck off the second floor, a screened-in porch on the first floor, and it overlooked a trout stream with a screened gazebo resting 10 feet from its bank. And the asking price was $150,000! Hmm, I said, I have to see this. So I drove out to West Virginia, and, indeed, it was 90 miles from the city and was everything described in the materials. I came to find out that the reasons for the low price were the West Virginia location (much less expensive than Virginia) and the fact that only a certain type of person, who's interested in preserving a historic house, would want to buy such a place.

> **Lesson Learned:** Be very careful if you purchase a unique or historic property. It may be a very difficult property to resell, and from a renovation perspective, there may be restrictions on what you can do to the house (especially if the home is located in a historic district or is on the National Historic Register).

I did my research and found out that the asking price was essentially what the owner had paid for the property three years earlier but that he was having difficulty selling it. He was a commercial builder based in D.C., and he had made a number of improvements (including installing a new heating system) to the house. Also, he sent construction crews to the house on free days, and they did a lot of restoration work (for example, they stripped paint off the wood ceilings and returned them to their natural appearance). He also upgraded the house's water system. The water was pumped directly from a fresh spring on the property. I had the water checked before buying the place and it was perfect . . . no treatment of any type was required.

I offered to buy the house and 10 acres for $125,000, with a two-year option to purchase the other 15-acre parcel of land for $17,000. Also, I wanted the owner to finance $120,000 of the purchase (at an 8.5% interest rate, payable monthly) for two years (I'd make a balloon payment of $120,000 at the end of the two-year period). He accepted my offer, so I essentially bought the farm for $5,000 down and a monthly payment of around $850. The really great thing about this purchase is that I moved my primary residency to the farm from D.C., thus reducing my state income tax by 5% and significantly cutting my car and other insurance rates. Based upon my calculations, these reductions more than covered my monthly mortgage payments . . . so the farmhouse was free!

When I began to tackle renovation tasks, my goal was to return the farm, as much as possible, to its original condition. I considered applying to have it designated a historic property by the National Trust for Historic Preservation, but I found out that this official designation has a number of constraints attached to it that might seriously hinder its resale. I began by focusing on the kitchen area, which was at some point—probably in the 1960s—renovated into a modern kitchen. This area was originally the animal stable—a common element of homes from this period. I decided not to reintroduce this concept to the house(!), but I did tear out a lot of poor-quality work and opened up the kitchen area so more light could diffuse throughout the space. Also, the washer and dryer were in the front of the kitchen by the windows, and there was a huge hot tub in the large bathroom at the back of the kitchen. I took out the hot tub and moved the washer and dryer to its place. I had to pay a plumber/electrician to do some of this work because I was working with 220-volt connections. They scare me because of the powerful shock you can get from them. I then built a large island for the kitchen that increased the working counterspace 100% and provided a natural gathering place for guests while meals were being prepared. Beyond that, I waxed and polished the interior floors and walls and generally cleaned up the interior. Because most of it was in its original condition (i.e., exposed stone walls, original glazing, etc.) I did not want or need to make any significant changes.

Next I focused on the exterior of the house. I filled in cracks in mortar and painted the porches and all of the clapboard. Some of the boards had rotted, so I took them out and replaced them. I had gutters placed on the roof to redirect water away from the foundation.

I then began working on the yard. It was in decent shape, but it was a grass front yard with no definition or comfortable outdoor space for gathering or relaxing. With the rushing creek not 25 yards from the front of the house, I knew I wanted it to be the focus of the changes to the yard. About the time I was thinking about what to do, I met a man from town who told me he had a large pile of cut limestone in his backyard that matched my farmhouse (the stone must have come from the same quarry). I went over for a look and bought the pile for $300. I moved the entire pile using my new (actually, used 1982 Ford F150) pickup truck.

Lesson Learned: You need a truck to take on any significant home renovation project. My current truck is a 1991 Ford F150 with an eight-foot bed that can accommodate a full sheet of four-by-eight-foot plywood. Trucks like this are relatively inexpensive ($2,000 to $5,000) and more than pay for themselves in a short time.

Some of the limestone blocks were two feet long and one foot thick and required a bucket loader to put on the truck and pile at the farm (to be used for later projects). I first built a flower planter running the length of the house, using small-cut limestone as the edging. I then used the stones to build a circular wall around a water-drainage hole that went under a driveway/parking area near the house. I moved the parking area across the street and had a crushed stone parking lot built. (Twice while I was parking on the grass, field mice made a nest in my car's heater fan, which cost me a bundle to fix each time.)

The major landscaping project I undertook was to build a patio area stretching from the house to the gazebo. I had to cut into a steep hill to build the patio, and I dug this out completely by hand using a pickax, a shovel and a wheelbarrow. I wanted to do it this way to get in shape, and I also felt like doing it the old-fashioned way because that is the way they would have done it in 1778! So I dug, and dug, and dug. At one point I was using the pickax and hit what I thought was a large stone. I tried to dig around it but this proved difficult. Upon further digging it seemed to be an almost perfect circle. I kept digging and sure enough, it turned out to be a large millstone (at first I thought it was a wheel from the Flintstones' car). I cleaned it up and proudly placed it in the house (another interesting yet unexpected find!).

In the end, it took me about two months on weekends to dig out the area, but it was satisfying work. I even dumped all of the dirt and stones down the side of the creek and extended the yard by about five feet. I then rented a tractor with a bucket loader and a shovel and began building the patio wall using the large limestone I had bought (see Figures 3.5 and 3.6). This was definitely a two-person job, and a friend came out to help me. We worked all weekend and build a beautiful retaining wall. We put crushed stone down on the patio floor, followed by sand, and then slate squares. The patio turned out perfectly, and it really matched the home because we used the old cut limestone blocks.

Figure 3.5 **Mike, at ease on a rented tractor with bucket loader**

Figure 3.6 **Patio area under construction**

Lesson Learned: To the extent possible, and to preserve the architectural and aesthetic integrity of your home, try to match the materials you're using during a renovation to the original materials used to build the house. In other words, you wouldn't want to put a stucco addition onto a clapboard colonial home.

When I decided to sell the farm (actually I got married, moved to New York City, and . . . you get the picture) I initially set the price very high ($250,000), thinking I could market it as a weekend estate to people living in Washington, D.C. This was at the height of the dot.com era, so my logic was not all bad. But, as it turned out, this was not a very good strategy. The property was just too remote for people looking for weekend estate properties, and the "original condition" of most of the house did not include many of the creature comforts people look for in weekend estate properties. So I reduced the price to $199,000 and sold it within two months for $180,000 to a George Washington University anthropology professor (a dream come true for him—there was some cosmic synergy going on there!).

Home Renovation #3

Location: Sonoma, California.

Home type: Small one-story house (1,315 square feet) on two acres, built in 1951 (see Figure 3.7).

Figure 3.7 **Exterior, Sonoma house**

Ownership period: September 2002 to present.

Purchase price: $630,000.

Financing: 100% bank financed ($0 down, 7.5% interest).

Cost of renovations: $30,000.

Duration of major renovations: Six months.

Sweat equity (estimated): 200 hours (to date).

Current appraised value: $785,000.

Purchase and sale closing costs (estimated): $50,000.

Net profit (estimated): $80,000; $120,000 if we sell the property ourselves.

Potential net profit with master bedroom addition: $200,000.

When Teresa and I moved to San Francisco in April 2001, we spent a number of weekends up in the wine country (Napa and Sonoma). Part of each weekend was spent exploring various towns and areas and looking at real estate so we could get a feel for the market. The real estate market in northern California in 2001 was hyperinflated because of the technology-driven economic boom. Between 1995 and 2001, prices in the Bay Area were appreciating more than 15% annually—in some places, more than 20% annually. We were pretty pessimistic about finding a place to buy that we could afford, but we kept looking for more than a year. We knew that we'd have to luck into a situation where we could negotiate a good price.

After spending a lot of time scouting areas, we decided to focus our efforts on Sonoma. We liked the fact that Sonoma was only 45 minutes from downtown San Francisco, plus the people who lived there seemed to be very nice and unpretentious. We also fell in love the Sonoma's main square, which is ringed by historic buildings, great shops, and excellent restaurants and is the site of many events (such as concerts, fairs, and other community gatherings) during the year, especially during the fall grape harvest. After we had decided which area we were interested in, we found a real estate agent to partner with to find a home.

Lesson Learned: Real estate agents are an invaluable resource, especially when you're buying a home. They can provide you with most of the information you need to ensure that you buy the right home. Make sure that you're crystal clear about what you're looking for, and explain in detail your plans for a home (e.g., you're looking for a fixer-upper and you'll be flipping the house in two years).

The process of finding a home to purchase in Sonoma hardly took any time once we decided upon a specific area and established a good working relationship with our agent. We only looked at about 10 houses before finding the perfect opportunity. The major problem we faced was negotiating a price with which we were comfortable. The home we settled on is 2.5 miles outside the center of Sonoma and sits on two acres on a hillside. It is located on one plateau cut into the hillside, and a pool, deck, and poolhouse sit on a second plateau about 100 yards above the main house.

When we first saw the house, it was in appalling shape from a curb-appeal perspective. The yard was hard-packed dirt with weeds as the only greenery, there were weird stone collections everywhere (including an ersatz mini-Stonehenge), and the exterior of the house was filthy. The only walkway up to the house was a dirt path, and trash and debris were strewn all around the property.

Inside, things were a little better, but it was clear that the owner did not care very much about how the house showed. The positive elements of the property were the land, the basic structural elements of the house (foundation, walls, windows, roof, utility systems, etc.), the pool/deck/poolhouse, and the two bathrooms that the owner had done a beautiful job of remodeling (supposedly at a cost of $70,000). The floors in the house were a bizarre combination of black river rocks, sectioned tree stumps, and mortar. The kitchen was a disaster, with an awkward layout, old appliances, poorly built cabinets, and poorly laid granite tiles on the countertops.

It took a lot of creative imagination to see beyond the house's current condition. But we were able to do this by writing out all of the positives associated with the property in one column, and all of the renovations that needed to be made to the house in another column. We then priced the cost of the renovations to determine the scope of what needed to be done to sell the property for a large profit. Table 3.1 is the spreadsheet we put together to calculate our potential net profit.

Once we determined that the renovations could be done for a reasonable cost, we began researching the history of the property and the current situation of the owner. We found out that from 1995 to 2001 the property had appreciated in value from $300,000 to its original listing with the current owner of $750,000. But because the property did not show well, its price was reduced from $750,000 to $699,000 after three months on the market. Also, we found out that the current owner had paid cash ($500,000) when she bought the property in 1999, had recently been let go by a failing dot.com firm, and had already bought a new house in Santa Barbara.

Using this information, we calculated what the current owner's break-even number would be; that is, the price she paid for the property ($500,000) plus what she put into the property (bathroom improvements for $70,000) plus her closing costs to sell it ($30,000). This number equaled $600,000. We offered $619,000 to give her a small profit, she countered with $630,000, and we accepted this price. Our real estate agent thought there was little chance she'd accept such a low price ("This just doesn't happen in Sonoma these days . . . properties either sell for the asking price or even get more than the asking price because of multiple competing offers"). But we had a feeling that the owner just wanted to get out from underneath the property and get on with her life, and we were right.

One reason we were able to get such a good deal on the property was we were prequalified for a mortgage (because we met certain asset, income, and credit requirements), and the only condition we put on the purchase was a positive home-inspection report. This inspection did uncover some minor problems with the property, and we got the owner to pay us $5,500 to fix them.

We got a 100%, no-points mortgage to purchase the home (the $503,000 first mortgage is at 7.5% and the $126,000 second mortgage is at 8.5%). Many times when borrowing such a large amount of money, you are required to split the loans into two separate

Table 3.1 **Potential Net Profit Spreadsheet for the Sonoma House**

		with Master Bedroom
Purchase price	$630,000	$630,000
Sales price (estimate)	$785,000	$950,000
Gross profit	$155,000	$320,000
RE commission	$39,250	$47,500
$$ improvements	$29,776	$60,000
Other closing costs	$10,000	$5,000
Total costs	$79,026	$112,500
Net profit	$75,974	$207,500
Renovation expenses		
Refrigerator	$1,731	
Range (w/oven)	$2,295	
Dishwasher	$677	
Washer/dryer	$1,103	
Total appliances	$5,806	
Kitchen cabinets	$2,150	
Countertop	$3,500	
Wood floor	$2,450	
Kitchen floor	$1,000	
Carpet	$620	
Landscaping (materials)	$1,000	
Kitchen labor (carpenter)	$7,000	
Miscellaneous hardware	$4,000	
Deck	$2,250	
Total	$29,776	

mortgages. We did this to conserve our cash so that we could use it to make the necessary renovations to the property. While interest rates are higher for this type of loan, we were most concerned with maintaining our savings, and we knew that once we made the improvements to the property we could refinance with a 90% mortgage (the other 10% being the equity value added to the property by executing our renovation strategy). Additionally, the higher our interest payments, the larger our income-tax deduction. So, at the end of the day, we acquired the property for about $8,000 out-of-pocket.

Once we acquired the property, we focused, in sequence, on five renovations:

1. Making one of the bedrooms livable.
2. Landscaping the yard around the main house.
3. Replacing the interior floors (except in the bathrooms).
4. Adding a large wrap-around deck.
5. Renovating the kitchen.

The house has two bedrooms. One of the bedrooms had carpet that smelled like a pet, so we immediately tore this out. This room (which now had a concrete floor) became the in-house work/storage room (we also turned the poolhouse into a woodworking space with a Shopsmith—a combined table saw, drill press, lathe, and disk sander—a workbench, and other tools). The other bedroom was originally painted a dark burgundy color, so we repainted this room (four times!) in a lighter, more neutral color. We also installed a ceiling fan/light and got rid of the existing cheap and ugly ceiling fixture.

We now had a place to sleep, plus we had an interior workspace, so we turned our attention to the yard—specifically, the front yard and walkway/entranceway. As we mentioned, the yard was a disaster. It was compacted dirt with weeds growing everywhere. There were large stones scattered throughout the yard that at one time must have been some sort of rock garden. It took us at least two days to dig up and move all of the stones in the yard. We then bought a heavy-duty rototiller for $10 at a garage sale (and then spent $220 getting it to work) because we calculated that we'd need it to do yard work over an extended period of time (so renting was not a good option). We tilled the yard repeatedly to break up the compacted dirt and to remove all of the small stones and rocks. In the front yard, we prepared the soil for a grass lawn by adding new topsoil, watering, and adding fertilizer.

Next, we reoriented the walkway from the parking area to the house. The original walkway was a dirt path that ran close to a number of very large trees whose exposed roots had to be stepped over. We decided to move the path away from the exposed roots and build an S-curve walkway out of the large, flat stones that we had dug up around the yard. We first laid out the path using Bend-a-Board and then dug it out so we could put down a layer of gravel to form the base of the path. We read a few books on how to construct walkways to ensure that we were doing it right. We laid the stones on the gravel base and then filled in the gaps between them with a layer of sand. On top of the sand we put down a layer of river stones that have a nice color and smooth texture. The path turned out great and its curve helps soften the square shape of the house.

Once the walkway was done, we were able to plant a grass lawn around it. The front yard is relatively small, so this was easy to do (except that every time we put down grass seed, millions of small birds were eating it!). But eventually, after multiple plantings, a nice green yard emerged. Now we could get to into the house without tracking dirt all over the place.

> **Lesson Learned:** Landscaping is relatively easy. It may be backbreaking work at times, but the fundamental tasks do not require much skill. It is an area for a do-it-yourself approach that can add tremendous value to a property for very little cost.

We decided to put hardwood floors in the living room, dining room, and hallway and to carpet the bedrooms for added comfort and appeal. In the kitchen, we installed slate tile. The bathrooms already had very nice slate floors. To begin, we called a couple of companies that specialized in installing hardwood floors to get estimates. They came in at approximately $13,000 for 600 square feet of 3/4-inch maple hardwood. Because the current floors were essentially concrete, a plywood subfloor was required. After reading some books on how to lay hardwood floors and talking with a few builders, we decided to do it ourselves. This turned out to be a very good decision that saved us more than $10,000!

After talking with the experts, we were ready. We were told that the type of floors we were installing, once varnished, repel moisture much better than prefinished hardwood flooring. In addition, we were told to put down a moisture barrier (basically, tar paper) between the subfloor and the hardwood floor and to make sure to leave 1/4 inch at each end of the floor so that the wood could expand without buckling. We visited three wholesale wood-floor providers and purchased the highest grade 3-inch tongue-and-groove maple flooring for $3.50 per square foot. We transported the wood to the house ourselves and stored it there for more than two weeks so it could adjust to the temperature and humidity conditions of the house before we installed it (one of the recommendations of the experts we talked to). During this time, we installed the moisture barrier and plywood subfloor. We nailed the plywood to the cement floor, which turned out to be a major job because there were hundreds of black river rocks scattered throughout the original floor. We ended up having to drill holes into the existing floor with a masonry bit and then pound the masonry nails into the concrete. A mistake we made at this point was not also gluing the plywood subfloor to the existing concrete floor. That way, the finished floor would not creak and crack as much as it does when walked on. Luckily, this is most noticeable in the hallway, and as time goes on, the floor is settling and the creaking is subsiding.

The process of installing the hardwood flooring could not have been easier. We rented a nail gun driven by an air compressor and used this tool to drive nails through the tongue of each board into the subfloor. We used a miter saw to cut the end boards so they stopped 1/4 inch from the walls. The entire floor took approximately 16 hours to lay. We then finish-sanded the floor (with a rented vibrating floor sander), cleaned up all the dust with an off-the-shelf solution, and then applied five coats of clear satin varnish. The floor is beautiful, and we gained a lot of satisfaction by doing it ourselves—plus, we added more than $13,000 in value to the house for less than $3,000.

Lesson Learned: Even if you have not done a particular type of renovation before, you can learn how to do it by reading up on it and by talking with experts. People tend to be very willing to provide guidance and helpful hints when they know you're attempting to do something yourself.

Next, we concentrated our efforts on building a wooden deck around three-quarters of the house. The house has three sets of French doors leading outside to an original concrete patio that encompassed about two-thirds of the house. This concrete was cracked and difficult to keep clean. We felt that by laying a wooden deck over this concrete and extending it around three sides of the house (the fourth side abuts a hillside) we could significantly expand the perceived size of the house (plus, it would allow us and our guests better use of the outdoor space). By adding the deck, we've added 750 square feet of indoor/outdoor living space to the original 1,315 square-foot house. In warm weather, we open the French doors and integrate the outside deck into our living space.

My father came out to Sonoma for a week and helped us build the deck. We talked to an employee at the local hardware store to decide how to build the deck and what materials to use. Because the deck foundation would essentially lie on the ground (or on the existing concrete slabs), we were told to use pressure-treated lumber beneath redwood planks. The wood for the deck cost approximately $2,300, and we completed it in four days. We never did get a quote to have the deck built by professionals, but a conservative guess is that a professional would have charged more than $6,000 for it, including materials. We let the deck weather for two weeks and then applied deck sealer. It looks fantastic and provides multiple areas for lounging and eating outside. We've also begun to incorporate the deck into our larger landscaping plans. For example, we are currently installing a formal garden on the side of the house where we have chairs and lounges on the deck for relaxing. We're planning to build an outdoor fireplace with seating, off the deck on the back of the house. And on the deck in the front of the house, we plan to place planters.

The renovation of the kitchen turned out to be the most costly and time-consuming renovation we tackled. The existing kitchen was off the living/dining room and was closed off by walls. It was a cramped, L-shape configuration with cabinets, counters, and flooring that clearly had not been built and installed by a professional (see Figure 3.8). To make matters worse, the previous owner had placed the washer and dryer in the space directly behind the cooktop, in plain view from the kitchen and hallway. All the appliances were at least 20 years old. Obviously, a total gutting was required. We decided we wanted an open kitchen that would be an integrated part of the living/dining room, thus opening up the living spaces considerably and allowing more light to enter. Our first task was to demolish the existing kitchen, which we did over a three-week period. It was actually fun to work with a sledgehammer and Skilsaw™ (circular saw) to demolish the kitchen and take it down to the studs. We removed the walls separating the kitchen from the other rooms (leaving a half-wall to separate the kitchen from the living room). We were very careful to make sure that all electricity and gas was shut off to the kitchen before we started our demolition.

Figure 3.8 **Sonoma kitchen prior to renovation**

Lesson Learned: While demolition is a dirty job, it is easy and fun to do. It is not worth paying a contractor between \$25 and \$65 an hour to accomplish, especially if you have a truck and can transport the debris to a landfill for disposal.

At the same time we were demolishing the old kitchen, we were designing the new kitchen. We decided to keep the dishwasher and range in the same position (so that we would not need to reroute the wiring or plumbing), but we wanted a new place for the refrigerator and we wanted to conceal a stacking washer and dryer. The first major task was dreaming up a suitable layout. Teresa had a drafting table and knew how to draft, but simply using graph paper to scale is an efficient and easy way for anyone to start sketching out possible plans. Most appliances and cabinet units come in standard sizes, so it's easy to make preliminary layouts (e.g., one graph-paper square equals twelve real-world inches). Most refrigerators are 30, 33, or 36 inches wide (and 28 to 32 inches deep), and dishwashers typically measure 24 inches by 24 inches. Counters are almost always 24 inches deep. See Chapter 9 for more detail on preparing your own layouts.

The second major task was figuring out the cabinet design and choosing the style of cabinets we wanted. We went to IKEA because we had seen some cabinets there that we liked, and we used their paper-layout tools to get an initial feel for how we wanted the kitchen to look. We then worked with a kitchen-design specialist to finalize the plans and order the correct cabinets, hardware, trim, and so forth. This process worked pretty well (though we thought IKEA was a bit slow, and we went back and forth a few times to get the plans right). But all in all the process worked, and we got the plans done and the cabinets ordered. We then concentrated on the appliances and did quite a lot of research on the Web to identify the style and prices of the appliances we were interested in. We ended up getting all of our appliances from Sears, including a JennAir range, a Kenmore washer and dryer (stackable), a KitchenAid dishwasher, and a KitchenAid refrigerator. Sears was having a promotion at the time we bought the appliances, and we got 12 months of 0% interest on our purchases. All of the appliances (except the washer/dryer) are stainless steel, which adds a sleek, professional look to the kitchen (very much the trend these days). We then chose a granite slab countertop and 24-inch slate floor tiles to finish the kitchen design.

Lesson Learned: Choosing appliances, materials, and fixtures is a very time-consuming job. It is also somewhat stressful on a couple who may not have the same ideas and taste. Plus, many of these decisions have high price tags associated with them, which raises the anxiety level. Know this going into a home renovation, and try to discuss your ideas with each other before you begin shopping. It also might be a good idea to designate a lead purchaser—that is, the one who's responsible for doing the research and ultimately responsible for the purchase decision.

Invariably, in any renovation you'll encounter some unforeseen complications, and we definitely did during our kitchen remodel. First of all, a dock strike in the San Francisco area delayed the delivery of our kitchen cabinets from Sweden for months. We kept getting different delivery dates from IKEA and finally canceled our order. This delay was very frustrating, but IKEA refunded our purchase in total. We then went to Home Depot and found some off-the-shelf cabinets that we liked and that fit into our design scheme well (maybe even more so than the original cabinets we picked).

Lesson Learned: You can choose between off-the-shelf and custom kitchen cabinets. Typically, custom cabinets take between six and eight weeks or longer for delivery from the time they are ordered and cost from two to four times as much as off-the-shelf cabinets, but they are usually higher quality. You can also order off-the-shelf cabinets in custom sizes. Working with the on-site kitchen-design staff at Home Depot, IKEA, or Lowe's, or with a private kitchen designer, can help you sort through the trade-offs and determine what is best for your needs, budget, time frame, and tastes.

Our other big frustration was with the contractor we chose to do the construction and finish work on the kitchen. While we did all of the demolition, kitchen planning, and cabinet assembly ourselves, we felt that we needed a professional to install the kitchen to our design specifications and deal with the electrical rewiring, the gas line, and range venting. We received what we thought was a reasonable bid (not to exceed $7,000, not including materials) from a contractor and entered into a contract to have him:

1. Frame in a new door and window.
2. Install insulation where the wall was opened to the outside.
3. Move the gas line and the range venting.
4. Install hold-downs for half-wall (i.e., secure the half-wall to the concrete floor).
5. Install eight recessed lights.
6. Install new electrical switches.
7. Drywall the new wall area and smooth the texture.
8. Build two pantry cabinets.
9. Set all kitchen cabinets.
10. Prime and paint walls and ceiling.
11. Replace two supply valves under the sink.
12. Install appliances.

Figure 3.9 **Sonoma kitchen renovation in progress**

It's not that we were unhappy with the quality of the contractor's work. The problem was, it took four times as long to complete the work as originally estimated—more than two months of living in a dusty construction zone without a kitchen. There was a legitimate reason for the delay (one of the workers on our kitchen had a small stroke), but the firm was small and had no way to work around the problem to satisfy their contractual obligation. We tried to be understanding, but as time wore on it became more difficult. In the end, we terminated our contract with this firm and hired other specialists to finish the job. Finally, the kitchen was finished—it looks beautiful, and we're enjoying it immensely (see Figure 3.9).

Lesson Learned: Contractors almost always underestimate the amount of time it will take to accomplish a job. So either factor this into your planning up front or try to add a clause to your agreement that specifies penalties for significant delays. This is difficult to enforce, though, because the reasons for delays are open to interpretation or may be considered acts of God (strikes, weather, etc.).

Second Lesson Learned: Don't pay ahead of schedule! Always leave at least 25% of the final balance to be paid on completion (to your complete satisfaction) of the project.

The other renovations/improvements we've made to the Sonoma property include:

- Installing new steps up to the pool/poolhouse.
- Trimming trees to let in more light throughout property.
- Fixing the stone walls where necessary.
- Painting the entire interior and exterior of the house.
- Replacing all of the interior moldings to better match the style of the house.
- Replacing most of the existing lighting fixtures with better-quality, more refined fixtures.
- Fixing the solar heating system on the pool.

We are also considering:

- Adding a master bedroom (our research suggests this could add up to $175,000 to the value of the property for a cost of about $30,000 if we do some of the work ourselves).
- Planting a small vineyard in an open space near the pool and placing small palm trees in the pool area.
- Renovating the poolhouse into a guesthouse.
- Laying new asphalt (or another material) in the parking area.

If we decide to do all of the renovations listed above, we'll be looking to sell the property for above $1,000,000. This price point is one that we'll have to seriously consider because it moves us into a different buyer bracket—that is, our potential-buyer demographic changes from people with very good jobs and/or dual incomes to people that have accumulated a significant net worth. This may be worth the risk, but it may not.

The Ones That Got Away

There were two homes that got away from us. We always try to approach the purchase of a home from the perspective that we're not likely to get it. There are a million reasons why a home purchase falls through—some in your control, and some not.

The First One That Got Away

The first house we lost was a townhouse in Washington, D.C., a few buildings down from Mike's condo. Built about 1900, it was large (approximately 6,000 square feet), with a full-floor rental on the ground floor, a duplex apartment on the second and third floors, and an unfinished basement. The townhouse had not been updated in 50 years, so it needed a significant amount of work (see preliminary description below), but its bones were excellent (or so we thought). We negotiated a good price for the house, signed the purchase contract, and initiated the home inspection. This is where we ran into trouble. The inspector found termite damage in the basement within the major structural support beams. He recommended that we get an expert in termite-damage evaluation to take a closer look at the damage. This would entail boring holes into the support beams and removing some old drywall. The owner refused to let us do this, so we had to walk away from the deal because we were not willing to purchase the house when such an important (and potentially costly) problem could not be fully investigated.

Below is the list of improvements that we were going to make to the home:

Build out of Basement into Apartment

- Dig out a patio and front entranceway; install door and window(s).
- Move heating and water systems to open basement for a possible second rental unit.
- Build one or two bedrooms for rental unit.
- Install rental-quality kitchen.
- Install rental-quality bath.
- Possibly build a back garden with fence and secure door.

First-Floor Apartment

- Update and extend kitchen into entranceway closet; install new cabinets; eat-in possibility?
- Add back bedroom to increase possible rental fee.
- Convert formal dining room into a bedroom.
- Add a half-bath in the kitchen area?
- Extend deck a few feet to make it more usable.
- Make necessary cosmetic improvements.
- Install new windows.

Top Two Floors

- Create a high-end kitchen out of the second-floor back bath, laundry room, and bedroom.

- Take out the front kitchen and replace it with built-in bookshelves (wall unit).
- Install new windows?
- Third-floor master bath—expand into adjoining closet, install large shower, add adjoining room as a large walk-in closet (built out with dressers, shelves, etc.).
- Convert the middle bedroom into an office.
- Third-floor back bath—add a shower.
- Make necessary cosmetic improvements.
- Add a back porch off the kitchen with stairs down to parking (also adding a secure door).
- Build stairway up to a new roof deck.

Overall Improvements

- Install new systems: heat, air-conditioning, water, electric (as separate systems, by apartment, or as one central unit?).
- Improve entranceway to apartments: new doors, lights, etc.
- Add security/intercom system?
- New cement for rear parking spaces.
- New railings for outside front stairs.

Even with all the work that needed to be done on this house (estimated at about $200,000), I predicted that the house would be worth close to $1 million (for a potential profit of around $400,000). And I was right. The person who ended up buying the house made some improvements when the D.C. real estate market took off, and the property sold a few years later for $1.1 million. Oh well, you can't win them all.

The Second One That Got Away

The other house we lost was in San Rafael, California. It was an Eichler home that had not been updated in more than 30 years and was in probate (the owner had died and the house was being sold via a probate court because the owner did not leave a will). Eichler homes are architecturally unique homes (with modern, open floor plans, post-and-beam construction, etc.) built in the 1940s and 1950s. Joseph Eichler was the builder of these homes, many of which are in Eichler subdivisions throughout southern California and some parts of northern California. Eichler homes have become sought-after properties in recent years due to their unique architectural structure, details, and their appeal to modern aesthetic sensibilities.

The problem with trying to buy a home in probate is that even if your bid is initially accepted, you still have to go before the probate court, and if someone else bids more than your offer at the hearing, they get the house. This is exactly what happened to us. Our bid was accepted, but when we went to finalize the contract, other people came to bid on the property. A bidding war ensued, and we eventually decided to drop out because the price went over our maximum purchase price. This process was very frustrating for us because we did our homework on the house and had our bid accepted only to lose the house at the last minute.

Lesson Learned: Homes in probate may provide an opportunity to get a good price on a house, but often you end up in a bidding war. Also, the probate judge can simply not accept your offer if he or she believes the price is too low.

Summary

We have learned a great deal from the three homes that we've renovated over the past 10 years. We've made mistakes, but luckily none of them caused us to lose money on any of our homes. Recently, a friend of ours was talking about the "factor of twos"—things costing twice as much and taking twice as long as you think they will. We've all heard that time is money, but when executing a home renovation strategy it is much better to extend the time frame for accomplishing a renovation than to let the cost of a renovation go over budget, especially if the budget increases by a factor of two. Delays are often very frustrating, especially when they are caused by contractors, but time is not necessarily money in a renovation context. Exceeding your budget will cost you real dollars.

Good planning and an attention to detail are also keys to a successful renovation. Before you bid on a house, you must do your homework and determine the cost of your renovations. Without this information, you're essentially flying blind. You need to be very confident in your renovation cost estimates, including a fudge factor for those unexpected things that always crop up. Next, once you have a hard number for your renovation activities, you need to use this information to negotiate a purchase price that allows you to make a significant profit once you're ready to sell. Stick to your guns! Do not get emotionally attached to a property to the extent that you end up paying to much for it. Establish a maximum price you'll pay for a property, and never go over this. Once you've invested a lot of time and energy into creating a renovation plan for a property, it is difficult not to get emotionally involved, but you must take a financial or a clinical approach to the situation and be willing to walk away if you can't get your deal. Even if you lose a property, it may come back on the market in a month or two. Accepted bids fall through up to 50% of the time, and if a property does come back on the market, the sellers may be willing to accept your price (especially if there are few contingencies) because they are weary of the selling process.

One approach we've used is to create a spreadsheet like the one we created for the Sonoma property (Table 3.1). We use it to run three separate scenarios: pessimistic, realistic, and optimistic. The factors we manipulate are those we mentioned at the beginning of this chapter:

- Purchase it for less than its market value.
- Complete renovations that add more value to the home than the renovations themselves cost.
- Sell it for a high price.
- General market appreciation.

The pessimistic scenario is the most important, because this calculation will help ensure that you don't lose any money even if all the above factors do not go your way. So, for example, take out any market appreciation from your profit calculation. What does this do to your ability to make money on the property? Add 30% to your renovation cost. What does this do to your ability to make money on the property? It's always motivating to project your potential profits, but it is much more important to protect against your downside.

Finally, have a realistic view of your home renovation skills. Are you mainly a project manager, or can you tackle complex construction activities? What is your Home Renovator IQ? The more renovation work you can do in your spare time, the larger your potential profit. But realize that this work must be done to professional standards, and also realize that a do-it-yourself approach often takes significantly longer than hiring professionals to accomplish the work. We've witnessed countless examples of someone's starting a do-it-yourself home renovation project that should take three weeks but ends up stretching out for months or even years. Having a kitchen torn up for a long period of time can place a lot of stress on a family (and a relationship!) and can be costly if you're eating out all of the time.

Chapter 4

The Financial Plan

The first thing to consider as you begin to develop a financial plan for a home renovation strategy is the amount of time and energy you can realistically devote to this endeavor. Every waking hour outside of your full-time job? Or, if you're part of a couple, almost all your time, while your partner holds down a full-time job and just helps out on weekends? As we've said before, our vision of a home renovation wealth creation strategy is one that is done part time, while you or your partner holds down a full-time job. That way, your gains are truly profits, not simply a replacement for income that you could be earning via a full-time job. Of course, you might decide to become a full-time renovator, but, again, you won't necessarily generate additional profit over and above what you previously earned in your full-time job. This part-time scenario is one reason we believe this type of wealth creation strategy is custom tailored for couples, especially if one of the partners does not have a full-time job. That way, one partner can cover the basic monthly living expenses while the other is free to execute the home renovation strategy. So, just how much time *can* you dedicate to your home renovation? Twenty hours per week? Ten hours per week? Or, less than five hours per week?

Next, you need to think through your short- and long-term goals. Are you looking to make $1 million in 5 years, or $250,000 in 10 years? Are your goals realistic? If you're truly attempting to make $1 million in five years (a very aggressive scenario we outlined in Chapter 1), can you afford the types of houses that can lead to such a large profit? Obviously, if you can only afford to buy houses in the $100,000 to $200,000 range, it won't be possible—even if all your stars are aligned—to make that kind of profit over a 5-year period (although it may be possible over a 10-to-20-year period).

Additionally, you need to realistically assess your risk tolerance. Can you afford to lose $10,000, $50,000, or even $100,000 on a property? As we mentioned in Chapter 3, there are four primary ways to make a profit on a home:

1. Purchase it for less than its market value.
2. Complete renovations that add more value to the home than the renovations themselves cost.
3. Sell it for a high price.
4. Through general market appreciation.

It is possible, even if you successfully accomplish items 1 through 3, to lose money on a renovated home if the real estate market significantly declines. So be aware of your risk tolerance and factor it into your home renovation strategy long before you purchase your first home.

You also need to determine your tolerance for moving. If you have children, moving every two years or so can be very difficult. Are you someone who likes change, or are you a nester who likes continuity? If you are a nester, you may not want to plan to move more often than every five to seven years. And finally, as we've discussed, what is your ability to do some of the renovation work yourself? If you can do some of the basics (or, even better, if you have significant renovation skills and capabilities), you can potentially earn larger profits, decreasing the number of homes you need to renovate to meet your goals.

We've classified three types of home renovator:

- The Dedicated Renovator.
- The Recreational Renovator.
- The Leisure Renovator.

The major difference among these renovator types is the amount of time each dedicates to pursuing this type of wealth creation strategy. How much time can you dedicate to the entire process of finding a home to renovate, renovating it, and selling the home? Below are the definitions for each type of renovator:

- The Dedicated Renovator commits, on average, approximately 20 hours per week to home renovation tasks (whether these are do-it-yourself renovations or the project management of renovation activities performed by others). The Dedicated Renovator is willing to move every two years and is attempting to make the most profit within the shortest period of time possible. The Dedicated Renovator views home renovations as the major avenue he or she will follow to create significant wealth.
- The Recreational Renovator dedicates approximately 10 hours per week to executing a home renovation strategy. The Recreational Renovator is unwilling to move every two years, preferring to stay in each home longer, possibly up to five years. The Recreational Renovator has a longer wealth creation time frame and

may be invested in other vehicles, such as 401(k) plans or stock options, with the potential to create wealth or accumulate a significant nest egg.

- The Leisure Renovator commits only 5 hours per week to executing a home renovation strategy. He or she has a long-term perspective and prefers moving every seven-plus years. In a lifetime, the Leisure Renovator may only renovate three homes.

To determine your home renovator profile, you need to think about and then answer the questions mentioned above. Then, use your responses to these questions to begin modeling your financial plan. Table 4.1 is a basic template to help you start the planning process.

The basic calculation you need to make for each renovated home is:

- Your *purchase price* (including *closing costs*).
- Plus your *renovation costs*.
- Minus your *sale price*.
- Equals your *gross profit*.
- Minus your *closing costs*.
- Equals your *net profit*.
- This model suggests that you then take the net profit from each renovated home and invest it in some other investment vehicle (such as stocks, mutual funds, or bonds) in order to diversify your portfolio and reduce your risk over time.
- Calculate the compounded *investment income* over the period of time left to execute your home renovation strategy (5 years, 7 years, 15 years, etc.) and sub-

Table 4.1 **Preliminary Home Renovation Financial Plan**

	Home #1	*Home #2*	*Home #3*	*Etc.*
Purchase price (including closing costs)	$ ______	$ ______	$ ______	
Renovation costs	$ ______	$ ______	$ ______	
Sale price	$ ______	$ ______	$ ______	
Gross profit	$ ______	$ ______	$ ______	
Closing costs	$ ______	$ ______	$ ______	
Net profit	$ ______	$ ______	$ ______	
Investment income	(__ years)	(__ years)	(__ years)	
(@ __ annual return)	$ ______	$ ______	$ ______	
Total gain	$ ______	$ ______	$ ______	
Accumulated profit	$ ______			

tract the capital gains tax you'll pay on this income; add this gain to your original net profit to calculate your *total gain*.

- Add up the total gain for each renovated home to get your *accumulated profit*.

As you know if you've read the preceding chapters, we have renovated three homes to date and expect to continue renovating homes for at least the next ten years. Table 4.2 is a spreadsheet of our gains to date along with projections on the homes we plan to renovate in the future.

As we've discussed, the key variable that will determine the success or failure of your home renovation wealth creation strategy is your ability to accurately estimate the costs of the required home renovations. And a key variable in this calculation is how much of the work you can do yourself (your sweat equity). Of course, maximum wealth creation comes when you purchase the right home for the right price, you do the right renovations, you sell the home for the best possible price, and general market conditions do not deteriorate. As you work through the process of creating your financial plan, you'll see that another key variable to maximizing your profits is the amount you'll have to pay a real estate agent to help you sell your home. Often, this fee can equal 6% to 7% of the sale price on homes sold for less than $500,000 and 5% for homes that cost more than $500,000. Obviously, if you can sell a home yourself without using a real estate agent, you can significantly increase your profits. We recommend, from a planning and modeling perspective, that you include the costs of using a real estate agent to sell a renovated home. You can always back out this fee if you actually sell a home without an agent. (In Chapter 5, we discuss issues related to selling a home yourself.)

There are many books on the market that can help you estimate the costs of home renovations (such as *National Repair and Remodeling Estimator* and *National Construction Estimator,* available from www.craftsman-book.com; *Home Repair and Remodel Cost Guide*, available from www.marshallswift.com/ecatalog.asp, etc.). Most have data on the total cost of a renovation, including materials and contractor-supplied labor. Obviously, if you're doing the work yourself, you should subtract your labor cost from these estimates or simply determine the cost of the materials for accomplishing a task.

Cathryn and Jim Bolt, Home Renovators

We've renovated two houses over the past 10 years. Our first house was in the Solana Beach area of San Diego, California, and we bought it for $300,000. It was

(continued)

Table 4.2 **Mike and Teresa's 15-Year Renovation Plan**

	D.C. Condo	*W. Va. Farm*	*Sonoma House*	*Home #4*	*Home #5*	*Home #6*
Year purchased	1995	1997	2002	2004	2007	2010
Purchase price ($)	135,000	142,000	630,000	700,000	750,000	800,000
Renovation costs ($)	40,000	2,000	60,000	90,000	100,000	125,000
Sale price ($)	270,000	180,000	950,000	1,100,000	1,200,000	1,250,000
Profit ($)	95,000	36,000	260,000	310,000	350,000	325,000
Closing costs ($)	20,000	13,000	52,500	60,000	65,000	70,000
Net profit ($)	75,000	23,000	207,500	250,000	285,000	255,000
Accumulated profit ($)	75,000	98,000	305,500	555,500	840,500	1,095,500

(Continued)

a poorly constructed home (2,200 square feet) built in 1970 on one acre (very private). Solana Beach 10 years ago was a less-expensive town in the San Diego area, but it is the next town over from Del Mar, one of the most expensive areas in the city. We took the home down to the studs because it was in such bad condition. We expanded some of the walls and put in huge windows and sliding-glass doors, which opened up the space and created a huge great room with tons of light streaming through the house. The renovation took twice as long (12 months) as the contractor expected. We spent about $200,000 on renovations because we almost rebuilt the house from the ground up. Three years later, we added on another room off the back that we use as an office but that also can be used as a guest or additional bedroom. We spent about $50,000 on this 400-square-foot addition—it has a fireplace and a really nice bathroom. The home's current value is $1.1 million, so our gain has been about $550,000. The house is now the most expensive in the neighborhood, which may be an issue when we try to sell it.

Lessons Learned

- Our big lesson learned is that you cannot live in the house during this type of renovation. Our contractor said we could, and we started out that way, but after two weeks the contractor told us we'd have to move out. So, with two dogs and two cats, we had a week to find a place to live that would rent on a month-to-month basis. This was very difficult to do (plus it was costly and stressful), and we ended up having to live in a not-so-nice area of San Diego for nine months. The experience was unpleasant, and we think the contractor was lying to us from the beginning in saying that we could stay in the house while the work was being done.
- It is extremely important for a couple to communicate well throughout the renovation process, especially at the beginning, when so many decisions have to be made.
- We should have lived in this house for a while before we began the renovation. We needed to get a feel for the home, and in retrospect we would have made some different choices and decisions if we had lived in the house prior to starting the renovation.
- You need to be in constant contact (every day) with your contractor to make sure that the job is going well, the right decisions are being made, and the

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schedule is being followed. Only this constant monitoring will keep the renovation on track.

- Toward the end of a renovation project, you'll become impatient and be tempted to cut corners to get it done. Resist this temptation, because the finish work at the end of a project is critical to a successful project. At the end of our renovation we told the contractor, "just choose any light fixtures," and we regretted this because we're unhappy with many of his choices.
- We needed to do more homework, research, and planning before we embarked on this renovation. It was a bit like "trial by fire" because we did not know many of the things we should have known to make good decisions and manage the project properly.

The second home renovation we undertook makes for an interesting story. The home is located in Crested Butte, Colorado, an old mining town of 1,800 people nestled in the mountains (see Figure 4.1). It is now mainly a ski and

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Figure 4.1 **Taking the house down to the studs**

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summer-resort destination and comprises about six square blocks. The home we bought (for $300,000) was built in the late 1960s by hippies out of scrap materials (we've heard that they spent $6,000 building the house). It is on the edge of town next to a creek that rushes down from the mountains. We bought the house because of the creek and because we wanted to be able to walk to the shops and restaurants, but it is far enough away from the center of town that we're away from the foot traffic and noise (which can be significant with partying young people). But because the house is within the town borders, anything done to it had to be approved by the town zoning board. The issue we faced is that to keep the home right next to the creek, we had to renovate it. (We could not simply demolish it and rebuild—if we did that we'd have to move the house 30 feet away from the creek.) So we worked with an architect to create a plan that the zoning board would approve, which took about three months. The board approved everything except a few very minor issues (such as, the windows should have six panes instead of four panes . . . really stupid stuff).

After we had the board's approval, we hired a general contractor (after doing reference checks and finding out that he had a good reputation) and began taking the home down to its studs. We quickly learned that Crested Butte is a unique place to try to build a home. The young workers work long enough to make some money, and then they just take off on some sort of adventure. Or, if it is ski season, they have something called the four-inch rule . . . if it snows more than four inches, everyone goes skiing. So, not surprisingly, it took two years to build the house, twice as long as originally estimated.

One of the bizarre things we found when we started deconstructing the house is that it had no foundation at all, it was simply built right on the ground. So they had to jack up the house and build a foundation, which was not part of the original specification. Also, the walls were insulated with cut logs stacked one on top of the other (we were wondering why the walls seemed so thick!). We also found out that every electrical jack had shorted and blackened the wood around the jacks . . . we never could figure out why the house never burned down. After the foundation was built and the house deconstructed, the

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Figure 4.2 **Progress!**

reconstruction went pretty well (see Figure 4.2). Except for the slate floors that we installed throughout the first floor.

We had seen slate floors in a friend's home and really fell in love with them. So we found the slate we liked (in San Diego) and had it shipped to Crested Butte (the slate itself cost about $5,000). We then had a very difficult time finding someone in Crested Butte with experience laying slate floors. We finally found someone, but he turned out to be a nightmare. Once he began laying the floor (over an in-floor heating system) it became apparent that he had not worked with this type of floor before, and thus it took months (instead of two weeks) to finish the job. The big issue for us at this point was not the time, but that he did not lay the floor properly, so it has different colors and texture of grout and is uneven in places. Our general contractor said he'd pull the whole floor up and redo it, but that the expense would probably put him out of busi-

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ness. So we're living with the floor as it is, but it drives us crazy to this day to see the poor workmanship. (We've placed a lot of rugs on top of it!)

In total, we spent $225,000 renovating the house. Today, it is worth about $850,000, so we've gained about $325,000 on this house.

Lessons Learned

- All renovations seem to take twice as long as originally estimated . . . just plan on it. You don't want the contractor to hurry and do poor quality work. In addition, becoming the enemy of your contractor is not a good idea. This is a major dilemma when you're renovating a home, and we have not figured out how to deal with this issue in a constructive way. Possibly we could do a better job of explicitly laying out the time frame (maybe with penalties) up front and checking progress on a weekly basis as part of our project management.
- Before you buy unusual and expensive materials for your home (such as the slate for flooring), check with your contractor to see if he or she can install the material or has reputable subcontractors that can do the work.

Marshall & Swift's Home Repair and Remodel Cost Guide (www.marshallswift.com)

Marshall & Swift's comprehensive and reliable online home improvement cost guide is a powerful negotiating tool. It's also a helpful budget resource, as well as a handy estimating guide.

- For Realtors, it provides your potential buyers with a quick estimate of repair and remodeling expenses.
- For appraisers, it quickly estimates the cost to replace home components.
- For home inspectors, it helps you figure out the financial magnitude of items listed on your defective-items checklist.
- For homeowners, it gives you the information you need to calculate the cost of home improvement projects and repairs.

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More than 1,000 regional modifiers help you determine costs in your local area. This reference also contains accurate and up-to-date costs for hundreds of specific home remodeling projects and for repairs to:

- Bathrooms.
- Kitchens.
- Plumbing.
- Doors.
- Exterior walls and windows.
- Heating, ventilating, and air-conditioning (HVAC) units.

In addition, you'll find:

- Definitions and illustrations of the various household components.
- Details on financing and types of available mortgages.
- Depreciation tables.
- Home improvement loan payment schedules.

The boxed renovation cost template shown here can help ensure that you're generating accurate numbers. One way to safeguard your estimates is to add a minimum of 10% to costs as a fudge factor (to be on the safe side, we suggest a fudge factor of 20%).

Renovation Cost Template

Activity	*Labor Cost*	*Materials Cost*	*L & M Costs*
____________________	____________	____________	____________
____________________	____________	____________	____________
____________________	____________	____________	____________
____________________	____________	____________	____________
____________________	____________	____________	____________
____________________	____________	____________	____________

Total costs ________________.

Total costs including (____%) fudge factor ________________.

Lifelong Financial Planning

The financial plan we're executing takes the profits from our home renovations and invests them in other types of income-generating vehicles—stocks, bonds, mutual funds, and so forth (not back into another home). Our reasoning is that we need to diversify our total financial portfolio so that over the long term we receive a decent return on our money as we protect ourselves from the large swings that can take place in the financial marketplace. We do not want to put all our eggs in one basket, to use a phrase you'll encounter frequently if you read about financial planning or talk to a professional in the field. Two financial-planning resources you can contact for information are the Financial Planning Association (www.fpanet.org) and the National Association of Personal Financial Advisors (www.napfa.org). To explain some of the issues related to creating a balanced investment portfolio, we asked our friend Sam Folin,[1] who helps his clients effectively manage their money, to provide us with his perspective on how to create a balanced financial portfolio. His thoughts are in the box "Riches, Not Rags."

Riches, Not Rags

There are several key ingredients in successfully balancing a "renovate to riches" program and the other pieces of your financial plan. The most pressing issues are *liquidity*, *diversification*, and *time*.

Let's start with the need for liquidity. Any financial plan will build in some sort of emergency cash hoard to be used for unexpected expenses in the event of illness, job loss, or natural disaster. The typical range for this stash is two to six months' normal expenses. This is basic liquidity.

Beyond basic liquidity is the need for adequate income to finance the debt service (mortgage) associated with the real estate you are renovating and cash reserves for unexpected expenses. Two unwritten rules of investment are that projects always take longer and cost more than expected and real estate sales never happen if you need them to happen. Maintaining adequate liquidity requires conservative planning using conservative "what if" outcomes. ("What if the market dries up for two years" is a good example.) Unfortunately, this is limiting. Tying up extra cash against rainy days reduces the value of the property you can afford. However, if you fail to have extra cash either on hand or within easy

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reach, you may be forced to liquidate properties prematurely in the event of an unexpected crisis. Any forecast return gets lost or worse in this forced action. Alternatively, you might be required to raid your 401(k) and pay penalties and taxes. Neither outcome is appealing.

After liquidity, the most important part of your financial plan is diversification. We all have heard the sage advice to not put all our eggs in one basket. In the case of real estate, which is an illiquid asset, this is even more true. If you are saving for retirement or a child's education, your risk (variability of return, or volatility) tolerance will be defined by several factors including the amount of time until the funds are needed. Diversification will lower the volatility of your portfolio, dramatically if you use conservative assets like bonds, or moderately if you use other, more risky investments like stocks.

One of the primary advantages of real estate investment is that it is an excellent diversifier in a mixed portfolio of real estate and financial assets. Real estate has risk-and-return characteristics that are similar to those of stocks. The primary risk of both assets is the variability of return, also known as volatility. We can say that stocks and real estate may provide annual returns of 8% or more over the next twenty years. But it is difficult to specify exactly when those returns might occur. This variability or volatility (actually, the standard deviation of expected returns) represents the primary risk in a well-diversified portfolio of assets.

The good news is that real estate and stock returns often happen in differing cycles. Stocks may zig while real estate zags! The period 2000–2003 is a good example of this phenomenon. Stock market investment produced negative returns during much of this period while real estate was booming. A portfolio of 50% real estate and 50% stocks would have had much less volatility (risk) than a portfolio of 100% of either investment. The technical term here is *correlation*. Real estate and stock returns are only partly correlated, so investing in both actually reduces annual risk despite the absolute risk of either's being quite high. Investment risk can be dampened by investments with low correlations. This is diversification. Bonds and international investments have even lower correlation with U.S. real estate even though their annual volatility characteristics are very different.

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Time is the third piece of this puzzle. If your investment plan requires a large outflow of cash in 12 months time, you cannot afford to be heavily invested in assets whose value might decline in that period. Instead, your portfolio should probably be a very conservative mix of assets, probably money funds and short-term bonds; you would be better off avoiding real estate and stocks. If, however, you have 30 years until you need the cash, you might invest heavily in highly volatile assets and build a portfolio that seeks to maximize returns over a period of many years. In the latter case, you might invest in real estate, U.S. stocks, international stocks, and cash (for liquidity).

In pursuing a "renovate to riches" strategy, it is most important to understand the risks involved and to balance your other assets accordingly. Investment becomes gambling if you invest cash you must have in three years time in a renovation project. Understand the risks of illiquid real estate and the impact of time before making a decision. As mentioned above, the worst outcomes are realized when real estate must be sold quickly.

Finally, consider conventional wisdom. If current wisdom is to invest in one asset class (stocks or real estate, for example), then chances are you would be wise to be somewhere else. Likewise, if everyone you know thinks real estate is much too risky and sales are sluggish, you may wish to take a closer look. Better returns are generated by buying assets that others do not want. In a slow real estate market, for example, it is often easier to secure price discounts. Not so in a hot market. A large part of the investment outcome is determined by the price you pay. Higher cost equals lower return. Easy math, right? Most of us are unable to act on this advice, however. We like to do the popular thing. Selling stocks in 1998 or 1999 (when they were more expensive than at any time in history) would have been a great move. Most people given that advice at that time thought it was ridiculous. Most of them are poorer today as a result. Run, don't walk, away from conventional wisdom.

Note

1. O. Sam Folin, CFA, President and CEO, Benchmark Asset Managers, 1700 Sansom Street, #11, Philadelphia, PA 19103, folin@benchmarkam.com.

Chapter 5

Buy Low, Sell High

Buying a Home

There are two absolutes when you are looking for a property to purchase as part of a home renovation strategy: (1) research, research, research, and (2) location, location, location. Of course, in the real world it is more complicated than this. But if you spend the time to research the general attributes of an area, the houses within it, and the people that live there, you can help ensure that your home purchase decision is based upon a sound foundation of facts and other information. The location of a home is a critical issue. Is it in an area that is appreciating in value? Has this appreciation been consistent over a long period of time? Is it an up-and-coming location, or is it an established area of choice for buyers?

Research, Research, Research

Peter Lynch, formerly of Fidelity Investments, where he managed the Magellan Fund (one of the most successful mutual funds of all time), said that if you want to purchase individual stocks you need to spend at least 8 hours researching each company that you're *thinking* about investing in. He did not say 8 hours per company that you *buy* stock in. So, if you researched five companies for every one company you ended up investing in, you'd be spending 40 hours in research-related activities per investment. We believe that this is similar to what you need to spend researching each property that you may purchase. This includes researching the area within a two-mile radius (at a minimum) of a potential home to ensure that there is nothing in the vicinity that may detract from the home's resale value.

Real estate statistics are available on every area, and it is important that you get this information. The key statistic you're looking for is the average *annual* appreciation (stated as a percentage) of homes in this location (be careful of month-to-month comparisons—such as May 2001 versus May 2002—they can be misleading because of large average-home price swings based on occurrences in a short, monthly period). Also, look at this data over at least a 10-year period. Were there periods when home prices fell? What was the percentage drop? What was the cause of this drop—Did a plant close, or was there a national recession? Use your findings to evaluate the risk you may be taking by buying a home in this area.

A real estate agent can be very helpful in getting you these statistics and in helping you make sense of them. For example, when we were bidding on a home in Marin County, California, our agent showed us data that home prices within the county, on average, had not dropped in value in 20 years. This certainly made us feel pretty good about our search for a home in this area. Aubrey Wallace, our real estate agent in Marin, suggests buyers review the following statistics:

- *Average sales price.* This is the easiest for nonprofessionals to understand. I think average sales price is more reliable than median sales price. In addition, I think it's best to calculate single-family homes and condos separately. On a regular basis, I run the average sales price for the past 12 months compared to the previous 12 months. In general, I don't think anything less than 12 months is accurate. When a market is "turning," however, it is very helpful to compare each month's average sales price over the past 12 months with each month's average in the 12 months previous.
- *Average sold price per square foot.* This helps buyers and sellers calculate the value of the home in a broad-brush way. In addition, I like to calculate the sold price per square foot in particular price ranges (e.g., \$500,000–\$1,000,000).
- *Number of sales as a percentage of number of listings.* This tells us whether buyers or sellers have the best negotiating position. As a rule of thumb, we consider a sales to listings ratio of 10% to 20% to be a buyers' market. Twenty percent to 30% is a "normal" market, with buyers and sellers having a nearly equivalent strength. And 40% sales to listings becomes a multiple-offer climate. Of course, this is more accurate when it is broken out by price range.
- *Number of listings available compared to the number that have gone into contract.* Sometimes I also look at these numbers for the past month or so. This refines the information from above.
- *Everything possible about sales on the street and in the neighborhood.* Once the buyers have narrowed down the area where they are searching—or when I am working with sellers—it is essential to know everything you can about the area: asking prices versus sale prices, days on the market, number of offers, and so on.

You can also access economic and housing data from the National Association of Home Builders (NAHB) on the Web (www.nahb.org). The association tracks statistics on:

- Home sales and prices.
- Forecasts and economic impact.
- Financial and mortgage markets.
- State and local data.
- Construction statistics.

It also creates the following indexes:

- Housing Market Index (HMI).
- Housing Opportunity Index (HOI).
- Remodeling Market Index (RMI).

And, finally, NAHB provides a wealth of information on building materials and how the general economy is affecting the housing market. It even conducts nationwide surveys of recent and prospective homebuyers to learn more about the design features, products, amenities, and layouts they prefer.

The Web is also a good place to research potential properties. Sites such as Home Gain.com, ZipRealty.com, and Homestore.com include listings that can be searched by zip code and location. They also provide resources ranging from tutorials on how to make improvements to a home to links to inspectors in your area. Other Web sites such as MSN's "House & Home" and America Online's "House and Home" channel are also very popular.

Finally, you'll need to familiarize yourself with the Multiple Listing Service (MLS). The MLS is the main database of property listings in the United States, and all real estate agents use it to locate properties. The output of the MLS is in a standard format. Being able to quickly decipher the MLS listing will help you determine whether a property is worth viewing in person.

Components of the MLS standard format include:

- List price: Current asking price of the home.
- Original list price: First asking price.
- DOM (days on the market): Begins the first day of the listing and counts to the day of report you are reading.
- Bedrooms: Number of bedrooms.
- Baths: Number of F (full) or P (partial) baths.

- Approx. square footage: Square footage of the home (from tax records).
- Parcel ID: The number on all records for this property.
- Lot sq ft: One acre is 43,560 square feet, 0.50 acre would be 21,780 square feet, 0.25 acre would be 10,890 square feet, and so forth.
- Thomas Bro.: The map location, for example, page 179, area C-3.
- Water–public: This means the property is on a city water system ("Water-well" means it is not on a city water system).

Interview with Fran George, Real Estate Agent, Sonoma and Napa Counties, California

How can you buy a house for less than the asking price?

- Do your homework.
- Have your financing in place.
- Take your time.
- Know the area.
- Location, location, location.
- Understand what is cosmetic . . . and what is not.
- Invest in a home inspection and pest report.
- Know the cost to repair or replace.
- Do not become emotional about the house.
- Make an offer and be prepared to negotiate or have it refused completely.

What things add the most value to a house from the home renovation perspective?

- Kitchen.
- Bathrooms.
- Closets.

How can you get the maximum price for a house?

- Put the house on the market at the right time . . . late spring/early summer is the best time to maximize interest from buyers.
- You never get a second chance to make a first impression.
- Curb appeal is extremely important.
- The house should be completely finished when put on the market, with staging (getting the house as presentable as possible) and landscaping.

Table 5.1 **Home Renovation Estimator**

Property Location:________________________
Date:________

Renovation Category	*Repair/Changes Needed*	*Estimated Cost* Low	*Estimated Cost* High
Kitchen	Total gut and remodel	$15,000	$20,000
Bathroom	1 bathroom upgrade	$2,000	$3,000
	1 bathroom addition	$5,000	$8,000
New deck	Off living room, 300 sq ft., redwood	$1,000	$2,000
Roof	Repair wood shingles	$500	$750
Landscaping	New flower garden, 40-ft. stone walkway, irrigation system	$5,000	$7,000
Miscellaneous			
Total		______ Low	______ High

Is a Home Worth Renovating?

Beyond researching a home's general location, you should focus a great deal of effort on evaluating whether a potential home is worth renovating. You'll need to spend a significant amount of time determining the types of renovations that can add the most value to the home from a resale perspective. Table 5.1 is a home renovation estimator that can help you calculate the costs of renovation activities.

Working with a Home Inspector

If you decide to make an offer on a home, you'll need to carefully review the home inspector's report to ensure that there are no significant problems with the home that you could not identify yourself. Home inspectors are professionals who systematically evaluate and diagnose home and general property defects. You can learn more about this profession from the American Society of Home Inspectors® (at www.ashi.org). Below is a list of the areas on which a home inspector will focus:

- Structural system.
- Exterior.
- Roof system.
- Plumbing system.
- Electrical system.
- Heating system.
- Air-conditioning system.

- Interior.
- Insulation and ventilation.
- Fireplaces and solid-fuel-burning appliances.

In addition, a list of Home Inspection FAQs published by ASHI® follows.

What is a "home inspection"?

A home inspection is an objective visual examination of the physical structure and systems of a home, from the roof to the foundation. Having a home inspected is like giving it a physical check-up. If problems or symptoms are found, the inspector may recommend further evaluation.

What does it include?

The standard home inspector's report will review the condition of the home's heating system, central air conditioning system (temperature permitting), interior plumbing and electrical systems; the roof, attic, and visible insulation; walls, ceilings, floors, windows and doors; the foundation, basement, and visible structure.

Why do I need a home inspection?

The purchase of a home is probably the largest single investment you will ever make. You should learn as much as you can about the condition of the property and the need for any major repairs before you buy, so that you can minimize unpleasant surprises and difficulties afterwards.

Of course, a home inspection also points out the positive aspects of a home, as well as the maintenance that will be necessary to keep it in good shape. After the inspection, you will have a much clearer understanding of the property you are about to purchase.

If you are already a homeowner, a home inspection may be used to identify problems in the making and to learn preventive measures that might avoid costly future repairs. If you are planning to sell your home, you may wish to have an inspection prior to placing your home on the market. This will give you a better understanding of conditions which may be discovered by the buyer's in-

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spector, and an opportunity to make repairs that will put the house in better selling condition.

What will it cost?

The inspection fee for a typical one-family house varies geographically, as does the cost of housing. Similarly, within a given area, the inspection fee may vary depending upon the size of the house, particular features of the house, its age, and possible additional services, such as septic, well, or radon testing. It is a good idea to check local prices on your own.

However, do not let cost be a factor in deciding whether or not to have a home inspection, or in the selection of your home inspector. The knowledge gained from an inspection is well worth the cost, and the lowest-priced inspector is not necessarily a bargain. The inspector's qualifications, including his or her experience, training, and professional affiliations, should be the most important consideration.

Can't I do it myself?

Even the most experienced homeowner lacks the knowledge and expertise of a professional home inspector who has inspected hundreds, perhaps thousands, of homes in his or her career. An inspector is familiar with the many elements of home construction, their proper installation, and maintenance. He or she understands how the home's systems and components are intended to function together, as well as how and why they fail.

Above all, most buyers find it very difficult to remain completely objective and unemotional about the house they really want, and this may affect their judgment. For the most accurate information, it is best to obtain an impartial third-party opinion by an expert in the field of home inspection.

Can a house fail inspection?

No. A professional home inspection is an examination of the current condition of your prospective home. It is not an appraisal, which determines market value, or a municipal inspection, which verifies local code compliance. A home in-

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spector, therefore, will not pass or fail a house, but rather describe its physical condition and indicate what may need repair or replacement.

How do I find a home inspector?

The best source is a friend, or perhaps a business acquaintance, who has been satisfied with and can recommend a home inspector they have used. In addition, the names of local inspectors can be found by searching our online database (www.ashi.org), or in the Yellow Pages where many advertise under "Building Inspection Service" or "Home Inspection Service." Real estate agents are also generally familiar with the service, and should be able to provide you with a list of names from which to choose.

Whatever your referral source, you will want to make sure that the home inspector is a Member of the American Society of Home Inspectors® (ASHI®) in order to be certain of his or her professional qualifications, experience, and business ethics. A list of ASHI® Members in your area is available upon request from the Association's headquarters.

When do I call in the home inspector?

A home inspector is typically contacted right after the contract or purchase agreement has been signed, and is often available within a few days. However, before you sign, be sure that there is an inspection clause in the contract, making your purchase obligation contingent upon the findings of a professional home inspection. This clause should specify the terms to which both the buyer and seller are obligated.

Do I have to be there?

It is not necessary for you to be present for the inspection, but it is recommended. You will be able to observe the inspector and ask questions directly, as you learn about the condition of the home, how its systems work, and how to maintain it. You will also find the written report easier to understand if you've seen the property first-hand through the inspector's eyes.

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What if the report reveals problems?

No house is perfect. If the inspector identifies problems, it doesn't necessarily mean you shouldn't buy the house, only that you will know in advance what to expect. A seller may adjust the purchase price or contract terms if major problems are found. If your budget is tight, or if you don't wish to become involved in future repair work, this information will be extremely important to you.

If the house proves to be in good condition, did I really need an inspection?

Definitely. Now you can complete your home purchase with your eyes open as to the condition of the property and all its equipment and systems. You will also have learned many things about your new home from the inspector's written report, and will want to keep that information for future reference.

Interview with Rick DeBoard, Home Inspector, Pre-Spect Inc., Volcano, California

The national average cost for an inspection is $300. Inspectors spend between two and three hours going through a house and any outbuildings. They also spend time looking at the property overall, the land, a pool, a spa, and so forth. The inspector has either a paper-based checklist of items to review or a computer program on a laptop to use. For each item, say a furnace, the inspector visually checks the equipment plus makes sure that it is operating properly. I use a three-point scale to measure whether an item is in good, fair, or poor shape. Some inspectors only use a two-point scale: serviceable and not serviceable. The definitions for the scale I use are:

- *Good:* serviceable and operating within the item's life span.
- *Fair:* not operating currently but within life span, or operating correctly but outside of life span.
- *Poor:* not working and outside of life span.

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I usually ask a client to meet me at the end of my inspection so we can review the results while everything is fresh in my mind. Some inspectors actually have the client tag along while they do the inspection, but I find this to be a hindrance, and it slows down the process. I usually provide the client with the written report a day or two after I've done the on-site inspection so I can ensure that I've crossed all the T's and dotted all of the I's. Also, sometimes, after a day or so I'll remember something important that I want to put into the final report. Photographs are now very popular to include in the inspection reports and I now have a digital camera that makes this very easy to do. Photos really help to explain problems and clarify issues.

The major issues that a buyer should focus on are the major systems and the structural components. These include:

- Electrical.
- Heating and cooling system.
- Roof.
- Foundation.
- Lot drainage.

In my opinion, a "fixer-upper" is usually a home in which two or three of these major components are in need of significant work. Some of these components are not that expensive to fix. Others, like a new roof, can cost more than $10,000. The issues that I would be very concerned about and may be deal-killers for a buyer include:

- *Sagging roof*. You are getting into structural issues here.
- *Foundation failure*. It is always very costly to fix or replace a foundation.
- *Termite or other pest problems*. You never know the extent of the damage until you start tearing down walls and exposing the damage; also, you need to hire a pest inspector—a home inspector is not usually qualified to do this type of work.
- *Older homes with insufficient electric power to the home*. Some older homes only have between 30 and 50 amps of electricity going in, and upgrading a home to more than 100 amps of power plus rewiring the entire home can be very costly.

In my opinion, whether a home is worth buying all comes down to price if significant problems are identified via a home inspection. If the price is right, maybe it makes sense to buy a fixer-upper that needs significant work on some

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of its major systems or components. But the buyer has to be willing to spend the time and energy to get these things fixed, which is a totally separate issue.

The Perfect Home to Renovate

In short, the perfect home to renovate:

- Is in a great location with a strong history of appreciating market values.
- Does not have good curb appeal or show well.
- Needs little or no work on its basic structure or systems.
- Requires what are essentially cosmetic refinements—both inside and outside the home.
- Has an old kitchen and/or bathrooms.

On the flip side, below is a list of red flags—potential deal-killers for a prospective home:

Red Flags . . . A List of Potential Deal-Killers

- *Termite damage:* Can you really determine the extent of the damage before you purchase?
- *Environmental issues:* Fixing problems associated with asbestos insulation, chemical contamination of the soil, radon contamination, lead paint, and so forth can be extremely costly.
- *Mold damage:* In certain parts of the country, mainly in the South, mold can be a serious issue.
- *Foundation damage:* Repairing a foundation can be extremely expensive.
- *Structural damage:* Wood rot or cracks/sagging in major support beams can be just the tip of the iceberg.
- *Fire damage:* Extensive fire damage typically requires a home to be leveled and rebuilt.
- *Water damage:* If a home (not just the basement) has been flooded, move on to the next one.
- *Major systems in need of replacement:* Installing new plumbing, electrical, heating, and cooling systems can cost thousands of dollars and does not return a high value from a renovation or resale perspective.

- *Severe drainage or landslide problems:* May require a soil engineer to evaluate, which costs thousands.
- *Zoning violations:* Do you really want to deal with a government entity?
- *Roof damage:* May not be a deal-killer but could cost up to $10,000 or more to replace.

Know the Seller

In addition to the information and advice discussed above, we strongly suggest that you get to know as much information about the seller or sellers as you can. Try to find out their reason for selling. Is it because of a job transfer that requires them to move by a certain time (which can provide you with an opportunity to negotiate a good price)? Also, find out how long the property has been on the market. If it has been for sale for more than two months, the home may have some problems (maybe just with its presentation). Take time to identify them (a real estate agent can help here). In addition, find out what the home previously sold for (available via local or county records) and what, if any, improvements were made by the sellers. Does the new sale price make sense based upon the previous purchase price, improvements made to the property (with each year that passes from the time improvements were made, the improvements lessen in value), and general appreciation?

When researching the three homes we purchased, we looked for homes that had been on the market for a while, and we found out some critical information about the owners that made us confident we could negotiate a good price (and we're three for three using this strategy!). For example, Mike found out that the owner of the D.C. condo was really anxious to get out from under his mortgage payments and was relocating to a different city. Really understanding the potential of a home from a renovation perspective (applying creativity and vision) is central to finding a good prospect. It helps a great deal to have others (such as your partner, a friend, or a real estate agent) view a potential home with you so that you can discuss and validate renovation ideas (that is, are they useful, practical, and will they add value?).

Location, Location, Location

Most of the people we've talked to over the years strongly suggest that anyone trying to make significant profits on a home renovation strategy purchase a home in the most expensive neighborhood possible (within his or her budget range). The reason for this advice is twofold. First, a fixer-upper in these neighborhoods typically can be purchased for below market value because most buyers in these areas are not interested in dealing with major renovation activities. And second, the potential upside (i.e., the profit) on these houses can be significant.

While buying a fixer-upper in an expensive neighborhood is a good strategy, obviously you have to be able to afford a house of this type. Plus, as we've discussed, the higher the purchase price of your home, the larger the total dollar amount you stand to lose if the market deteriorates. The first two houses Mike renovated were priced under $150,000, and he made a combined profit of almost $100,000 on the homes after renovating them. The key consideration is not the relative price of a home, it is the location of a home. A small, inexpensive cottage on a lake in a popular location may be a much better home to renovate than an equally priced old, 4,000-square-foot home in a neighborhood that is on the decline. A neighborhood in decline just looks tired (you'll see trash and junkers on its streets, poorly maintained yards, peeling paint on houses, debris strewn around houses, etc.). Table 5.2 is a checklist to help you compare the homes you may be considering.

In addition to this checklist, you may want to devise your own list of desirable home attributes. For example, we listed all the critical elements we were looking for in a home (see Table 5.3) and checked them off as we viewed potential properties. It's easy to start confusing one property with another as you look at more and more houses!

Selling a Home

Selling a home for top dollar is as much an art as it is a science. The key issues involved in this equation include:

- The time of the year a home is put on the market.
- The home's location.
- The home's curb appeal (landscaping and exterior appearance).
- Whether the home has all of the "hot" features (chef's kitchen, luxury bathrooms, walk-in closets, new windows, etc.).
- Staging (what the home looks like on the exterior and interior).

Typically, depending upon where you're located (Miami, Florida, may be different from Seattle, Washington), late spring to early summer is the best time to sell a home. This is partly due to the weather and partly because the school year is ending. As we've discussed, location is also a key consideration. Related to location is the feeling potential buyers get when they first drive up to the home and get out of the car. Is the home clean and inviting, or does it exhibit problems that immediately raise questions in the minds

Table 5.2 **Home Comparison Checklist**

	Home #1	*Home #2*	*Home #3*	*Home #4*
Property address	________	________	________	________
Asking price	________	________	________	________
Real estate taxes	________	________	________	________
Previous sale price/year purchased	________	________	________	________
The House	________	________	________	________
Age	________	________	________	________
Number of stories	________	________	________	________
Design/type	________	________	________	________
Exterior material/condition	________	________	________	________
Roof type/condition	________	________	________	________
Foundation type/condition	________	________	________	________
Overall exterior condition	________	________	________	________
Garage size/condition	________	________	________	________
No. of bedrooms	________	________	________	________
Living room	________	________	________	________
Dining room	________	________	________	________
Family room	________	________	________	________
No. of bathrooms	________	________	________	________
Enclosed porch	________	________	________	________
Basement/finished	________	________	________	________
Attic/finished	________	________	________	________
No. of closets	________	________	________	________
Fireplace(s)	________	________	________	________
Study/library	________	________	________	________
Laundry room	________	________	________	________
Heating system/condition	________	________	________	________
Cooling system/condition	________	________	________	________
Type of insulation/condition	________	________	________	________
Water heater/condition	________	________	________	________
Age of electrical wiring/condition	________	________	________	________
Age of plumbing/condition	________	________	________	________
Estimated water bill	________	________	________	________
Estimated heating bill	________	________	________	________
Estimated electric bill	________	________	________	________
Wood floors/no. rooms	________	________	________	________
Tile floors/no. rooms	________	________	________	________
Carpeting/no. rooms	________	________	________	________
Kitchen appliances/condition	________	________	________	________

(continued)

Table 5.2 (*Continued*)

	Home #1	*Home #2*	*Home #3*	*Home #4*
Windows/condition	______	______	______	______
Connected to sewer or septic	______	______	______	______
Connected to water or well	______	______	______	______
Landscaping/condition	______	______	______	______
Driveway & walkways/condition	______	______	______	______
Security system	______	______	______	______
Other security features	______	______	______	______
Building code compliance	______	______	______	______
Ability to expand/enlarge house	______	______	______	______
Swimming pool or spa	______	______	______	______
Size of lot/land	______	______	______	______
The Neighborhood				
Near work	______	______	______	______
Near schools	______	______	______	______
Near shopping	______	______	______	______
Near highways	______	______	______	______
Near public transportation	______	______	______	______
Near doctors/dentists	______	______	______	______
Near amusements (e.g., movies)	______	______	______	______
Near churches	______	______	______	______
Near parks and recreation	______	______	______	______
Garbage collection	______	______	______	______
Street lights	______	______	______	______
Sidewalks	______	______	______	______
Streets/alleys well maintained	______	______	______	______
Traffic volume on street	______	______	______	______
Neighbor's property well maintained	______	______	______	______
Near airport(s)	______	______	______	______
Neighborhood association	______	______	______	______
Special assessments forthcoming	______	______	______	______
Zoning restrictions	______	______	______	______
Environmental concerns	______	______	______	______
Type of local government	______	______	______	______
Local government services provided	______	______	______	______
Property value appreciation average	______	______	______	______

Table 5.3 Home Characteristics Wish List
Home #______: (Address______________________)

Our Wish List	*Potential to Improve*
Light and sun exposure	
Hardwood floors	
Up-to-date kitchen	
Up-to-date bathrooms (list number)	
Mature landscaping	
Central air/gas heat	
Fireplace(s)	
Ample closets	
# of bedrooms (space for guests)	
Outdoor living space (e.g., yard, deck, patio, etc.)	

of the prospective buyers? Have you renovated the home by focusing solely on what features and additions will most appeal to prospective buyers and increase the value of the home? And, finally, make sure the home is spotless inside, all the lights are turned on (even during the day), and all clutter is stored away. You might even want to remove some furniture from the home when you're trying to sell it so it looks roomier and less cramped.

Studies show that the longer a property stays on the market, the less the seller will net. The best opportunity for selling your property is within the first seven weeks of listing. Below are five main factors to accomplishing this goal.

Pricing Factor

Price your property at a competitive market value at the time you list it. The market is so competitive that overpricing by even a few thousand dollars could mean that your house will not sell. It is also true that your first offer is usually your best offer.

There are reasons for pricing your property at its market value right from the start in order to net you the most amount of money in the shortest amount of time. An overpriced home minimizes offers because it lowers agent response, decreases showings, limits the number of qualified buyers, and limits financing availability. Most often, an overpriced home nets less for the seller.

Eighty percent of the marketing is done when you decide on the price for which you will list your home. If you are unwilling to list at current market value, you would be better off not putting it on the market at this time.

Clean Factor

Most people are turned off by even the smallest amount of untidiness or odor when buying a home. Sellers lose thousands of dollars because they do not adequately clean up before showing a house.

If your house is squeaky clean, you will be able to sell it faster and net hundreds—if not thousands—of dollars more. If you are planning on moving, why not get rid of that old junk now so that your house appears larger? Make more space. Eliminate odors, especially if you have dogs, cats, young children in diapers, or if you smoke. You may not notice the smells, but buyers do! Most real estate agents have a difficult time communicating with sellers about odor. If you employ an agent to get the most amount of money for you, don't take offense if he or she confronts you about odor problems.

Access Factor

Top-selling agents will not show your home if both key and access are not readily available. They do not have time to run around town all day picking up and dropping off keys. They want to sell homes! The easiest way to ensure that your house will be shown to a prospective buyer by an agent is to make a key accessible at all times (usually in a lock box that is located in a logical place). When your home is being shown:

- Keep all lights on.
- Leave all drapes and shutters open.
- Keep all inside doors unlocked.
- Leave soft music playing.
- Take a short walk with your children and pets.

Let the buyers be at ease, and let the agents do their job.

Paint and Carpet Factor

Paint is your best improvement investment for getting a greater return on your money. Paint makes the whole house smell clean and look neat. If your house has chipped paint, exposed wood, or if the paint looks faded, it is time to paint.

If your carpet is worn, dirty, outdated, or an unusual color, you should seriously consider replacing it. Many houses do not sell because of this problem. Don't think that buyers have more money than you have to replace carpet. They don't. They simply buy a different home.

Front Yard Factor

Your front yard immediately reflects the inside condition of your house to buyers. People enjoy their yards. Make certain that the trees are trimmed so the house can be seen from the street. Have the grass mowed, trimmed, and edged. Walkways should be swept. Clean away debris. Remove parked cars. This all adds to curb appeal. If buyers don't like the outside, they may not stop to see the inside.

Eight Deadly Mistakes Made by Home Sellers

There are eight deadly mistakes commonly made by home sellers. Being aware of them can help you avoid them.

Mistake #1: Marketing Ineffectively

When you are selling your home, there are no guarantees that your ultimate buyer of your home will simply walk through your front door. In many cases, you may have to bring your home to the buyer. Effective marketing will help ensure that your property receives maximum exposure to attract a ready, willing, and able buyer in the shortest period of time. Ask your Realtor to give you a list of all the ways he or she intends to market your home, with a timeline. Also be sure to ask about having the home advertised on the Internet.

Mistake #2: Taking for Granted the Curb Appeal of Your Home

When you're preparing your home for sale, remember the importance of first impressions. A buyer's first impression can be the deciding factor on whether they even want to go inside for a look. It has been estimated that more than half of all houses are sold before the buyers even get out of their cars. With that in mind, stand outside your home and take a realistic fresh look at it, and then ask yourself what can be done to improve its curb appeal. Also ask your Realtor's opinion of how to improve the curb appeal. It could make a huge difference in your final sale price.

Mistake #3: Forgetting About Health and Safety Issues

Be up-front and tell your Realtor about any problems with the property. They are going to be discovered anyway. A decade ago, health and safety issues were rarely part of the typical real estate transaction. Today, however, it's common for inspections related to health, safety, and even environmental concerns to be a part of most sales contracts. Moreover, in many states, the seller must disclose to the buyer any knowledge of existing property problems. In many cases, these issues have been or can be factored into the home's listing price.

Mistake #4: Forgetting What You Would Want to See If You Were the Buyer of Your Home

Remember that although people may vary in personality, they tend to be the same when it comes to expectations at someone else's expense. In other words, a prospective buyer would probably like your home to be a perfect home from top to bottom, inside and out. Try to do as many of the following tasks as possible to improve the likelihood of your home's selling in an expedient way.

On the Outside

1. Sweep the front walkway.
2. Remove newspapers, bikes, and toys.
3. Park extra cars away from the property.
4. Trim back the shrubs.
5. Apply fresh paint to siding and trim.
6. Clean all windows and window coverings.
7. Make sure roof and gutters are clean and in good condition.
8. Mow the lawn frequently and plant flowers.
9. Keep any outside areas frequented by pets clean and tidy.

On the Inside

1. Clean the kitchen and bathroom(s) to a shine.
2. Vacuum the entire house and clean carpets as needed.
3. Place fresh flowers in the main rooms.
4. Put dishes away, unless you are setting a formal display as decoration.
5. Make all beds and put away all clothes.
6. Open drapes and turn on lights for a brighter look.
7. Straighten up closets.
8. Put away toys.
9. Turn off televisions.
10. Play soft music on the radio/stereo.
11. Keep pets out of the way and pet areas clean and odor-free.

12. Secure jewelry, cash, prescription medication, and other valuables.
13. Enhance the spaciousness of each room. For example, less furniture is always better and clutter makes a room feel smaller.

Mistake #5: Thinking You Need to Be in the Home to Explain Things to a Prospective Buyer

You will be better served by allowing your Realtor to do the job without you. Most potential buyers feel more comfortable if they can speak freely to the real estate professional when the owners are not present. If people unaccompanied by an agent request to see your property, refer them to your real estate professional for an appointment.

Mistake #6: Pricing Your Home Too High or Too Low

Perhaps the most challenging aspect of selling a home is listing it at the correct price. It's one of several areas where the assistance of a skilled real estate agent can more than pay for itself. Listing the home too high can be as bad as listing it too low. If the listing price is too high, you'll miss out on some potential buyers who are looking in the price range where your home should be. This is the flaw in thinking that you'll always have the opportunity to accept a lower offer. Chances are, the offers won't even come in, because the buyers who would be most interested in your home have been scared off by the price and don't even take the time to look. By the time you lower the price, you've already lost exposure to a large group of potential buyers. The listing price is especially tricky to set when prices are quickly rising or falling. It's critical to be aware of where and how fast the market is moving—both when setting the price and when negotiating an offer. Again, an experienced, well-trained agent is always in touch with market trends—often even more than appraisers, who typically focus on what a property would be worth if sold as-is, right now.

Mistake #7: Starting to Plan Your Move Too Late

Many sellers simply don't plan their move early enough and then feel totally overwhelmed at the time of moving out of the house. If you are able to move at any time of the year, don't wait until summer, the peak moving season. Consider, also, that the first and last few days of any month are extra busy. If you plan to sell your house, get it on the market as soon as possible. And keep a record of all expenses related to your move—some of them may be tax deductible.

Fill out a "personal household inventory" for each room. This is important for establishing the declared valuation for the shipment and as a permanent inventory for insurance purposes. List, as nearly as possible, the year of purchase and original cost of each item. Attach any invoices or records of purchase to the completed inventory. Prepare a separate high-value inventory if the shipment will contain articles of extraordinary value. The following list includes items that might fall into this category:

- Antiques.
- Art collections.
- Cameras.
- China collections.
- Computer equipment.
- Crystal.
- Figurines.
- Firearms.
- Jewelry.
- Manuscripts.
- Oriental rugs.
- Silver.
- Stones or gems.
- Tapestries.
- Televisions or stereos.

Also, unless you have been given a binding moving estimate, in which a firm cost is established in advance, the exact cost of a move cannot be determined until after the shipment has been loaded on the van and weighed. (The weight on which charges are based is calculated by weighing the van before and after loading.) The total cost of the move will include transportation charges, charges for declared valuation, plus charges for any extra services performed at your request. All of these charges are based on tariff rate schedules.

Mistake #8: Using a Convenient Realtor Instead of an Experienced Realtor

When working with a Realtor, it's critical that you have full confidence in the agent's experience and education. A skilled, knowledgeable agent should be able to explain to you exactly why your home needs to be priced at a certain level—compared to recent listings and sales of homes similar to yours. Experienced agents also know exactly what the current pool of buyers is looking for in relation to particular styles and price ranges of properties. A skilled agent can recommend changes that will enhance the salability of your home, thus increasing the price—and/or decreasing the length of time before a sale.

Interview with Aubrey Wallace, Real Estate Agent, Marin County, California

You've heard the saying, "You don't get a second chance to make a first impression." Well, this is definitely the case when you put a home on the real estate market. The keys to getting top dollar for a home are:

- Timing (time of year, market conditions, etc.).
- Conditioning (current shape of home, features, etc.).
- Pricing (correctly setting the price to sell).
- Staging (presenting the home in the most favorable light visually, with an eye to "curb appeal"—its immediate first impression on a buyer arriving at the house).

Not paying close attention to these factors typically results in a property's being listed for too high a price. Then, when the home does not sell, the price will repeatedly be reduced, and the home will become stale. The longer it sits on the market, the more people will stay away from it. People will begin to ask, "What's wrong with it?" and "Why hasn't anybody else bought it?" People seem more willing to get into a bidding war with other prospective buyers and pay too much for a property because they are comforted in knowing that other people are interested in the property. When you're trying to sell a home, the most important day is the day of the open house for real estate agents. To get top dollar, the presentation this day must build excitement among the agents. That's when the buzz starts to happen.

A real estate fact is that the more people that want to buy a property, the higher the sale price will be. For example, I recently had a client who inherited a home in a very desirable neighborhood for young families. The buyers of this type of home will be very busy with kids, and it is likely that both parents work, so the buyers will not want to deal with any major renovations in the short-term—they'll want something that they can immediately move into. The home was in poor shape cosmetically, so I recommended that the owners paint the interior and exterior of the home and carpet the interior. These minor improvements, including some minimal staging (e.g., planting fresh flowers in the yard), got a number of buyers interested in the property, and the sellers received $50,000 more than the initial asking price. Staging is crucial—you need to give

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people some reason to get excited about a home. There has to be an emotional reaction. You have to push buttons.

The more a home looks like a model home, the more a buyer's reserve drops. And this is very important. Buyers must be made to feel comfortable immediately when they enter a home so that they will open closets and cabinets and ask any questions on their mind. The problem is that we're taught to do the exact opposite when we enter someone else's home. We're taught to be respectful, to not touch anything, to ask for permission before doing anything, and so on. Model homes are a bit sterile, but they convey the feeling that the buyer is free to explore and probe. I try to put something in the home, if it is staged, that will connect in some way with a buyer, such as small plants, a picture, magazines, nice furniture, and so forth.

There are beautiful properties on the market all the time that do not sell for a long time, and sometimes these homes can be purchased for below their market value. Typically, they come on the market at too high a price. Also, they may have poor curb appeal and not be staged very well. In addition, many homes are simply not marketed well by the listing real estate agents. I look for these properties all the time because I have clients that are interested in picking up properties of this type if they can negotiate a very good price. But this type of buyer has to be patient, because typically there are not dozens of these properties on the market at any given moment and other people are aggressively looking for these properties, too.

There is an old saying in the real estate business, "Buyers are liars." I can't tell you how many buyers I've had come into a first meeting and tell me, "We can see beyond the rough edges of a home and we're willing to do some work on a home if we can get a good deal." They tell me they're willing to do cosmetic improvements like paint and carpet and may even be willing to renovate a kitchen or bath. And then I take them into a home that just needs the cosmetics, and they look at each other, turn their noses in the air, and don't make an offer.

How can people work best with a real estate agent? My best clients are honest, open, know what they want, and loyal. If I have clients that fit this description, I call them first with the best new listings. I don't think people realize that

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real estate agents are compensated 100% through commissions. People should know that we do not earn one dime until a deal closes (the day a buyer takes possession of a home and money exchanges hands), and the amount we end up with is just a fraction of the total commission.

To sum up, someone considering buying homes to renovate:

- Needs to be able to purchase the home for the right price.
- Needs to know up front, before buying a home, what changes need to be made to add significant value.
- Needs to know what price he or she will have to sell the home for to make a profit.
- Will be best off buying the *next* least expensive home in the most expensive neighborhood possible.
- Needs to know the potential buyer and neighborhood profile (e.g., new families, retirees, etc.) and needs to match all renovations to their specific needs and tastes.
- Needs to make improvements to the four key attributes that sell houses: curb appeal, kitchens, bathrooms, and closets.

Working with Real Estate Agents

Working with a qualified real estate agent when *buying* a home is a no-brainer. At this preliminary stage in the home renovation process, working with an agent will not cost you a penny, and he or she can provide you with all sorts of valuable services. Realtors can help you:

- Determine what kind of home you're looking for.
- Calculate what you can afford.
- Research locations and available properties that meet your criteria.
- Set up home-viewing appointments.
- Advise you on the strengths and weaknesses of the property you are looking at.
- Dig up context on the property and the owners (e.g., Are the owners transferring? Are there any problems with the home?).
- Write an offer and deal with the eventual negotiations.
- Set up and handle the home inspection.

- Deal with the paperwork required by your lender and other involved parties (e.g., title company, insurance company, etc.).
- Close the deal, dot the I's and cross the T's, and even help you arrange and manage your move.

This is truly a significant amount of service for free, but that's the way the game is played. Your real estate agent will make money by earning a percentage fee from the seller (typically between 5% and 7% of the sale price). Just remember that while a real estate agent may have your best interests at heart, he or she is a 100% commissions-based salesperson and does not earn a dime unless you purchase a home. So it is in the agent's interest to make sure that you do this, and his or her advice may be somewhat tainted by this fact. Also keep in mind that the fee earned by a real estate agent is usually split between two agents (the listing agent and your agent—unless your agent *is* the listing agent). Additionally, your agent's fee is shared with the real estate agency that employs them (such as Coldwell Banker or Remax). So while a 5%–7% fee on the sale price may seem like a lot of money to you, in reality, it is split many times, leaving only about 1% to 2% for the agent.

Interview with Tom Gardner, Real Estate Agent, Washington, D.C.

The least desirable homes from a buyer's perspective need work. For a renovator, pick a location (a neighborhood) that merits making improvements on a home. The best strategy for renovators is the worst house in the best location.

A buyer may be able to get a good price on a home if it has been on the market for a long time. Working with an aggressive real estate agent (that is, one who is working solely for the buyer) will get you all the information you need to make a sound purchase decision. A buyer's agent will not require a retainer but may want a signed exclusive contract with the buyer.

Do not be afraid to lowball the buyer. But before you do this, prequalify for a loan and have all your financial information in order. This way, you can waive the financing contingency and go to a clean and simple contract. Do not waive the inspection contingency, because you never know what an inspection will uncover. Don't get emotionally attached to a prospective home—this is a business decision. You need to have vision to see beyond what looks like a crummy

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home to something that can become very appealing from a buyer's perspective after renovation.

What to renovate?—kitchens and baths. Make them nice looking and neutral. Put in appliances and fixtures that match the cost/quality of the home and the neighborhood. Don't put a Viking range in a $150,000 home (though it may be a good idea to put in stainless steel, faux chef's appliances in a new kitchen because this is a hot trend). Open up the inside of the home as much as possible, paying particular attention to letting in light throughout the house. Fix anything that would be flagged in a home inspection report.

When selling, curb appeal is a key to getting the top price for a home. Don't spend a huge amount on landscaping (buyers are willing to upgrade landscaping), but the front yard, especially, must be neat and attractive. If a home has hardwood or carpeted floors, make sure they are in excellent shape. Paint everything, inside and out. Timing is everything when selling a home, and timing is often location-specific, so find out when the best time to sell is in your area, and put your home on the market then. Price a home at its market value—don't try to overprice it. You could get three real estate agents to give you a price and then average them. Don't put a home on the market until the renovation work is 100% complete.

Ten Questions to Ask a Realtor Before Listing

1. What is your percentage guarantee on the sale of the home?
2. Do you personally answer all phone calls on the property?
3. Do you have an escrow assistant to keep the paperwork flowing smoothly?
4. Do you have a personal Internet Web site? How do you use this site to market homes?
5. What systems do you have in place that will keep you in constant contact with me during the listing and the transaction?
6. Are you fully automated with your own personal computer, fax machine, e-mail, and voice mail?
7. How much time and money do you invest each month in professional training so that my home has the advantage of the latest marketing strategies?
8. Can you give me a list of your clients who have closed escrow and can I call them?
9. Why are you personally motivated to sell my house?
10. Why should I list with you rather than any other agent who is calling?

Interview with Danielle Fraser, Real Estate Agent, Crested Butte, Colorado

How Can a Buyer Purchase a Home for Below Its Asking Price/Market Value?

The art of negotiation comes into play here. You do not want to insult the sellers by making a ridiculously low offer. Depending on your market, your local Realtor has the knowledge and practical experience on the current trends in your area. The Realtor's commission is negotiable, as is the property's asking price. The agent's commission is well worth the expense, however, considering how much one does for you managing the logistics associated with the extensive paperwork that will be generated to make a purchase. Buying a house on your own or buying a "For Sale by Owner" house not only puts the burden on your shoulders, but legal fees are costly.

Your Realtor will pull comparables sold in your market and come up with a fair offer for a starting point in the negotiation process. Your Realtor is working for *you,* so trust him or her. Together with your knowledge and input, the deal will be successful.

What Renovations Add the Most Value?

Curb appeal. Cosmetic changes on the outside of a home or even a paint job can sell a home. Landscaping or becoming clutter-free is a big help, too. The kitchen is the number-one indoor seller in a home. If you are renovating your kitchen for resale, then most definitely update your appliances, cabinetry, lighting, and countertops. If your cabinets never went out of style, clean them up and change the hardware. Bathroom remodels are second to kitchens. Put tile on the surfaces and update the hardware and lighting.

What Elements of a Home Are Prospective Buyers Most Interested In?

Every buyer is different; however, from an overall U.S. market point of view, the key elements a homebuyer wants are location; a solid infrastructure, including a solid foundation with curb appeal; and interior potential for renovation. As I already mentioned, the potential for renovating the kitchen and bathrooms is very important in the buying decision.

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How Can a Seller Get the Maximum Price for a House?

The best way to do this is to not be in a hurry to sell. However, from a renovating standpoint, be sure to put good-quality, attractive items in your project. People shop enough to know what is quality and what is not. Do not cut corners on the finish work. People believe they are getting a great deal when the cosmetic touches are meticulous—window trim, moldings, door hardware, front and interior doors. Being messy with paint can make a house look trashy and decrease the offer by $10,000. A clean, uncluttered, and well-thought-out renovation will bring in a top-dollar offer.

The question of whether to work with a real estate agent when you're *selling* a home is more complex. The best way to determine whether you need an agent to sell your home is to perform a simple cost-benefit analysis. For the 5%–7% fee (the national average in 2002 was 5.74%) on the sale price of your home (the cost), what benefit will you derive (the benefit)? Real estate agents also perform valuable services during the sale of a home. They help:

- Set a sale price that is reasonable based upon current market conditions.
- Enter the home into the MLS database.
- Prepare the home for sale, offering suggestions to improve the curb appeal and general condition of the home before it is shown.
- Market the property via networking with their peers, open houses, newspaper advertisements, and so forth.
- Represent the seller when an offer had been made and handle the paperwork to ensure a smooth transaction.

Of course, the question always comes down to whether this set of services is worth 5% to 7% of the sale price. At 6%, an agent's fee on the sale of a $500,000 home is $30,000, which may be equal to or more than the home's market appreciation (which has averaged 4% nationally since 1993).

Sell Your Home Yourself

Nearly 50% of homeowners try to sell their home on their own, but, according to the National Association of Realtors, only 16% actually sell their home without access to the MLS, the primary database most realtors use to market and sell property. Additionally, if you think you may want to sell your home yourself, you need to consider the time you will spend marketing it, plus you will need to decide whether to pay half the typical sales commission to real estate agents that are representing buyers. If you decide not to pay this commission, you'll seriously limit the pool of potential buyers because agents will not show them your home. While potential buyers may find your home themselves, often buyers do not aggressively search for homes on their own but instead rely on their agents to steer them.

The Internet has enabled a number of firms to blossom that can help someone trying to sell a home without using a real estate agent. Web sites such as assist2sell.com, hotlineproperties.com, ziprealty.com, getonmls.com, owners.com, 4salebyowner.com, and ForSaleByOwner.com offer a wide variety of services for the owner that wishes to sell a home on his or her own. The following fact sheet from ForSaleByOwner.com offers an example.

> **About the Company:** ForSaleByOwner.com is the first and only national residential property network combining both online and offline property listings, directly connecting buyers and sellers of homes without charging a broker commission. Alongside its profitable premier Internet guide, ForSaleBy Owner.com distributes 1.2 million magazines, with a readership of close to 3 million each month, across the largest real estate markets in 26 states.
>
> **Mission:** ForSaleByOwner.com is a real estate services company committed to allowing consumers to buy and sell property without having to pay a commission. The company drives potential property buyers to its web site and its magazines in order to help sellers generate interest in their property. Also, the company provides its customers with the ability to list their properties in the Multiple Listing Service (MLS) for a flat rate.
>
> **Offerings:** ForSaleByOwner.com currently lists tens of thousands of homes on its web site and in its magazines throughout North America. For its various services, the company charges its customers a low flat fee, which is far less than the national average broker commission of 6%. In addition to allowing its customers to list property anywhere in North America and to browse its database of properties for free, ForSaleByOwner.com offers the following comprehensive resources to homebuyers and sellers:
>
> - *Home Improvement:* access to contractors across the country as well as tutorials and advice.
> - *Moving Services:* information on relocation and moving companies, utility connections and home inspections.

- *Financial Services:* online applications, online mortgage calculators, financing information, appraisals, title search services and credit reports.
- *Neighborhood Reports:* city profile database, cost of living comparisons, school reports and crime statistics.

How it Works: On the Internet, ForSaleByOwner.com utilizes the e-commerce hub model; a Web site that allows buyers and sellers to communicate directly with one another without the interference (or the commission) of a middleman or broker.

With the ForSaleByOwner.com MLS option, ForSaleByOwner.com acts as the listing agent, but does not charge and will not accept a commission for the service. With the listing agent out of the picture, only the buyer's agent is left to pay, obligating a ForSaleByOwner.com customer to pay only a 3% commission (to the buyer's agent). And, of course, if a buyer contacts the property seller through ForSaleByOwner.com, he/she doesn't have to pay any commission whatsoever.

Get Your Real Estate License

If you are actively pursuing a wealth creation renovation strategy, it may make sense for you to get your real estate license. It is fairly simple to do (there are, typically, many local classes, and the Web has dozens of online alternatives, including www.lumbleau.com), and by getting your license you can feel more confident about selling a home yourself. Plus, if you work for a real estate firm, you can take advantage of the benefits of working with a professional agent while paying a fraction of the typical fee. Each state licenses its own real estate agents, but a good place to start your inquiries is the National Association of Realtors (www.realtor.org).

Thom and Marcy Currā, Home Renovators

We have been renovating cottages on small lakes outside of Scranton, Pennsylvania. We look for lakes that are private and for homes that are sound structurally but in need of basic cosmetic updating. We renovate these cottages in a very classic lake-cottage way (say, from the 1920s) and then rent them out to people from

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New York City or Philadelphia who are trying to get away from the stress and frenetic activity of big-city life. We actually try to create a whole experience (down to classic-style radios, old jazz CDs, and period colors on the walls) for our renters that lets them feel as though they have stepped back in time.

To date, we have renovated three cottages. They have all been lakefront properties that we purchased for between $65,000 and $80,000. Our financial model is that the properties will be entirely debt-free in 15 years, and the rent from the properties will cover all expenses during this period. We used the equity from the first cottage, purchased in 1993, as collateral for the second cottage, and the equity from the second for the third.

Because Thom lived in the first cottage for a number of years and did a lot of the renovation work himself, he was able to get a very good feel for both the area where these lakes are located in northeastern Pennsylvania plus become an expert in how to renovate cottages of this type. The first cottage had a great view and a fireplace, but everything else was in terrible shape. Thom basically rebuilt the home from the foundation up (a great learning experience, but that's not the type of cottage we look for now). Besides rebuilding the foundation, Thom redid the wiring and plumbing and installed a new heating system. Thom bought this cottage for $70,000 and put $50,000 into it. It has recently been appraised for $150,000.

The second cottage was right next door to the first (see Figure 5.1). We knew what we were looking for at this point and only had to do cosmetic improvements such as painting (both the interior and the exterior). The previous owners were heavy smokers, so we had to scrub all the walls, ceilings, and floors with bleach and paint, paint, paint. The only things we hired outside contractors for were to check the wiring and install ceiling fans and to build a dock (a necessity for a lakefront cottage). The second cottage is really a cash cow for us. Our mortgage is around $500 per month, and renters pay $750 per week during the season (basically, from Memorial Day through Labor Day). In the off season, we rent the cottages monthly. We paid $65,000 for the second cottage, and it was recently appraised at $107,000.

We bought our third cottage for $68,000 fully furnished (which is the way to go if the furniture is nice and you're going to turn the property into a rental—see Figure 5.2). This house was an excellent deal because the elderly woman

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Figure 5.1 **Our second cottage renovation**

Figure 5.2 **Interior, third cottage view**

who lived there qualified for some government assistance and they paid for the installation of new windows throughout the house, an updated heating system, the installation of a new washer, dryer, and hot water heater. We hired young workers during the summer to paint the exterior of the cottage (they needed to be watched, but they did an excellent job). We rented this cottage for $875 per week, but we ended up keeping it for only one year because someone offered us $123,500. We took the money and ran!

We recently bought a new home that we live in full-time. It's a large (3,600 square foot) old Victorian-style home built in 1865. It has five bathrooms, five bedrooms, and three fireplaces. It sits on two acres and there is also a carriage barn and other stone outbuildings on the property. We paid $212,500 for the house and are currently in the process of restoring it. We are going room by room, starting with the rooms that we spend the most time in. We've redone the wood floors downstairs and rewired the whole house. We've also done some painting. Recently we had the house reappraised and it was valued at $350,000.

Lessons Learned

- Work with what you have in a house. Don't just tear everything out and put in new things. We've mostly done cosmetic work and focused on decorating.

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Look at the magazines that feature the type of house you've bought for ideas and trends.

- Paintable caulk is your best friend; you can repair a lot of blemishes and not-so-perfect work with caulk.
- The Web is a great way to advertise a rental. We get all of our rentals through it, and we do not need to run classified ads in newspapers. Cyberrentals.com, A1vacations.com, and greatrentals.com are excellent.
- Make sure you really interview and get to know potential contractors. Important considerations for us are: Do we like their personality, are they approachable, and are they willing to work with us in a close partnership? We'd recommend working with an excellent craftsperson who works independently and is licensed and insured. Ask contractors what their hourly rate is up front and what the time frame for completing the project will be. Get them to put these things in writing. We always buy all of the materials ourselves so that we don't pay the contractor a percentage on top of the base cost.
- Don't hire your relatives. You'll be afraid to tell them if something is wrong and it's more than just a business relationship.

Chapter 6

Home Financing

Sashi S. McEntee

We are not experts in home financing (even after purchasing three homes), so we asked our friend Sashi S. McEntee to write this chapter because she *is* an expert. Sashi sharpened her creative financing skills while working as an independent mortgage broker, packaging residential purchase, refinance, and construction loans for a variety of lenders. Based in the San Francisco Bay Area, she currently works as a mortgage consultant for a nationwide direct lender.

Introduction

When you make an investment, such as buying a stock, you usually have to come up with 100% of the money. Not so in real estate. As long as you can secure the financing, you can come into the deal with as little as no money down. There is no trick or magic to this—you simply have to convince a lender to lend you this money based on its evaluation of risk factors such as your credit history and ability to repay the loan. When you are trying to purchase a home with an eye to renovating and selling, getting financing that allows you cash-flow flexibility and ease of selling is the goal. In this chapter, we'll talk about the different kinds of financing and how to secure the best financing for your needs.

Mortgage Basics: Concepts and Definitions

Your mortgage consists of several components:

- *Loan amount:* the amount you are borrowing.
- *Interest rate:* the simple interest the lender charges you to borrow.

- *Term:* the time period in which your loan will be paid.
- *Amortization:* the schedule by which your loan can be repaid by the end of the term.

Amortization is a way of dividing loan payments into principal and interest contributions such that the loan gets paid off entirely by the end of the term. Loan payments follow an amortization schedule, which dictates how much of your payment goes toward reducing your loan's principal balance and how much goes to the lender as interest.

Fixed versus Adjustable

The interest rate on your mortgage can either be fixed or be adjustable over the term of the loan; that is, a fixed rate mortgage (FRM) or an adjustable rate mortgage (ARM). As you'd expect, FRMs have a fixed interest rate for the entire term of the mortgage, which can be anywhere from 10 to 30 years (with 15 and 30 years being the most common). Payments are amortized over the term of the loan, so the payment on a 15-year fixed loan will usually be around 40% higher than the payment on a 30-year fixed loan. Table 6.1 provides examples.

Adjustable rate mortgages are 30-year mortgages that have an initial fixed period and thereafter become adjustable on a monthly, semiannual, or annual basis. This fixed period could be as short as one month or as long as 10 years. In general, the shorter the period of time the lender is keeping the rate fixed, the lower that rate is. After the fixed period, the rate is determined by the index plus the margin, which are both determined at the start of the loan. An index is an economic indicator, usually an average of yields or rates of a particular benchmark, like U.S. Treasury securities, over a period of time, like one year or six months. The margin is the amount added to the index in order to calculate the interest rate for an adjustable rate mortgage (ARM). The margin is expressed as a percentage, for example, 0.75%. Common indices used to calculate ARMs are the Prime Rate, the one year constant maturity treasury index, and the London Interbank Offered Rate (LIBOR). The more volatile and reactive to the market the index is, the lower the interest rate the lender will offer you. We'll talk more about ARMs in the next section.

Balloon loans also have an initial fixed term, e.g., 7 years, and are usually amortized over 30 years, but at the end of that fixed term the balance of the loan is due in full.

Table 6.1 **Payment Comparison: 15-Year Fixed vs. 30-Year Fixed Mortgage**

	15-year fixed	*30-year fixed*
Loan amount	$240,000.00	$240,000.00
Interest rate	5.75%	6.25%
Term (months)	180	360
Payment (months)	$1,992.98	$1,477.72

Conforming versus Jumbo

Conforming loans are those that meet Federal National Mortgage Association (FNMA or Fannie Mae) guidelines. The 2003 loan amount limit for a single-family home is $322,700. Anything above that is considered a jumbo loan. Because the loan amounts of conforming loans are smaller than those of jumbo loans, conforming loans are generally priced at lower interest rates.

Your Interest Rate

Don't get too excited when you see that spectacularly low interest rate online or in the paper. Interest rates are tailored to the particular loan situation, so your rate may be different, based on certain factors and their relative risk to the lender (see Figure 6.1) These factors include:

- *Loan amount:* The higher the amount borrowed, the greater the risk to the lender.
- *Loan-to-value ratio (LTV):* This is the ratio of the amount borrowed to the appraised value of the property. Loans with an LTV over 80% are considered to be riskier loans and will be priced higher; conversely, loans under 70% LTV are much less risky and can have lower interest rates.
- *Credit score:* The FICO score, developed by the Fair Isaac Corporation, is a way of using credit information to calculate potential risk. Most lenders have a range of credit scores in which they are comfortable lending, such as 660 and above. Below this level, rates may be higher.
- *Type of loan:* Historically, borrowers who choose a fixed rate mortgage are less likely to default than those who choose mortgages with changing payments (ARMs or balloons).
- *Occupancy:* A mortgage for a primary residence is considered less risky than one for a vacation home or an investment property since the borrower has more personally invested in the home.
- *Points:* Lenders offer interest rates at a range of prices expressed in points (i.e., percentage points) of the loan amount. A no-points loan means that the origination fee, usually 1 to 2 points, is paid for in an increased rate. If you pay points, you can lower your interest rate, generally at a rate of 0.125% in rate for every 0.25% to 0.5% paid in points. We'll cover points and other closing costs in the next section.
- *Lock period:* At a certain point, you will decide to *lock* the interest rate, which guarantees you this rate for a period of time—usually 30, 45, or 60 days. The

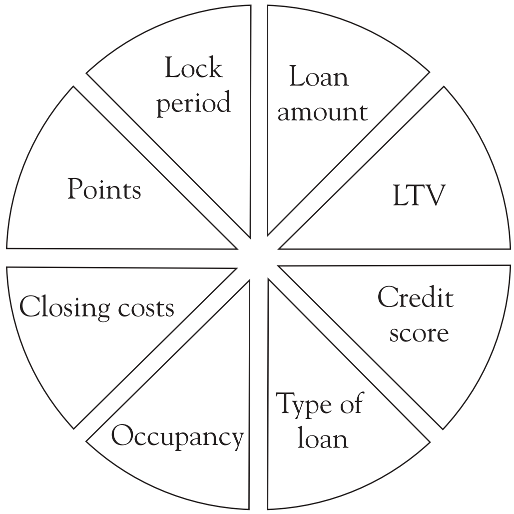

Figure 6.1 **What determines your loan rate?**

shorter the lock period, the cheaper the rate will be. In some case, you can get a 15-day lock, but this is only advisable when you are very near close of escrow.

Closing Costs

As they say, there is no such thing as a free lunch—or a free loan. The fees associated with the loan are called closing costs or settlement costs. You will always pay closing costs, even in a no-cost loan. It's just a matter of whether you pay them up front at closing, or the lender pays them and offers you a higher interest rate to compensate. You can expect to pay around 1% in closing costs for a no-points loan.

In addition to closing costs, there are certain items you will prepay at closing, including prorated interest on the new loan for the first month, the first years' hazard-insurance premium, and prorated county property taxes.

Your lender or broker is required by law to give you a Good Faith Estimate (GFE) of closing costs and prepaid items within three days of application. The GFE corresponds to the Settlement Statement, or HUD-1 form, using the same codes for each line item. There should be no surprises when it comes time for closing. The GFE is just an estimate, but the end total should not be too different (in most cases, it should be less than what you expected).

Sample Closing Costs

Lender Fees:

- Origination fee, usually 1–2% of loan amount.
- Discount points.
- Underwriting, processing, or document review fee.
- Application fee.
- Credit report fee.
- Life of loan flood certficate
- Tax service fee.

Mortgage Broker Fee.

Appraisal Fee.

Escrow and Title Fees:

- Escrow or settlement fee.
- Homeowner's title insurance policy.
- Lender's title insurance policy.
- Notary fees.
- County recording fees.
- Wire transfer fee.

In addition to the GFE, your lender will provide you with a Truth-in-Lending Statement that shows the loan's annual percentage rate, or APR. The APR expresses the interest rate plus closing costs as a percentage, allowing you to make an apples-to-apples comparison of two loans. However, the APR for ARMs is calculated using the current index, which could in some cases be lower that the quoted rate (this can be a little misleading). Your actual interest rate will be what you were quoted, not this lower rate.

Impound, or Escrow, Accounts

At closing, you will be given the option to open an impound account for taxes and/or insurance. If you accept this option, your monthly statement will bill you for a month's worth of taxes and insurance in addition to your mortgage payment. This money will be placed in your impound account, and when your taxes and insurance come due, they will be paid automatically out of this account. Lenders love impound accounts because they ensure you will stay current on your taxes and insurance. However, when you have an impound account, you are paying for taxes and insurance before you need to, which reduces your cash flow toward renovations. Avoid the impound account, but make sure you pay your taxes and insurance on time (or the bank could initiate foreclosure proceedings!).

How Does the Lender or Broker Get Paid?

The lender or broker gets paid by the origination fee, usually 1% to 2% of the loan amount. Most people get no-points loans, in which the origination fee is paid via a slightly higher interest rate. If the loan is through a broker, the broker's fee on a no-points loan is paid by the lender. This shows up as a line item in the settlement statement—sometimes this is the only place where the broker's fee is disclosed.

In addition to the origination fee and the interest on the loan, lenders usually sell their loans on the secondary market. For example, conforming loans will be sold to Fannie Mae or the Federal Home Loan Mortgage Corporation (FHLMC or Freddie Mac), the two largest mortgage investors. Fannie and Freddie are stockholder-owned corporations, and a portion of their boards of directors are appointed by the president of the United States. Even when the loan is sold, the lender will generally retain the servicing of the loan for a fee from Fannie Mae, for example, which means you continue to get your statement from the same lender after the loan itself is sold.

Simon Ressner and Moy Pang, Home Renovators

Our building was an unusual project for New York City in that it was a multistory single-family townhouse built in a section of Brooklyn where vacant lots were extremely scarce (see Figure 6.2). While we bought this house new on spec from a local developer, we ended up doing a renovation of some complexity since the developer's contractors did such a poor job on many construction details. The building cost $732,000 initially, but with changes, modifications, and customization, it ended up costing closer to $750,000. The building is four stories, with structural walls of concrete block with brick veneer. The main structure of the floor and roof is solid timber joists. Interior partitions are constructed of drywall (Sheetrock) on wood studs. The building has central air-conditioning and circulating hot water for heat.

Due to a number of factors, all of the builder's initial trade work—plumbing, electrical, heating, and interior finish carpentry—ended up requiring ex-

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Figure 6.2 **Exterior, Brooklyn multi-story, single-family townhouse—a rarity!**

tensive reworking. Because the quality of most of the labor pool in our area is poor, workers need to be monitored closely (which the developer's contractors did not).

As a result, a lot of the finish carpentry was just not done or was done poorly. Casing was not installed around any windows. Trim under the windowsills was

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done improperly in terms of accepted practice. Almost every lighting fixture had to be reinstalled because outlet boxes for fixtures were not properly attached to the structure, so heavier fixtures could not be attached without first providing proper framing to which the boxes could be attached. The heating system was not properly piped because the plumbers were used to installing equipment for one- and two-story structures. (As buildings get taller, adjustments and additional equipment must be included in hydronic heating systems.)

However, the basic construction of the house is solid and substantial. Due to the extremely high demand for single-family homes within the city proper, this building has appreciated in value more than 40% in less than a year.

Based on our experience, here is a list of things a homeowner should check or have checked before purchasing a home:

- All electrical devices (using a circuit-tester from someplace like Home Depot). Are outlets and switches connected, are they connected properly, and are circuits identified in the panel box?
- Water pressure and flow rate at all kitchen and bath fixtures.
- Holes in walls for pipes. Are they sealed and do they have escutcheon plates?
- Heating system components. Are they all properly sized and operating?
- Central-air systems. These should be balanced and checked *before* you close up walls and ceilings. If the system is out of balance or is not getting adequate flow, it is much less painful to make the changes if you don't have to cut out walls and ceilings.
- Effective warranty dates for anything mechanical/electrical: boiler, air conditioner, refrigerator, range, disposal unit, alarm system (very important), washer/dryer, and so on. Get out all the owner's manuals and make a note of the warranty dates—you may have a lot of appliances in the house months before you actually move in, and the clock is ticking.
- Fireplace flues and dampers.
- Roof, gutters, drainage piping, and every penetration through the roof from pipes and skylights.
- Smoke detectors and carbon monoxide detectors. They are critical!

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Lessons Learned

- Incomplete or poor construction drawings lead directly to poor construction.
- Although high-priced contractors are not necessary to guarantee good-quality work, low-priced contractors almost certainly will provide poor-quality work.
- Finish carpentry (moldings, casework, paneling) should be considered early in the project and clear details provided for proper assembly.
- Avoid using forced hot air for heat in cool-to-cold climates. We used an air system for cooling and traditional cast-iron radiators with circulating hot water for heat. The extra cost is worth the difference in comfort.
- Good-quality windows have a substantial effect on the appearance of each room. If the cost is not prohibitive, clad-wood windows are both durable and aesthetically preferable.
- Carefully plan all the internal wiring for power, lighting, data, and television. Always put more electrical outlets in the room than the code requires (12-foot maximum spacing.)
- Pay good subcontractors on time.
- Cut your losses with bad contractors, even if it means delays. If you don't have time to do it right now, when will you?
- Use the Internet to obtain product information, and read the details before installing equipment, appliances, and so forth.
- Use good-quality doors and hardware.
- Hang in there, and check work often.

The Loan Process

These are the basic steps you can expect to take in the process of securing your financing (see Figure 6.3).

Prequalification

During prequalification, your broker or lender will evaluate your credit history, credit score, income, debt, and assets to determine how much you can afford. This is not a commitment to lend or a guarantee of approval; however, most realtors will not present an offer without one. Prequalification shows you are serious and have taken the first steps to secure financing.

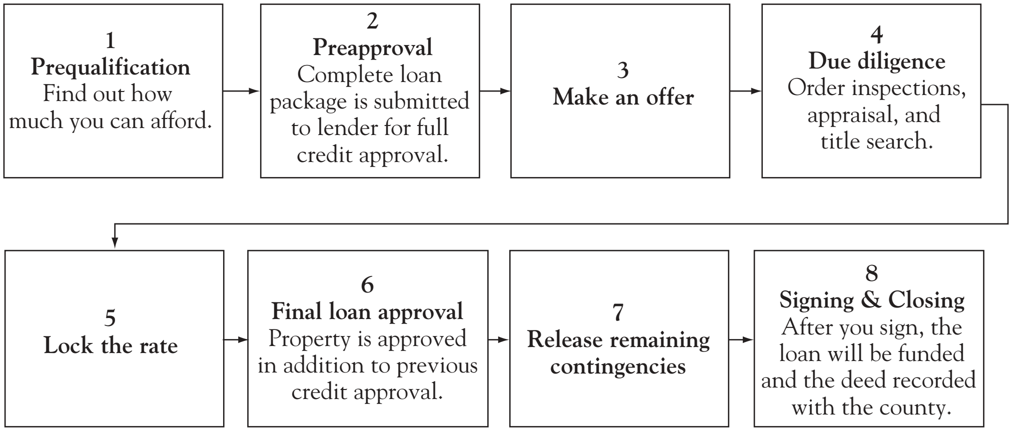

***Figure* 6.3** **Steps to securing your financing**

Preapproval

Preapproval makes your offer even stronger. It is an indication that a loan package, including documentation of credit, income, and assets, has been submitted and approved; that is, you are as approved as you can be without a property. This is also known as credit approval. Your lender will send you a letter saying it is committed to lending you this money based on the information you submitted.

At this point, *do not change anything related to your finances!* We cannot stress this enough. Your approval is based on the information you submitted to the lender, and any changes can cause that approval to become void, forcing the approval and underwriting process to happen all over again. This can cost you valuable time in the process and could cause you to lose the deal. This means you should *not:*

- Apply for credit cards or other finance accounts.
- Move any significant amount of money between bank accounts.
- Make late payments on credit cards, student loans, and, especially, your current mortgage.

Make an Offer

You and your Realtor will craft an offer with your offering price and with various standard contingencies that must be met by certain dates. Contingencies may include dates by which inspections must be completed and signed off on, that an appraisal meeting the price must be completed, and that the loan for a certain amount must be arranged.

Due Diligence

At this point, the lender has approved you and your financials but not the property. You'll schedule inspections to make sure you are comfortable with the condition of the property. You and the seller may arrange for certain repairs to be made before closing, based on inspections. In some cases, what turns up in inspections may cause you to walk away from the deal (in which case, you wouldn't want to have wasted money on the appraisal).

The lender will nearly always require an appraisal. In most cases, the appraised value comes in right at your offering price, but it is a safeguard in case you are overvaluing the property. Your lender will lend based on appraised value, not purchase price.

Your lender will also order a title search or a preliminary title report. In some states, a title company handles this; in others, a settlement attorney completes the search. This ensures that the title is "clear"—that the property is the seller's to give, and no one else can claim ownership of it.

Lock the Rate

When you started the process, your lender or broker quoted you an interest rate. You aren't guaranteed this rate unless it has been locked. A rate lock is usually for 30, 45, or 60 days; purchases are usually locked at 30 days unless the sale is contingent on the sale of another property (e.g., your old house or the seller's new one). When rates are volatile, lock as soon as the rate reaches a level you like. When rates are fairly stable, wait to lock until closer to the end of the process, usually up to a week before closing. This allows you to lock in for the shortest time possible, usually 30 days. In some cases, you may be able to lock for 15 days at an even cheaper rate, but not all lenders offer this option. It is only advisable when you are very near close of escrow. All lenders will charge a fee to extend the rate beyond the lock period, usually around a quarter-point.

Final Loan Approval and Release of Contingencies

Once the lender has reviewed the final loan package, including an updated loan amount, locked rate, appraisal, and title search, it may ask that certain conditions be satisfied before a final approval will be issued. These may include requests for more detailed financial records from you or assurance that any delinquent taxes will be paid at closing, for example. Once all conditions are satisfied, the lender will issue a final approval. At this point, you can decide whether to remove the loan contingency. Once you remove this contingency, you are agreeing to pay the sales price, whether you have a loan or not, so be sure you have final approval in writing from the lender.

Signing and Closing

Now your lender will send loan documents to the escrow company or settlement attorney for you to sign. After signing, the lender will fund the loan, and the deed will be recorded with the county. Then you pick up the keys to your new house!

Strategies to Optimize Cash Flow and Ease the Sale

Whether you are a Dedicated Renovator, a Recreational Renovator, or a Leisure Renovator, the object of this exercise is to make money. The loan you choose should help you do this by maximizing the cash flow you can devote to renovation while ensuring ease of recouping your investment when you sell. In order to accomplish this goal, you should:

- Choose the right loan term.
- Put as little down as possible.
- Pay as little principal as possible.

Choosing the Right Loan Term

The longer the fixed period of a loan, the higher the interest rate will be. In 2003, when rates were at 45-year lows, for example, there was no reason to pay a higher rate for a longer fixed term than you need. Choose an ARM with an initial fixed period that will cover the length of time you intend to hold the property.

No Money Down

Gone are the days when you were required to put 20% down on a property. If you qualify, you can get financing that does not require any down payment from you. Any money you put toward the down payment is money you can't use for renovations, so getting 100% financing is an ideal solution.

Some people are nervous about the idea of putting no money down and wonder if there are any hidden risks. The only risk is if the value of the home goes down by the time you go to sell it—then, what you owe on your home will exceed the price you can get for it. This is always a risk with real estate, but you will greatly decrease these odds by improving the property.

If you already own your home, chances are you put between 5% and 20% down. The difference between the appraised value of your home and what you owe on your mortgage is your equity. All of this is available to you to use for renovation—we'll cover attaching a home equity line to an existing mortgage later in this chapter.

Why Pay Principal? Interest-Only Loans

Lenders lend based on the appraised value of your home, which you will be increasing by your renovations—it's the net increase with which we are concerned. Any amount you put toward principal, whether it is up front (as a down payment) or paid monthly, is cash flow diverted from your renovation that you won't have access to until after you sell the property.

So how can you avoid paying principal? Some ARMs have an interest-only option. This means that you are only required to pay the interest portion of the payment, with no money going toward principal. You can, of course, still contribute toward principal on your own. You also increase your purchasing power with an interest-only loan because you only have to qualify for the lower, interest-only payment. An example of the difference, using a 5/1 ARM for a $240,000 loan, is shown in Table 6.2.

Negative Amortization Loans

Can you get away with paying even less? Absolutely, thanks to a new loan program called a negative amortization loan. This gives you the option of paying principal and interest, interest only, or the minimum payment as defined by the lender annually. This loan is essentially a one-month ARM, meaning it has the potential to change every month. The lender sets a minimum payment amount every year, and if that happens to be less than the interest-only payment for that month (based on the index plus the margin), the difference is added to your principal balance. This is the negative amortization part—instead of your payments working out so your loan is paid off at the end of the 30-year amortization term, your loan balance may be higher by the time you sell your home than it was when you started.

The biggest benefit of this loan is that you have the option of making less than the interest-only payment on any given month. This could be a boon during a renovation, especially if in a month when all your contractor bills are coming due. This is a very cash flow–friendly loan. When cash is a little less tight, you can go right back to paying interest-only again. However, this loan is not without risks. Because it is fully adjustable, the rate could soar, depending upon economic conditions. Usually there is a lifetime cap the rate cannot exceed, but that could be as high as 18%. This is not a loan you want to have for more than a couple of years, given the current economic climate. The "neg am"

***Table* 6.2 Interest-Only Loan Payment Comparison**

	5/1 ARM	*5/1 ARM interest only*
Interest rate	5%	5%
Monthly payment	$1,288.37	$1,000.00
Total payments over 5 years	$77,302.31	$60,000.00
Savings by paying interest only	$17,302.31	

loan has gotten a bad reputation, somewhat unjustly. It can be a powerful tool if used wisely as a cash management solution.

Home Equity Line of Credit as the First Mortgage

Yet a third option is the home equity line of credit (HELOC)—it's not just for second mortgages anymore! As shown in Table 6.3, this could be the perfect loan for a Dedicated Renovator. A few lenders are starting to allow borrowers to have a HELOC as a first mortgage. A HELOC is also an ARM, usually with no initial fixed period. The index is the Prime Rate as published in the *Wall Street Journal*. When the Federal Reserve Board lowers or raises the discount rate, the Prime Rate is generally directly affected by this change. There are several advantages to the HELOC first mortgage:

- The margin can be negative, for example, prime *minus* 0.5%, making this one of the lowest rates around.
- Payments are usually interest-only.
- It's a line of credit—if you pay it down, you can use it up again.
- In many cases, you can have over 80% of the value of your home on the line of credit without having to pay mortgage insurance. (We'll cover mortgage insurance more in the next section.)

***Table* 6.3 Best Loan Programs for Different Types of Renovators**

Renovation Scenario	*Years to Hold Property*	*Best Loan Programs*
Dedicated Renovator	2	1. HELOC (1st) 2. 1/1 ARM 3. 3/1 ARM
Recreational Renovator	4	1. 5/1 ARM 2. 3/1 ARM
Leisure Renovator	6	1. 7/1 ARM 2. 10/1 ARM

Stan and Janas Horner, Home Renovators

Basics

- Location: Richmond, Virginia.
- Three-story Georgian revival built in 1910 (see Figure 6.4).
- Measures 5,700 square feet, plus 1,200 square feet in basement.
- Nine fireplaces.
- First floor: large foyer, parlor, library, formal dining room, kitchen, breakfast room, two bathrooms.
- Second floor: Two master bedrooms, one bedroom or parlor, dressing room, large storage closet, two servants rooms, two bathrooms.
- Third floor: two bedrooms, one bathroom, and a bonus room.

Costs

House as is	**$575,000**
Central air-conditioning	$27,000
Electrical	$2,000
Ironwork	$2,000
Carpenter labor	$7,500
Materials	$4,000
Replace sewer pipe	$5,500
Lighting fixtures, ceiling fans, etc.	$2,500
Total	$626,000 (approximately) to date, with another $5,000 or so to go.

Key Thoughts

We have always loved old houses. When we travel, we liked to stay at old bed-and-breakfast-style inns just to enjoy the charm of older homes and learn about their history. We moved from the suburbs of Austin, Texas, back home to Richmond, Virginia. We looked for houses in the suburbs but just could not find what we wanted: a large yard, a modern, big kitchen, a two-car garage, lots of storage space, a good school district (to help resale), and a traditional-style home. Janas, my wife, was looking all day with a Realtor while I was at work. Between visits to homes in the suburbs, Janas suggested looking in town at some

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***Figure* 6.4** **Exterior, restored Virginia Georgian Revival-style townhouse**

of the older homes just out of matter of curiosity and as a way to fill in time between house showings. At first, all she saw were old homes that had been modernized and had lost their old charm in the process. Finally, one day she said, "I want you to come and look at this historic townhouse we saw." As soon as I walked in the door, I just fell in love with the place. The house was built in 1910 and is on the National Historic Register. It was covered with beautiful original mahogany woodwork (see Figure 6.5) and had high ceilings on all three floors, but it was clear that it would require a lot of work to make it livable. It

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Figure 6.5 **Restored mahogany woodwork on first floor**

had been a boarding house for 15 years, and the upper floors were in pretty bad shape. There was no garage, no yard to speak of, and the kitchen had been redone in the 1970s and was small. Most of all, it was dirty and in desperate need of repair, yet the basic foundation and structure looked great. The walls are 18 inches thick; the frame is constructed of real 2 x 12 and 2 x 10 beams. By “real,” I mean they actually measure 2 inches by 12 inches. Plaster had been exposed to water damage from a leaking roof, there was rotten wood on the exterior front, a number of windowsills were rotten from the many window air-conditioning units. The carpet covering much of the hallways, stairwells, and rooms in the upper floors was falling apart, and the pad underneath it was almost reduced to dust.

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The walls were covered with faded and dirty wallpaper. The house was dark inside. The dark mahogany wood, and the fact that the houses on either side are only five feet away and also are three stories tall, limits the light to the center of the house.

For the first three months, we kept most of our household goods in storage so we could work on the house. We moved in on May 19, 2002, with just the bare essentials. The first few months were spent on the first floor, which was in fairly good shape but still required a lot of cleaning, repairing plaster, and so forth. The front exterior woodwork balcony under the third-floor window was rotting away as the rainwater collected. For this project, we hired a carpenter on an hourly basis. I thought we would get this and some other exterior, high-up work done by a professional as I had neither the time, the know-how, or the equipment. The carpenter was referred to us by the roofer we hired to make minor repairs in the tin roof. By the time we had the carpenter lined up, our household belongings had arrived, and we spent a lot of time trying to figure out where to put it all. Every room was filled with boxes. We quickly learned that the carpenter needed space for his tools, the raw materials, and a place to work. As we shifted from working on one room to another, we had to move the boxes and other items again and again. Our oft-quoted saying was, "We moved all this from a 3,300-square-foot house into a 5,700-square-foot house, and while we have a lot more space, we don't have any room."

These old houses were partially designed for the homeowners to showcase their success and with space for servants. So the first floor has a lot of open space for entertaining, the house is narrow and deep, and the stairwells and hallways take up a lot of space. By mid-June, it was clear that we had to have the house air-conditioned as soon as possible. It was unbearably hot during the day (we arrived at the start of one of the hottest and driest summers in Richmond's history). Janas broke out in a very uncomfortable heat rash. We had hoped to put this off until the following summer. Well, the AC process took about three months to complete, about two weeks before the outside temperature finally cooled and the rains came. One of the ducts that ran along the second-floor roof leaked and ruined the ceiling we had just about finished repairing. It was a good thing we heard the water rushing in, or it would have ruined the formal dining

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room below. Every few hours, we got up and emptied many gallons of water to keep the large containers from overflowing. In order to keep the ductwork hidden, much of it had to be run through the closets, taking up valuable closet space, but we did not want the ducts to show and ruin the original look of the house. A crane had to be brought in to lift the large AC units up on the third-floor roof and over the third-floor roof to the second-floor roof in the back of the house. (Lesson learned: Be sure you agree on and clearly mark where you want the units to go. One unit was placed less than five feet from a second-floor window. We insisted that it be moved out onto the middle of the roof to keep down the noise and for aesthetic reasons, and in the process there was some damage done to the roof as it took a team of men to move it by hand.) The salesperson for the AC company lived in the neighborhood, and his company had installed AC into the two houses next door. This recommendation was so strong that we did not shop around. Well, the company had changed a lot since my neighbors used them, and we were disappointed with the rough treatment they dealt to our house. (Lesson learned: Make sure you get current references, and when they say will have to put airflow ducts in your closets, be sure you know that it might take up half your closet space.)

However, we did get a referral for an electrician from the AC people, and he did a lot of electrical work that I wasn't sure about. The most difficult part was trying to match fixtures to the wall outlets. Each outlet had both electric and gas connections, and just about every one was done in a different way. Some of the outlets were not hooked to any light switches, so we had to either buy lighting fixtures with switches or have switches added to the ones we had already bought. Some of these fixtures are so high my wife cannot reach the switch to turn them on and off.

It took us some time to figure out the best way to remove the wallpaper and the backing. We tried a number of solutions, including expensive remover from the hardware store. In the end, what worked the best was simply hot water and paper-scrapers to remove both the paper and the backing. This revealed plaster walls with many cracks and old water damage. In a few of the rooms, the walls were so bad that we had the carpenter cover them with drywall. I filled in the small cracks, primed, and painted all of the walls. Where major

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damage was done, we had the carpenter tear out the plaster and patch the area with drywall.

What worked:

1. We had a great carpenter who was a friend of the roofer, so they worked well together to ensure that the exterior repair would be watertight.
2. We paid the carpenter by the hour and contracted directly with him. We would leave him a list of what we wanted to do next; he would leave a list of what materials he would need; and we would purchase the material and leave it for him in the work area. I did not want to pay the carpenter to go to the hardware store every day, and he did not want to do that, either. We gave him a key to the house in case we were not at home.
3. The carpenter showed me how to do some of the work myself and provided many valuable tips on how to do things.
4. Having most of our household goods delivered two months after we moved into the house worked well. One of the biggest problems after our stuff arrived was having to keep moving it, covering it, and worrying about messing it up.
5. Living close to two hardware stores and a millwork outlet specializing in wooden moldings was a blessing.
6. I bought a 10-foot stepladder to make it easy to work on the high areas. With a 12-foot ceiling, you need a lot of reach. I did not buy a bunch of other tools. Most of what we needed to do required a few simple tools—a respirator for the lead paint removal, palm sanders for sanding hard-to-get-to spots in the hardwood floors, a heat gun for removing paint off the woodwork, a Shop Vac, cordless circular saw, and a cordless drill. I rented floor sanders from the hardware stores. The hardest part was getting the sander up the stairs, but I was surprised at how easy it is do the work using the vibrating platform sanders available today.
7. Premixed drywall joint compound was great for patching up the plaster. We bought it in 5-gallon buckets and used about 30 gallons.
8. It took a total of 35+ gallons of paint. Because I did a lot of painting in the few hours I had in the evening after work, I was using a lot of paint rollers.

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It was too time-consuming to wash them out each time. Janas suggested putting the paint-soaked rollers in airtight plastic bags. This worked great, and I was able to use the same roller over and over again for the same color. This saved a lot of money on rollers and time on trips to the store.

9. Buy the best paint brushes and paint. I used only American Tradition paint for the interior and Behr paint for the exterior. Purdy trim paintbrushes are great and will last a long time if you clean them well each time and put them back in their cover to keep the bristles in place. Not only will they do a better job than cheap brushes, they will outlast numerous cheap brushes and cost less in the end.
10. Janas removed, cleaned, lubricated, and polished the old brassware, door locks, and so forth. This made a great improvement in the functioning and looks of the classic materials and was well worth the effort.
11. You can do a lot more yourself than you would think. I figured out how to replace electrical outlets, and Janas is good at wiring telephones and doorbells.
12. We located copies of the original blueprints for the house, and they were very useful in helping us understand the original design. We learned, for instance, that the outside door on the second floor that goes nowhere was originally the door to the servants' balcony, long since gone.

What did not work:

1. None of the paint strippers we bought did as good a job as the heat gun at removing layers of paint. (But you have to really be careful not to burn the house down.)
2. Expensive wallpaper-removal liquids did not work as well as warm water.
3. It doesn't pay to be in a hurry to get things done: It took three months to have the custom ironwork done for our front gate and third-floor balcony. We have been looking for a pocket-door roller for more than eight months and still do not have one. A tradesperson agreed to make us one six months ago. It took more than eight weeks to have the AC installed.
4. Do not get a puppy during renovation! We love our dog and are glad we have him. However, taking care of a large puppy and working on a house at the same time is not a good idea. Chasing a puppy through a three-

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story house after he has danced in a paint tray is not my idea of fun (but he was easy to track!).

5. Living in a house while doing major renovation is tough. It is hard to not work on it every available minute. It can consume all your time, energy, and—if you are not careful—your money, too.

Avoiding Common Financing Pitfalls

Securing the right financing is not without its pitfalls. Here are some common traps to avoid that will save you money.

Pitfall #1: Mortgage Insurance and Private Mortgage Insurance

If you qualify, you can get financing for 100% of the value of your home. We've just gone over the benefits of doing this. However, any loan for more than 80% of the value of the home requires that you purchase mortgage insurance (MI) or private mortgage insurance (PMI). MI is not tax deductible, and it can be expensive—as much as a few hundred dollars a month. Fortunately, there is an easy loophole: You can get two loans, one for 80% of the value, and a second for up to 20% of the value; this is also known as an 80/20. The combined loan-to-value (CLTV) is 100%, but you have avoided having a single loan for more than 80%. Another way to avoid paying MI is by getting a loan with lender-paid mortgage insurance (LPMI), in which the lender increases the rate a bit to pay for the MI. This way, you still get the tax deduction because you are effectively paying for it in the rate. However, the rate will be higher than if you get an 80/20, so this is advisable only as a last resort.

Pitfall #2: Prepayment Penalties

A prepayment penalty is a fee for paying off the loan by selling or refinancing within a given period of time, usually one or three years. This can be a hefty fee, for example, 3% of the loan amount, and that takes away some of your flexibility. Selling your home will require an element of timing. You'll also want the flexibility to be able to refinance if rates suddenly become more favorable. Most lenders at least offer no prepayment penalty as an option, although some may raise the quoted rate a bit for this privilege.

Pitfall #3: Contingent Sales

Many people make a home purchase contingent on the sale of their existing home. Obviously, this is so they do not have to carry two mortgages during the transition. However, in a competitive market, you may lose the deal to someone who can close faster. It may be worth it to sell your home first and rent month-to-month in order to avoid having to require a contingent sale.

Adding a HELOC to an Existing Mortgage

If you put money down on your current home and want to access that equity for renovation, adding a home equity line of credit (HELOC) may be the perfect solution. In many cases, you can just walk into your bank and apply at little or no cost. You'll want to choose a HELOC that allows you to access up to 100% of the equity in your home and that has a low margin. Remember that this is a fully adjustable loan—it can be adjusted monthly whenever prime changes.

Advanced Loan Strategies

Savvy buyers can optimize their cash flow even further with these advanced strategies.

No Closing Costs

Closing costs can add up to thousands of dollars, money you could put to better use in your renovation efforts. Here is how you can finance these costs. If both you and the seller agree, the seller can increase the price by up to 6%, crediting the increase back to you at closing.

The key to this strategy is the appraisal—the lender will always require an appraisal and will lend based on the result, not on the purchase price. Your real estate agent will be able to estimate whether you can get an appraisal to meet that value by researching recent comparable home sales, known as comps. The appraiser will also use comps to determine the final value, so this will give you an idea of whether you are in the ballpark.

The caveat here is that your loan amount just went up—so your renovations must increase the value that much more to make your expected profits. This may, however, be a good strategy if you want to avoid paying any closing costs out-of-pocket.

Assumability

If your loan is assumable, it can be taken on by the new owners without their having to secure their own financing. This can make the home attractive for a quick sale; however, most ARMs and FRMs are not assumable. Those that are have a number of conditions that must be met—be sure to read the conditions closely.

Choosing the Best Loan for You

The best loan for you will not only have the best rate available now, but will also be able to meet your timing, cash-flow, and financial needs. Following are some suggestions based upon your renovator category.

The Dedicated Renovator: Sell in Two Years

The Dedicated Renovator is best equipped to take advantage of low rates associated with ARMs. The HELOC first mortgage is an excellent first choice in this scenario, with the winning combination of the lowest rates around, no negative amortization, and a revolving line of credit. Table 6.4 shows other options suited to this renovation

Table 6.4 Loan Options for the Dedicated Renovators

Loan Program	*Pros*	*Cons*
HELOC (1st)	Superlow rates, usually prime minus margin. The full amount of the line of credit is always available to you, even as you pay your mortgage off.	Rate can adjust monthly
Negative amortization ARM	Can pay less than interest-only when needed.	Rate can adjust monthly Principal balance may increase
1/1 ARM	Rate is fixed for 1 year and can only be increased once in the two years you'll hold the loan.	Rate is higher than the negative amortization ARM and HELOC (1st)
3/1 ARM	Safe—the rate is fixed for three years, one year longer than you need it.	Rate is the highest of these options

scenario, listed in order of preference. All of these programs are available with interest-only options.

The Recreational Renovator: Sell in Four Years

The Recreational Renovator should lock in a low rate for three or five years. A 3/1 ARM (fixed for the first three years and adjustable annually thereafter) is a good choice; a more conservative borrower could buy a couple of extra years of cushion with a 5/1 ARM. Both loans are widely available with interest-only options.

The Leisure Renovator: Sell in Six Years

The Leisure Renovator need not get an expensive 30-year fixed mortgage. Currently, there are ARMs that are cheaper and have interest-only options, such as 7/1 and 10/1 ARMs.

Qualifying for a Loan

You qualify for a loan based on the lender's assessment of the risk associated with the borrower (you), the property, and the transaction (see Table 6.5).

Lenders will qualify you for a loan based on the Five Cs:

- *Characteristics:* The characteristics of the loan scenario.
- *Credit:* Your FICO score and credit history.
- *Capacity:* Income; your ability to pay.
- *Cash:* Assets available for down payment, closing costs, or as a payment reserve.
- *Collateral:* The property itself, including its value and clear title.

This is a way of evaluating the risk factors of the loan. Lenders can be forgiving if you have difficulties in one area but you make up for them in others.

Table 6.5 **Variables Considered in Loan Qualification**

You	*The Property*	*The Transaction*
Credit history	Appraised value	Loan amount
FICO score	Title abstract/report	Loan-to-value ratio (LTV)
Income	Property type	Occupancy
Debt		
Assets		

Characteristics

Certain loan scenarios are considered to be inherently more risky for a lender and therefore require greater scrutiny in underwriting. These can include:

- Down payment: A borrower who is putting less than 20% down is thought to have less invested in the property and therefore have a greater potential to default. Nowadays, it is very common to put down 10% or less on a property, so the real scrutiny comes in at 5% or less, especially no-money-down scenarios.
- Property type, for example, multi-unit property.
- Occupancy, for example, investment property.

Credit

Your credit is one of the most important parts of qualifying for a loan. Your credit report lists every credit account you have held for the past 7 to 10 years, including credit cards, finance cards, car loans, student loans, and mortgages. Each open account reports to the Big Three credit bureaus—Equifax, Experian, and TransUnion —every month on your current balance, minimum payments due, and late payments or delinquencies. In addition, public records (such as bankruptcies or foreclosures), fraud alerts, and collection accounts will appear on your report.

Lenders will evaluate your credit based on the information in your credit report and your credit scores. The FICO© score methodology was developed by the Fair Isaac Corporation; it is a way to quantify credit risk using credit history information. A FICO score can range from 300 to 850, with 850 being the best. Each of the Big Three credit bureaus uses the credit information it has to compute its version of your FICO score. Your lender will use the middle of the three scores, or, if there are two coborrowers, either the lower of the two middle scores or that of the primary borrower.

FICO scores above 680 are considered excellent. Some lenders may even lower the interest rate for exceptionally high credit scores. Scores between 620 and 660 are marginal. Scores of 620 and below are usually the result of a history of more serious delinquencies, which may include bankruptcy or foreclosure. This does not preclude you from being approved, but it does mean you will probably receive a higher interest rate and loan costs to compensate the lender for the increased risk. Your credit score is based on:

- Payment history, including any 30-, 60-, or 90-day late payments.
- Length of credit history.
- New credit or credit inquiries.
- Types of credit in use, such as revolving credit and mortgage loans.
- Amount owed versus amount of credit available.

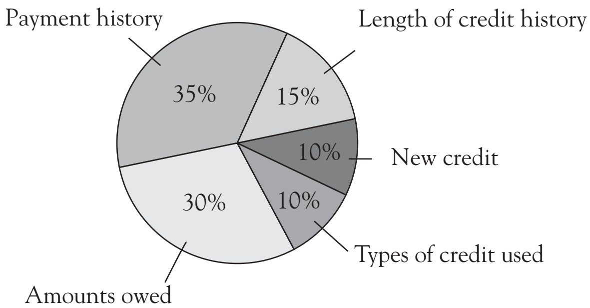

***Figure* 6.6 Weighted factors used to compute FICO scores**

Source: Fair Isaac Corporation, http://www.myfico.com/myfico/Credit Central/ScoreConsiders.asp, last accessed May 8, 2003

If you have had credit extended to you that you have both used and paid back in a timely manner, you will likely have a great credit score (see FICO factors in Figure 6.6). A credit score of 680 or above is excellent for the purposes of getting a mortgage loan. You may have a lower score if you:

- Have made a late payment on your credit card, student loan, car loan, or mortgage in the last 12 months.
- Owe more than 30% of your available credit, for example, have maxed-out credit cards.
- Have only had your open credit accounts for less than a year, or do not have any credit accounts at all.
- Have recently opened or tried to open several new accounts—each will count as a credit inquiry.
- Have many installment loans.

In addition to contributing to your credit score, your credit history is important because lenders will also scrutinize the information in it to determine your creditworthiness. You generally will have to explain any derogatory items on your report, whether you have a high score or not. Derogatory items can include:

- Late payments.
- Collection accounts.
- Foreclosures.

- Bankruptcies.
- Tax liens.

There is no quick cure for credit woes. Instead, you have to identify any ongoing issues, such as too high a balance on your credit cards, and correct them over time. Any negative items on your credit will lose importance once they become more than a year old and will drop off after 10 years. Don't rely on consumer credit counseling services to negotiate with your debtors. Some consumer credit counseling services will help you file for Chapter 13; others will do the creditworthiness equivalent. Either of these will be reflected negatively on your credit report.

If you have insufficient credit, you can build an alternative credit history by showing you have paid at least three separate monthly bills on time for at least 12 months in a row. This can include your rent, utility, telephone, and cell-phone bills.

A Note about Collections

It is not uncommon to find a small collection on your report, such as $50 owed to your doctor from two years ago that your insurance didn't cover and you didn't find out about until you saw it in your report. The impulse is to rush out and pay it to get the collection off the report. *Don't do it!* Once you've paid it, it becomes a current item, recorded within this year. It suddenly increases in weight, and your score actually goes down. Most lenders will require any collections to be paid in escrow—you can take care of it then. If you find fraudulent or false information on your credit report, immediately document the error if you can and forward this information with your request to Equifax, Experian, and TransUnion. You must report the error to all three bureaus for the change to be effective.

Capacity

Another important factor is your ability to repay the loan. Lenders analyze your income along with your debt to calculate two ratios: the front-end ratio and the back-end, or debt-to-income, ratio.

Front-end ratio = Mortgage payment including principal, interest, taxes, and insurance (PITI) ÷ Gross monthly income

Back-end ratio = (Mortgage payment [PITI] + Monthly debt obligation) ÷ Gross monthly income

The back-end ratio includes any minimum payments you are required to make monthly and that show up on your credit report as liabilities. These may include student loan, credit card, installment loan, and mortgage payments, as well as alimony or child support. A good rule of thumb is that the front-end ratio should not exceed 28%, and the back-end ratio should not exceed 38%. You can push those boundaries by perhaps 2% or 3%, but for the purposes of qualifying, stick to those numbers.

The lender will also look to see what your income history is. The best case is if you have worked for the same company for more than two years. If you have changed jobs within the last two years, your income will be considered less stable. If you receive bonus income, it is generally not counted in your gross monthly income unless you have been receiving bonuses consistently for the last two years; in that case, a 24-month average is used. If you are self-employed, you may be asked to back up your claim of income with a profit-and-loss statement or a letter from your accountant. If this is your first home purchase, the lender will also evaluate your "payment shock," that is, the difference between what you are paying now in rent and your proposed mortgage payment with taxes and insurance (PITI). (PITI stands for Principal Interest Taxes Insurance—the mortgage payment plus monthly property taxes and homeowners insurance.) If you are self-employed, you may be asked to back up your claim of income with a profit-and-loss statement or letter from your accountant, as well as two or three years of complete tax returns.

Cash

Even if you are doing a no-money-down purchase, your cash reserves will still be taken into account. Cash reserves include liquid money in checking, savings, and money-market accounts as well as money in portfolio and retirement accounts. If you are less than 60 years old, 80% of your retirement funds will be counted as available reserves.

Your lender will usually require that you have enough cash to close—including down payment, closing costs, and prepaids—and a certain amount of money in reserve post-closing. This amount will usually be a percentage of the price, for instance, 5%, and/or two to six months of PITI payments. If you are not documenting your income (in what is known as a stated income loan), you will usually be expected to have 50% of your stated annual income in reserves.

Collateral

The property itself is, of course, a major consideration in the transaction. The lender will want assurance of its current market value, which it will get through an appraisal. It is rare for a loan to be given for a purchase without an appraisal. This is also your safeguard against paying too much. The lender will also want to know that the title is clear, that is, that the property is the seller's to give. The title company or settlement attorney will complete a preliminary title report or title search and will issue a title insurance policy for both you and the lender against defects in the title.

The Sixth C: Compensating Factors

Lenders will consider certain compensating factors to bend the rules a bit in qualifying. For example, if you have received an annual bonus for only one year, but it is common in your company and expected that this will continue for the coming year, the bonus income can be considered a compensating factor to allow you to be approved for a loan at a higher than usual back-end ratio. Other compensating factors can include anything that mitigates a negative in the other Five Cs. Here is where you are relying on the skill and insight of your loan officer or mortgage broker—he or she will need to paint the best picture possible by pulling out compensating factors that are compelling.

How to Shop for Loans

It's up to you to make sure you are considering the other important factors of the loan and comparing apples to apples—that is, compare interest rates of the same loan type. Other factors to consider are:

- Prepayment penalty, if any.
- Loan amount allowed.
- Loan-to-value ratio allowed.
- Origination fee or points up front.
- How long the quoted rate would be locked (15, 30, 45, or 60 days are most common).
- Other closing costs.
- Cash reserves required.

Advertised Rates versus Your Rate

When lenders or brokers advertise interest rates, they generally advertise the best-case scenario. The rate you are quoted depends on the factors we just discussed, including your credit score and history. In addition, if you are not documenting your income, your rate will be 1/8 to 1/4 of a percentage point higher.

Choosing a Mortgage Professional

Chances are you have been bombarded with advertising from various lenders and brokers who want to handle your loan for you. Choosing a mortgage professional can be very confusing. Here are some tips for sorting it all out.

Mortgage Banker or Broker?

You can get your mortgage either directly through a bank or by going through a mortgage broker. In either case, you will be working with a loan professional, but a direct lender's loan officer will offer you his or her bank's products at the retail rates, and a broker will offer you a choice from many banks' products, marked up from the wholesale rate. Both will charge an origination fee (usually one to two points). If it is a no-points loan, the bank is paying for the points in exchange for a slightly higher rate. The broker's fee will be paid by the bank; this is disclosed on your settlement statement (HUD-1) as a separate item paid out of closing (it may be marked POC). In some cases, the broker may not disclose his or her fee in any other way (e.g., if he or she merely said it was a no-points loan), so be sure to ask up front what the fees will be.

Brokers tend to have access to variety; however, there are not that many different permutations out there. Each lender has its own niche—some specialize in riskier loan types, and others stay with safer, middle-of-the-road loans—and they all have different underwriting styles and requirements. A good broker will not only be able to identify some good choices from what is available but will also be familiar enough with the lenders to know how best to package the loan for acceptance.

Direct lender's loan officers will generally offer you loans from the lender's own products, some of which may not be available through a broker; however, sometimes they can broker as well. This can help if the lender does not offer the product you want but you still want to work with a particular loan officer. Both brokers and bankers are heavily regulated, but bankers tend to have been put through extensive training by their banks to ensure compliance. This can give you some peace of mind.

Is one better than the other? It depends on you. You'll want to work with the professional who fits the best with your style and needs. As we discussed earlier, it's not just about interest rates. Your lender or broker should take a big-picture view of your needs and help you decide what kind of loan program is best for you. Interview a few, and see who you have the most confidence in; this person will be able to get you what you need in most cases, or recommend somewhere else you can get it.

Alternative Lending Sources

If you have serious blemishes on your credit, such as tax liens, bankruptcies, or foreclosures, or if you have several mortgage late payments, you may only be able to qualify for a loan through an alternative source. Most lenders have subprime divisions that cater to these situations; some lenders do nothing but subprime lending. You can also get a subprime loan through a mortgage broker. A subprime lender will generally place more restrictions on the loan, including:

- *Prepayment penalty:* Usually one to three years.
- *Higher interest rate:* Can be up to 5% higher than regular Prime Rates.
- *Higher origination fee:* Between two and four points.
- *Limited loan programs:* Usually, shorter-term loans.

However, subprime lenders will also be more forgiving, offering:

- *Higher allowable debt-to-income ratios:* As high as 50–55%.
- *Higher LTV:* Up to 100% financing.
- *Lower FICO scores OK:* As low as 500.
- *Smaller reserves requirement:* Requiring smaller than normal postclosing assets.

Since it is presumed that you will not always be a subprime candidate, you will not often see long-term loans offered by subprime lenders. This is a way to get you into a property and give you some time to clear up any clouds on your credit or financial situation.

Even subprime lenders have their limits. If your credit scores are below 500 or you are currently in the middle of bankruptcy, you may have to seek a hard money loan. Hard money lenders lend based solely on the property and do not consider your credit, income, and other assets. However, they will also have shorter term loans, higher rates, and more points. Generally, hard money lenders will not exceed 50–65% LTV.

A special set of predatory lending laws governs subprime and hard money lenders, including the maximum amounts of points that can be charged. For more information, see the Department of Housing and Urban Development (HUD) Web site: (http://www.hud.gov/offices/hsg/pred/predlend.cfm).

Your Rights

The Federal Department of Housing and Urban Development (HUD) regulates mortgage brokers and bankers to protect your rights as a consumer. A HUD regulation called the Real Estate Settlement Procedures Act (RESPA) requires that everyone involved in the process, from Realtor to lender to escrow agent, follow certain procedures so that all fees are disclosed to you, the consumer. A full list of requirements can be found on HUD's Web site at http://www.hud.gov/offices/hsg/sfh/res/respa_hm.cfm. You are also protected against discrimination by the Office of Fair Housing and Equal Opportunity within HUD and by various state agencies.

Home Finance/Mortgage Terms

Adjustable rate mortgage (ARM): A 30-year mortgage whose interest rate is adjustable on a periodic basis, based on an index plus a margin. ARMs have an initial fixed period that can range from 1 month to 10 years.

Amortization: The schedule by which a mortgage can be repaid by the end of the term, with certain amounts going toward payment of principal and the rest toward interest.

Back-end ratio: The ratio of your total monthly debt obligation, consisting of your proposed mortgage payment (PITI) and any other monthly debt payments, as a ratio of your gross monthly income. Also known as debt-to-income ratio (DTI).

Combined loan-to-value (CLTV): The total loan amount from all the mortgages on the property, e.g., 1st and 2nd mortgages, as a percentage of the appraised value of the property.

Conforming loan: A loan that conforms to Fannie Mae's published guidelines, e.g., a loan of $322,700 or less on a single-family home.

Debt-to-income ratio (DTI): See *back-end ratio*.

Fannie Mae (FNMA): A stockholder-owner corporation that is the nation's largest mortgage investor. The president appoints a portion of Fannie Mae's board of directors.

Freddie Mac (FHMC): Similar to Fannie Mae, this stockholder-owned corporation supports the secondary mortgage market. The president appoints a portion of Freddie Mac's board of directors.

Front-end ratio: The proposed mortgage payment (PITI) as a ratio of your gross monthly income.

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Fixed rate mortgage (FRM): A mortgage whose interest rate is fixed for its entire term. The 30-year term is the most popular, although FRMs are offered with terms of 10, 15, and 20 years as well.

Home equity line of credit (HELOC): An ARM whose index is the Prime Rate. Unlike other ARMs, the HELOC is a revolving line of credit that can be drawn upon up to its limit for a 10-year period. Payments are usually interest-only.

HUD-1: Standard form used to disclose costs at closing. All charges imposed in the transaction, including mortgage broker fees, must be disclosed separately. Also known as the *Uniform Settlement Statement*.

Index: A published interest rate, such as the Prime Rate, LIBOR, T-Bill rate, or the 11th District COFI. On ARMs, a predetermined margin is added to the index to compute the interest rate adjustment.

Jumbo loan: A mortgage whose loan amount is greater than the Fannie Mae conforming limit for a single-family home (changes annually; $322,700 for 2003).

Loan-to-value ratio (LTV): The ratio of the loan amount to the appraised value of the property.

Life cap: The maximum interest rate allowed on an ARM predetermined at the start of the loan.

Margin: The fixed percentage added to the index to calculate the interest rate of an ARM.

Mortgage insurance (MI): Insurance written by a private company protecting the lender against financial loss if the borrower defaults on the mortgage. MI is required on any single loan whose loan-to-value exceeds 80%. Also known as *private mortgage insurance (PMI)*.

Negative amortization: An ARM that allows the borrower to pay a fixed minimum payment each month, which may be less than the interest-only payment. The difference between interest-only payment and the minimum payment is added to the principal.

Private mortgage insurance (PMI): See *mortgage insurance*.

PITI: The proposed monthly mortgage payment including principal, interest, property taxes, and hazard insurance.

Uniform Settlement Statement: See *HUD-1*.

Home Finance Resources

Fannie Mae: Homebuyers & Homeowners Page
http://www.fanniemae.com/homebuyers/homepath/

Freddie Mac: Weekly Mortgage Market Survey
http://www.freddiemac.com/pmms/

Mortgage Bankers Association of America: Consumer Resources
http://www.mbaa.org/consumer/

HUD: Predatory Lending
http://www.hud.gov/offices/hsg/pred/predlend.cfm

HUD: Office of Fair Housing & Equal Opportunity
http://www.hud.gov/offices/fheo/index.cfm

Fair Isaac: What's in Your Score
http://www.myfico.com/myfico/CreditCentral/ScoreConsiders.asp

Chapter 7

Renovations That Add (the Most) Value

Knowing which renovations add the most value is the easy part. There is almost uniform agreement on what will add the most value to a home: renovating the kitchen and bathroom(s). In fact, you almost get the feeling from reading literature on home renovation and talking with the experts that a home with a new kitchen and remodeled bathrooms could get top dollar—even if the rest of it was falling down. The National Association of the Remodeling Industry (NARI; www.nari.org) says that a minor kitchen remodeling can recoup 153% of the cost to renovate. This means your investment of $7,000 to remodel a kitchen can increase the resale value of your home by $10,710, for a profit of $3,710. Table 7.1, from NARI, lists the most popular renovation activities, their average costs, the average resale value added to a home, and the percentage of the renovation cost recouped (the homes were sold one year after the renovation).

If you were to take the information contained in this table at face value, you might conclude that only renovating the kitchen and bathrooms makes sense from a return-on-investment (ROI) perspective. However, this table does not account for two important factors: (1) a do-it-yourself renovation strategy, and (2) the cumulative effect of all of the renovation activities required to transform a fixer-upper into a model-like home. For example, remodeling our kitchen in Sonoma cost us $19,456 because we did some of the work ourselves (demolition, finish painting, and laying the tile floor). If we use the resale-value figure of $28,358, cited in Table 7.1 for a "major kitchen remodel," our ROI was 146%, 17% above the national average.

In addition, you must examine figures for your region because they may vary widely. The National Association of Realtors (NAR) publishes location-specific figures on the cost of renovations versus their value (www.realtor.org). For example, NAR states that

Table 7.1 **Renovation Activity—the Most Bang for Your Buck**

Renovation Activity	*Average Job Costs ($)*	*Average Resale Value ($)*	*Cost Recouped (%)*
Minor kitchen remodel	8,047	12,333	153
Major kitchen remodel	22,030	28,358	129
Bath addition	11,444	12,000	105
Bath remodel	8,344	8,500	102
Family room addition	29,451	28,333	96
Master bedroom suite	34,949	30,000	86
Siding replacement	4,618	3,833	83
Two-story addition	53,676	43,333	81
Deck addition	5,717	4,333	76
Attic bedroom	22,854	17,000	74
Home office	8,627	4,000	46

an upscale master-suite addition in Detroit costs $136,179 and adds $93,695 in value to a home, recouping just 69% of the investment. In San Francisco, this same master suite costs $147,727 and adds $172,000 in value, recouping 116% of the investment. A bathroom addition in Baltimore recoups just 48% of the investment, while in Fairfield and New Haven Counties, Connecticut, the same bathroom recoups 163% in value. This is not to say you shouldn't remodel—but knowing these figures for your area will give you a gauge of *how much* you should invest in a specific remodeling activity to best recoup your costs and make a gain.

In our Sonoma house, we plan to add a master suite and estimate that we can do much of the work ourselves (aided by a builder) for approximately $30,000. It is a pretty simple task because the suite will sit on a concrete slab and be attached to the back of the house. We expect to add about 400 square feet to the home and will include popular features such as a cathedral ceiling, French doors opening onto a garden courtyard, a large walk-in closet, and an upscale master bath. If the NAR figures are correct, this addition will add $152,875 in value to our home, producing an ROI of 510%, or a profit of more than $120,000!

It is important to remember that these figures are averages. Even within a city such as Baltimore, the relative return on renovations can be wildly different among neighborhoods. Neighborhoods where property values are increasing and in demand will garner a much higher ROI on renovation activities than neighborhoods in decline. Many variables, including the housing market's health, the value of similar homes in a neighborhood, and the quality of the renovation, impact what renovators can expect to gain from their activities.

So what other renovation activities add significant value to a home? Based upon our experience and discussions with experts, we've created the following list:

- *Windows:* New windows look great and are more energy efficient (thermal windows are up to 70% more efficient according to the Environmental Protection Agency). Tilt-out windows are very convenient for cleaning.
- *Floors:* New or reconditioned floors are a must renovation item. If a home is old, you may get lucky and uncover original hardwood floors beneath a layer of old carpet or linoleum. It is important to match new carpet, tile, wood, or linoleum floors to the style of the home you're renovating and to the value of the home.
- *Paint:* Repaint both the interior and the exterior if they need it. Stay with muted, neutral colors. (There's more about this in the design section that follows.)
- *Refinished basement or attic:* Adding an extra room if you don't have to build the outer structure is an excellent way to add value to a home. Whether this renovation produces a guest bedroom, an office/library, or a playroom, this type of conversion is relatively easy to accomplish.
- *Lighting:* Installing new lighting fixtures is an easy way to upgrade and brighten a room (consider using halogen lights, which emit brighter, fuller-spectrum light). Again, remember to match the cost of fixtures to the general value of a home (we don't recommend using a $500 fixture in a $150,000 home). Read more about the different effects of lighting and types of fixtures in Chapter 9.
- *Natural light:* Anything you can do to bring more light into a home is always a plus, whether you do it via skylights, new doors, or windows.
- *Closets:* Large, walk-in closets are popular these days, so if you have the space, put in one or more.
- *Big, open spaces:* The trend in new homes is toward larger kitchens, bathrooms, and great rooms that combine kitchen, living room, and dining room. So if you have the opportunity to open up confined spaces (e.g., opening up a kitchen into a dining area), do it.
- *Landscaping:* Curb appeal is crucial to getting top dollar for your home, and a groomed lawn with flowers growing in garden areas makes a good first impression. Organizing outdoor space into "rooms" (e.g., space for play, space for outdoor dining/entertaining, workout space, etc.) can extend the square footage of a home and enhance its value. Check out the landscaping section in Chapter 9 for more ideas and how-to information.

Renovations to avoid include:

- *Swimming pools:* Maintaining pools is time-consuming, and they pose liability risks (although they may be a requirement in hot climates). Also, perhaps surprisingly, swimming pools generally do not add value to a home.
- *Elaborate gardens:* Specialty gardens, while beautiful, are often very difficult, time-consuming, and/or expensive to maintain and might actually scare off some prospective buyers.
- *Stone walls and fences:* They may look good, but they're expensive to build and don't return much direct value to a home.
- *Outdoor spas:* The jury is split on whether spas add much value to a home.

Shelly and Bob Moses, Home Renovators

We live in a little town called Lebanon, New Hampshire. We bought our house in 1986 (for about $100,000), and over the last 15 years we have done three major renovation projects. The house was built in 1850, so it has some charming elements (French doors, hardwood floors, built-in cabinets, etc.), but it also had some not-so-nice features because previous owners had torn out and changed a lot of the house over the years. When we first bought the house, a priority was to convert the front entranceway and room into office space that Bob could use for the accounting firm he was launching. The renovation work to create Bob's office required putting up new drywall, adding wiring for office equipment, and remodeling a bathroom that clients would be using. One mistake we made was trying to do the mudding (covering the seams and nail holes with plaster between sheets of drywall) ourselves to save money. This turned out not to be an easy job, and we spend weeks trying to get it right. We also did quite a lot to deconstruct some of the poor-quality changes that had been done to the home over time. The living room had a large woodstove with a mirrored mantel that looked terrible, so we removed it. We also tore down the dropped ceilings and put in drywall ceilings. We ripped out the carpet in the living room hoping to find a hardwood floor, but it was plywood, so we recarpeted. The kitchen had stained plywood cabinets that looked terrible. We simply sanded them, painted them a nice color (inside and out), put on new knobs and han-

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dles, and they looked great. We also put down new linoleum flooring. Upstairs we had only one bathroom, with a bathtub (no shower) and a toilet but no sink (very strange). So we added a sink. We also put in some bedroom closets because homes from this era were not built with closets in the bedrooms. All of the work cost us about $5,000, not including the significant amount of sweat equity we invested, mainly in refinishing and painting. These improvements made the home very livable for a period of time—until our family began to grow.

In 1995, when we already had three young children, we decided to put a major addition on the home. We wanted the addition to match the original home from a design perspective, so we hired an architect to design it. We could have used our builder's design services, but we felt that because he was not a professional architect he would not have the capabilities required to design an addition that met our needs (plus, the architect only cost $3,000—out of an $80,000 total cost for the addition). An added benefit of using the architect was that he could keep track of the progress of the project and work with the builder to solve any problems that might arise. We built a two-level addition that included a large master bedroom (with cathedral ceiling) and bathroom on the top floor, and a family room, a half-bath, and a mudroom on the first floor. The living room has French doors that open out onto a stone patio. The addition is beautiful, and it improved our lives in countless ways. One side story is worth recounting, however. Even architects make mistakes. When our new master bedroom was ready to be opened up into the existing home, the builder found out that the measurements supplied by the architect were wrong, and the openings between the addition and the existing home did not match up (and the size of the doorway was way too small). So the builder and architect had to come up with a creative solution to build this doorway, and they did. One good thing about additions is that they are relatively self-contained, so the building process does not have to intrude all that much on your day-to-day life.

Our last—and hopefully, final—major renovation project was recently completed (see Figure 7.1). The major goal of this renovation was to replace the kitchen, but once we began the planning process, the renovation became a way to tie together our two previous renovation projects. We again worked with an

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Figure 7.1 **Back exterior during kitchen remodel**

architect to help us design the new kitchen, which would actually incorporate four rooms within the house—the existing kitchen, a pantrylike room that housed the kitchen sink and dishwasher, the formal living room, and a dining room. Basically, we gutted all four rooms, opening up walls between them. We thus built a great room that combines the kitchen, dining, and living areas. It is a very large space that is now integrated with our outside patio and a screened porch that used to be off the living room. This entire project only took two-and-a-half months, but we planned everything down to the last detail, had a great builder, and spent a considerable amount of time each day managing the project. The builder tried to keep our existing kitchen intact for as long as possible, but we ended up living with a refrigerator and a microwave for about two months (a real challenge with three kids). This renovation was expensive (more than $100,000), not so much in the fees paid to the contractors, but in the materials used. We bought beautiful cherry

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Figure 7.2 **Side exterior after completed renovation**

cabinets, put in hardwood floors, and used expensive fixtures. We also decided before starting the project to rewire the entire house and reconfigure the heating system that went to the old part of the house, and we replaced all the old windows throughout the house (see Figure 7.2). The one thing that we love the most about the new space is the gas fireplace we put in the kitchen. It's like an old wood-burning stove on legs, and it's on a timer so it comes on automatically every morning at 5:00. So when we get down to the kitchen in the morning, it's warm and cozy. We even placed a rug in front of the fireplace because the kids like to sit on the floor in front of the fire. Finally, to complete the total renovation of the house, we put a shower in the kids' bathroom upstairs (so they would quit using the shower in the master bathroom) and renovated the guest bedroom.

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It took us more than 15 years and three major projects to totally renovate our house, but it is now worth more than $400,000 and we love everything about it.

Lessons Learned

- Sometimes you need to be a creative problem solver to overcome obstacles. Don't give up too quickly when you really want something to be a certain way, even if your contractor or other experts say it can't be done.
- Use an architect if you're planning a major renovation; we've found their services to be well worth the money and time.
- If contractors are at your home for an extended period of time and you're also living there, make sure they get a port-a-potty. It makes a difference in terms of your privacy to not have to share your bathrooms with strangers.
- We also told our last contractor that any subs had to be nice, friendly people, and if anyone was not, we'd fire them on the spot. When workers are around your kids for an extended period of time, you want them to be nice.
- Being at the house every day and asking a lot of questions is key to a successful renovation using contractors. Good project-management skills and a preestablished system for managing all the bills and paperwork is critical to success.
- Make sure all of the materials and supplies (whatever you're responsible for) are there before the contractor needs them, or you'll cause delays. Also, be willing to go out and pick up supplies yourself if needed. You want to keep the workers working, not shopping.

One way to get a handle on what is generally popular with buyers is to visit newly constructed model homes. Homes build by the large national builders such as Pulte Homes (www.pulte.com), Centex Corporation (www.centex.com), Lennar Corporation (www.lennar.com), and D. R. Horton Inc. (www.drhorton.com) can be guideposts for what is hot and what is not for homebuyers at any given time. You can also check out dedicated kitchen and bath showrooms (often found in the design centers of major cities) and new design outlets such as Home Depot's upscale Expo stores (these feature a wide variety of complete kitchen showrooms and bathroom configurations). Associations such as the National Association of Home Builders (NAHB; www.nahb.org) and NARI (www.nari.org) provide very useful information on buyer preferences and building/remodeling trends. For example, NAHB offers the information shown in Table 7.2 com-

Table 7.2 **Consumer Preferences: New Home between $150,000 and $350,000**

	$150,000 Home	*$350,000 Home*
Type/Area	S.F. Detached Single story Preference: Outlying Suburb or Close-in Suburb	S.F. Detached Two story Preference: Outlying Suburb or Close-in Suburb
Size	1,800 sq. ft.	3,000 sq. ft.
Kitchen	Completely open or visually open	Completely open or visually open
Bedroom	Three	Four or more
Bathroom	Two or two and a half	Three or more
Washer/Dryer	Kitchen area or near bathroom	Near bedroom
Parking	2-car garage	3-car garage
Siding	Vinyl or brick	Brick, concrete, stucco or wood
Products	May be brand name, but not necessary	Brand name products necessary
Window	Vinyl window/double pane	Wood window/double pane
Skylight	Not necessary	Necessary
French door	Preferred, but not necessary	Necessary
Molding	—	Ceiling crown molding
Fireplace	Wood-burning	Wood-burning/Gas
Kitchen Cabinet	Light wood	Light wood
Walk-in Pantry	Must have	Must have
Microwave	Built-in	Built-in
Island Work Area	Must have	Must have
Extra Long Counter in Solid Surface	Must have	Must have
Toilet, Tub and Shower	White	White
Separate Shower	Preferred	Preferred
Multiple Showerhead	—	Preferred
Linen Closet	Must have	Must have
Whirlpool tub	—	Must have
Exhaust Fan	Must have	Must have
Ceramic Tile Walls/Bathroom	Must have	Must have
Specialty Areas	Laundry room Dining room Sun room	Laundry room Dining room Sun room Media room Home office
Sound Proofing	Preferred	Preferred
Front Porch	Preferred	Preferred
Deck/Patio	Preferred	Preferred

(continued)

Table 7.2 (Continued)

	$150,000 Home	*$350,000 Home*
Exterior Light	Preferred	Preferred
Ceiling Height	8′	9′ or higher
Amenities	—	Whole-house wiring Multiple phone lines Multizone HVAC
Complex	Park area Playground Walking/Jogging trails	Park area Playground Walking/Jogging trails Open space for community
Flooring: Entry Foyer	Ceramic/hardwood	Ceramic/Hardwood
Flooring: Kitchen	Vinyl	Hardwood or Ceramic tile
Flooring: Bedroom	Carpet	Carpet/Hardwood
Flooring: Bathroom	Ceramic/Vinyl	Ceramic
Flooring: Hallway	Carpet	Carpet/Hardwood
Security System	—	Must have
Central Vacuum System	—	Must have

Source: National Asssociation of Home Builders—www.nahb.org.

paring the typical elements of a home built for $150,000 with those of a home built for $350,000.

In addition, NAHB released the following conclusions from its 2000 survey of consumer preferences:

1. The more bathrooms the better (see Figure 7.3).

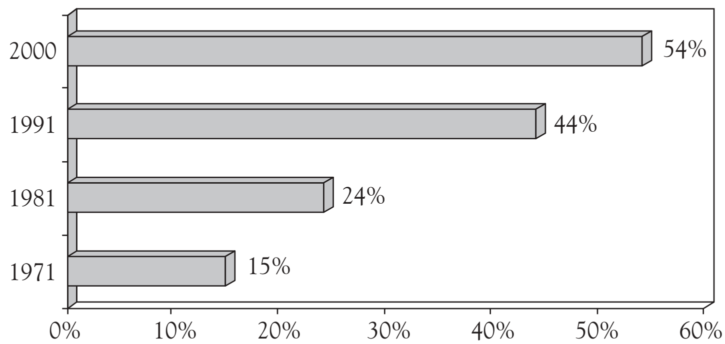

Figure 7.3 **Conclusion: The more bathrooms, the better**

Source: Census Bureau, Characteristics of New Homes Completed.

2. Central air-conditioning is a must (see Figure 7.4).

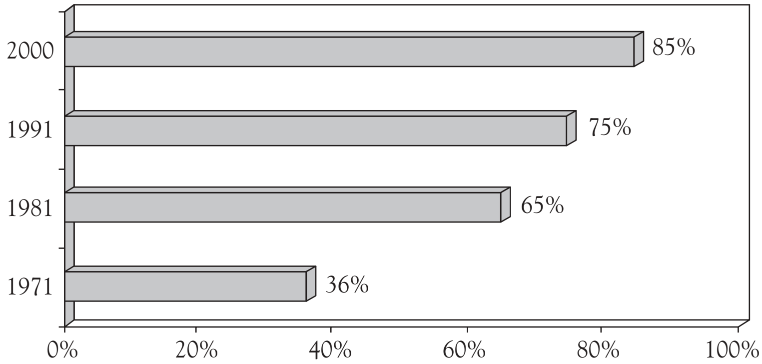

Figure 7.4 **Conclusion: Central air is a must**

Source: Census Bureau, Characteristics of New Homes Completed.

3. A home office is becoming more important (see Figure 7.5).

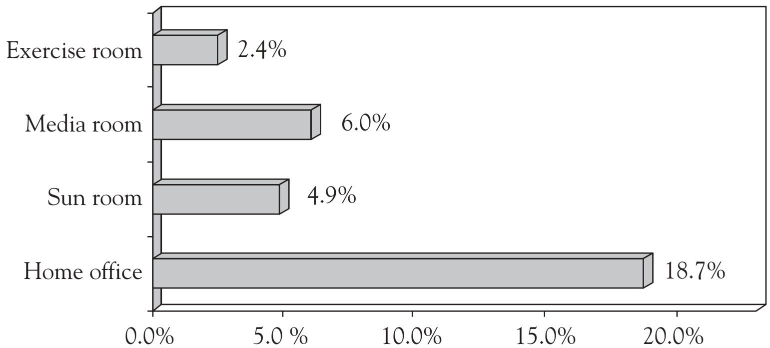

Figure 7.5 **Conclusion: A home office is becoming more important**

Source: NAHB, BEC Survey, 2001.

4. Three or more bedrooms is optimal (see Table 7.3).

Table 7.3 **Number of Bedrooms Preferred**

Number of Bedrooms	*1980 (%)*	*1996 (%)*	*2000 (%)*
2 or less	24	8	12
3	55	40	49
4 or more	21	53	41

Source: NAHB Consumer Preference Surveys of 1980, 1996, and 2000.

5. A two- to three-car garage is preferred (see Table 7.4).

Table 7.4 Parking Facility Preferred

	1980 (%)	1996 (%)	2000 (%)
1-car garage	4	6	10
2-car garage	69	53	53
3-car garage	22	32	24
None	1	2	3

Source: NAHB Consumer Preference Surveys of 1980, 1996, and 2000.

6. Open kitchens continue to be fashionable (see Table 7.5).

Table 7.5 Kitchen/Family Room Arrangement Preferred

	1980 (%)	1996 (%)	2000 (%)
Visually open w/half wall	45	47	42
Completely open	9	31	23
Completely separate	21	10	18
Side-by-side w/wall	24	8	9
Oversized kitchen and no family room	N/A	N/A	8

Source: NAHB Consumer Preference Surveys of 1980, 1996, and 2000.

7. Island work areas and walk-in pantries are must-have features (see Figure 7.6).

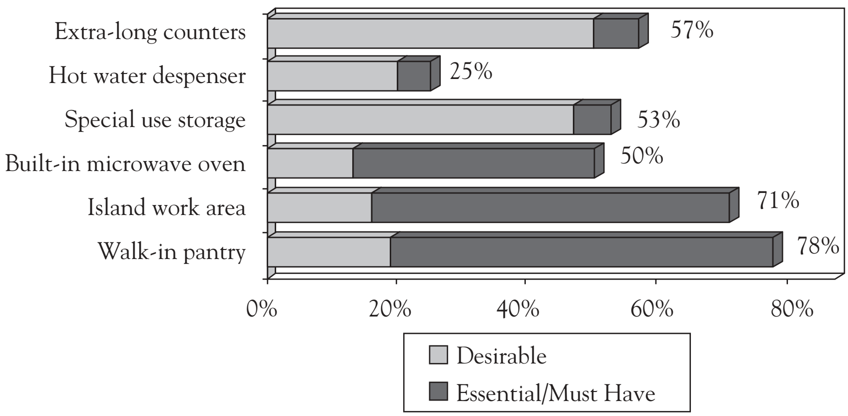

Figure 7.6 Conclusion: Islands and walk-in pantries are must-have features

Source: NAHB Consumer Preference Survey 2000.

8. A linen closet and exhaust fan are essential (see Figure 7.7).

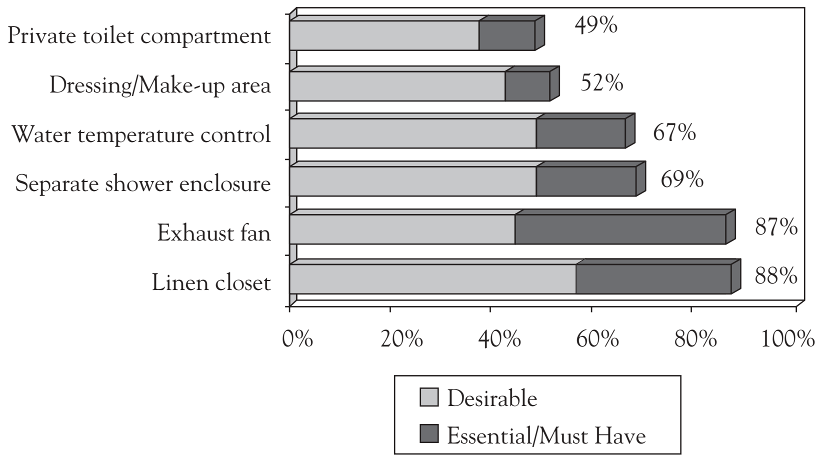

***Figure* 7.7 Conclusion: A linen closet and exhaust fan are essentials**

Source: NAHB Consumer Preference Survey 2000.

9. Outdoor elements are critical (see Figure 7.8).

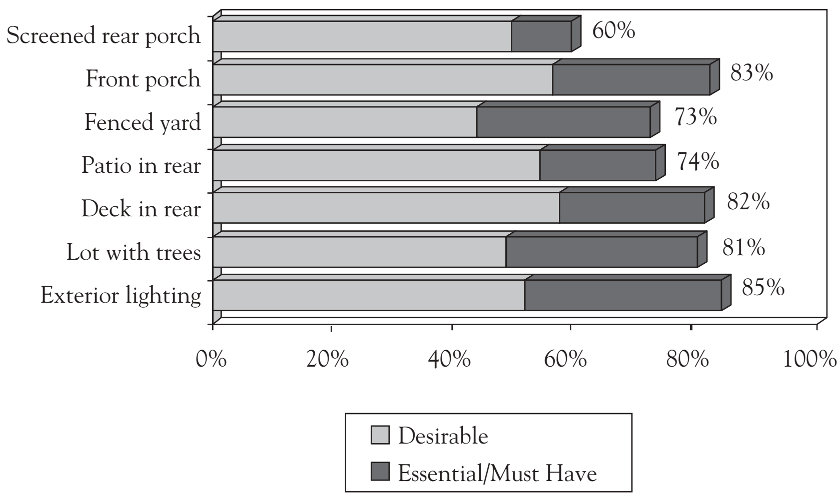

***Figure* 7.8 Conclusion: Outdoor elements are critical**

Source: NAHB Consumer Preference Survey 2000.

10. Brick is king (see Figure 7.9).

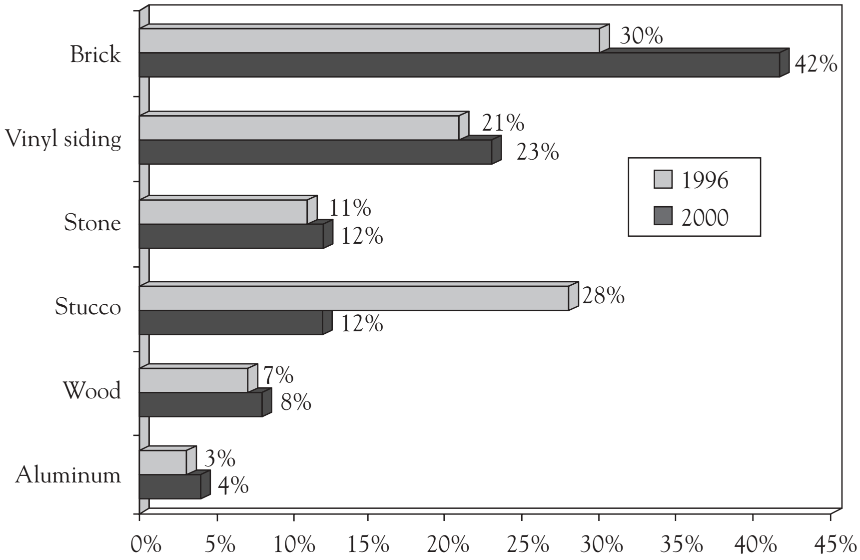

Figure 7.9 **Conclusion: Brick is king**

Source: NAHB Consumer Preference Surveys, 1996 and 2000.

11. The amenities in a community are important (see Figure 7.10).

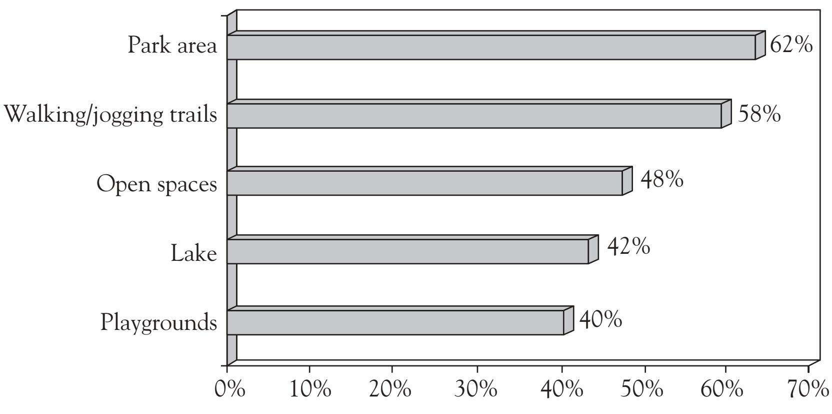

Figure 7.10 **Conclusion: The amenities in a neighborhood are important**

Source: NAHB Consumer Preference Survey 2000.

As you see, a significant amount of data is available to help guide your renovation decisions. Use this type of information to map out the renovations that can add the most value to a home, and stay away from renovations that are simply your personal preference but not supported by the statistics. Be sure to match the quality of your materials to the home you are renovating, remembering that you want to *match* comparable high-end homes in the neighborhood, but you do not want your home to become the most expensive one.

Chapter 8

Do It Yourself and Save a Huge Amount of Money!

As we've discussed throughout this book, we strongly believe that you can tackle many home renovation tasks yourself and save a significant amount of money by not paying contractor fees (which can range from $40 to $80 per hour). These savings can lead to higher profits when you decide to sell your home. The main issues for you to think about when considering whether to tackle a home renovation project are your time and your skill level:

- Do you have the time to devote to a renovation project (e.g., a minimum number of hours per week)?
- Do you have the skill level to successfully complete renovation tasks?

The biggest mistakes you can make are overestimating the amount of time you have available to devote to a renovation project (and underestimating the time the project will take) and overestimating your skills and abilities to do a *professional*-quality job. This last point is very important. The jobs you tackle must be done to professional standards. Potential buyers will quickly be able to identify work that is not done to professional standards, and this will negatively impact their interest in your home or cause them to try to negotiate the sale price down. There are a number of renovation tasks that most people can perform with professional quality results, plus there are some renovations not visible (e.g., basic wiring, plumbing, etc.) that you can do with solid, if not necessarily elegant, results.

Other questions to ask yourself include:

- Do I have all of the tools (or can I rent them) needed to accomplish the project?
- Will I need help from a professional at any point during the project?

- Have I thought through the risks and safety issues related to the project?
- Am I confident that I understand or can figure out the structural elements and systems of my house (if your project involves these areas)?
- Do I have the staying power to complete a project, even if there are obstacles in my path?

Table 8.1 is intended to help you decide what renovation tasks you can realistically handle. Listed down the left-hand side of the table are the most common projects and tasks tackled during home renovations. We've then identified in the table whether this activity can be accomplished by someone with basic, intermediate or advanced knowledge, skills and abilities (KSAs). Below are our definitions of each level.

- *Basic:* Someone who has not done any significant type of renovation work in the past, but can competently handle a paintbrush and roller, use a measuring tape and vibrating sander, and drill a hole with a portable, battery-powered drill. This person is willing and open to learning more sophisticated skills and can usually figure things out by reading directions, reviewing a do-it-yourself book, or participating in a class sponsored by Home Depot or Lowe's.
- *Intermediate:* Someone who has done some renovation work in the past and is capable of running a table saw and other power tools such as a miter saw and circular saw. This person could easily build a professional-looking bookcase, install a small deck off the back of a home, or replace a tile floor in a bathroom.
- *Advanced:* Someone whose skills are at or close to the level of a professional contractor or builder. This person has extensive experience with home renovation projects and can read architectural blueprints, rewire a home, and install new plumbing. This person can build an addition onto a home with little or no help from a professional.

Basic/Intermediate Tips and Lessons Learned (by Jay Heininger, Master Builder)

For those items designated as Basic/Intermediate, we've asked our friend Jay Heininger, a master builder based in Aspen, Colorado, to provide some tips and lessons learned below to help you accomplish these tasks. You can visit his Web site (www.heiningerbuildingdesign.com), too.

Table 8.1 **Project Matrix by Skill Level**

	Basic	*Intermediate*	*Advanced*
Additions – major		X	X
Additions – minor		X	
Bath			
New – within existing walls		X	
New – change walls or add on		X	X
New toilet	X		
New sink	X	X	
New faucet	X		
Mirrors	X		
Towel bars	X		
Shower curtain	X		
Shower door	X	X	
New tile		X	X
New vanity	X	X	
New countertop	X	X	
GFI circuit	X	X	
New light fixtures	X		
New light fixtures switched	X	X	
Closets			
New		X	
Shelves	X		
Systems	X	X	
Rods	X		
Decks			
Small on grade	X	X	
Cantilevered		X	X
With stairs and railings		X	X
Doors			
Interior replace in existing opening	X		
Interior replace in existing jamb	X	X	
Modify opening required		X	
Shower	X	X	
Exterior in existing opening	X	X	
New front door unit – existing space	X	X	
New front door unit – change opening		X	
Cabinets doors – adjust	X		
Cabinets doors – new	X	X	
Garage door – new		X	
Garage door – opener	X	X	
Garage door enlarge opening		X	X
Fireplace glass	X	X	
Drywall			
Hang new	X	X	
Finish new	X	X	

(continued)

Table 8.1 *(Continued)*

	Basic	*Intermediate*	*Advanced*
Patch	X		
Electrical			
New service			X
Auxiliary panel		X	X
Outlets – add	X	X	
Outlets – add half switched		X	
New circuit		X	X
Switched fixtures	X	X	
Heat	X	X	X
Dryer			X
GFI circuit	X	X	
Surge protections at panel		X	X
Fireplace			
Gas	X	X	
Zero clearance		X	X
Masonry			X
Gas log	X	X	
Glass doors	X	X	
Insulation	X		
Heating Systems		X	X
Kitchen			
Cabinets – refinish	X	X	
New cabinet doors	X	X	
Install new cabinets		X	X
New counters		X	X
New faucet	X		
New sink	X	X	
Garbage disposal		X	
Complete new kitchen		X	X
New appliances	X	X	
New hood – interior venting	X	X	
New hood – exterior venting		X	X
Lighting Fixtures	X	X	
Landscape	X	X	X
Locks			
Door – interior	X		
Door modify – interior	X	X	
Door – exterior	X	X	
Door mortise		X	
Cabinet	X		
Closet	X	X	

(continued)

Table 8.1 (*Continued*)

	Basic	*Intermediate*	*Advanced*
Floors			
Carpet		X	X
Tile		X	
Linoleum		X	
Wood tongue and groove		X	X
Laminate		X	
Parquet		X	X
Stone		X	X
Refinish	X	X	X
Concrete		X	X
Plumbing			
New bath		X	X
New shower		X	X
New kitchen		X	X
New washer		X	X
Hot-water heat			X
Water softener		X	X
New fixtures		X	X
Paint and Stain			
Exterior	X	X	
Interior	X	X	
Lacquer	X	X	
Varnish	X		
Stain	X		
Floor	X	X	X
Paneling			
New – single boards	X	X	
New sheets	X	X	
Finish	X		
Roof			
New – complete		X	X
Repair	X	X	
Skylights		X	X
Windows			
Install new to fit existing		X	
Install new into new openings		X	X
Shades and blinds	X	X	

Baths

• *New sink w/laminate counter:* If you purchase a new sink that is smaller than or equal in size to your opening, you will need to make only small adjustments to your countertop. If you need to cut the opening wider, use a router and a guide or a reciprocating saw. Use a fine blade, and be careful not to chip the laminate. If possible, make a sample cut where the counter is sure to be covered. Also, put some tape on the bottom of your saw so you do not scratch the laminate.

• *New toilet:* This is simple. Turn off the water to the toilet and disconnect lines. Flush the toilet and remove it (it's usually bolted to the floor). You will see a wax ring smudged to the bottom of the toilet and perhaps lingering at the flange (i.e., the opening). Clean this off. Buy a new wax ring, making sure it is the recommended thickness for your toilet (ask someone at the hardware store). Place the wax ring on the flange, reset the toilet, and bolt it down. That should be all there is to it, except for reattaching the water lines. If you need to buy new lines, the flexible ones are the easiest to work with, but the solid ones look better. Avoid the plastic cheap lines (they can break and leak more easily). *Hint:* If water seeps out at the base of the toilet after the new installation, add another wax ring or replace it with a thicker one. If the toilet is on the second floor and you know the exact location, check the ceiling beneath the toilet in a few days to make sure it is not damp. If it is, examine the installation and reinstall.

• *New faucet:* If you are keeping your old sink, make sure that what you purchase fits the holes. If the faucet is mounted in the countertop and you are keeping it, do the same.

• *Mirrors:* You can attach a mirror to the wall with construction adhesive or silicone or hang it with the hardware provided by the manufacturer. If you're installing a heavy mirror using screws, use a stud-finder to find the wall studs and attach the screws to these studs or use fasteners (such as molly bolts) that secure the screw to the drywall.

• *Towel bars:* If your house was well planned, there should be solid-wood blocking behind possible tile-rod locations. If this is not be the case, find a stud—the wall framing—for attaching the unit, if possible. If you cannot find a stud in the right location, use a fastener. There are a variety of fasteners. The easiest to use are the expansion kind, which expand with the screw to fit a hole drilled in the drywall. These are usually plastic, and they work well unless you are prone to pull on towels vigorously or have a tendency to lean on the towel rod as you exit the shower. If you do, these fasteners will fail and your towel rod will fall down (and you after it). I recommend the type with the bolt and butterfly or the metal drywall molly that tightens to the inside of the drywall surface. Do not buy anything that just sticks to the wall—it will eventually fall off.

•*Shower door:* The easiest type of shower door to install is one that combines two doors in a frame, that is, each door slides by the other. You will probably need to cut the track to size with a hacksaw. It will be necessary to drill the tile and then attach the frame with an expansion molly bolt. Here, the expansion fastener will work because tile is solid (the fastener will probably come with the unit). Be careful not to crack the tile when you drill it. Hold your drill firmly, and don't get impatient. Purchase and use a masonry bit for this project.

•*New tile:* I recommend that you install new tile over cement board, not drywall. You can cut the cement board with a special knife, or use your circular saw and an abrasive blade. First, remove the old tile. It is not necessary to remove the drywall unless it is damaged. Screw the cement board to the wall (right on top of the drywall if it is in good shape). Be sure to install this level and at the proper height to accommodate your tile. Measure the tile and ascertain the height based on the required number of full courses of tile plus the width of the bull-nose finish tile. Then, you will be wise to cut the cement board to a bit less than your measurement. This will work fine as long as there is enough cement board to attach the bull nose to (two-thirds of its width).

Your bath wall may not be square. Think about where your eye travels. It looks to the center of a space, doesn't it? So make a plumb line down the center of the shower, then measure to see how much cutting will be required at the corners, if any. Try to lay out the tile so that you only need to cut one side. Start the tile at the bottom in the middle, and work both ways. If your tub is off a little, don't worry about it. If it is off a lot, examine your tile layout before your start, and look for any problems. *Note:* If you installed the cement board on top of your drywall, you will need to purchase a tile with a mud set and a wide bull nose to cover the edge of the cement board. It will also give you a more expensive-looking and finer job than just quarter-inch-thick tile attached to drywall (which I have always thought appears cheap).

•*New vanity (cabinet):* First, remove the old one. You may be able to use your old sink and counter, but if you are buying a new vanity, why not buy a new sink and countertop, too? You can make the countertop or buy it. There are some nice premade sizes of Corian® with the sink built in that require only trimming. Or, you can fabricate a new one out of laminate or tile. Any of these are pretty simple to do. If you are cutting a new hole for your sink in a laminate counter, drill a hole inside your line to accommodate your saw blade and, again, be careful not to chip the surface outside the body of the sink as you cut.

When installing separate pieces of backsplash you may need to scribe it to the wall. Slide the material into the wall corner. Trace a line or measure any difference top and bottom, and cut the splash to fit the corner. Do this first with one piece, and then with the next. Apply adhesive to the back and install. Cut temporary pieces of material (any thin strips of wood) to brace this stuff in place while the adhesive dries, placing one end of the brace against the wall and the other end against the backsplash material. *Note:* Slide a wood shingle against the wall and behind your brace so that you do not scratch the wall's finish.

•*GFI (ground fault interrupter) electric outlets:* It is a good idea to install GFI outlets in your house if it does not already have them in the kitchen and baths. These are designed to keep you from being electrocuted if you stand in a puddle and have a short in your hair dryer or electric razor. (I don't know if they will work if you jump into your bathtub with a television.) Buy and install these in place of the old outlets. If you are installing a new outlet, you will have to fish a line from another outlet and install a box. Turn off the circuit at your electric panel before doing this. In case you are not familiar with GFI outlets, they come with the breaker as part of the duplex outlet. Ask a salesperson at your local hardware or electrical supply store for assistance.

•*New lighting fixtures:* Purchase a simple book on basic wiring and/or closely follow the instructions provided by the manufacturer. Make sure that the electrical supply is shut off to the lighting fixture (you can buy an electric current indicator for $10).

Closets

•*New rods:* Attach blocks to wall and rod to blocks.

•*Shelves:* Install supports, then shelves; to nail supports to studs, find one, then check every 16 inches of center. *Hint:* To find a stud (without a stud-finder, which is a really cool tool), drive a nail through the drywall or paneling behind where your shelf or shelf support will sit. That way, no hole will show even if you try thirty times before you find one.

Decks

•Check with your lumberyard—it probably sells deck kits or books on deck installation. If you get elaborate, you or a designer will need to design one. If it is a new deck and it is large, make sure that you allow for traffic flow around and past any furniture you intend to place on the deck. The minimum width you'll want is probably 10 feet. The deck material should be water-resistant—typical materials used include pressure-treated wood, redwood, and other rot-resistant materials.

Doors

•*Replacing an existing door:* First, remove the trim—carefully, if you wish to reuse it—and remove the door and jamb. Then, take a reciprocating saw with a combination wood-metal cutting blade and run it down both sides and across the top of the jamb. Remove the whole unit. If you are smart, you bought a prehung door (the door is already hung, hinges on, in one unit).

Next, check the framing for plumb with your large level so that you know how much you will need to shim and where—top or bottom. Check the floor to see if it is level. If it is not, cut the bottom of the jamb (one leg longer than the other) to match the floor. This will allow the top of your jamb to be level even though the floor is not. Is your door going to be the same height as the others in your house? If so, match the nearest one. Cut down the jamb to allow for the match, ensuring that your door will clear the existing floor. Check this with your level to make sure that the floor is not so out of whack that the door hits or rubs it when opened.

Install the hinge side of the doorjamb first. Start by removing the door from the system. If the door came with a stop, remove the stop and attach screws through the doorjamb behind the stop location. Install the jamb plumb with one line of screws, shimming as required. (Purchase shim shingles from the lumberyard for this.) Position one on either side of the jamb and push the shingles in or pull them out until the jamb reads level, then screw it in place. Start this process at the top or bottom where your door requires the least shimming. (In other words, if the framing is out, it is probably off at either the top or bottom; rarely, uniformly in the middle.) At the location that requires the least shimming, shim 1/4″ if you have room. This will allow for adjustment later.

Install the door and set the head and side jamb to match the reveal (the gap between the door and the jamb). *Note:* It is possible that your door will appear to fit crooked to your level jamb, with a wider gap at the top or bottom. This is why you used the screws. If necessary, readjust the shims and add shims behind the hinges to handle any reveal problems. Make sure that you do not get too carried away with this and end up with the door completely out of whack, requiring the removal of the shims and starting over. This advice comes from experience—sometimes perfection will make things worse, not better.

Having said all this, I have put new doors in old houses when everything was crooked. If this is the case, you may want to install your new door out of plumb to match your out-of-plumb house. Also, if the door happens to sit near a particularly out-of-plumb wall, you again may want to set things slightly off. If your new door is perfect and the wall is not, your perfection may look like a mistake. In old buildings, there are no rules, and the same is true of crooked new ones. Sometimes you need to use your level and your eye. Think politics—sometimes nothing is as it seems.

If you have chosen to place a new door in an exiting jamb, you will first need to mortise and install the hinges that were on the old door. The new door will probably not fit properly, and you will need to carefully cut it to match the opening and its reveal.

If you cannot, then remove the old trim and adjust the old jamb in part or all using the steps described above for installing a new door.

Drywall

• When you install new drywall, I recommend that you screw it *and* glue it to the underlying studs. Using screws is standard procedure everywhere these days. Using glue is not. So if you live in an area where they do not glue drywall, people may ask why. "Why not," is my response. This is a superior way to install drywall, and the only downside is if you are going to rip it out later. PL 200 glue is made for this application. Liquid Nails has a similar product. Taping the drywall is messy, but you can do it. You will need a pan for the mud and a trowel. Then, it is just a matter of troweling on the mud, coating the tape, and installing it. Once the mud is dry, sand it for an even finish. Sounds easy, but a good drywall installer does this so you cannot see the joints (you may want to hire an expert to do the finish coat and final preparation before painting).

When you cut drywall, score the surface on the front of your sheet as deep as you can with your knife. You can then snap the material. It will break on this line with paper still attached to the back. When cutting out windows and electric boxes, you can mark them and then insert a small router into the box, push it to the edge, and follow the pattern (be careful not to slice your electric wiring). Similarly, at the edge of a window or door opening, you can just run this router to the material to cut the opening. This is much easier than cutting with a knife. You can purchase a special router for this or use one that doubles as a laminate trimmer.

Electric Wiring

• Purchase a simple book on electric wiring. Basic wiring, such as replacing a plug or a lighting fixture, is easy, but always remember to turn off the electricity at the electric panel. Buy an electrical current indicator so you can be sure that no power is going to the wires with which you're working.

Fireplaces

• There are too many different types of fireplaces to comment on here. I recommend that you select one and read its installation instructions. If you have Internet access, surf the Web for fireplace products for a start (Majestic, Superior, and Masco products are commonly used). Check with your local building department regarding fireplaces, gas logs, and zero-clearance glass. Some areas no longer allow any type of fireplace except gas.

Floors

• *Tile:* I recommend that you install tile on cement board or concrete. Plywood works, but not as well. You will need to check how this relates to other floor surfaces in your home (to match floor heights). Again, check the layout before you start. Do not start in a corner. Using a chalk string, snap a square cross-reference along both axes of your room so that you see what you are doing. Analyze required cuts before you start. Tile is *always* started from the middle line of a room—lay tiles out from both sides of this line.

• *Hardwood:* Unfinished hardwood is the best. Unless you are going for the old and funky look, it is extremely important that your material be as dry as possible. This will help to eliminate gaps in the future. You must allow for expansion (wood is a natural element, and it moves with seasonal cycles of humidity). So, at the edges of your room you must allow a minimum of 1/2′′ where possible. Remove and then reinstall your baseboard, and plan on the installation of a base-shoe (one or more pieces of trim) to cover the gap you leave for expansion. Many people simply put hardwood down on tarpaper that is laid directly on the subfloor. I always glue (and nail) a hardwood floor to the subfloor. It is a much better procedure because it will result in your floor's having fewer squeaks—mine have never had any. It may seem odd that surfaces glued will still expand, but they do. If you buy the wood yourself, keep it inside at normal room temperature (and humidity) for at least 10 days before installing it to get the wood to expand to its normal state. This is very important; if you don't do it before laying the floor, it can buckle and warp. If you have someone else do the work, be sure to look at samples of his or her work and ask for references.

• *Prefinished:* I don't recommend installing a prefinished floor. It will look nice initially but will not wear very well. After four or five years, it will look poorly finished. If you have to use it because it is a one-step product or possibly because of cost, again, make sure it is dry.

• *Parquet:* Parquet is probably easier to do yourself in a small area rather than in a large area because you can purchase and install it similarly to floor tile. It, too, does not wear well because it comes prefinished.

• *Laminate:* Make sure that you grind down any humps and ridges in your floor before you install laminate. The same applies to linoleum. If you are unsure, you may wish to first level the floor and install 1/4′′ Luan plywood as an additional subfloor.

• *Stone:* Stone is messy and needs to be set in mud. Make sure that you seal the material afterward. You will need to allow for transition to other floor materials because a stone floor will be a minimum of 2 1/2′′ thick. Measure your current floor height to see if this is feasible.

Insulation

• Pretty much anyone can install insulation. Wear a mask. Secure the insulation with a staple gun if you are installing it vertically. Insulation will make you itch, so cover yourself as much as possible and shower afterward, in cold water first.

Kitchens

• In general, kitchens are not that difficult to install, but it is best to buy a kitchen book to do this. It is important that cabinets be set level and square. It is more difficult to install the modern ones because you have fewer margins for error where doors meet doors on a frameless cabinet. If you are going to install the cabinets yourself, purchase a cabinet with a frame. Some contemporary ones are made like this; they are not as exacting or demanding to install as the frameless cabinets.

The same principles that I described for tile and flooring apply to cabinets. Check your walls. Mark level and plumb lines. Examine the corners. Know where something is off before you start, and then analyze how you will deal with it.

• *Countertops:* The easiest countertop for a do-it-yourself person to install is one made of tile. Not because tile is so easy to work with, but because it is made up of many pieces, and when you mess up you have only wasted one or a few of them. Also, you do not need to do it all at once, except for the grouting.

Laminate tops are not difficult—they just require planning and preparation (if you make a mistake, there goes the whole sheet!) Tile or laminate will require a base material. In the case of tile, it can be plywood or plywood with a piece of 1/4″ cement board attached to it. For laminate, you must purchase the best, tightest grade of particleboard intended for use as a base.

Once your cabinets are in, you will make countertops of this material, joining it together with cleats underneath and doubling it up with strips on the front, the sides, and the back, and along the lines of cabinets. Once this is accomplished, you cut holes for sinks, faucets, and so forth (with laminate, you may do this later or beforehand—I recommend later), then apply laminate or tile to the countertop. Get a pamphlet on this from the tile supplier or the lumberyard or, again, use the Internet for additional resources (www.homedepot.com, www.lowes.com, etc.).

You can order premade laminate countertops. These come with the backsplash attached, and you just attach them to the cabinets. The downside to premade tops is, if things are out of whack in your kitchen, they may not fit correctly. These types of counters also *look* premade. There also may be companies in your area that will come in and do the measuring for your countertops and install them or let you install them yourself once they are professionally cut.

• *Refinishing cabinets:* You can try this yourself, but there may be companies in your area that specialize in refinishing cabinets for a reasonable price. Also, simply replacing cabinet doors is an alternative to replacing the entire cabinet. Painting is always an excellent way to update the look and feel of older wood cabinets (I'd recommend high-quality oil-based paint for wear and tear).

• *Painting or staining:* Read the instructions on the can. Make sure you have plenty of fresh air, and also read the labels for clean-up recommendations and information regarding toxicity. Make sure you use tape and drop cloths to cover everything that you don't want to drip on. The use of paint spray guns is an option to achieve a uniform finish.

Paneling

• Check the situation of the walls before you start paneling. I recommend that you start on a plumb line in the center of your wall and work in both directions. It does not need to be absolute center if a window or door sits there. It is best to start with a full board. As you near the corners, examine how your boards will fit. If you finish up with one very skinny piece you may choose to modify a few pieces as you progress so that it is less noticeable than finishing with a small sliver of only an 3/4′′ or 1′′.

If your corners are not plumb and you need to cut the last board at an angle, this will be less noticeable on a wider piece of material. If you are installing tongue-and-groove boards over drywall, glue and nail them to that surface. You can probably hide all your nails in the tongue-and-groove joints of the paneling, except in the first pieces. If you do face nails, make sure to line them up. Another trick is to nail through partial knots if your material is not clear. You may find it necessary to drill the paneling to do this.

Roofs

• There are so many types of roofs that I hesitate to comment here except to suggest asking a building inspector or someone at a lumberyard what type works best in your area. Are cedar shingles allowed where you live? If they are, note that there are two types of cedar—red and white. Red is far superior and will last much longer. Is it windy where you live? Are any brands of asphalt shingles known for blowing off roofs in your region? Do you want a metal roof? If so, will this affect the way snow clings to your roof? These are some of the questions to ask your building inspector or other local expert. If you are talking to roofers, ask them, too (don't use a roofer who doesn't give clear answers).

Skylights

•Again, there are too many types of skylights to address them all here. In general, many companies make skylights with flashing kits designed for various roof systems and materials. Velux is one, Pella another, and there are many others. Order the flashing kit specified for your roof system. I recommend using lots of an ice and water shield product around and up the sides of any skylight before installing the flashing kit. The easiest installation, if you have a standard roof system built 2′ on center, is one of the products designed to fit in that 22 1/2′′ rough opening. If you are installing a series of these, you may need to address airflow and the venting of your roof (with one lone skylight, this should not matter). The steeper your roof, the less likely you are to have leaks. I would not install any standard skylight system on a pitch of less than 4:12. This does not mean that you cannot have a skylight on a flat roof. You can, but you will need to be more cautious about potential leaks. Ask your building department or speak to a representative at a local roofing company that does industrial roofing.

Thank you, Jay, for that valuable insight and advice!

Kathy Joyce and Thomas Tumicki, Home Renovators

We chose to buy an old house and renovate for several reasons:

1. We wanted a specific neighborhood, and houses in good repair were selling within hours of going on the market (we missed out on two contracts because the houses sold immediately). By asking around in the neighborhood, we found a house not yet on the market, and made a low offer before it went on the market. The owners were willing to take less money because they didn't have to pay Realtor fees.
2. We like to do renovations and could customize the house to our needs and preferences.
3. There were many fixer-uppers in the area, and it was hot for renovations then resale. The potential ROI, even after putting extensive work and money into the house, looked excellent (see Figures 8.1 and 8.2 for our kitchen renovation).

(continued)

(Continued)

Figure 8.1 **Kitchen under construction (but still in use!)**

Figure 8.2 **Completed kitchen**

This is our renovation process/advice:

1. If it's an old house that needs systemic repairs, make them! Although I wanted a new kitchen ASAP, we decided to do systemic work first—central AC, new electric, new plumbing, new roof—and leave the more cosmetic work until later. We can do more of that ourselves, but we needed contractors to do some of the other work.
2. Figure out a way to live in the house while the work is being done if possible; that way, you can start fulfilling the IRS time requirements for living in the house before you sell it immediately rather than after the renovations are completed. For example, we lived in our finished attic for a few months while work was being done in other parts of the house.

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3. Ask neighbors for contractor advice. They often know independent contractors, who can be much cheaper and do as good or better work than big firms.
4. Be your own prime contractor; there's some hassle involved, but lots of financial savings.
5. If someone needs to be fired, do it, then have them leave the premises immediately.
6. Keep valuables, including power tools, very secure if you're having contractors in and out of the house.
7. Know what you're doing contractually; read every word carefully and make every amendment you can think of. Examine whether you're making assumptions about anything and, if you are, get them in the contract. For example, don't assume that contractors will haul away whatever they're taking out of the house (hauling can be very expensive), and don't assume that they'll provide necessary materials that aren't spelled out in the contract.
8. You can often buy fixtures or materials at better rates and/or higher quality than contractors; feel free to do so. For example, by supplying our own plumbing fixtures, toilet, cabinets, and so forth, we saved significant money over what the contractor was charging and got what we wanted, not what the contractor had to offer.
9. Do the work you can on your own if you like it and are good at it. For example, we chose to paint several rooms after drywall was installed, sealed, and sanded. We like to paint, could make sure the job was done as we wanted it done, and saved lots of money by doing it ourselves. For some rooms, we hired an independent painter who was less expensive than the main contractor we used. (Painters from the finishing teams of electrical or plumbing firms are more expensive than independent painters).
10. When making an offer on a fixer-upper, you can write the contract to buy the house "as is" but with a stipulation that you can adjust your offering price up to a specific amount if an inspection turns up problems not obvious to the buyer. For example, our contract included a clause that we could reduce the purchase price by as much as $10,000 if the inspection

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warranted it. The inspector found that the roof required replacement, and we rewrote the contract for $10,000 less.

Financing Advice

1. Keep a constant eye on real estate in your neighborhood to be sure that you're staying within limits of financial investment and structural norms. If it means hiring someone to do an appraisal or assessment, do it. A few hundred dollars for an appraisal is cheaper than spending several thousand more on a renovation than you'll get out of the house.
2. We financed our renovations with minimal cash up front, then with an equity line. As we renovated more, we increased the equity line to do the next project. As long as the house stays "within range" in the neighborhood, you can essentially have the house finance itself while you get a tax write-off every month, plus realize the appreciation in your home (tax free) when you sell. For example, we added central air-conditioning to the house, electric baseboard heat to the attic (thus making it count as another bedroom), and new electric throughout the house. Those renovations (a very inexpensive cash outlay) increased the appraised value of the house by 25%. We then got an equity line for the new appraised value and used some of the funds to replace the roof, upgrade the plumbing, and redo a bathroom. Those renovations added more appraised value; we increased the equity line again and can now finish the house. On completion, selling the house will still provide us with substantial tax-free profit, and we're getting tax breaks both on the mortgage and the equity line (which is at a very low interest rate).

Home Renovator Tool Chest

Having the right tools can make all of the difference in the ease with which a home renovation project can be accomplished and in the quality of the final product. Without the right tool, you're always trying to accomplish a task in a roundabout way. The set of tools and equipment we have cost about $1,500. Table 8.2 is a list of the tools we bought in one day at Sears (the best shopping trip I have ever had!—the guy checking us out said, "I've always dreamed of just going into a hardware store and buying a whole workroom full of tools and equipment"), plus other items we've purchased to fill our tool chest.

Table 8.2 **Recommended Tools and Their Cost**

Item	Cost ($)	Item	Cost ($)
Tape measure	6.99	Steel square	4.99
Wall scraper	5.99	Wrench set	9.99
Post level	4.99	Small sledgehammer	21.99
6′ ladder	49.95	Screwdriver set	29.99
Wrench	13.99	Pry bar	6.99
Duster (dustpan with handle)	4.88	Vibrating sander	39.99
12″ square	11.99	Circular saw	29.99
Reciprocal saw	49.88	Electric cutting tool	39.88
Sawhorse	24.99	500-watt light on stand	39.99
Metal clamp set	14.99	10″ miter saw	99.99
36″ bar clamps (2)	34.99	Jigsaw	35.70
20″ hand saw	15.99	Electric drill	48.99
Bib apron	5.49	18-volt cordless drill	29.99
Wheelbarrow	29.95	150-PSI compressor (w/18-gauge nail gun)	199.99
Extension cord	14.99	16-gauge nail gun	100.00
Hammer	9.99	Wet/dry vacuum	82.88
Pliers	14.88	Stud finder	19.99
Router	59.99	Electric current indicator	9.99
24″ level	14.99		

In addition, we bought a used Shopsmith at a garage sale for $250 that was about 40 years old. A Shopsmith combines a table saw, a drill press, a lathe, and a disk sander in one piece of equipment. It is a really compact and useful tool that we have used extensively during our Sonoma home renovation. Of course, we've also picked up other smaller tools over time (we constantly search garage sales for cheap tools). Some of them were meant to accomplish specific tasks that we've done once, and we've never used again (if these are expensive tools, it's better to rent them if possible). Finally, we've also bought about $500 worth of tools and equipment for our landscaping activities (including a rototiller; a weed-eater with attachments; a power washer; and basic rakes, shovels, pickaxes, etc.).

Living in a Renovation Zone

A childhood friend's father who is an architect began a kitchen renovation and still had not completed it a decade later. Another friend's father put an addition on their home but never completed the interior, so it has never been used. These have to be the worst examples of living in a renovation zone, which can be a disruptive and unpleasant experience. Luckily, there are many things you can do to minimize the effect on your day-to-day life. The keys to success for living in a renovation zone are planning, containment, and clean-up.

Planning involves thinking through what the renovation will entail and the impact it will have on your family's life. Create a list of these things and then come up with ways to alleviate these problems. For example, if you are renovating a kitchen, you may need to plan different types of meals for a while (using a microwave or outdoor grill). Or if you're remodeling a bath, family members may need to share another bath for a few weeks. Also, if you're using a contractor, go over your list together to come up with ways to keep everyone happy and the project on schedule. Contractors will have many suggestions based upon their experience that can help alleviate the stress and impositions of a renovation project.

Containment has to do with isolating the renovation area as much as possible from the rest of your house. For example, dust is always a problem during a renovation, so try your hardest to prevent dust from spreading by sealing off the room where renovation activities are taking place. Also, turn off your forced-air heating and cooling system in the rooms where dusty work is being done (and change the filters in this system often). There is always a lot of traffic in and out of a house during a renovation, so designate one entrance for everyone to enter and exit, and protect the flooring with paper or plastic.

Cleaning up during a renovation project is critical to ensure that the inevitable mess created does not negatively impact your family's life. It is best to stay on top of clean-up activities on a daily basis. Sweep up as often as possible and use a vacuum to pick up dust and other small particles. Also, make sure your contractor knows what is expected from a clean-up perspective (daily, weekly, etc.), and make sure that there is room to store materials, tools, and equipment so that a work space does not become too cluttered.

A renovation can be a very stressful experience. But with careful planning up front and some good, common-sense execution, you can minimize the stress and have a good experience. The National Association of the Remodeling Industry (NARI) suggests that each family member should have a role and responsibility during a renovation project (even if it's a small child who's responsible for keeping the dog out of the work space). In addition, NARI says to remember these main rules:

- Know what is expected of you and articulate what you expect of others.
- Know what you want and what other family members want.
- Realize that there are compromises along the way and devise a way to minimize them and keep everyone happy.
- Choose the right person in the family for each job, regardless of age or role in the family.

- Don't ignore problems or disappointments—talk to someone who can help.
- Focus on the positive aspects of the project.
- Never forget your goal.
- Maintain constant communication with all parties.
- Keep a good attitude.
- Look at the project as an adventure, not an imposition.[1]

Renovation Safety, Environmental Hazards, and Fire Prevention

The two most common accidents during a renovation are falling off a ladder and receiving an electrical shock, so be very careful when you're standing on a ladder or working with wires and electrical current. In addition, you can be seriously hurt using power tools of all types. Always operate these tools in the correct manner and wear eye protection at all times (and ear protection if recommended). Most accidents happen when you're not concentrating on the task at hand (your mind is wandering), you're not doing it properly (you're cutting corners), or you're tired. I've had many close calls over the years, and most of these I can attribute to one of these three reasons. I've been especially careless when I'm tired and trying to accomplish too much in a given period. One time, at the end of the day after installing windows using a ladder, I was very tired but tried to do just one more window. I did not set the ladder correctly on the ground, and when I reached the top of the ladder, about 20 feet up, the ladder slipped out and I fell straight down. Luckily, I was not seriously hurt, just scared and bruised.

You also need to be aware of various environmental issues that can cause serious risks. These include:

• *Lead paint:* Before 1978, oil-based paint had lead as an additive. This is especially an issue if you have children because lead poisoning can cause learning disabilities and affect hearing and growth (your doctor can order a simple blood test to determine if lead levels are elevated). Lead can be released into the home environment if paint is peeling, chipping, chalking, or cracking. Also, some small children chew on painted surfaces. To see if paint in your house poses a health problem, hire a certified inspector/assessor. He or she will use a variety of methods to assess lead hazards in your home, including the visual inspection of paint condition, laboratory tests of paint samples, surface dust tests, and/or tests using a portable X-ray lead-testing device. You need to take special precautions when removing lead-based paint. For example, regular air-filtering masks are not adequate to catch the fine lead dust that is produced by removal efforts. Also, cleanup cannot be done with a regular vacuum cleaner; you need to use a HEPA vacuum. You may want to consider hiring a professional to perform this task because professionals have the proper tools and follow regulated procedures for dealing with this problem.

• *Asbestos:* Asbestos exposure can cause cancer, so asbestos is nothing to play around with. Asbestos was used in a variety of products until 1996, but, again, materials from before 1978 are of particular concern. The most common items in the home that may contain asbestos are: vinyl flooring; duct wrapping on heating and air-conditioning systems; insulation on hot-water pipes and boilers; some roofing, roof shingles, and siding; ceiling and wall insulation built between 1945 and 1972; drywall taping compounds; and some ceiling materials. Typically you'll have two options when you have asbestos in your house: (1) seal it and leave it there, or (2) remove it. Again, hiring a professional may be the best option for dealing with asbestos.

• *Formaldehyde:* Formaldehyde is a colorless, pungent gas that is water soluble and also can cause cancer in humans. It can also cause other symptoms such as irritation to the eyes, skin, and respiratory tract; coughing, a sore or burning throat; nausea; and headaches. It is used as an ingredient in the manufacture of paints, plastics, and resins and in building materials such as fiberboard and some foam insulation. The average concentration level of formaldehyde in conventional homes is 11 particles per billion (it is higher in manufactured homes). You can test for formaldehyde levels via an ambient-air test (usually done over a 24-hour period). If high levels of formaldehyde are found in your home, you can increase the level of ventilation and replace composite wood products or insulation containing formaldehyde with other products. Reducing the temperature and humidity levels in your home can also help.

• *Carbon monoxide:* Carbon monoxide levels can be a deadly issue if you're working on your home's gas-heating system or gas fireplace. Make sure you have a carbon monoxide detector/alarm system installed in your home before you move in and, especially, before you begin work on these systems.

• *Natural gas or propane:* The potential of a gas explosion is a concern if you're remodeling your kitchen or rerouting gas lines. Make sure that the gas is turned off *at the source* before doing any work with or around a gas line.

• *Oil tanks:* Oil can seep out of an old tank and contaminate the soil around it. This is a very costly problem to fix, and federal, state, and local environmental protection agencies issue rules and regulations for dealing with this issue.

• *Mold:* Molds are fungi that grow and reproduce on organic material (such as wood, plants, and dirt). Mold usually is an issue in warm, humid climates. Mold gradually destroys the organic material it is growing on. The following are common sources of indoor moisture that may lead to mold problems: flooring, leaky roofs, sprinkler spray's hitting a house, plumbing leaks, overflow from sinks and sewers, damp basements or crawl spaces, steam from showers or cooking, humidifiers, wet clothes drying indoors, and clothes dryers that exhaust indoors. Warping floors and discolored walls and ceilings can be indications of moisture problems. Condensation on windows or walls is also an important indication, but it can sometimes be caused by an indoor combustion problem (such as a leaking gas stove). Mold causes respiratory problems, nasal and sinus congestion, eye irritation, and skin rashes in humans. If you see visual signs of mold (discolored patches or cottony or speckled growth on walls or furniture) or if you smell an earthy or musty odor, you probably have a mold problem. If the mold is growing in a small contained area, you can handle the problem by identifying and eliminating the source of the moisture and cleaning and drying the moldy areas (bleach is very effective). If mold has contaminated a large area (say, more than 100 square feet), you may need to hire a professional to deal with the problem.

•*Radon:* Radon is a gas that is naturally emitted by decaying radium and uranium and can cause cancer in humans. Check with your state's department of health services or the U.S. Environmental Protection Agency for average radon levels in your area. If they are high, you should install a radon detection unit.

In addition, see Appendix B, "A Guide for Healthier Home Remodeling." Below are several tips from the booklet:

- Isolate work areas from the living space with plastic sheeting or zipper doors.
- Have a plan for appropriate removal and disposal of debris, so construction debris doesn't spread into occupied spaces.
- People with asthma or allergies, especially children, may want to consider living elsewhere during a major remodeling project.
- If you have pets, limit their access to the remodeling area so they don't track contaminants throughout the home.
- If there is asbestos or lead-based paint in your home, hire a professional to remove these materials. Attempting to remove asbestos or lead-based paint by yourself can increase your exposure.
- Use a high efficiency furnace filter—such as a Filtrete™ Ultra Allergen Reduction Filter from 3M. It contains electrostatically charged fibers that capture up to 30 times more smoke, pet dander, and other pollutants than the typical fiberglass filter.
- Run the furnace fan continuously—regardless of the outdoor temperature—to ensure proper air circulation and continuous filtration.

Finally, we asked our friend Simon Ressner, a firefighter, structural engineer, and building inspector in New York City, to provide some advice and guidance related to fire. Here's what Simon said:

- In wood-frame construction, avoid prefabricated lightweight wood trusses and wooden I-beams. Although they speed up construction, they are extremely vulnerable to fire and rapid collapse. Traditional framing costs a little more, but on a percentage basis it's worth it.
- Carbon monoxide detectors are just as important as smoke detectors (maybe more).
- Wooden doors kept closed will contain fire for ample time to escape.
- Domestic sprinkler systems have become cheaper and cheaper. They should be strongly considered, especially in buildings far from a paid fire department. The sprinkler will most likely prevent loss for most rooms away from the origin of the fire.
- In multistory buildings, escape routes should be considered during the design planning stage.
- Enclose furnaces/boilers in a separate room within the cellar/basement. A wall constructed of one layer of drywall to each side of metal studs provides a one-hour fire-resistance rating but, more importantly, will contain a fire long enough for you to get out of the house. A rate-of-rise heat detector in the boiler room can be wired to an alarm system.
- Each room should have a flashlight, and each child should know how to *crawl* out to a point of safety.

Elena Colombo, Home Renovator

Sometime in 1992, before the summer season began in New York, an old friend and I were having lunch and discussing what we were going to do for the summer. New York City is a place you need to get out of for at least the weekends during the summer, and people spend a great deal of time and money securing their summer rentals. I had spent a number of summers in Bridgehampton, New York, but I had since changed that part of my life and couldn't picture myself driving my old pick-up down the road next to Upper East Siders in their Porsches and BMWs, nor did I have the money the Hamptons demand. You can buy a house in some places for what it costs to rent them out there.

So I was at a loss as to what to do, when my friend said he was going to rent a shack on the beach on the North Fork of Long Island. Without thinking twice,

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I asked if he needed a roommate. I had driven through the North Fork a number of times in the past, and my best friend was from Greenport (which I remembered as a sleepy fishing town, more blue collar than white and without any of the Hamptons snobbery). Much to my good fortune, my friend said he could use some help on the rent, which was a whopping $2,500 for the season (May 1 to October 1). He encouraged me to take a look at it before making my final decision, because it really was a shack, and the whole property was falling apart a bit. He continued to describe it as an old tourist community of 30 cottages right on the Peconic Bay overlooking Shelter Island.

The story goes something like this: The Sages, the family who had owned the land since the 1800s, sold it in the early 1980s to a development corporation. The corporation subsequently found that the town of Southold was particularly protective of its waterfront and would not allow subdivision or destruction of the 30 original cottages that were built there at the turn of the century; nor would they allow the construction of a sewer system. Eventually, the corporation defaulted on its loan, and the property went into legal limbo until the Sage family paid the back taxes and got the property back into the family. Nineteen ninety-two was the first year they opened again as a summer rental community, and they were in the process of fixing up the cottages one shack at a time.

The property is like the land that time forgot. It consists of 90 acres of land on which sit a necklace of 30 little cottages along the 1,500-foot waterfront. There are two barns, three ponds, a tiny cove for boats, and a piece that borders on a working marina with another 2,000-foot waterfront. The property was originally a factory that produced bricks for New York City and surrounding areas in the 19th and early 20th centuries. The cottages were sprinkled around the property and housed the brick-workers during working months. The hurricane of 1938 brought the bay onto the land and filled all the clay pits with saltwater, submerging all the equipment and essentially finishing the brick business. The Sage family then moved all the cottages to the waterfront and began a very popular summer-rental community where people came back year after year and rented the same cottage, had families who then rented their own, and so on. We recently met a 95-year-old woman who was born in the only two-story house there.

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I didn't know any of this when I agreed, sight unseen, to rent for the summer of 1992. When I arrived, on one of those first warm days of spring, I nearly cried at how perfect it was. Our first cottage, #16, was all of 500 square feet, with a porch facing the water about 50 feet away. My friend and I spent a magical summer there and invited a constant flow of grateful friends to spend the weekends with us. The next year, we rented cottage #2. Our friends, who had been so charmed the year before, began renting other cottages as they were fixed up. By 1995, there were probably six or seven cottages filled with our friends from the city, and we spent the summer giving dinner parties outside, fishing from our front yard, planting flowers in our teeny gardens, and decorating our shacks with all the random assortment of 1930s, 1940s, and 1950s furniture that filled the barns and other cottages.

In 1998, and still a renter, I finally settled in the cottage that I had had my eye on since I arrived—#3. It was one of the last cottages the Sages fixed up, and there wasn't a plumb line in the place. It was, however, the only cottage with a fireplace and two bedrooms facing the water. By this time, I had adopted Lucky, the scrappy Labrador retriever that roamed the property in search of treats. He had to have been seven or eight by that time and more or less chose me. He remains as important a part of this story as finding the property.

As a lot of renters in New York will tell you, you begin fixing up a place whether you own it or not. I didn't care—I just wanted to see the house looking happy and clean with me in it. That first year in #3 was spent scraping, sanding, and painting. The salt air and water does a lot to destroy a place, and the paint history of the cottage was completely visible in the huge curls of paint on all the walls. Essentially, however, the house was in good shape despite its looking like hell. The construction of all the cottages was the same: They sat on locust tree posts about a foot off the ground with decorative brick foundations, four-inch wainscoting walls with no insulation, wide-plank wood floors, and cedar-shake roofs. They actually don't make building materials like that anymore.

The Sages installed a new electric system and a new refrigerator, stove, and water heater and I was in business. The rent ballooned up to $5,000 for the season, as mine was one of the bigger cottages on the property. I had about a year

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of oblivious renter's bliss, when the Sages came and told a few of the longer-term renters that another development corporation had made them a cash offer of $3.5 million for the property and they were seriously considering selling. Panic!

They were giving us the opportunity to make a counteroffer (amazing), but here we were a bunch of 20- and 30-somethings without a care, planting sunflowers, eating flounder sandwiches, and certainly with no money in the bank. There were some elders on the property with some experience negotiating real estate, so we quickly formed a ramshackle board of directors and called meetings under the big tree to figure out what to do.

It is difficult to describe the feeling of this place and how beautiful the sense of community was and is, but I hardly think it exists anywhere else in the world. The word that we all seem to come back to is *magical*. Imagine waking up in the morning with your bedroom window a view completely filled with water that sparkles on the ceiling, pulling on a sundress and flip-flops, getting on your bike, and peddling past the kids from #5 who have set up their manicure-and-lemonade stand, going to #31 for coffee and on to the big house for pancakes and bacon, then spending the rest of the day planning your garden and what you're going to make for the pot-luck dinner outside at #14 that evening. Needless to say, we all wanted and needed to protect our slice of paradise, and we were going to do everything we could to stay.

In that respect, this story may diverge a little from the theme of this book. Although we knew what an incredible investment purchasing 90 acres of waterfront property two hours from New York City was, we each bought our share to ensure that we didn't lose this community and disband the friendships it created and nurtured. No matter what, I'm never selling.

The steps we took to purchase were quite disruptive to the community. We first had to put up $5,000 each to ensure our participation, and we hired a lawyer. We next hired someone to estimate the value of each cottage. When he came back with the different prices and an attempt to draw property lines, it was obvious he didn't understand our situation. Some cottages were wildly expensive, and others were so cheap it was unfair. So we all walked the property ourselves and put prices on the cottages that equaled $3.5 million when totaled. We fig-

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ured if everyone did this and we averaged all the numbers, that would take care of any low prices people put on the cottages they wanted to purchase.

We also realized this was a co-op scenario, not condo, because the houses were so close together they didn't fit under town requirements of property-line designation. As a result, there are no property lines, we all own the land equally and communally, and we are leasing our houses from the corporation. The mantra we began chanting was, "One share in the corporation equals one cottage and one vote" (no matter the size of your house).

Next, we had to write a proprietary lease, our by-laws, and rules and regulations. This is backward to most co-op situations (usually these are all in place when you purchase a co-op), so we all had to continue to stay in the deal without knowing what the terms were (which certainly gave everyone's personal lawyers pause). We also had to keep putting up $5,000 chunks to weed out people who could not afford to buy but were staying in because they truly wanted to. That was the most disruptive—seeing people you had lived next to for years have to give up their cottage because they couldn't afford to stay. Banks were not giving mortgages on a share of the corporation for a number of reasons: The cottages were not full-time residences, had no heat or running water in the winter, and were not recognized as a co-op in the State of New York at the time of purchase. It was a cash deal no matter how you looked at it.

Each cottage came out roughly to be around $100,000. The cheapest was $50,000 (for a 300-square-foot shack that was originally the laundry), and the most expensive was $250,000 (for the brick house that was the original owner's house and was winterized). My cottage was $128,000. It might as well have been $1 million because I didn't have any money. But the Sages let me take out a personal mortgage with them for $80,000, and I begged and borrowed for the rest.

Today I have a tidy 10-year mortgage at $1,000 a month, plus we each pay $300 per month for maintenance. I have also been on our board of directors for the past three years, most recently as vice president of House and Grounds. My family has always been in construction, and I have studied architecture, so I wanted to make a lasting contribution to the physicality and architectural integrity of the property. The cottages were originally constructed with what today are the highest-quality building materials—if they are even available. Despite

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being a little long in the tooth and heavy on jerry-rigged repairs, the cottages still have wainscoting walls and ceilings, crown moldings, wide-plank floors, old wood doors, and beautiful details. We are currently restoring two out-buildings. One is a brick barn that served as the depot for hauling brick back and forth; it has a brick floor and a cedar ceiling. The community is paying for its restoration out of our maintenance fund.

Our first major projects on the property have been to establish the infrastructure and individualize each cottage for proper billing by the electric-power and water companies. A first assessment of $1,000 per cottage was to bring in individual water service to each (the old system was a wildly inefficient series of hoses that connected each cottage underground and linked them all together.) We had to pave a new road at a cost of $40,000 (and another $1,000 assessment per cottage). There were quite a few major expenses to get out of the way before I could even consider renovating my own cottage, but when I could, I had to get a new roof first. As they say, I had to protect my investment.

I wanted to restore the cottage as best I could to its original state when it was built in the 1920s. All the cottages were built with cedar shake roofs, although all of them had been replaced with asphalt shingles over the years. Mine had about six layers of asphalt, but underneath was still the battens that you nail cedar shakes to. This was a great find, because if these had been removed the job would have been twice as expensive, and out of my league. As it was, it cost $8,000, for a 1,000-square-foot cottage. Cedar—the best decision I ever made. Looks great, smells great, and it has a 60-year life span (at least).

Next, I put up copper gutters and downspouts. Another expensive choice, but it's like jewelry for your house, and I just couldn't bring myself to put aluminum next to that cedar. After all that was completed, I had the best roof and gutters on the block—but on a crooked house with god-awful rolled roofing for my siding. To save the house from decay using the least-expensive solution possible, the previous owners removed the battens from the original board-and-batten cedar siding and put rolled asphalt roofing over the sides and nailed it up. It looked terrible, but it did work well as protection.

I next went about leveling the house and putting up siding. When the roof went up, the contractors leveled the house with house jacks so the roofline was

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straight. A year later, they wanted their jacks back, and I had to consider new footings for the foundation. I couldn't afford to do them all at once, so we replaced eight of the most rotten locust posts under the house for about $175 each and leveled the house as best we could. It's still a little crooked, but I replace a few a year, and it'll get there. As I was about to put up new novelty siding, I realized I couldn't do that without changing the windows first.

The windows were beautiful old double-hung, nine-pane true-light windows that were completely dry-rotted. I priced out an exact replacement and was astounded that they would be $1,200 each. I only have six windows, but I wanted the whole job to cost about that. I settled for Andersen vinyl-clad wood builder's select double-hung windows at $200 each. I highly recommend these windows. They don't have the extra UV rating that salespeople like to push (which reduces the price by at least $100 a window); you don't have to paint them, which saves you the painting bill; and they are very simple and clean. There are a lot of bells and whistles in window choices that really aren't necessary. If you're able, keep to a standard size and you will save immeasurably.

Next the siding went up. The property has a number of houses with novelty, or Dutch lap, siding. When I priced regular cedar siding, it was much more expensive than the novelty siding. Novelty siding is made from pine, a lower-grade wood, but because I would be painting it, I didn't think it mattered. I also liked the look of it better—it's tongue and groove, so it has a nice horizontal detail. As a group, we decided that the historical and architectural integrity of the community was very important, so thankfully, there is no aluminum anything allowed. Because the house isn't very big, materials and labor for the siding cost roughly $3,000 (see Figures 8.3 and 8.4 for before and after exterior renovations).

That pretty much did it for the exterior necessities—the rest of the renovation was more landscaping, decoration, my own labor painting inside, and collecting furniture. I believe good taste is free. You can spend all the money in the world, but you can't buy good taste if you don't have it. In both my exterior and interior work, I have tried to use the best-quality materials and spend the money where it counted. I would prefer to spend a little time, go to an antiques store, and buy an old wooden door with a beautiful window for $50 than go to Home Depot for a hollow pressed-aluminum door for $150 dollars. In this case, good taste is less expensive than bad. In the case of a cedar roof (which is more-

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Figure 8.3 **Exterior of cottage before renovation**

expensive good taste), I'll easily recoup the original expense of the roof by adding thousands more to the purchase price if I ever sell.

Clean simplicity is the best way to look at something. Inside the cottage was particularly fun to do and inexpensive. Because the wainscoting was still intact, all it needed was a good scrape-and-paint job. I used gloss and semigloss paint because by the water, it reflects light everywhere, and glossy paint looks beautiful. It is also easier to keep clean and seems to last longer. I never use oil-based paint anymore because of its toxicity and extra expense. The colors are relatively muted, except in the kitchen, where they are bright and fun. The better your style looks to potential buyers, the more apt they'll be to purchase your house. This philosophy has worked for me in the film and photo world as well. I make a good amount of money each year renting the cottage to photographers who shoot for catalogs, magazines, and books. It has appeared in *Country Home*, *Country Living*, and *Elle Decor* magazines; J. Jill and J. Crew catalogs; and the book *Waterside Living*. I don't

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Figure 8.4 **Cottage exterior after renovation**

spend a great deal of money on furnishings, but I take the time to look for and purchase things that are well made and have simple, clean lines. Again, I would rather pay the Salvation Army $45 for a couch from the 1940s (when they were sturdy and simple) and reupholster it in white cotton than go to Jennifer Convertibles and buy a huge, overstuffed monstrosity for $2,000.

It is part of my philosophy to recycle things, and the house helps me to do that. Because I am usually on a strict budget, hand-me-downs work well at the cottage. It is important to me to keep things that should be kept—a couch with a particularly elegant silhouette, a door with beveled glass, a lamp from the 1960s; you can recognize an item worth saving by its workmanship, its simplicity, and if it makes you smile.

The main reason for being at the cottage is to entertain friends, make them comfortable, and give all of us a place to relax. Fire has become an essential el-

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ement to entertaining by the water. There seems to be a primal need to gather around fire; it attracts people as light attracts moths. The house has an indoor fireplace that gets lots of use, but I have also designed an outdoor firebowl that I hook up to a propane tank for entertaining large groups by the water. I've begun manufacturing a six-foot corten steel bowl that is at once very simple and primal, yet very elegant in its shape and silhouette. You can have raging wood fires in it or soft gas fires. There is rarely a day during the year, except in the dog days of August, when you can't use a bit of flame to take the chill off.

Recently, a cottage that was purchased for $95,000 in our 2000 co-op conversion was put on the market for $400,000. It seems a remarkable jump, but 90 acres with 3,500 feet of waterfront two hours from New York City is a combination that doesn't happen often. I will probably never sell, but it's nice to know the property increases in value each year.

Building Permits, Codes, and Rules and Regulations

Depending upon the type of renovation activity you're undertaking, even if you do the work yourself, you may need to get a building permit (permit conditions may vary depending on whether you're an owner-occupier and doing the work yourself or hiring a contractor). Check with your local building department or planning committee. You may also need to get a zoning variance or even a Certificate of Appropriateness if your home is located in a historic area. Building permits are typically necessary for major demolition, new construction, and remodeling projects with structural changes or additions. To obtain a permit, you'll be required to submit forms and project drawings and specifications. Permit fees are based upon the estimated cost of construction. Inspectors will periodically check structural, electrical, mechanical, and plumbing work to ensure that it conforms to local building codes.

The Contractor as Mentor

One final thought about do-it-yourself home renovation: Try to find a contractor or carpenter who is willing to work alongside you and mentor you as needed. Depending on the skills and capabilities you possess when you start this relationship, you can become something like an apprentice of times past. Maybe you can find a contractor who is retired and just looking to fill up some hours during the week (and make a little spending money). This is an excellent way to develop skills while ensuring that the work is being done to professional standards.

Note

1. From the National Association of the Remodeling Industry, www.nari.org, last accessed March 21, 2003.

Chapter 9

Some Thoughts on Interior and Landscape Design

Making design decisions may seem difficult, especially if you haven't experimented with home design and renovation projects before. However, there are a few tricks you can use to great success in planning and executing your design strategy.

First of all, one of the best things you can do (even before looking at potential properties to buy) is peruse current home-design magazines and books for home ideas you like. Clip out or copy pictures of designs that particularly excite or enchant you. As time goes on, you'll get a good idea of what designs are currently popular and of what *your* personal style is. When renovating a home as an investment strategy, it is often best to strike a balance between your own preferences and what is currently appealing to the general market.

Familiarizing yourself with the world of home design will also make it easier for you to spot good renovation opportunities once you begin to look for a home to buy. Pay particular attention to before-and-after case studies to see how other renovators have tackled their projects. Subscribe to three or four home design magazines (our favorites include *Elle Decor*, *Sunset*, *House Beautiful*, *House & Garden*, *Coastal Living*, and *Metropolitan Home*). Magazine subscriptions are relatively inexpensive (usually from $12 to $24 annually), and you'll be amazed at the ideas and solutions to problems the magazines will generate.

Where to Begin Looking for Great (Potential) Homes

You've found a good real estate agent, figured out your financing, and you have a budget in mind . . . now you can start looking. When looking at prospective properties, think about the following questions.

What are the bones of the home?

Try to imagine the total space you have to work with, regardless of the number of rooms/walls/closets that are in it now. Many fixer-upper homes are more than 30 years old, and they often have a number of smaller rooms that can be opened up to maximize space. Most interior walls are not load-bearing, so knocking down walls to create space is often not an issue. Also, think about ways you can "borrow" space from closets, hallways, under stairs, and so forth to create even more open and usable spaces.

What is the circulation of the home, and how could it be improved?

As you walk through a prospective home, think about circulation patterns. Is it easy to get to one room from another (is there a sense of flow)? Could built-ins or other obstructions that impede circulation be moved? Are there nonessential partitions that block light or views that could be changed? Simply improving the circulation pattern in a home can have dramatic (and pleasing) results. In our Sonoma home renovation, the kitchen area was initially walled off, preventing light on the east side of the house from entering the main living/dining room (see Figure 3.8 in Chapter 3). The interior walls of the kitchen also created awkward circulation with adjoining spaces. So we lowered the central wall's height to four feet, creating an open-plan kitchen adjoining the living/dining room, and eliminated the partial wall from the side of the kitchen to allow easier access to the pantry/laundry areas. These changes allowed more light to enter the kitchen and main living areas and created better access to the pantry, refrigerator, and laundry and easier passage to outdoor living spaces (Figure 3.9 in Chapter 3 shows the opened-up kitchen).

What works, and what doesn't?

Is the kitchen large enough? Are the appliances outdated? Are there enough bathrooms? How well do you like the current materials used for flooring, countertops, and fixtures? Is there enough storage space? How much natural light comes into the house? Are there appealing special features (such as fireplaces, decks, and so on) in place, or could they be added? Determining what is acceptable—and how much needs to be changed—can help you narrow your options and decide whether you want to buy a particular place. You might even consider creating your own checklist of what you're looking for (see Table 9.1 for an example)—you can bring it to each house you view. This checklist can be a lifesaver—after you've looked at a number of homes, it's easy to forget or confuse the details of each house you've viewed.

Table 9.1 **Prospective Home Checklist**

Address/ Price	*# BR*	*#Bath*	*W/D*	*FP*	*Views*	*Office*	*Storage*	*Outdoor*	*Light*	*Gas Appliances*	*Positives*	*Negatives*
Windsor Road/ $455,000	3	2	√	no	yes/E	no	good	good	OK	yes	room to expand	outdated kitchen
Jackson Street/ $529,000	3	2	√	yes	yes/N	no	decent	OK	good	yes	great kitchen/ baths	needs landscaping
Maple Place/ $499,000	3	1	√	yes	no	yes	good	good	great	yes	great light; modern	need to add bath

The Design Process

Once you've found and purchased a home to renovate, the fun begins. For the spaces within the home that already work for you, think about easy cosmetic changes that could add value. (We'll get to more complicated renovations later in this chapter.)

Simple Cosmetic Changes

Fresh paint, cabinet refacing, and new carpeting or other flooring are three of the easiest cosmetic changes to make. Some of your options are described here.

Fresh Paint

An inexpensive and effective way to revitalize and refresh a space is with a good paint job. For resale purposes, rich, neutral tones are preferable. Luckily, you can find a plethora of wonderful neutral options at your local paint store. Ask a resident color consultant for assistance, or buy small cans of colors you like and paint sample strips side-by-side on the wall of the room you are repainting. Once they dry, you can see which paint looks best within the space (and also how it looks at different times of the day, with artificial lighting, etc.). Generally, a semigloss or eggshell paint finish is best (they have a nice, subtle sheen and are easier to clean than flat paint). High-gloss paint tends to work best for finish work or smaller spaces. If any walls are slightly damaged or uneven in finish, textured or faux-finish paint can cover flaws that regular paint won't.

Cabinet Refacing Options

If you like the general layout of the existing kitchen or bathrooms—but hate the cabinets—consider refacing, bleaching, or painting them for an updated look. Because installing entirely new cabinets requires more time and money and may require you to change the floor, simply refacing or repainting/bleaching existing cabinetry can be worthwhile. Make sure the existing cabinet frames are in good condition before considering this option. If kitchen cabinet frames are in particularly good condition, consider eliminating cabinet doors altogether—open shelving in kitchens is a contemporary look that has become quite popular. New hardware can also update and transform plain cabinets into something special.

Carpeting and Other Flooring

A new, good-quality carpet can add considerably to the aesthetics of a space, especially in bedrooms, dens, and home offices (we prefer hard-surface flooring, such as hardwood or natural stone, for living and dining areas). While there are many relatively inexpensive, good synthetic carpets available today, we recommend choosing a wool or wool-blend variety if you can afford it (they wear longer and they look and feel great!). Check your Yellow Pages for carpet retailers in your area, and visit those that carry high-end options as well as general carpeting materials. Often these stores have high-quality remnants from larger installations that you can buy at a significantly reduced price (we did this for one of the bedrooms in our Sonoma place and loved the results).

If you have older vinyl or laminate flooring you'd like to replace, always check to see if it was laid on top of hardwood flooring. You can remove the vinyl or laminate, resand and refinish the hardwood, and create instant value, both aesthetic and monetary. If you'd like to install new vinyl flooring over an existing vinyl floor, you can use a synthetic floor-leveling material over the existing floor and lay the new flooring on top of it.

More Detailed Renovations; or, How Do I Fix What Doesn't Seem to Work?

One of the easiest ways to visualize possible renovations is to map out basic floor plans and elevations for the spaces you wish to change. Having a graphic image of the space allows you to think about ways to best utilize it. You don't have to know how to draft to do this, either—all you really need is a metal measuring tape, graph paper, and a pencil (with eraser!). An architect's scale is also helpful for more precise measurements (those that don't fall exactly on the gridlines of your graph paper). You can easily find a scale at your local art supply store (they look like triangular rulers). Tracing paper is also useful to sketch out new rough designs over your existing floor plan. There are relatively inexpensive software programs available for design and space planning that are also helpful, but we prefer the paper-and-pencil approach.

Creating a Floor Plan

A floor plan of the existing space will give you a bird's-eye view to help you start the planning process. First, measure the space. You can create a general floor plan as you measure using graph paper (each 1/4-inch square = 1 foot). Start by measuring the total length and width of the space from wall to wall (as if there were no built-in cabinets or fixtures), and mark them on the graph paper. Use the 1/4-inch side of your scale to note any measurements that don't fall on 3-inch increments of your grid. Then, measure and mark the location of doors and windows. Include the jambs and frames on doors and windows in your measurements (for example, a door itself may be 30 inches wide, with a 3-inch frame on each side; your total measurement for the door would be 36 inches, or 3 feet[1]). Next, mark out the *general* locations of the current plumbing, electrical outlets and switches , lighting, gas lines, and any venting (use a different color to mark each of these locations). Wherever possible in your renovation, keep plumbing/electrical wiring/gas in the same locations to keep your costs down. (Moving them can be expensive.) Don't pencil in any of the existing cabinets or millwork at this point. However, do note the position of adjacent spaces (such as closets, hallways, and other rooms) that could be utilized or incorporated in your new design.

Creating Simple Templates

If you are creating a plan for a kitchen, for example, create simple templates for common fixtures and appliances (cabinets, refrigerator, cooktop/range, wall oven, dishwasher, etc.).

- Most *kitchen base cabinets* are 24″ deep (2′, or two graph-paper squares) by 15″, 18″, 24″, or 36″ wide (34″ to 36″ high). Use ready-made cabinets (instead of custom cabinets) whenever you can—not only will this speed up your renovation time, but it will also save you a lot of money in the long run.
- *Kitchen wall cabinets* generally measure 12″ to 15″ deep by varying widths (12″, 15″, 18″, 24″, or 36″) and are 12″ to 33″ high.
- Standard *refrigerators* are 24″ to 34″ deep and 30″ to 42″ inches wide (64″ to 69″ tall).
- *Cooktops and ranges* are often 24″ deep by 30″ inches wide (for four burners; the width increases with the number of burners); their height is from 34″ to 36″.
- *Wall ovens* are 24″ deep by 27″ to 30″ wide.
- Almost all *dishwashers* are 24″ deep and 24″ wide (34″ high).

For bathrooms, common fixture sizes include:

- *Bathtubs* are normally 30″ wide by 60″ long and 15″ deep.
- *Shower stalls* start at 36″ by 36″ .
- *Bathroom-sink cabinets* are typically 24″ to 36″ wide by 19″ to 21″ deep (30″ high) with 12″ to 18″ drawers or doors.
- *Toilets* are usually 19″ to 21″ wide by 28″ to 32″ deep (22″ to 28″ tall).

We use different colors of self-stick notes to create these templates (measured and cut to size)—they are easy to move around on your floor plan as you explore different layouts. Some home-design retailers such as IKEA have ready-made paper templates you can use (check the back of their free kitchen design catalog).

You can get specifications from particular manufacturers, and you can also look up standard fixture/appliance/millwork sizes in *Time-Saver Standards for Interior Design and*

Space Planning (Joseph De Chiara, Julius Panero, and Martin Zelnik; your local library may have a copy in its architectural resource section). This fascinating resource book includes information and recommendations on everything from the proper height of counters and wall cabinets for human comfort and efficiency to color theory to typical layouts and specific construction details.

In kitchen design, your goal is to create a good "work triangle"—the shortest number of steps from sink to stove to refrigerator without having the space be too cramped. Typical kitchen layouts are L-shaped, U-shaped, corridor (galley, or two counter rows opposite each other), and broken U-shaped (e.g., the refrigerator or range is located apart from the main kitchen plan). All kitchen design magazines and reference books like *Time-Saver Standards* have samples of these types of layouts. Take a look at them to get ideas for your own plan.

More Hints on Kitchen Appliance/Fixture Placement

- Unless you are planning to use a built-in *refrigerator* that becomes part of the cabinetry, place your refrigerator at one end of a counter run (not in the middle). Place it in a location that is also easily accessed by other family members without a lot of traffic congestion when you are preparing a meal (think about circulation when the doors are open, for example).
- The *sink* is best in a central location, with a dishwasher placed next to it (for the most efficient plumbing and also the best position for rinsing and loading dishes). Storage cabinets for dishes should be near the sink and dishwasher. If you have the space and easy access to a water source, you might consider adding a small utility sink elsewhere in the kitchen for easy vegetable/fruit preparation and for simple tasks such as refilling the coffeepot.
- *Stoves* are best placed on an outside wall (for ventilation) and not next to the sink, the refrigerator, or near any doors. It's also important to include some counter space on each side of the stove.
- *Make sure you leave enough clearance between appliances and adjacent or nearby cabinets so you can open their doors without interference.* You don't want your dishwasher door to be in the way of your oven, for example, if you have both doors open at the same time. Usually the minimum clearance between appliances situated across from each other is four feet.
- Carefully consider the placement of task (specific-area) and ambient (general-area) *lighting* for your kitchen (see the interview with lighting designer Pat Pitzer in this chapter). It is generally worth the cost to add additional light sources if your original kitchen has a single overhead lighting fixture or there is limited task lighting near the sink or stove.

Hints on Bathroom Fixture Placement

- For cost savings and the easiest repairs, it's best to have all plumbing on one wall (a so-called *wet wall*).
- Make sure there is 30 inches of clear space in front of your *sink* or *vanity* to optimize circulation around it. Consider installing a two-sink vanity if more than one person uses the bathroom. It's great if you can locate the sink near a natural light source.
- In placing your *toilet*, make sure there is at least 20 inches of clearance in front of the bowl. Measuring from the center line of the toilet, you should also allow a minimum of 14 inches to the nearest cabinet and 18 inches to the nearest wall.
- Make sure you have adequate space in front of your *bathtub* to kneel comfortably (for cleaning it, bathing a child, etc.).
- According to Kitchen and Bath Design News (kbdn.net), the *best add-ons for your bathroom* that appeal to prospective homebuyers are whirlpool tubs, two sinks in a vanity, elegant faucets, and a stylish vanity or toilet. The *best luxury items* are skylights, heated floors, heated towel bars, and TV/stereo systems. Carefully consider this kind of upgrade before committing to one—make sure you feel confident you'll get a good ROI when you sell.
- You can make your *bathroom space* seem bigger with mirrors, a skylight, or a raised ceiling.
- Proper placement of *lighting* is particularly important in the bathroom. See Pat Pitzer's interview for specific tips on the best bathroom lighting aesthetics.

Creating an Elevation

Once you have a general map of the space with your floor plan and a general idea of where you might like to place cabinets, appliances, doors, and so forth, it's very helpful to create elevations for your space. An elevation is a two-dimensional view of the heights and widths of the cabinets and fixtures on a particular wall. An elevation will help you decide if your kitchen plan is really functional—for example, it's easier to decide on the best placement of utility drawers and cabinets when you can see them positioned next to related appliances and work areas.

To create an elevation, use your floor plan as a guide to mark out the widths of general floor-level measurements of the millwork (cabinets) and appliances on a particular wall (use a separate piece of graph paper for each wall). Then mark out the heights of all fixtures and appliances on the wall, plus the location of wall cabinets, windows, and doors. Elevations are particularly useful to help you determine placement of finish details, such as crown moldings, lighting fixtures, and different ceiling heights.

Interview with Pat Pitzer, Lighting Designer

- *Basics:* Light will expand a space. If you want the ceiling to feel higher, use up-lighting to get light on the ceiling plane. If you want a room to feel wider, light the walls softly and uniformly. (This works well in narrow hallways—lighting the side walls will make them feel wider.) Drama can be added to a room easily and inexpensively with simple floor cans tucked behind a planter in a corner to silhouette the foliage and cast shadows on the ceiling.
- *Locate permanent lighting for flexibility:* Usually you can determine primary locations for artwork or accent in the more public areas of the house (the living room, dining room, and foyer), but rooms that change as families grow need to be flexible. Furniture locations will shift and usage might change, which will affect lighting locations if they are too specific. When in doubt, pick one major wall to highlight and then light the rest of the room with general lighting from either recessed lighting or portable lighting (i.e., lighting on a cord and plug—table lamps, floor lamps).
- *Track lighting:* When weighing your options, track lighting often makes sense in instances where existing plaster or drywall is to remain or where plenum space is limited. Though track lighting is a much more visible element in a space than recessed lighting or flush-mounted fixtures, it does allow access to power from one point for many lights. It can also be configured with various connectors to light an entire room.
- *Kitchens:* Lighting for the task is important here. Most builders locate one large, bright lighting fixture in the center of the room (depending on the room size). Though this may appear to be adequate, it puts the light behind the person working at the room's perimeter (so you are always working in your own shadow). If possible, locate recessed lighting over the edge of the countertop and use undercabinet lighting to fill in and supplement. If recessed lighting cannot be installed economically, keep the center bright fixture but add undercabinet lighting or supplemental lighting of some kind over the primary task surfaces.
- *Don't downlight faces:* Bathrooms are one of the hardest rooms to light. If you place a recessed downlight at a mirror, the downlight will create harsh shadows under the eyebrows, nose, and chin—which are not conducive to shaving or applying makeup. Make sure that lighting at the mirrors cross-lights

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the face with soft, diffuse light (best done with luminous sconces flanking the mirror). Lighting over bathtubs should be located toward the spigot end of the tub so that you are not looking up into the light while you are soaking.

Residential Lighting–Basic Terminology

Different Types of Lighting Functions

Ambient lighting: Ambient lighting is the overall general illumination of an area or room.

Task lighting: Task lighting gives concentrated lighting to a specific area used for tasks such as reading, food preparation, or makeup application.

Accent lighting: Accent lighting is lighting used to highlight an area to create a mood or to enhance specific features of a space (such as artwork or architechtural details).

Different Types of Light Distribution

Direct lighting: The light emitted from a specific light source is directed downward only. Recessed lighting is one of the most common direct lighting applications.

Indirect lighting: The light emitted from a specific light source is directed upward only. Indirect lighting fixtures most commonly provide general lighting that is reflected off the ceiling (cove lighting is another example of indirect lighting).

Indirect/direct lighting: The design of the light fixture offers both uplight and downlight (for example, many sconces installed in hallways feature an upward light reflector for general illumination and a downlight for more concentrated hallway illumination).

Diffuse lighting: Light emitted from a specific light source is emitted in all directions, typically through some type of diffuser (such as glass or acrylic). This type of fixture is most often used to provide ambient light or general illumination of a space.

To enhance the comfort of a room or space, it is recommended to combine the use of direct and indirect lighting. A space with only indirect light gives a feel-

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ing of darkness in the areas below the light source even if the room is well lit. Using only direct lighting may give a room a feeling that the ceilings are low and closed in. Many lighting design professionals believe that the key to a well-balanced environment is to use a combination of ambient, task, and accent lighting.

Materials and Sources

- *Appliances:* Before you buy any new appliances, check out the annual *Buying Guide* by *Consumer Reports* for the ratings and the best deals on current appliances (currently available for $9.99 at www.ConsumerReports.org). Each monthly issue of *Consumer Reports* includes an index of topics from the previous 12 months (an annual subscription to the magazine is currently $26, which also includes the annual *Buying Guide*). Because *Consumer Reports* is an independent, nonprofit testing and information service, you'll get unbiased evaluations of current products in the market. Once you've found appliances you like, check out www.bizrate.com to compare prices. This Web site compiles information from other Web sites to list the best prices for products. As you may have guessed already, neutral tones are always best for appliances—prospective homebuyers are more drawn to white, almond, or stainless steel appliances (unless built-in appliances match the cabinetry).
- *Countertops:* Following is a list of common materials for countertops, their costs, and their advantages and disadvantages:

  Laminate. One of the least-expensive materials for countertops ($7.50 to $20 per square foot, installed), laminate is easy to clean, comes in a wide variety of colors, and has multiple edge-treatment possibilities. Its drawbacks: laminate is not as heat-tolerant as other materials (so it's subject to surface burns), and chips are not repairable.

  Tile. Tile can be among the least-expensive countertop materials (starting at $3 per square foot) but can get pricey (higher-end, more exotic tiles can cost up to $100 a square foot). You also need to add the cost of installation. Its benefits include a huge selection of styles, patterns, and colors, and it is generally heat- and moisture-resistant. Weak points: Tile may require resealing over time, grout stains are hard to clean, and chipped tiles usually need to be replaced (i.e., they can't be repaired).

Butcher block. For homey, warm appeal, butcher block can be a great kitchen countertop material (around $26 per square foot, not including installation). It's usually made of maple, so it has better wear resistance than softer woods, and nicks and scratches become part of its patina.

Concrete. For a modern touch at a moderate price, concrete is a great material for countertops ($55 to $100 per square foot, installed). It can be mixed and poured in a variety of color and shapes (you can also add in your own decorative elements, such as glass or mosaic details), and it is scratch- and heat-resistant. Concrete's drawbacks are that it stains easily and can crack over time.

Solid synthetic surfaces. At $45 to $75 per square foot (and up to $80 to $170 per linear foot not including installation for premade slabs), solid synthetic materials like Corian, Avonite, and Swanstone are good choices if you're looking for durability, a variety of colors, a seamless look, and an elegant finish. Scratches and chips can be repaired, and these surfaces are stain-resistant. Their main drawback is scorching from high heat.

Stainless steel. For a look that can be modern, industrial, or even retro, stainless steel is a good choice ($75 to $100 per square foot, installed). As its name implies, it doesn't stain, and it's heat-resistant. It's available in large sheets if you want a seamless look. Its main drawbacks are that is needs frequent cleaning (fingerprints and smudges show easily) and scratches are difficult to remove.

Natural stone. A favorite of designers and homebuyers alike, natural stones like granite, marble, limestone, and slate are a big visual and tactile plus in any kitchen or bathroom. Stone is also the most expensive countertop material ($80 to $150 per square foot). Granite is the most durable because it's heat-, water-, and, generally, stain-resistant. Marble and limestone are also aesthetically pleasing and heat-resistant but need to be resealed frequently to prevent staining. For a rustic look, slate slabs or tiles can be used as a countertop material (slate slabs are more susceptible to staining, however).

Engineered stone products: Engineered quartz and granite countertop materials, like Silestone, Zodiaq, Caesarstone, and Rocksolid Granit, are becoming increasingly popular with homeowners. While these products can cost as much as natural granite, they have some distinct advantages. Engineered quartz is usually 93% quartz and 7% binding agents (engineered granite is 95% granite and 5% polymer), so this type of engineered stone is nonporous and never needs to be sealed (granite and other natural stone are still somewhat porous and require periodic sealing). And unlike natural stone products, engineered stone usually comes with a warranty. There are also more color options to choose from with engineered stone products. Rocksolid Granit, an engineered granite from Italy, is unique because its slabs are only 1/4-inch thick, making a lighter, more flexible stone material. Because of its thinness (which doesn't compromise its strength), Rocksolid Granit can be used to "reface" existing countertops or tub and shower walls, thus speeding up installation time. Engineered stone products can be obtained direct from the manufacturer and/or their authorized dealers (check www.silestoneusa.com, www.zodiaq.com, www.caesarstoneus.com and www.rocksolidgranit.com).

Best sources for countertop materials: Check your local Yellow Pages for tile and stone showrooms. Most general tile showrooms have a selection of ceramic tile as well as samples of solid synthetic materials such as Corian and Avonite (you can also check out the Web sites for those two products at www.corian.com and www.avonite.com). If you want to use natural stone, see if you can acquire it directly from a quarry. To find a stone dealer in your area, you can also check out the Marble Institute of America (www.marble-institute.com). For stainless steel, contact a sheet-metal fabricator in your area. The Home Depot, the Home Depot's Expo stores, and other do-it-yourself stores also have a good selection of materials at reasonable prices.

- *Flooring Materials*. Following is a list of popular flooring materials, their costs, and their advantages and disadvantages. Flooring materials are similar to those used for countertops.

  Vinyl tile. The least expensive synthetic flooring material ($3 to $8 per square foot; minimal installation cost), vinyl tile has good resiliency and comes in a huge variety of colors. It requires frequent cleaning (usually weekly) and is subject to indentation. Vinyl is also available in sheets, which is more expensive per square foot but easier to install.

  Linoleum. Linoleum is actually a natural flooring material (it's made of linseed oil, resin, and cork). It's slightly more expensive than vinyl tile and has similar wear-and-tear qualities. It's a little more expensive than vinyl tile but tends to wear much longer than vinyl (30–40 years vs. 10–20 years for vinyl) and is easier to maintain. Linoleum costs anywhere from $4 to $10 per square foot (installation costs vary).

Carpeting. Suitable and aesthetically pleasing for bedroom, home office, or living-area flooring, carpeting starts at around $25 per square yard (for synthetics), and the price goes up from there depending on the quality (add $3.50–$6.00 per square yard for installation). As mentioned earlier, wool or wool-blend carpets are more expensive but are preferred for their resilience and visual appeal. Carpets typically need to be replaced every 10 years due to wear and tear and changes in fashion.

Concrete. Often a choice for modern or industrial interiors, concrete can be tinted or inlaid with other materials for a unique or custom look. The cost of installing a concrete floor varies widely with the complexity of the installation but usually is less than for hardwood or stone. Concrete floors have the same drawbacks as concrete countertops—they stain easily and can crack.

Ceramic tile. Ceramic floor tiles start as low as $2 per square foot but, like ceramic countertop tiles, can get quite expensive if you choose special varieties (ranging from $25 to $100 per square foot). If you are not going to lay the tile yourself, you also need to factor in the cost of installation (as much as two to three times the cost of the tiles, depending on the variety). Ceramic tiles resist heat and water and are generally easy to clean. They wear very well but can be noisy or feel hard under your feet.

Brick. Brick can be a striking flooring material, especially in kitchens, and it costs about the same as moderately priced ceramic tile installed (you can buy it prefinished with a glaze and lay it in a number of patterns). It's extremely durable and easy to maintain, but like tile, can feel hard underfoot.

Hardwood. Hardwood floors are great in practically any style of home and are favored by homebuyers. Typical hardwoods used for flooring are maple and oak; bamboo is also popular. Hardwood floors have very good wear resistance, are warmer in feel than tile or synthetic materials, and require little maintenance once installed. Hardwood floors usually cost from $6 to $15 per square foot when installed professionally (though we installed ours ourselves for a lot less—we bought directly from a hardwood wholesaler in our area). You can also investigate manufactured wood flooring (such as Pergo), which is easy to install and costs less than hardwood flooring.

Stone. Stone is also aesthetically pleasing, especially in bathrooms, kitchens, and entryways. Stone tiles run about $8 to $30 per square foot but can cost upward of $25 to $95 per square foot installed (marble is the most expensive). While extremely long-wearing, most stone needs to be sealed for easy care and maintenance. Its main drawbacks (other than cost) are its weight (you need to make sure your subfloor can support it) and that it can be cold or noisy underfoot.

Best sources for flooring materials: Check your local Yellow Pages for carpeting, tile, wood, and stone showrooms. Look for showrooms that have carpet remnants or for outlets for odd lots of ceramic tiles. You can also check the Web sites of popular flooring manufacturers such as Armstrong (www.armstrong.com), Wilsonart Flooring (www.wilsonart.com), and Congoleum (www.congoleum.com). Home improvement stores usually have a selection of tile, carpeting, and stone.

- *Cabinetry.* Kitchen and bathroom cabinets can be made of laminate; wood veneer over particle board; painted materials; or solid woods such as maple, oak, pine, and cherry. Following are some benefits and drawbacks of each.

  Laminate. Laminate cabinets, like laminate countertops, are relatively inexpensive and easy to maintain. Laminate cabinets also lend themselves to a contemporary look. Their main drawback is chipping at the edges over time (though laminate cabinets can be resurfaced), and their look isn't as rich as what you can achieve with wood.

  Wood veneer. High-quality wood veneer cabinets can look great and cost considerably less than solid wood cabinetry. However, because the veneer is usually placed over particle board or fiberboard, only certain door styles are available in this material. Veneers are more susceptible to wear and tear than solid woods—peeling, chipping, and fading mean you may have to reface.

  Solid pine. Usually the least expensive of solid wood cabinetry, pine is great for a country or rustic look. It is usually stained a light honey color but can also be painted, whitewashed, or pickled. Because it is a relatively soft wood, it is subject to nicks and indentations over time.

  Solid oak. Also reasonably priced and readily available, oak is a great choice for traditional kitchen designs. You can also give it a contemporary look by pairing it with butcher block or solid synthetic counters, sleek porcelain flooring, and streamlined tile designs. Oak has a strong grain and is very porous, so it stains very easily. It is very sturdy and works well if you're trying to achieve a warm, homey environment.

  Solid maple. Because of its neutral color and soft grain pattern, maple lends itself to a variety of design options. It is a current favorite with homebuyers and works well in both traditional and contemporary/modern design plans. It also pairs well with popular kitchen finishes such as granite and stainless steel. Because it is one of the harder woods, maple wears extremely well.

Solid cherry. Also a favorite with homebuyers, cherry is elegant, rich in tone, and probably has the most formal look for cabinetry (with a price tag to match). It works well in both traditional and contemporary/modern design plans. It has a more pronounced grain than maple but doesn't have the heavy look of high-grain oak. Lighter stains have a more modern feel; darker stains are best for old-world or formal kitchen styles. Like maple, cherry pairs well with solid surfacing, stone, or stainless steel countertops and is very durable.

Painted cabinets. Perhaps surprisingly, painted-finish cabinets can be more expensive than solid wood cabinetry. They are great, though, if you're trying to get away from wood cabinets or want to make a bolder design statement with color. Painted cabinets work very well with interesting tile, most countertop materials, and most flooring options. They're perfect for traditional design plans and work well with contemporary kitchen and bathroom materials.
Best sources for cabinetry: For reasonably priced options, check out IKEA and do-it-yourself outlets like the Home Depot and Lowe's for off-the-shelf cabinet options. Before buying, check to make sure the cabinets can support heavier materials such as stone or granite countertops if you plan to use them. Local kitchen-and-bath design showrooms are also good places to shop, though they tend to be more expensive. Only consider custom cabinetry if you have an unusual-shape room or special areas that require custom-built sizes. Check the Yellow Pages for local options (and always get references!).

Lessons Learned

- Be creative with your designs. There are often multiple solutions for any given design challenge. Experiment with your appliance/fixture templates until you feel comfortable with your new plan. If you order cabinets from retailers like IKEA or the Home Depot, they will create a computerized version of your floor plan/elevations that you can give to your contractor (currently, IKEA does not charge for this service and the Home Depot charges a nominal fee).
- For the best results and a smooth renovation process, find a professional remodeling contractor for your project. Check the National Association of the Remodeling Industry's Web site (www.nari.org) for a contractor near you, or consult your local Yellow Pages for listings. Always get at least three references for a contractor, and check them!

- Make sure you have the necessary permits to complete your project. Check with city or county authorities before you start work.
- Select as many materials as you can before you start your project (from appliances to flooring to lighting fixtures, etc.), and specify your product and material selections in the contract with your contractor. Include as much detail as possible (model numbers, sizes, colors, and other specifications).
- Shop around! Surf the Web for good prices, visit showrooms and do-it-yourself retail outlets, and, by all means, check out independent research sources (such as *Consumer Reports*) for the best deals on quality appliances and fixtures.

Some Fundamentals of Landscaping

Enhancing the landscaping around your home is another way to add value to your home. Not only will a pleasing landscape make your time in your home more enjoyable, it also plays a significant role in the curb appeal and overall impression of your home when you go to sell it.

These days, it's easier than ever to create great outdoor spaces and professional-looking landscapes (without necessarily having to hire a professional). There are terrific books (such as *Taylor's Master Guide to Landscaping* [by Rita Buchanan; see Recommended Resources list at the end of the book for more information], and the *Sunset* or *Creative Homeowner* book series on gardening topics), cable channels dedicated to the topic (*HGTV*), a plethora of Web resources, and inexpensive and easy-to-use landscaping materials (plants, supplies and tools) are increasingly available. One of our favorite catalogs for plant products is from Springhill Nurseries (www.springhillnursery.com). You can also check with your local gardening society or club for reference materials for your area.

Before you go out and change or buy anything, take an inventory of what you already have in your outdoor space. What do you like, and what would you like to change? Much as you did when you analyzed the interior spaces of your home, imagine how you would like to use the space outside it. Do you like entertaining and want more space and amenities for alfresco dining? Do you have children and want a dedicated play area? Are there areas inside your home that you would like to connect to the outdoor space (to better enjoy a view or to increase the feeling of spaciousness in your home)? Do you have pets to accommodate? Are there particular plants or flowers you'd like to incorporate into your outdoor living space (maybe a rose garden or a grape arbor)? Make a detailed wish list of what you'd like to have, and then you can get down to the particulars.

The Particulars

1. *Do your homework.* (Or, as my dad used to say, "homefun.") Buy one or more home landscaping books specifically for your region. One of the biggest mistakes novice gardeners and landscapers make is falling in love with plants, trees, or flowers that aren't easily sustained in their area. This is easy to do because some gardening outlets (such as those at the Home Depot, Wal-Mart, and others) carry the same wide array of plants nationwide (for example, you may find warm-zone plants for sale in New Jersey or temperate-zone perennials in Arizona). A regional landscaping book will offer you tips on what plantings will work in your area and will usually include sample layouts for a number of landscape options, including cultivated front yards, outdoor play spaces, ideas for decks and patios, and plans for "outdoor rooms" you can create to extend your total living space. You can also get valuable guidance and insights from the staff of your local gardening store or nursery. Make sure to visit the ones that cater to the serious gardener—chances are, the people who work there have been doing landscaping projects for years, and they usually are more than willing to share their knowledge and experience.

2. *Keep it simple.* Keep in mind your renovation style when considering what to do with your landscape. If you are a Dedicated Renovator, you may be occupying the home for two or three years at the most—gauge how much work you want (or need) to do on how long you think you'll own the property. Even if you are a Leisure Renovator and plan on owning the property longer, it is still best to keep your initial landscaping plans simple (you can add to them later). You also should reflect the home's style in your landscape style (i.e., traditional homes look great with more formal, symmetric landscaping; cottages look great with free-form flower gardens, and so on). Identifying the style of your home makes it easier for you to narrow down your choices for the outdoor space.

3. *Do a basic sketch of the areas you wish to landscape.* Just as you sketched out basic plans for your interior renovation, do the same for your outside space. Measure the general area and then mark out the specific areas you'd like to cultivate (and their relation to the house). These sketches do not need to be as precise as the interior plans but will be helpful in mapping out the changes you'd like to make. Consider what paths, walkways, decks, walls, and borders you'd like to include or add (keeping in mind circulation to critical areas, like the doors). You can create paths and walkways with a number of inexpensive materials (including bark, wood chips, loose gravel, etc., which all require some maintenance) or with more expensive but permanent materials such as brick, flagstones, concrete pavers, and so forth (which require more installation effort but only occasional maintenance).

4. *Where is the sun?* Before you go too far with your plans, consider the sun. Southern and eastern exposures are best for sun and part-sun plantings; northern and western exposures generally do best with shade plantings. Also consider how you plan to use different areas of your property throughout the day. Do you want your patio positioned to enjoy bright morning light, or would you rather have a glass of wine there as the sun is setting? What times of day are you most likely to be outside?

5. *What is your planting zone?* Your local nursery staff or a regional landscaping book will tell you what your planting zone is. Make sure you don't do any landscaping out of season for your area.

6. *Soil.* How is your soil? Most likely it is decent, but often soil can benefit from some fortification (we've heard it said it is better to spend more on the soil than on the plants!). Once you know your local planting season, plan on enriching the soil somewhat. If you are planting new beds, remove any existing grass (by digging it up or by using an organic herbicide). Turn over the soil (using a rototiller if you have a large space—you can rent them by the day for a reasonable rate). Add between six inches and a foot of good organic matter on top of the existing soil (again, trust your local nursery for advice on the best mix for your area). Rake it in evenly—and you're ready to plant.

7. *Water.* Consider your water resources, too. First, what hydration is normal for your area? Determine what natural water is available (rainfall, runoff, etc.). What type of watering system does your landscape have (or need)? If you don't want to spend a lot on irrigation, you can create simple watering systems using drip hoses and sprinklers set on timers (timers are relatively inexpensive at about $30 each). What you are hoping to plant? If you can find drought-resistant or heat-tolerant plants, you won't need to water as frequently once they are established.

To achieve the greatest watering efficiency, and for aesthetic reasons, you may want to consider installing an in-ground automatic sprinkler system (see Appendix D for detailed how-to information and to analyze the benefits of this option). The beauty of this kind of system is its efficiency (less water and time wasted), its efficacy (more even, regular watering keeps your plantings looking great), and its no-brainer component—future homeowners can maintain the landscaping without starting from scratch (an especially appealing feature for prospective homebuyers).

8. *Tools*. Don't go crazy in the tools department—a few basics will get you through. Invest in a decent spade (you'll use it a lot); a shovel, tiller, and rake are also essential, as is a good pruner. Inexpensive cotton gardening gloves work fine, though some people

prefer more expensive synthetic gloves (they're less bulky so it's easier to feel things when you're working the soil).

9. *Less is more*. When making a list of the plants you'd like to use, simplify and eliminate. Often the most beautiful and pleasing effects are created by using a simple color palette (two or three colors only) or by planting different varieties of the same plant. Select plants in a variety of shapes and textures with an eye to ones that bloom at different times of the growing season (plants that are drought and disease resistant are also helpful for the novice gardener/landscaper).

10. *Repetition is the mother of mastery*. This is something I heard in a yoga class, but it applies here as well. Plant a lot of the same specimen and/or color for a pleasing visual effect. To get an idea of how your final planting will look, leave plants in their pots and position them strategically in the bed, repeating colors and specimens for effect (be creative!) Once you have a design you like, start planting.

11. Tips for the Dedicated Renovator:

- For the biggest effect, use inexpensive annuals and fast-growing perennials if you plan to be in your home for a short time. You can acquire many of these plants at large gardening outlets such as those in the Home Depot, Lowe's, Wal-Mart, Target, or even in supermarkets.
- Put your money into making improvements to or creating pathways, decks, patios, and so forth yourself. Generally, these tasks are not hard to do but take time.
- If you are really in the dark about a plan for your property, consider working with a landscape designer to create a plan for your landscape (that you can then execute yourself). Simple plans start at a few hundred dollars but generally cost no more than $1,500. Check out the Association of Professional Landscape Designers at www.apld.org and the American Society of Landscape Architects at www.asla.org. Landscape designers are generally less expensive than landscape architects. You may also find references for landscape designers at your local nursery or in the Yellow Pages.

12. Tips for the Recreational Renovator:

- Investigate perennials more closely. Assuming you will be in your home for more than two years, you're an ideal candidate for learning the joy of creating a perennial garden. Most plants don't fully mature for two to three years, but once they do, the effect can be spectacular (and you won't have to plant over and over again).

- Keep a diary during your first year in the house of different seasons/sun patterns on your landscape. You can make adjustments to your landscaping accordingly to improve the health of plantings and your use of your outdoor space.
- Keep paths and borders simple. It's easy to replace soft materials like bark or gravel if you need to.

13. Tips for the Leisure Renovator:

- Consider hiring someone from your local nursery to consult on your landscape. Chances are he or she is less expensive than a landscape architect or designer, and it could well be worth the money to make fundamental enhancements to the curb appeal of your property without the guesswork of doing it yourself.

Interview with Skip Burck, Landscape Architect

The outdoor space around a home is an incredible resource and can add a great deal to the value of a property while enhancing the overall enjoyment of the inhabitants. I think about the use of the space outside of a home from the perspective of architecture. This means I approach the design of a landscape using the metaphor of rooms—rooms that may have more than one function. An example is to think about adding a "living room" outdoors. What are the components of an indoor living room (couch, side tables, fireplace, etc.) that can be extended to an outdoor space? I believe it is useful to first consider the landscape in pragmatic ways: What do you want to do in the land surrounding your home, what can you do, and so forth.

The landscape around a home may have so many different components or variables to consider that the process of landscape design can seem a daunting task. The metaphor of rooms is intended to simplify the process by focusing you in on one area at a time. As you approach the task of designing and modifying a landscape, what are your priorities? Is your first priority a kid's playground with a swing set, sandbox, and play area, or is it an ornamental garden? One thing to consider is positioning a play area so that the kids can easily be watched from inside the home (e.g., out a kitchen window). Or is your first priority:

- An outdoor kitchen and dining room with a stove and picnic table?
- A vegetable and fruit garden?
- A tranquil space for relaxing and meditating with privacy from the road?

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I'd suggest a three-step road map for a renovator starting to think about redesigning the landscape around a home:

1. Ask Realtors who the potential buyers are and what will they value. Are the buyers a young couple who would value a kid's play area and an outdoor cooking and eating space? Or are the buyers an older married couple who will value a screened-in porch for reading and relaxing and a vegetable garden?
2. Talk to Realtors to find out what landscaping they think will add resale value to your home.
3. Design a program that includes overall criteria, design elements, and a plan for execution.

Divide the plan into different rooms or components, for example:

- Outdoor living room.
- Ornamental garden.
- Play area.
- Tranquil setting.
- Dog run.
- Parking area.
- Outdoor kitchen and dining area.

Of course, with an existing home you will be working with a set of elements already in place (such as the driveway, porch/deck, lawn, shrubs, etc.). You need to consider these elements as you develop your new plan. Once you have created your overall plan, consider how the various elements are oriented to one another. Are there a good flow and symbiotic relationships between the play area and the outdoor living room? Also, make sure that areas do not conflict—if you place a soccer field next to a garden, the garden will get trampled by balls and feet. Next, consider the orientation of the sun to the areas you've designed, and map water flow during a rainstorm to ensure that a play area is not located in part of the property that gets flooded and remains wet for long periods. Think through the pluses and minuses of various alternatives before you settle on a final plan (and be willing to make modifications and changes midcourse as you begin implementing it).

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Our Home Landscape Design

My wife, son, two dogs, and I live in a 1,500-square-foot home in Lexington, Massachusetts. The house is on a very small lot, so we faced many design challenges when we began to plan our outdoor space. Because we live in a relatively small home, we knew we needed to incorporate the yard into our total living space. So we set out to create an integrated space outdoors that would significantly expand our living space, plus serve a number of very practical purposes. The design and plan we created (see Figure 9.1) included:

- A garden that produces fruits, vegetables, and herbs.
- A storage shed for all outdoor storage needs (the shed was created by demolishing half of the existing one-car garage to open up some additional yard space).
- An area with a grill (with a light over it) and a table for preparing food.
- An outdoor living room with a hammock, chairs, and tables, for relaxing and talking in groups (we bought teak furniture because it is very low maintenance).
- An enclosed dog run.
- A play area for kids that includes a round trampoline.
- A basketball court and tether-ball area in driveway.

One way we connected the outside space to the inside of the house was by putting a sliding window in the kitchen that can be opened in good weather. We attached a collapsible shelf below this window so that stuff can be easily passed from the kitchen to the outside. The entire backyard is covered with crushed stone, which is very inexpensive and easy to maintain (especially with the dogs). Pavers form a path from the driveway to the back door, and in the winter this path becomes the only thing we need to shovel to get to the shed, trash cans, and our cars. We use the outdoor space about seven months a year, and during the very nice months we seem to spend more time outside than inside our home (see Figures 9.2 and 9.3 for views of the outdoor area).

Lessons Learned

- Talk to suppliers about installation details and make sure you know what you're getting into (e.g., it is much more difficult to lay pavers in a deep base than to lay them on the existing ground).

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Figure 9.1 **Outdoor space in relation to the house**

- Use how-to books; there are hundreds to choose from.
- Do it once, and do it right—don't get impatient and cut corners.
- Don't underestimate the amount of effort and time involved to complete a project.

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Figure 9.2 **Outdoor space in summer—great for relaxing or dining al fresco**

Figure 9.3 **Outdoor area set for entertaining**

- Consider using a landscaping designer (they typically charge between $50 and $75 per hour at the low end) to help you with the overall design and possibly do some of the more complex projects.
- Storm water can impact your design and plans, so know how water flows over your property.
- Be aware that most communities restrict property owners from changing the water flow on their property if the change affects a neighbor's property.
- Fences are also regulated by some communities, as is your freedom to trim or remove trees.
- With proper definition, small spaces can feel big.
- Entertaining in tight spaces works better than in large spaces (they are more intimate and have better energy for the guests).

Note

1. On a working construction document you would mark the door or window opening—the width of the actual door or glass itself—and then indicate the size of the jambs or framing. For your purposes, you do not need to be so precise. A great resource book on the basics of drafting and the essentials needed to communicate architectural design effectively is *Architectural Graphics*, by Frank Ching. See Recommended Resources at the end of this book for more information.

Chapter 10

Contractor Management

It's not by accident that we titled this chapter "Contractor Management" because management is exactly what it is all about. If you've ever done any significant renovation work with a contractor, you'll know what we mean. Finding a qualified contractor; negotiating the price, schedule, and contract; and getting the work accomplished can tax even the most skilled negotiator or project manager. Even if you luck out and find the best, most qualified, most conscientious contractor, issues will arise that will require you to be a skilled mediator and a creative problem solver. It is not by chance that general contractors, home remodeling contractors, and home builders all make the Better Business Bureau's (BBB) list of business types receiving consumer complaints. As you can see in Table 10.1, the BBB receives hundreds of thousands of complaints a year from people that are so unhappy with their experiences with these businesses that they take the time to lodge formal complaints against them. And can you imagine how many complaints go unrecorded?

It is useful to understand the fundamental way in which most contractors operate because many of the problems that arise with contractors are due to this business model. Most contractors, especially independent contractors, run relatively small enterprises. They are undercapitalized (i.e., they do not have a lot of capital sitting in the bank, nor do they have a line of credit to rely on) and therefore their cash flow (the money flowing in and out of the business) is always under constant pressure. In addition, contractors make money on a time and materials basis, and most of their money is made by selling time—their own time and the time of employees or subcontractors. And, finally, contractors often do not know what their next job will be because they do not have sophisticated sales and marketing capabilities. These three aspects of a contractor's mode of operation cause them to:

1. Try to front-load payments as much as possible over the duration of a project. (Result: This increases their cash flow and locks in the client.)

Table 10.1 **BBB 2001 Ranking of Complaints**

Rank	*Type of Business*	*Number of Reports*
1	Work-at-Home Promotions	461,202
2	**Roofing & Guttering Contractors**	443,065
3	**General Contractors**	365,887
4	**Mortgage & Escrow Companies**	338,666
5	Automobile Dealers – Franchised (new & used sales)	294,580
6	Moving/Storage Companies	274,388
7	**Home Builders**	252,264
8	**Home Remodeling Contractors**	222,476
9	Auto Repair Shops	189,937
10	**Plumbing Contractors**	152,037
11	**Air-Conditioning Contractors**	146,241
12	Credit Card Offers & Plans	136,395
13	Computer Dealers	132,437
14	Automobile Dealers – Used Cars Only	132,116
15	Swimming Pool Contractors/Service & Supplies	128,836

2. Never turn down work, even when they are at capacity. (Result: This ensures that they have a next job, even if it causes delays in ongoing jobs.)
3. Work a pretty high fudge factor into their bids because they are, basically, selling time, and it is difficult to know how long certain tasks will take until they have actually begun a job. (Result: They minimize their cost exposure.)
4. Be overly optimistic about how long it will take to finish a job, because they know that once they start, the client will have difficulty replacing them without incurring time delays (Result: They get more work by seeming to be efficient.)

The major issue most homeowners face with contractors is that the work does not get done in the time frame established in the original estimate. The second-biggest complaint is that clients end up paying more than originally estimated. The third most common problem is that the completed work is not of the quality expected. Each one of these issues is serious, but each can be effectively dealt with before the work even begins by hiring the right contractor for the job and negotiating the right kind of contract. Of course, as with all business transactions, there is a human aspect in this equation, but the key to success in working with contractors is to take as much emotion out of the process as possible in order to deal with the relationship in a very professional and businesslike way.

Hiring the Right Contractor

The key to finding the right contractor is threefold:

• First, ask friends and associates (architects, inspectors, real estate agents) for referrals to people they've used and been happy with, and make sure that the contractors they refer do the type of work you're seeking to accomplish (e.g., a contractor specializing in bathrooms may not be the best choice for a new family-room addition). If you cannot find a referral this way, check local, regional, or national associations such as the National Association of Home Builders (www.nahb.org) and the National Association of the Remodeling Industry (www.nari.org).

• Second, interview candidates aggressively (just as if you were hiring them for a staff position at a company) and check their references. During an interview with a contractor, most people focus their questions on the work to be performed (cost, time frame, availability, etc.) and not on the contractor's qualifications and work practices. Start with these questions first, then, if you're comfortable with the answers, move on to questions about cost, time frame, and availability (but don't hire anyone before doing reference checks). NARI suggests asking the following questions of potential contractors:

How long have you been in business?

Who will be assigned as project supervisor on the job?

Who will be working on the project? Are they employees or subcontractors?

Does your company carry workers compensation and liability insurance? (Always verify this information by calling the agency. A copy of an insurance certificate does not let you know if the policy is still current. Even if this certificate has an expiration date, you cannot tell if the insurance has been canceled by either party. If licensing is required in your state also ask if the contractor is licensed and call to confirm compliance with the law. Not all states offer or require licensing. Check with your local or state agencies).

What is your approach to a project such as this?

How many projects like mine have you completed in the last year?

May I have a list of references from those projects?

May I have a list of business referrals or suppliers?

What percentage of your business is repeat or referral business?

Are you a member of a national trade organization?

Have you or your employees been certified in remodeling or had any special training or education, such as earning a Certified Remodeler (CR), Certified Remodeler Specialist (CRS), or Certified Lead Carpenter (CLC) designation?

What is the time frame for starting the project?

Is your company a full service or specialty firm?

Do you have design services available?

Will we need a permit for this project?

Do you offer a warranty on your work? If so, what kind and for how long?[1]

- Third, do a thorough reference check and if possible, look at some of the work performed by a contractor. This visual check will help answer the question of the quality of the contractor's work. Questions to ask the contractor's references include:

Would you hire this contractor again?

Did the contractor do a great job?

Was the work performed on time and on budget?

Did you find the contractor easy to work with and communicate with?

Did the contractor provide you with timely updates on the work's progress?

Did the workers show up on time and were they pleasant people?

Was the work site kept tidy and as clean as possible?

Did the contractor attempt to separate the work being done from the other parts of the house?

There are also companies on the Web that will investigate potential contractors to see if there are any issues that you should be aware of before hiring them. Examples are ChoiceTrust (www.choicetrust.com) and Servicemaster (www.servicemaster.com). ChoiceTrust's mission statement reads, "We help you gain information about the people or companies with whom you do business, both professional and personal, to help you make smarter choices. Simply put, we help restore the element of trust that has been increasingly lost over time."

Often, it's not the questions that contractors can answer that are important, it's the ones that they cannot answer or seem to hedge on. Follow your instincts in this regard. Trust your feelings if you think a contractor is not being 100% truthful or forthcoming. NARI provides a list of red flags that should automatically disqualify a potential contractor:

- You can't verify the name, address, and telephone number or credentials of a contractor.
- The salesperson tries to pressure you into signing a contract.
- The contractor says your home will be used for advertising purposes so you will be given a "special, low rate."
- The contractor tells you a special price is available only if you sign the contract today.
- No references are furnished.
- Information you receive from the contractor is out-of-date or no longer valid.
- You are unable to verify license or insurance information.
- You are asked to pay for the job in advance, or to pay in cash to a salesperson instead of by check or money order to the company itself.
- The company cannot be found in the telephone book and is not listed with the local Better Business Bureau or with any local trade association.
- The contractor does not offer, inform, or extend notice of your right to cancel the contract within three days. Notification in writing of your right of recision is required by law. This grace period allows you to change your mind and declare the contract null and void without penalty (if the agreement was solicited at some place other than the contractor's place of business or appropriate trade premises—in your home, for instance).

Getting Bids and the Best Price

Depending upon the project that you're asking a contractor to bid on, getting bids and the best price can be fairly straightforward or very complicated. Always—even for what seem like little jobs—get multiple bids. This can save you a lot of money over time. Obviously, you're not looking just for the lowest price, but for the best combination of price with professionalism, quality of service, track record, and so forth. If you're simply getting bids to have a contractor install a new hardwood floor, the line items in this bid are fairly simple and easy to get a grip on: materials (wood, nails, glue, finishing compounds), labor (a few days), surcharges (10% for materials purchased), and so on. If your project is a new addition, the line items required to accomplish this task are numerous and will require you to have a more sophisticated system to compare and contract different bids. Friends of ours who are both engineers devised the spreadsheet shown in Table 10.2 to get a handle on all the line items required to accomplish the total renovation of their home and to be able to compare contractor bids apples to apples. We think their approach is an excellent one and is certainly worth the time and effort if you're going to be investing tens of thousands of dollars in a renovation project.

Table 10.2 Home Renovation Spreadsheet/Comparison of Contractor Bids

Item	*Contractor 1 Bid*	*Contractor 2 Bid*	*Contractor 3 Bid*	*Owner's Estimate*
Architecture and City				
Plans	$	$	$	$
Permits and fees	$	$	$	$
Temporary toilet	$	$	$	$
Gas and electric	$	$	$	$
Telephone	$	$	$	$
Subtotal (Architecture and City)	$	$	$	$
General Construction				
Demolition	$	$	$	$
Excavation and grading	$	$	$	$
Concrete and foundation	$	$	$	$
Exterior walls	$	$	$	$
Interior walls (drywall)	$	$	$	$
Windows and exterior doors	$	$	$	$
Door and window hardware	$	$	$	$
Exterior painting	$	$	$	$
Interior painting	$	$	$	$
Roofing and insulation	$	$	$	$
Lumber – rough	$	$	$	$
Lumber – finish	$	$	$	$
Carpentry – rough	$	$	$	$
Carpentry – finish	$	$	$	$
Electrical – rough	$	$	$	$
Electrical – finish	$	$	$	$
Exterior lighting	$	$	$	$
Plumbing – rough	$	$	$	$
Plumbing – finish	$	$	$	$
HVAC	$	$	$	$
Subtotal (General Construction)	$	$	$	$
Bathrooms				
Floor	$	$	$	$
Tile	$	$	$	$
Toilet	$	$	$	$
Tub	$	$	$	$
Vanity	$	$	$	$
Countertop	$	$	$	$
Sink	$	$	$	$

(continued)

Table 10.2 (Continued)

Item	*Contractor 1 Bid*	*Contractor 2 Bid*	*Contractor 3 Bid*	*Owner's Estimate*
Medicine cabinet/mirror	$	$	$	$
Plumbing fixtures	$	$	$	$
Lighting fixtures	$	$	$	$
Other permanent fixtures	$	$	$	$
Subtotal (Bathrooms)	$	$	$	$
Bedrooms				
Flooring	$	$	$	$
Ceiling	$	$	$	$
Closet doors	$	$	$	$
Built-ins	$	$	$	$
Interior doors	$	$	$	$
Lighting fixtures	$	$	$	$
Subtotal (Bedrooms)	$	$	$	$
Living Space				
Flooring	$	$	$	$
Ceiling	$	$	$	$
Built-ins (A/V cabinet)	$	$	$	$
Interior doors	$	$	$	$
Staircase and railing	$	$	$	$
Fireplace (insert and finish)	$	$	$	$
Lighting fixtures	$	$	$	$
Subtotal (Living Space)	$	$	$	$
Kitchen				
Flooring	$	$	$	$
Ceiling	$	$	$	$
Cabinets	$	$	$	$
Countertops	$	$	$	$
Sink	$	$	$	$
Plumbing fixtures	$	$	$	$
Garbage disposal	$	$	$	$
Stove/oven	$	$	$	$
Hood/ventilation	$	$	$	$
Dishwasher	$	$	$	$
Refrigerator	$	$	$	$
Backsplash (tile)	$	$	$	$
Lighting fixtures	$	$	$	$
Subtotal (Kitchen)	$	$	$	$

(continued)

Table 10.2 (Continued)

Item	*Contractor 1 Bid*	*Contractor 2 Bid*	*Contractor 3 Bid*	*Owner's Estimate*
Laundry room				
Floor	$	$	$	$
Interior doors	$	$	$	$
Cabinets	$	$	$	$
Countertop	$	$	$	$
Sink	$	$	$	$
Plumbing fixtures	$	$	$	$
Lighting fixtures	$	$	$	$
Other permanent fixtures	$	$	$	$
Washer/dryer	$	$	$	$
Subtotal (Laundry Room)	$	$	$	$
Garage				
Miscellaneous	$	$	$	$
Subtotal (Garage)	$	$	$	$
Deck				
Miscellaneous	$	$	$	$
Subtotal (Deck)	$	$	$	$
Subtotal	$	$	$	$
Contingency	$	$	$	$
Subtotal	$	$	$	$
Supervision, overhead, and profit (15%)	$	$	$	$
TOTAL	$	$	$	$

Silicon Valley Couple, Home Renovators

Before my wife and I were married, I had bought and sold a house and a condo in San Jose, California. The first property was a small home in downtown San Jose that I bought in 1992 in what I thought was an up-and-coming neighbor-

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hood. What interested me most about the area was that I knew that the town of San Jose and San Jose State University were planning to spend a lot of money to fix up the university's campus (which is downtown) and its surrounding area. I paid $195,000 for the house and stayed there three years, during which time I added a new bathroom, did some extensive landscaping on the yard, replaced the roof, painted inside and out, and generally cleaned up the place. I did a lot of the work myself and only spent about $15,000 out of pocket on the renovations. I sold the home for $340,000, making a nice profit.

I then bought a condo for $400,000 in Redwood Shores, California, in a complex that was under construction. Obviously, this was a new property, so I did not do any renovations. I got cold feet, however, thinking that condos might not be a good long-term investment, so I sold it in less than two years for $520,000 (the housing market in Silicon Valley was really starting to pick up at the time). Once again, I made a good profit.

We bought our current house in February 2000 for $650,000. It is located in Woodside, California, a pretty exclusive area. It is an 1,800-square-foot two bedroom/two bath home on a 9,500-square-foot lot (which is a good-size lot in this area). It has excellent views overlooking a valley, and we felt that it had a lot of renovation potential because it had not been updated in decades (see Figure 10.1 for an exterior view of the house before it was renovated). Our goal was to add a new bedroom and another bath to transform the house from a 2/2 to a 3/3 (bedrooms/bathrooms). We also wanted to improve the home's curb appeal and upgrade the systems (electrical and plumbing). At the same time, we wanted to retrofit the home for earthquakes. We hired an architect to help us design the renovation because we knew that it was going to be a major undertaking and would require some engineering skills. We paid the architect a flat fee of $10,000 to do the entire plan, which we think was very inexpensive because some architects try to get an up-front fee plus a fee of as much as 10% of the total renovation cost (which in our case turned out to be $215,000).

Initially, we had a budget of $100,000 for the renovation, but we quickly found out that this was totally inadequate for what we wanted done to the house. We increased our budget to $150,000 and started talking to contractors. We felt

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Figure 10.1 **First floor totally gutted**

that the contractors were able to give us very accurate bids because they had access to the architectural plans. Also, we created a very detailed spreadsheet (see Table 10.2) in which we broke down the contractor bids by line item. We were then able to use this spreadsheet to compare and contrast the various bids we received. We ended up getting three bids, all from contractors who were recommended to us and whose references we checked. The first bids we received ranged from a low of $180,000 to a high of $350,000. We then showed each of the contractors his bid compared to the other bids (removing the names of the other contractors) and began negotiating the price. For example, one contractor might be charging twice as much for wood supplies or painting. We used the spreadsheet to initiate a discussion about why a contractor's bid might be so far

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out of alignment with another contractor's. Through this process, we really got to know the contractors and eventually ended up hiring the contractor who had submitted the middle bid. As we've mentioned, the final bid was $215,000—more than we had budgeted, but at the end of this process we were sure of what we were getting for this money and so we decided to proceed.

We basically stuck to the plan set forth in our spreadsheet. We did make a few changes and modifications over the renovation period as we learned new things (for instance, the true cost of countertops—we actually spent less than we had budgeted). We also made sure that we bought all of the materials for the renovation possible. That way we saved the 15% surcharge contractors charge when they buy supplies for a job. We also tied the payments to the contractor to the elements within the spreadsheet. We did not make micropayments to the contractor, but we did make sure that we never paid too far in advance. This kept the contractor on the job every day because he was not sitting on a large prepayment.

From the start, we set up twice-weekly meetings with the contractor (usually before work). These meetings really kept the communication channels open and resolved a lot of things on the spot before they blossomed into real issues. Because of the way we broke down tasks and costs within the spreadsheet, we were able at times to find subcontractors when we thought that our main contractor was moving too slowly. Sometimes, we found out, a general contractor will take on too much work for his small core team of workers in order to maximize his profits, but often this is at the expense of getting the work done to schedule. When we saw that this was happening, we were able to bring in other specialists to accomplish certain tasks quickly (and often for less than budgeted with our main contractor).

We're not yet back in the house (we had to move out for about 10 months). We've done as much of the finish work such as painting and putting up moldings as possible to save money. We're also working on much of the landscaping ourselves, and this process will continue for quite some time (see Figure 10.2 for a finished view of the exterior). Recently, we had the house reappraised so we could refinance and lock in low interest rates, and its appraisal value was $950,000—not bad for this area, which has been hit very hard by the technology slump of the last few years.

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Figure 10.2 **Completed exterior**

Executing the Contract

A well-written and complete contract is essential to a smooth renovation. The contract should be as detailed as possible, articulating what will (and will not) be done. Listing what is not going to be done can be a very effective way to root out those issues that can come back to haunt you during a renovation and, especially, after a contractor completes a renovation. This way, you won't find yourself saying, "I thought XYZ was included in our deal." If it is not written out in black and white in the contract, it is not included. We know this task can be a bit daunting and time-consuming, but establishing a detailed list of activities and deliverables is critical to ensuring that your relationship with a contractor stays on track and there are no surprises during the process or after the work is completed.

Good contracts should include the following:

- The contractor's name, address, phone number, license number, and insurance information.
- The start date and estimated completion date. It is also helpful to include completion dates for major milestones (e.g., completion of framing or wiring) so that you can keep track of a contractor's progress.
- A list of what the contractor will (and will not) do.
- A complete list of the materials (size, color, model, brand name, etc.) needed by the contractor and a statement of who is responsible for purchasing these materials. (Remember, contractors will add between 10% and 15% to the price they pay for the materials if they buy them. This may be reasonable if you have no time to shop for materials or don't have a way to transport them. The amount of the percentage surcharge may also be negotiable; contractors typically get a 10% trade discount on materials, so you may be able to negotiate paying the retail price.)
- If building plans are required, specify that you must approve the plans. Make sure that the development of any plans is included in the contract deliverables and any fee if this is something that you want the contractor to handle.
- A clause describing how "change orders" are to be handled. Invariably, small and large changes to a renovation plan will crop up, and you'll need a process for adding them to the contract.
- A warranty covering the materials used in the renovation and a warranty on the quality of the work performed. A typical term for a warranty of this type is one year. If the warranty is *limited*, make sure this term is defined. Make sure that the written warranty specifies what is covered under the warranty, how long it lasts, who the warranty is for (you or the contractor), and how to handle claims should something go wrong. Be careful of terms such as *satisfaction guaranteed* or *lifetime warranty*—these are vague and potentially problematic.
- Information on who will obtain and pay for necessary permits and other approvals. Generally, a building permit is required whenever structural work is involved or when the basic living area of a home is being changed. If a contractor gets the permit, he or she is liable if work done does not comply with local building codes (we recommend that you insist the contractor obtain the permit).
- Details on issues such as access to your home, care of the premises, phone and bathroom use, cleanup, and trash removal.
- Financial terms, including the payment plan. These should be clearly spelled out. Make sure that you do not pay too much up front, and don't pay a large por-

tion of the total fee until the work is completely finished. A contractor who already has been paid 90% to 95% of the fee has no financial motivation to finish the work. We recommend that you hold back 20% to 30% of the fee until the work is 100% complete *to your satisfaction*.
- A lien waiver. This will protect you from third-party claims of nonpayment (e.g., if your contractor does not pay a hardware store for items he bought and for which you paid him).

You may also want to include a binding arbitration clause in case a disagreement occurs. Binding arbitration can enable you to resolve disputes without costly litigation.

If the scope of contract exceeds $25,000, you may want to have a lawyer review the contract. This may add $200 to $1,000 to your renovation cost, but it may save you some real money in the end and countless headaches. Always keep a copy of the final signed contract for your records. Make sure that you formally sign off on the completed project before you make your final payment. Typically, your contractor will have an Affidavit of Final Release.

Getting the Work Done

Getting the work done can be the most frustrating part of the renovation process if you decide to use a contractor. It always seems that the project starts out well and the initial project milestones are met with ease, but then the process starts bogging down over time and deadlines are missed. We've had projects that were supposed to be done in three weeks take three months. Some of this delay can be attributed to acts of God such as rain and snowstorms, but much of it is simply due to the fact the contractor does not show up for work. So, what can you do about this? There is no simple answer.

One suggestion, repeating what we've said before, is to make sure that specific deadlines for pieces of the work are clearly articulated in the contract. You might also want to put together a more detailed timeline with the builder so you are in agreement on the dates and deliverables. You may be able to write into your contract penalties for not finishing the work on time, but often the reasons for delays are open to interpretation. One strategy is to put a bonus into the contract for meeting (or beating) a schedule; this way, there is an incentive for the contractor to finish on time. Next, we've found that it is important to lay down the law early on if a contractor is not meeting deadlines. Typically, this involves giving one warning and then, if the behavior does not change, firing the contractor. Of course, you don't want to be in a position where you have already paid the contractor a large percentage of the total project fee up front when you decide to terminate the contract because it may be difficult to get back this money.

Open communication is the key to establishing a good working relationship with your contractor. So schedule update meetings (face-to-face works best) at which you can review progress and discuss any issues that may have surfaced. We've also found that it is important to be present when the work is being performed or, at a minimum, to check on the work daily. It seems that contractors sometimes take advantage if you are not physically present and not show up to do the work. Try to keep emotions out of the relationship, even thought this can be very hard to do when you do not think a contractor is living up to obligations. We once had a situation in which our contractor had a ministroke right in the middle of our project. We tried to be very understanding, but the work dragged on and on. We asked the contractor if he wanted us to find someone else to finish the work ("no hard feelings"), but he said no, he really wanted to finish the job. Well, delays continued and in the end we had to spend a week on the job with the contractor so that (1) he'd show up, and (2) we could help him finish the work.

If you run into trouble with your contractor, first write down the exact nature of the problem so you can clearly communicate it to the contractor. You may want to fax or mail the contractor a letter outlining the issue or problem so that (1) he knows it is serious, and (2) you have documentation that the issue was raised and you tried in good faith to resolve it (this could come in handy if you ever have to go to arbitration with or sue a contractor). Always give the contractor a chance to resolve an issue before you go to a lawyer, a trade association, or a regulatory agency. Again, make sure to keep all correspondence and discussions professional and businesslike. Angry, threatening, or sarcastic communications never do much good.

If you reach an impasse with a contractor, try contacting your local building or contractors' association. They often have systems in place for examining and resolving complaints. Only as a last resort is it wise to contact a lawyer or go to small claims court because these avenues typically are time-consuming and/or costly. Remember that most contractors want customer referrals and repeat buyers, so they want you to be satisfied. Play to this fact when trying to resolve an issue with a contractor.

Note

1. From the National Association of the Remodeling Industry, www.nari.org, last accessed March 21, 2003.

Appendix A

IRS Publication 523: Selling Your Home

Department of the Treasury
Internal Revenue Service

Publication 523
Cat. No. 15044W

Selling Your Home

For use in preparing
2002 Returns

Get forms and other information faster and easier by:

Computer • www.irs.gov or **FTP** • ftp.irs.gov

FAX • 703-368-9694 (from your FAX machine)

Contents

Important Changes

September 11, 2001, terrorist attacks. If you are an individual affected by the September 11, 2001, terrorist attacks and do not meet all the requirements for the maximum exclusion of gain on the sale or exchange of your main home, you may qualify for a reduced maximum exclusion. See *Reduced Maximum Exclusion,* later.

Sale of vacant land. The exclusion of gain from the sale of your main home does not apply to the sale of vacant land unless it is adjacent to your main home, you have owned and used it as part of your main home, it is sold within 2 years of the sale of your home, and the other requirements for excluding gain have been satisfied. See *Main Home,* later.

Main home. If you alternate living in two homes, ordinarily the one you live in most of the time is your main home, but there are additional factors to consider in determining which home is your main home. See *Main Home,* later.

Maximum exclusion – joint owner. You can claim an exclusion of up to $250,000 of the gain from the sale of your interest in your main home if you are a joint owner, file a separate return, and satisfy the requirements for this exclusion. See *Maximum Exclusion,* later.

Maximum exclusion – joint return. If either spouse does not satisfy all requirements, the maximum exclusion that can be claimed by the couple is the total of the maximum exclusions that each spouse would qualify for if not married and the amounts were figured separately. See *Maximum Exclusion,* later.

Reduced maximum exclusion. If you do not satisfy the ownership and use test, or you sell a second home before the end of the 2–year period required for exclusion of gain, you may qualify for a reduced maximum exclusion if the primary reason for sale is a ***change in place of employment***, ***health***, or ***unforeseen circumstances***.

There are certain sets of facts and circumstances (safe harbors) that will be considered as satisfying the primary reason test for the sale of a main home. If the sale of your home does not qualify under one of these safe harbors, there are a number of factors that may be relevant in determining your primary reason for the sale. See *Reduced Maximum Exclusion,* later.

Change in place of employment. The sale of your main home is because of a change in place of employment if your primary reason for the sale is a change in the location of employment of a qualified individual. There is a safe harbor for a qualified individual whose new place of employment is at least 50 miles farther from the home sold. See *Reduced Maximum Exclusion,* later.

Health. The sale of your main home is because of health if your primary reason for the sale is to obtain, provide, or facilitate the diagnosis, cure, mitigation, or treatment of disease, illness, or injury of a qualified individual. There is a safe harbor for a qualified individual whose physician recommends a change of home for reasons of health. See *Reduced Maximum Exclusion,* later.

Unforeseen circumstances. The sale of your main home is because of an unforeseen circumstance if your primary reason for the sale is the occurrence of an event that you do not anticipate before purchasing and occupying your main home. There are safe harbors for specific events such as death or divorce. See *Reduced Maximum Exclusion,* later.

Figuring reduced maximum exclusion. If you qualify for a reduced maximum exclusion, it is figured by multiplying the maximum exclusion by a fraction. You can use either days or months (but not both) in the fraction. See *Worksheet 3,* later.

Office in home. If the part of your property used for non-residential purposes is within your home, such as a room used as a home office for a business, you are treated as satisfying the use test for the entire property for purposes of the exclusion whether or not you were entitled to claim any depreciation deductions. See *Business Use or Rental of Home,* later.

Applying rules retroactively. Generally, you can apply these new rules retroactively if you would otherwise qualify to exclude gain from a sale of your main home before the effective date of the new rules (December 24, 2002), but on or after May 7, 1997, provided the period of limitations for filing an amended return has not expired for the year of sale.

Important Reminders

Change of address. If you change your mailing address, be sure to notify the Internal Revenue Service (IRS) using Form 8822, *Change of Address.* Mail it to the Internal Revenue Service Center for your old address. (Addresses for the Service Centers are on the back of the form.)

Home sold with undeducted points. If you have not deducted all the points you paid to secure a mortgage on your old home, you may be able to deduct the remaining points in the year of sale. See *Points* in Part I of Publication 936, *Home Mortgage Interest Deduction.*

Photographs of missing children. The Internal Revenue Service is a proud partner with the National Center for Missing and Exploited Children. Photographs of missing children selected by the Center may appear in this publication on pages that would otherwise be blank. You can help bring these children home by looking at the photographs and calling **1–800–THE–LOST (1–800–843–5678)** if you recognize a child.

Introduction

This publication explains the tax rules that apply when you sell your main home. Generally, your main home is the one in which you live most of the time.

Gain. If you have a gain from the sale of your main home, you may be able to exclude up to $250,000 of the gain from your income ($500,000 on a joint return in most cases). Any gain not excluded is taxable. See *Excluding the Gain*, later.

Loss. You cannot deduct a loss from the sale of your main home.

Worksheets. Worksheets are included in this publication to help you figure the adjusted basis of the home you sold, the gain (or loss) on the sale, and the amount of the gain that you can exclude.

Reporting the sale. Do not report the sale of your main home on your tax return unless you have a gain and at least part of it is taxable. Report any taxable gain on Schedule D (Form 1040). You may also have to include Form 4797, *Sales of Business Property.* See *Reporting the Gain*, later.

Sale before May 7, 1997. If you sold your main home before May 7, 1997, and postponed the gain while serving in the Armed Forces, see Publication 3, *Armed Forces Tax Guide,* for special rules that are not covered in this publication.

Date of sale. If you received a Form 1099–S, *Proceeds From Real Estate Transactions*, the date of sale should be shown in box 1. If you did not receive this form, the date of sale is the earlier of (a) the date title transferred or (b) the date the economic burdens and benefits of ownership shifted to the buyer. In most cases, these dates are the same.

What is not covered in this publication. This publication does not cover the sale of rental property, second homes, or vacation homes. For information on how to report those sales, see Publication 544, *Sales and Other Dispositions of Assets*.

Comments and suggestions. We welcome your comments about this publication and your suggestions for future editions.

You can e-mail us while visiting our web site at **www.irs.gov**.

You can write to us at the following address:

Internal Revenue Service
Tax Forms and Publications
W:CAR:MP:FP
1111 Constitution Ave. NW
Washington, DC 20224

We respond to many letters by telephone. Therefore, it would be helpful if you would include your daytime phone number, including the area code, in your correspondence.

Useful Items

You may want to see:

Publication

- ❑ **521** Moving Expenses
- ❑ **527** Residential Rental Property
- ❑ **530** Tax Information for First-Time Homeowners
- ❑ **544** Sales and Other Dispositions of Assets
- ❑ **547** Casualties, Disasters, and Thefts
- ❑ **551** Basis of Assets
- ❑ **587** Business Use of Your Home
- ❑ **936** Home Mortgage Interest Deduction

Form (and Instructions)

- ❑ **Schedule D (Form 1040)** Capital Gains and Losses
- ❑ **1040X** Amended U.S. Individual Income Tax Return
- ❑ **4797** Sales of Business Property
- ❑ **8822** Change of Address
- ❑ **8828** Recapture of Federal Mortgage Subsidy

See *How To Get Tax Help*, near the end of this publication, for information about getting these publications and forms.

Main Home

This section explains the term "main home."

Usually, the home you live in most of the time is your main home and can be a:

- House,
- Houseboat,
- Mobile home,
- Cooperative apartment, or
- Condominium.

To exclude gain under the rules in this publication, you generally must have owned and lived in the property as your main home for at least 2 years during the 5-year period ending on the date of sale.

Land. If you sell the land on which your main home is located, but not the house itself, you cannot exclude any gain you have from the sale of the land.

Example. On March 4, 2002, you sell the land on which your main home is located. You buy another piece of land and move your house to it. This sale is not considered a sale of your main home, and you cannot exclude any gain on the sale of the land.

Vacant land. The sale of vacant land is not a sale of your main home unless:

- It is adjacent to land containing your home,
- You owned and used it as part of your main home,
- The sale of your home satisfies the requirements for exclusion and occurs within 2 years before or 2 years after the date of the sale of the vacant land, and
- The other requirements for excluding gain from the sale of the vacant land have been satisfied.

The sale (or sales) of the home and the vacant land are treated as one sale and only one maximum exclusion can be applied to any gain. See *Excluding the Gain,* later.

More than one home. If you have more than one home, you can exclude gain only from the sale of your main home. You must include in income gain from the sale of any other home. If you have two homes and live in both of them, your main home is ordinarily the one you live in most of the time.

Example 1. You own and live in a house in the city. You also own a beach house, which you use during the summer months. The house in the city is your main home.

Example 2. You own a house, but you live in another house that you rent. The rented house is your main home.

In addition to your living in your home most of the time, other factors are relevant in determining if that home is your main home. Those factors include the following:

1) Your place of employment.
2) The location of your family members' main home.
3) Your mailing address for bills and correspondence.
4) The address listed on your:

a) Federal and state tax returns,

b) Driver's license,

c) Car registration, and

d) Voter registration card.

5) The location of the banks you use.

6) The location of recreational clubs and religious organizations you are a member of.

Property used partly as your main home. If you use only part of the property as your main home, the rules discussed in this publication apply only to the gain or loss on the sale of that part of the property. For details, see *Business Use or Rental of Home,* later.

Gain or Loss on the Sale

If you sold your main home in 2002, you may be able to exclude from income any gain up to a limit of $250,000 ($500,000 on a joint return in most cases). See *Excluding the Gain*, later. If you can exclude all of the gain, you do not need to report the sale on your tax return.

If you have gain that cannot be excluded, it is taxable. Report it on Schedule D (Form 1040).

If you have a loss on the sale, you cannot deduct it on your return.

The main topics in this section are:

- How to figure gain or loss, and
- Basis.

The following topics are discussed in subsequent sections.

- Excluding the gain,
- Ownership and use tests,
- Special situations,
- Reporting the gain, and
- Real estate and transfer taxes.

This section includes worksheets you can use to figure your gain (or loss) and your exclusion. Use *Worksheet 1* to figure the adjusted basis of the home you sold. Use *Worksheet 2* to figure the gain (or loss), the exclusion, and the taxable gain (if any) on the sale. In some situations, you may also need to use *Worksheet 3* to figure a reduced maximum exclusion.

How To Figure Gain or Loss

To figure the gain or loss on the sale of your main home, you must know the ***selling price,*** the ***amount realized,*** and the ***adjusted basis***.

Selling price. The selling price is the total amount you receive for your home. It includes money, all notes, mortgages, or other debts assumed by the buyer as part of the sale, and the fair market value of any other property or any services you receive.

Personal property. The selling price of your home does not include amounts you received for personal property sold with your home. Personal property is property that is not a permanent part of the home. Examples are furniture, draperies, and lawn equipment. Separately stated amounts you received for these items should not be shown on Form 1099–S (discussed later). Any gains from sales of personal property must be included in your income.

Payment by employer. You may have to sell your home because of a job transfer. If your employer pays you for a loss on the sale or for your selling expenses, do ***not*** include the payment as part of the selling price. Your employer will include it in box 1 of your Form W–2 and you will include it on line 7 of Form 1040.

Option to buy. If you grant an option to buy your home and the option is exercised, add the amount you receive for the option to the selling price of your home. If the option is not exercised, you must report the amount as ordinary income in the year the option expires. Report this amount on line 21 of Form 1040.

Form 1099–S. If you received Form 1099–S, box 2 (gross proceeds) should show the total amount you received for your home.

However, box 2 will not include the fair market value of any property other than cash or notes, or any services, you received or will receive. Instead, box 4 will be checked to indicate your receipt or expected receipt of these items.

If you can exclude the entire gain, the person responsible for closing the sale generally will not have to report it on Form 1099–S. If you do not receive Form 1099–S, use sale documents and other records to figure the total amount you received for your home.

Amount realized. The amount realized is the selling price minus selling expenses.

Selling expenses. Selling expenses include commissions, advertising fees, legal fees, and loan charges paid by the seller, such as loan placement fees or "points."

Adjusted basis. While you owned your home, you may have made adjustments (increases or decreases) to the basis. This adjusted basis must be determined before you can figure gain or loss on the sale of your home. For information on how to figure your home's adjusted basis, see *Basis,* later.

Amount of gain or loss. To figure the amount of gain or loss, compare the amount realized to the adjusted basis.

Gain on sale. If the amount realized is more than the adjusted basis, the difference is a gain and, except for any part you can exclude, generally is taxable.

Loss on sale. If the amount realized is less than the adjusted basis, the difference is a loss. A loss on the sale of your main home cannot be deducted.

Jointly owned home. If you and your spouse sell your jointly owned home and file a joint return, you figure your gain or loss as one taxpayer.

Separate returns. If you file separate returns, each of you must figure your own gain or loss according to your ownership interest in the home. Your ownership interest is determined by state law.

Joint owners not married. If you and a joint owner other than your spouse sell your jointly owned home, each of you must figure your own gain or loss according to your ownership interest in the home. Each of you applies the rules discussed in this publication on an individual basis.

Trading homes. If you trade your old home for another home, treat the trade as a sale and a purchase.

Example. You owned and lived in a home with an adjusted basis of $41,000. A real estate dealer accepted your old home as a trade-in and allowed you $50,000 toward a new home priced at $80,000. This is treated as a sale of your old home for $50,000 with a gain of $9,000 ($50,000 – $41,000).

If the dealer had allowed you $27,000 and assumed your unpaid mortgage of $23,000 on your old home, your sales price would still be $50,000 (the $27,000 trade-in allowed plus the $23,000 mortgage assumed).

Foreclosure or repossession. If your home was foreclosed on or repossessed, you have a sale.

You figure the gain or loss from the sale in generally the same way as gain or loss from any sale. But the amount of your gain or loss depends, in part, on whether you were personally liable for repaying the debt secured by the home, as shown in the following chart.

IF you were...	THEN your selling price includes...
not personally liable for the debt	the full amount of debt cancelled by the foreclosure or repossession.
personally liable for the debt	the amount of cancelled debt up to the home's fair market value. You may also have ordinary income, as explained next.

Ordinary income. If you were personally liable for the canceled debt, you may have ordinary income in addition to any gain or loss. If the canceled debt is more than the home's fair market value, you have ordinary income equal to the difference. Report that income on line 21, Form 1040. However, the income from cancellation of debt is not taxed to you if the cancellation is intended as a gift, or if you are insolvent or bankrupt. For more information on insolvency or bankruptcy, see Publication 908, *Bankruptcy Tax Guide*.

Form 1099–C and Form 1099–A. If your debt is canceled, you may receive Form 1099–C, *Cancellation of Debt*. Generally, you will receive Form 1099–A, *Acquisition or Abandonment of Secured Property*, from your lender. This form will have the information you need to determine the amount of your gain or loss and any ordinary income from cancellation of debt.

More information. If part of your home is used for business or rental purposes, see *Foreclosures and Repossessions* in chapter 1 of Publication 544 for more information. Publication 544 has examples of how to figure gain or loss on a foreclosure or repossession.

Abandonment. If you abandon your home, you may have ordinary income. If the abandoned home secures a debt for which you are personally liable and the debt is canceled, you have ordinary income equal to the amount of canceled debt.

If the home is secured by a loan and the lender knows the home has been abandoned, the lender should send you Form 1099–A or Form 1099–C. See *Foreclosure or repossession*, earlier, for information about those forms. If the home is later foreclosed on or repossessed, gain or loss is figured as explained in that discussion.

Transfer to spouse. If you transfer your home to your spouse, or to your former spouse incident to your divorce, you generally have no gain or loss (unless the *Exception*, discussed next, applies). This is true even if you receive cash or other consideration for the home. Therefore, the rules explained in this publication do not apply.

If you owned your home jointly with your spouse and transfer your interest in the home to your spouse, or to your former spouse incident to your divorce, the same rule applies. You have no gain or loss.

A transfer of your home to your spouse, or to your former spouse incident to divorce, does not affect the basis of any new home you buy or build.

Exception. These transfer rules do not apply if your spouse or former spouse is a nonresident alien. In that case, you generally will have a gain or loss.

More information. See *Property Settlements* in Publication 504, *Divorced or Separated Individuals*, if you need more information.

Basis

You need to know your basis in your home to determine any gain or loss when you sell it. Your basis in your home is determined by how you got the home. Your basis is its cost if you bought it or built it. If you got it in some other way (inheritance, gift, etc.), its basis is either its fair market value when you got it or the adjusted basis of the person you got it from.

While you owned your home, you may have made adjustments (increases or decreases) to your home's basis. The result of these adjustments is your home's ***adjusted basis,*** which is used to figure gain or loss on the sale of your home.

To figure your adjusted basis, you can use *Worksheet 1*, shown later. A filled-in example of that worksheet is included in the comprehensive *Illustrated Example*, later.

Table 1, shown later, explains how to use *Worksheet 1* in certain special situations.

The main topics in this section are:

- Cost as basis,
- Basis other than cost, and
- Adjusted basis.

Cost As Basis

The cost of property is the amount you pay for it in cash, debt obligations, other property, or services.

Purchase. If you buy your home, your basis is its cost to you. This includes the purchase price and certain settlement or closing costs. Generally, your purchase price includes your down payment and any debt, such as a first or second mortgage or notes you gave the seller in payment for the home. If you build, or contract to build, a new home, your purchase price can include costs of construction, as discussed later.

Seller-paid points. If the person who sold you your home paid points on your loan, you may have to reduce your home's basis by the amount of the points as shown in the following chart.

IF you bought your home...	THEN reduce your home's basis by the seller-paid points...
after 1990 but before April 4, 1994	only if you deducted them as home mortgage interest in the year paid.
after April 3, 1994	even if you did not deduct them.

If you must reduce your basis by seller-paid points and you use *Worksheet 1* to figure your adjusted basis, enter the seller-paid points on line 2 of the worksheet (unless you used the seller-paid points to reduce the amount on line 1).

Settlement fees or closing costs. When you bought your home, you may have paid settlement fees or closing costs in addition to the contract price of the property. You can include in your basis the settlement fees and closing costs you paid for buying the home. You cannot include in your basis the fees and costs for getting a mortgage loan. A fee paid for buying the home is any fee you would have had to pay even if you paid cash for the home.

Settlement fees do not include amounts placed in escrow for the future payment of items such as taxes and insurance.

Some of the settlement fees or closing costs that ***you can include*** in your basis are:

1) Abstract fees (abstract of title fees),
2) Charges for installing utility services,
3) Legal fees (including fees for the title search and preparing the sales contract and deed),
4) Recording fees,
5) Survey fees,
6) Transfer taxes,
7) Owner's title insurance, and
8) Any amounts the seller owes that you agree to pay, such as:
   a) Certain real estate taxes (discussed later),
   b) Back interest,
   c) Recording or mortgage fees,
   d) Charges for improvements or repairs, and
   e) Sales commissions.

Some settlement fees and closing costs ***you cannot include*** in your basis are:

1) Fire insurance premiums,
2) Rent for occupancy of the house before closing,
3) Charges for utilities or other services related to occupancy of the house before closing,
4) Any fee or cost that you deducted as a moving expense (allowed for certain fees and costs before 1994),
5) Charges connected with getting a mortgage loan, such as:
   a) Mortgage insurance premiums (including VA funding fees),
   b) Loan assumption fees,
   c) Cost of a credit report,
   d) Fee for an appraisal required by a lender, and
6) Fees for refinancing a mortgage.

Real estate taxes. Real estate taxes for the year you bought your home may affect your basis, as shown in the following chart.

IF...	AND...	THEN the taxes...
you pay taxes that the seller owed on the home (the taxes up to the date of the sale)	the seller does *not* reimburse you	are added to the basis of your home.
	the seller reimburses you	do *not* affect the basis of your home.
the seller paid taxes for you (the taxes beginning on the date of sale)	you do *not* reimburse the seller	are subtracted from the basis of your home.
	you reimburse the seller	do *not* affect the basis of your home.

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Construction. If you contracted to have your house built on land you own, your basis is:

1) The cost of the land, plus
2) The amount it cost you to complete the house, including:
    a) The cost of labor and materials,
    b) Any amounts paid to a contractor,
    c) Any architect's fees,
    d) Building permit charges,
    e) Utility meter and connection charges, and
    f) Legal fees directly connected with building the house.

Your cost includes your down payment and any debt such as a first or second mortgage or notes you gave the seller or builder. It also includes certain settlement or closing costs. You may have to reduce your basis by points the seller paid for you. For more information, see *Seller-paid points* and *Settlement fees or closing costs,* earlier.

Built by you. If you built all or part of your house yourself, its basis is the total amount it cost you to complete it. Do not include in the cost of the house:

- The value of your own labor, or
- The value of any other labor you did not pay for.

Temporary housing. If a builder gave you temporary housing while your home was being finished, you must reduce your basis by the part of the contract price that was for the temporary housing. To figure the amount of the reduction, multiply the contract price by a fraction. The numerator is the value of the temporary housing, and the denominator is the sum of the value of the temporary housing plus the value of the home.

Cooperative apartment. Your basis in the apartment is usually the cost of your stock in the co-op housing corporation, which may include your share of a mortgage on the apartment building.

Condominium. To determine your basis in a condominium, use the same rules as for any other home.

Basis Other Than Cost

You must use a basis other than cost, such as fair market value, if you got your home as a gift, from your spouse, as an inheritance, or in a trade. If you got your home in any of these ways, see the following discussion that applies to you. If you want to figure your adjusted basis using *Worksheet 1*, see *Table 1*, later, for help.

Fair market value. Fair market value is the price at which property would change hands between a willing buyer and a willing seller, neither having to buy or sell, and both having reasonable knowledge of all necessary facts. Sales of similar property, on or about the same date, may be helpful in figuring the fair market value of the property.

Home received as gift. Use the following chart to find the basis of a home you received as a gift.

IF the donor's adjusted basis at the time of the gift was...	THEN your basis is...
more than the fair market value of the home at that time	the same as the donor's adjusted basis at the time of the gift. *Exception:* If using the donor's adjusted basis results in a loss when you sell the home, you must use the fair market value of the home at the time of the gift as your basis. If using the fair market value results in a gain, you have neither gain nor loss.
equal to or less than the fair market value at the time, and you received the gift before 1977	the smaller of the: • donor's adjusted basis, plus any federal gift tax paid on the gift, or • the home's fair market value at the time of the gift.
equal to or less than the fair market value at the time, and you received the gift after 1976	the same as the donor's adjusted basis, plus the part of any federal gift tax paid that is due to the net increase in value of the home (explained next).

Part of federal gift tax due to net increase in value. Figure the part of the federal gift tax paid that is due to the net increase in value of the home by multiplying the total federal gift tax paid by a fraction. The numerator (top part) of the fraction is the net increase in the value of the home, and the denominator (bottom part) is the value of the home for gift tax purposes after reduction for any annual exclusion and marital or charitable deduction that applies to the gift. The net increase in the value of the home is its fair market value minus the donor's adjusted basis.

Home received from spouse. You may have received your home from your spouse or from your former spouse incident to your divorce.

Transfers after July 18, 1984. If you received the home after July 18, 1984, there was no gain or loss on the transfer. Your basis in this home is generally the same as your spouse's (or former spouse's) adjusted basis just before you received it. This rule applies even if you received the home in exchange for cash, the release of marital rights, the assumption of liabilities, or other consideration.

If you owned a home jointly with your spouse and your spouse transferred his or her interest in the home to you, your basis in the half interest received from your spouse is

Table 1. **How To Use Worksheet 1 in Special Situations**

If you use *Worksheet 1* to figure the adjusted basis of your home and any of the situations described below apply to you, follow these instructions.

IF...		THEN...
you inherited your home	1	skip lines 1–4 of the worksheet.
	2	find your basis using the rules under *Home received as inheritance* in this publication. Enter this amount on line 5 of the worksheet.
	3	fill out the rest of the worksheet.
you received your home as a gift	1	read *Home received as a gift* in this publication and enter on line 1 and 3 of the worksheet either the donor's adjusted basis or the home's fair market value at the time of the gift, whichever is appropriate.
	2	if you can add any federal gift tax to your basis, enter that amount on line 5 of the worksheet.
	3	fill out the rest of the worksheet.
you received your home in a trade	1	find your basis using the rules under *Home received in trade* in this publication. Enter this amount on line 1 of the worksheet. (But if you received your home in a trade for your previous home before May 7, 1997, and had a gain on the trade that you postponed using Form 2119, enter on line 1 of the worksheet the adjusted basis of the new home from that Form 2119.)
	2	fill out the rest of the worksheet.
you built your home	1	add the purchase price of the land and the cost of building the home. (See *Construction* in this publication for details.) Enter that total on line 1 of the worksheet. (However, if you received a Form 2119 to postpone gain on the sale of a previous home before May 7, 1997, enter on line 1 of the worksheet the adjusted basis of the new home from that Form 2119.)
	2	fill out the rest of the worksheet.
you received your home from your spouse after July 18, 1984	1	skip lines 1–4 of the worksheet.
	2	enter on line 5 of the worksheet your spouse's adjusted basis in the home just before you received it.
	3	fill out the rest of the worksheet, making adjustments to basis only for events after the transfer.
you owned a home jointly with your spouse, who transferred his or her interest in the home to you after July 18, 1984		fill out one worksheet, including adjustments to basis for events both before and after the transfer.
you received your home from your spouse before July 19, 1984	1	skip lines 1–4 of the worksheet.
	2	enter on line 5 of the worksheet the home's fair market value at the time you received it.
	3	fill out the rest of the worksheet, making adjustments to basis only for events after the transfer.
you owned a home jointly with your spouse, and your spouse transferred his or her interest in the home to you before July 19, 1984	1	fill out a worksheet, lines 1–13, making adjustments to basis for events both before and after the transfer.
	2	multiply the amount on line 13 of that worksheet by one-half (0.5) to get the adjusted basis of your half-interest at the time of the transfer.
	3	multiply the fair market value of the home at the time of the transfer by one-half (0.5). Generally, this is the basis of the half-interest that your spouse owned.
	4	add the amounts from steps 2 and 3 and enter the total on line 5 of a second worksheet.
	5	complete the rest of the second worksheet, making adjustments to basis only for events after the transfer.

Table 1. *(Continued)*

IF...		THEN...
you owned your home jointly with your spouse who died	1	fill out a worksheet, lines 1–13, making adjustments to basis only for events before your spouse's death.
	2	multiply the amount on line 13 of that worksheet by one-half (0.5) to get the adjusted basis of your half-interest on the date of death.
	3	use the rules under *Surviving spouse* in this publication to find the basis for the half-interest owned by your spouse.
	4	add the amounts from steps 2 and 3 and enter the total on line 5 of a second worksheet.
	5	complete the rest of the second worksheet, making adjustments to basis only for events after your spouse's death.
you owned your home jointly with your spouse who died, and your permanent home is in a community property state	1	skip lines 1–4 of the worksheet.
	2	enter the amount of your basis on line 5 of the worksheet. Generally, this is the fair market value of the home at the time of death. (But see *Community property* in this publication.)
	3	fill out the rest of the worksheet, making adjustments to basis only for events after your spouse's death.
your home was ever damaged as a result of a casualty	1	on line 8 of the worksheet, enter any amounts you spent to restore the home to its condition before the casualty.
	2	on line 11 enter: any insurance reimbursements you received (or expect to receive) for the loss, and any deductible casualty losses not covered by insurance.

generally the same as your spouse's adjusted basis just before the transfer. This also applies if your former spouse transferred his or her interest in the home to you incident to your divorce. Your basis in the half interest you already owned does not change. Your new basis in the home is the total of these two amounts.

Transfers before July 19, 1984. If you received your home before July 19, 1984, in exchange for your release of marital rights, your basis in the home is generally its fair market value at the time you received it.

More information. For more information on property received from a spouse or former spouse, see *Property Settlements* in Publication 504.

Home received as inheritance. If you inherited your home, your basis is its fair market value on the date of the decedent's death or the later alternate valuation date if that date was chosen by the personal representative for the estate. If an estate tax return was filed, the value listed for the property generally is your basis. If a federal estate tax return did not have to be filed, your basis in the home is the same as its appraised value at the date of death for purposes of state inheritance or transmission taxes.

Surviving spouse. If you are a surviving spouse and you owned your home jointly, your basis in the home will change. The new basis for the half interest that your spouse owned will be one-half of the fair market value on the date of death (or alternate valuation date). The basis in your half will remain one-half of the adjusted basis determined previously. Your new basis is the total of these two amounts.

Example. Your jointly owned home had an adjusted basis of $50,000 on the date of your spouse's death, and the fair market value on that date was $100,000. Your new basis in the home is $75,000 ($25,000 for one-half of the adjusted basis plus $50,000 for one-half of the fair market value).

Community property. In community property states (Arizona, California, Idaho, Louisiana, Nevada, New Mexico, Texas, Washington, and Wisconsin), each spouse is usually considered to own half of the community property. When either spouse dies, the fair market value of the community property generally becomes the basis of the entire property, including the part belonging to the surviving spouse. For this to apply, at least half the value of the community property interest must be includible in the decedent's gross estate, whether or not the estate must file a return.

For more information about community property, see Publication 555, *Community Property.*

Home received in trade. If you acquired your home in a trade for other property, the basis of your home is generally the fair market value of the other property at the time of the trade. If you traded one home for another, you have made a sale and purchase. In that case, you may have realized a gain. See *Trading homes,* earlier, for an example of figuring the gain.

More information. For more information about basis, get Publication 551.

Adjusted Basis

Adjusted basis is your basis ***increased*** or ***decreased*** by certain amounts.

To figure your adjusted basis, you can use *Worksheet 1*, shown later. A filled-in example of that worksheet is included in a comprehensive *Illustrated Example* later. *Table 1* on the next page explains how to use the worksheet in certain special situations.

Increases to basis. These include any:

1) Additions and other improvements that have a useful life of more than 1 year,
2) Special assessments for local improvements, and
3) Amounts you spent after a casualty to restore damaged property.

Decreases to basis. These include any:

1) Gain you postponed from the sale of a previous home before May 7, 1997,
2) Deductible casualty losses,
3) Insurance payments you received or expect to receive for casualty losses,
4) Payments you received for granting an easement or right-of-way,
5) Depreciation allowed or allowable if you used your home for business or rental purposes,
6) Residential energy credit (generally allowed from 1977 through 1987) claimed for the cost of energy improvements that you added to the basis of your home,
7) Adoption credit you claimed for improvements added to the basis of your home,
8) Nontaxable payments from an adoption assistance program of your employer that you used for improvements you added to the basis of your home,
9) First-time homebuyers credit (allowed to certain first-time buyers of a home in the District of Columbia), and
10) Energy conservation subsidy excluded from your gross income because you received it (directly or indirectly) from a public utility after 1992 to buy or install any energy conservation measure. An energy conservation measure is an installation or modification that is primarily designed either to reduce consumption of electricity or natural gas or to improve the management of energy demand for a home.

Improvements. These add to the value of your home, prolong its useful life, or adapt it to new uses. You add the cost of additions and other improvements to the basis of your property.

Examples. Putting a recreation room or another bathroom in your unfinished basement, putting up a new fence, putting in new plumbing or wiring, putting on a new roof, or paving your unpaved driveway are improvements. An addition to your house, such as a new deck, a sunroom, or a new garage, is also an improvement.

The following chart lists some other examples of improvements.

Additions Bedroom Bathroom Deck Garage Porch Patio	**Heating & Air Conditioning** Heating system Central air conditioning Furnace Duct work Central humidifier Filtration system
Lawn & Grounds Landscaping Driveway Walkway Fence Retaining wall Sprinkler system Swimming pool	**Plumbing** Septic system Water heater Soft water system Filtration system
Miscellaneous Storm windows, doors New roof Central vacuum Wiring upgrades Satellite dish Security system	**Interior Improvements** Built-in appliances Kitchen modernization Flooring Wall-to-wall carpeting
	Insulation Attic Walls, floor Pipes, ductwork

Improvements no longer part of home. Your home's adjusted basis does not include the cost of any improvements that are no longer part of the home.

Example. You put wall-to-wall carpeting in your home 15 years ago. Later, you replaced that carpeting with new wall-to-wall carpeting. The cost of the old carpeting you replaced is no longer part of your home's adjusted basis.

Repairs. These maintain your home in good condition but do not add to its value or prolong its life. You do not add their cost to the basis of your property.

Examples. Repainting your house inside or outside, fixing your gutters or floors, repairing leaks or plastering, and replacing broken window panes are examples of repairs.

Exception. The entire job is considered an improvement if items that would otherwise be considered repairs are done as part of an extensive remodeling or restoration of your home.

RECORDS

Recordkeeping. You should keep records to prove your home's adjusted basis. Ordinarily, you must keep records for 3 years after the due date for filing your return for the tax year in which you sold your home. But if you sold a home before May 7, 1997, and

Worksheet 1. **Adjusted Basis of Home Sold**

Caution: *See if any of the situations listed in* Table 1 *apply to you before you use this worksheet.*

1.	Enter the purchase price of the home sold. (If you filed Form 2119 when you originally acquired that home to postpone gain on the sale of a previous home before May 7, 1997, enter the adjusted basis of the new home from that Form 2119.)		**1.** ______
2.	Seller paid points for home bought after 1990. (See *Seller-paid points.*) Do not include any seller-paid points you already subtracted to arrive at the amount entered on line 1 above		**2.** ______
3.	Subtract line 2 from line 1		**3.** ______
4.	Settlement fees or closing costs. See *Settlement fees or closing costs.* If line 1 includes the adjusted basis of the new home from Form 2119, go to line 6.		
a.	Abstract and recording fees	**4a.** ______	
b.	Legal fees (including title search and preparing documents)	**4b.** ______	
c.	Surveys	**4c.** ______	
d.	Title insurance	**4d.** ______	
e.	Transfer or stamp taxes	**4e.** ______	
f.	Amounts that the seller owed that you agreed to pay (back taxes or interest, recording or mortgage fees, and sales commissions)	**4f.** ______	
g.	Other	**4g.** ______	
5.	Add lines 4a through 4g		**5.** ______
6.	Cost of additions and improvements. Do not include any additions and improvements included on line 1 above		**6.** ______
7.	Special tax assessments paid for local improvements, such as streets and sidewalks		**7.** ______
8.	Other increases to basis		**8.** ______
9.	Add lines 3, 5, 6, 7, and 8		**9.** ______
10.	Depreciation, related to the business use or rental of the home, claimed (or allowable)	**10.** ______	
11.	Other decreases to basis (see *Decreases to basis.*)	**11.** ______	
12.	Add lines 10 and 11		**12.** ______
13.	**ADJUSTED BASIS OF HOME SOLD**. Subtract line 12 from line 9. Enter here and on *Worksheet 2*, line 4		**13.** ______

Worksheet 2. **Gain (or Loss), Exclusion, and Taxable Gain**

Part 1 – Gain (or Loss) on Sale		
1.	Selling price of home	**1.** ______
2.	Selling expenses	**2.** ______
3.	Subtract line 2 from line 1	**3.** ______
4.	Adjusted basis of home sold (from *Worksheet 1*, line 13)	**4.** ______
5.	Subtract line 4 from line 3. This is the **gain (or loss)** on the sale. If this is a loss, stop here	**5.** ______
Part 2 – Exclusion and Taxable Gain		
6.	Enter any depreciation allowed or allowable on the property for periods after May 6, 1997. If none, enter zero	**6.** ______
7.	Subtract line 6 from line 5. (If the result is less than zero, enter zero.)	**7.** ______
8.	If you qualify to exclude gain on the sale, enter your maximum exclusion. (See *Maximum Amount of Exclusion* earlier.) If you do not qualify to exclude gain, enter -0-	**8.** ______
9.	Enter the smaller of line 7 or line 8. This is your **exclusion**	**9.** ______
10.	Subtract line 9 from line 5. This is your **taxable gain.** Report it as described under *Reporting the Gain* on page 16. If the amount on this line is zero, do not report the sale or exclusion on your tax return. **If the amount on line 6 is more than zero, complete line 11**	**10.** ______
11.	Enter the smaller of line 6 or line 10. Enter this amount on line 12 of the *Unrecaptured Section 1250 Gain Worksheet* in the instructions for Schedule D (Form 1040)	**11.** ______

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postponed tax on any gain, the basis of that home affects the basis of the new home you bought. Keep records proving the basis of both homes as long as they are needed for tax purposes.

The records you should keep include:

- Proof of the home's purchase price and purchase expenses,
- Receipts and other records for all improvements, additions, and other items that affect the home's adjusted basis,
- Any worksheets you used to figure the adjusted basis of the home you sold, the gain or loss on the sale, the exclusion, and the taxable gain,
- Any Form 2119, *Sale of Your Home*, that you filed to postpone gain from the sale of a previous home before May 7, 1997, and
- Any worksheets you used to prepare Form 2119, such as the *Adjusted Basis of Home Sold Worksheet* or the *Capital Improvements Worksheet* from the Form 2119 instructions.

Excluding the Gain

You may qualify to exclude from your income all or part of any gain from the sale of your main home. This means that, if you qualify, you will not have to pay tax on the gain up to the limit described under *Maximum Amount of Exclusion*, next. To qualify, you must meet the ownership and use tests described later.

You can choose not to take the exclusion by including the gain from the sale in your gross income on your tax return for the year of the sale. This choice can be made (or revoked) at any time before the expiration of a 3–year period beginning on the due date of your return (not including extensions) for the year of the sale.

You can use *Worksheet 2* to figure the amount of your exclusion and your taxable gain, if any.

Maximum Amount of Exclusion

You can exclude up to $250,000 of the gain on the sale of your main home if all of the following are true.

1) You meet the ownership test.
2) You meet the use test.
3) During the 2-year period ending on the date of the sale, you did not exclude gain from the sale of another home.

This exclusion also applies to the gain attributable to your interest in your main home if you are a joint owner, file a separate return, and the 3 items above are true.

You can exclude up to $500,000 of the gain on the sale of your main home if all of the following are true.

1) You are married and file a joint return for the year.
2) Either you or your spouse meets the ownership test.
3) Both you and your spouse meet the use test.
4) During the 2-year period ending on the date of the sale, neither you nor your spouse excluded gain from the sale of another home.

If either spouse does not satisfy all these requirements, the maximum exclusion that can be claimed by the couple is the total of the maximum exclusions that each spouse would qualify for if not married and the amounts were figured separately. For this purpose, each spouse is treated as owning the property during the period that either spouse owned the property.

Reduced Maximum Exclusion

You can claim an exclusion, but the maximum amount of gain you can exclude will be reduced if either of the following is true.

1) You did not meet the ownership and use tests, but the ***primary reason*** you sold the home was:
   a) A change in place of employment,
   b) Health, or
   c) Unforeseen circumstances, to the extent provided in regulations (as discussed below).
2) Your exclusion would have been disallowed because of the rule described in *More Than One Home Sold During 2-Year Period*, later, except that the primary reason you sold the home was:
   a) A change in place of employment,
   b) Health, or
   c) Unforeseen circumstances, to the extent provided in regulations (as discussed below).

Use *Worksheet 3* to figure your reduced maximum exclusion. When completing the worksheet, you can use either days or months (but not both) to figure your reduced maximum exclusion.

Primary reason. There are certain sets of facts and circumstances (safe harbors), described later, that will be treated as satisfying the primary reason test for the sale of a main home. If your home sale does not qualify under one of these safe harbors, factors that may be relevant in determining your primary reason for sale include the following.

1) Your financial ability to maintain your home materially changed.
2) The suitability of your property as a home materially changed.
3) The circumstances causing your sale were not reasonably foreseeable when you began using the property as your main home.

4) During the time you owned the property, you used it as your home.
5) The circumstances causing your sale occurred during the time you owned and used the property as your main home.
6) Your sale and the circumstances causing it were close in time.

Change in place of employment. The sale of your main home is because of a change in place of employment if your primary reason for the sale is a change in the location of employment of a qualified individual.

Qualified individual. For purposes of the reduced maximum exclusion, a qualified individual is any of the following.

- The taxpayer.
- The taxpayer's spouse.
- A co-owner of the residence.
- A person whose main home is the same as the taxpayer's.

Employment. For this purpose, employment includes the start of work with a new employer or continuation of work with the same employer. It also includes the start or continuation of self-employment.

Distance safe harbor. The primary reason for the sale of your main home is a change in place of employment if:

1) The change occurred during the period you owned and used the property as your main home, and
2) The new place of employment is at least 50 miles farther from your home than the former place of employment was.

Example. Justin was unemployed and living in a townhouse in Florida that he had owned and used as his main home since 2001. He got a job in North Carolina and sold his townhouse in 2002. Because the distance between Justin's new place of employment and the home he sold is at least 50 miles, the sale satisfies the conditions of the distance safe harbor. Justin's sale of his home is because of a change in place of employment and he is entitled to a reduced maximum exclusion of gain from the sale.

Health. The sale of your main home is because of health if your primary reason for the sale is to obtain, provide, or facilitate the diagnosis, cure, mitigation, or treatment of disease, illness, or injury of a qualified individual. For purposes of this reason, a qualified individual includes, in addition to the individuals listed earlier, any of the following:

- Parent, grandparent, stepmother, stepfather,
- Child, grandchild, stepchild, adopted child,
- Brother, sister, stepbrother, stepsister, half brother, half sister,
- Mother-in-law, father-in-law, brother-in-law, sister-in-law, son-in-law, or daughter-in-law,
- Uncle, aunt, nephew, or niece.

Example. In 2001, Chase and Lauren, husband and wife, bought a house that they used as their main home. Lauren's father has a chronic disease and is unable to care for himself. In 2002, Chase and Lauren sell their home in order to move into Lauren's father's house to provide care for him. Because the primary reason for the sale of their home was the health of a qualified individual, Chase and Lauren are entitled to a reduced maximum exclusion.

Doctor's recommendation safe harbor. The primary reason for the sale of your main home is because of health if, for one or more of the reasons listed at the beginning of this discussion, a doctor recommends a change of residence.

Unforeseen circumstances. The sale of your main home is because of an unforeseen circumstance if your primary reason for the sale is the occurrence of an event that you do not anticipate before purchasing and occupying your main home.

Specific event safe harbors. If the sale of your main home is because of any of the following events, the primary reason for your sale is an unforeseen circumstance and you are entitled to a reduced maximum exclusion.

1) An involuntary conversion of your home.
2) Natural or man-made disasters or acts of war or terrorism resulting in a casualty to your home, whether or not your loss is deductible.
3) In the case of qualified individuals (listed earlier under *Change in place of employment*):
   a) Death,
   b) Unemployment (if the individual is eligible for unemployment compensation),
   c) A change in employment or self-employment status that results in your (if you are the taxpayer) inability to pay reasonable basic living expenses (listed later under *Reasonable basic living expenses*),
   d) Divorce or legal separation, or
   e) Multiple births resulting from the same pregnancy.
4) An event the Commissioner of IRS determined to be an unforeseen circumstance to the extent provided in published guidance and rulings. (See *September 11, 2001, terrorists attacks,* next.)

September 11, 2001, terrorist attacks. Recently, the IRS issued a notice explaining the circumstances under which these terrorist attacks qualify as unforeseen circumstances for the purpose of claiming a reduced maximum exclusion. The notice provides that a taxpayer can claim a reduced maximum exclusion of gain on a sale of the taxpayer's main home because of unforeseen circumstances if the taxpayer sells the home as a result of being affected by the September 11, 2001, terrorist attacks in one or more of the following ways.

1) A ***qualified individual*** (as defined below) was killed.
2) A qualified individual lost employment and became eligible for unemployment compensation (as defined by federal law).
3) A qualified individual experienced a change in employment or self-employment that resulted in the taxpayer's inability to pay ***reasonable basic living expenses*** (as defined below) for the taxpayer's household.
4) The taxpayer's main home was damaged (even if the taxpayer is entitled to a casualty loss deduction).

Qualified individual. The term "qualified individual" means, as of September 11, 2001, any of the following.

- The taxpayer.
- The taxpayer's spouse.
- A co-owner of the home.
- A person whose main home is the same as the taxpayer's.

Reasonable basic living expenses. Reasonable basic living expenses for the taxpayer's household include the following expenses.

- Amounts spent for food.
- Amounts spent for clothing.
- Housing and related expenses.
- Medical expenses.
- Transportation expenses.
- Tax payments.
- Court-ordered payments.
- Expenses reasonably necessary to produce income.

Amounts spent on these items to maintain an affluent or luxurious standard of living are not reasonable basic living expenses.

2001 home sales. Taxpayers affected by the September 11, 2001, terrorist attacks who qualify for a reduced maximum exclusion of gain on a 2001 sale of their main home can claim the exclusion on their 2001 return. Taxpayers who have filed their return for 2001 can file an amended return to claim the exclusion.

More Than One Home Sold During 2-Year Period

You cannot exclude gain on the sale of your home if, during the 2-year period ending on the date of the sale, you sold another home at a gain and excluded all or part of that

Worksheet 3. **Reduced Maximum Exclusion**

Caution: *Complete this worksheet only if you qualify for a reduced maximum exclusion. (See* Reduced Maximum Exclusion *earlier.) Complete column (B) only if you are married filing a joint return.*			(A) You	(B) Your Spouse
1.	Maximum amount	**1.**	$250,000.00	$250,000.00
2a.	Enter the number of days (or months) that you used the property as a main home during the 5-year period ending on the date of sale. (If married filing jointly, fill in columns (A) and (B))	**2a.**		
b.	Enter the number of days (or months) that you owned the property during the 5-year period ending on the date of sale. (If married filing jointly and one spouse owned the property longer than the other spouse, both spouses are treated as owning the property for the longer period)	**b.**		
c.	Enter the smaller of line 2a or 2b	**c.**		
3.	Have you (or your spouse if filing jointly) excluded gain from the sale of another home during the 2-year period ending on the date of this sale? **NO.** Skip line 3 and enter the number of days (or months) from line 2c on line 4. **YES.** Enter the number of days (or months) between the date of the most recent sale of another home on which you excluded gain and the date of sale of this home	**3.**		
4.	Enter the smaller of line 2c or 3	**4.**		
5.	Divide the amount on line 4 by 730 days (or 24 months). Enter the result as a decimal (rounded to at least 3 places). But do not enter an amount greater than 1.000	**5.**		
6.	Multiply the amount on line 1 by the decimal amount on line 5	**6.**		
7.	Add the amounts in columns (A) and (B) of line 6. This is your **reduced maximum exclusion**. Enter it here and on *Worksheet 2*, line 8	**7.**		

gain. If you cannot exclude the gain, you must include it in your income.

However, you can still claim an exclusion if you sold the home due to:

1) A change in place of employment,
2) Health, or
3) Unforeseen circumstances, to the extent provided in regulations (as discussed earlier).

The maximum amount you can exclude is reduced. See *Reduced Maximum Exclusion,* earlier.

Example 1. In September 2000, Paul and Nadine bought a new home. In November 2000, they sold their old home at a $40,000 gain. They had owned and lived in the old home for 4 years. They excluded the gain on the sale.

On October 1, 2002, Paul and Nadine sold the home they purchased in September 2000 at a $15,000 gain. The sale was not due to a change in place of employment or health. Because Paul and Nadine had excluded gain on the sale of another home within the 2-year period ending on October 1, 2002, they cannot exclude the gain on this sale.

Example 2. The facts are the same as in *Example 1* except that Paul and Nadine did not sell the home purchased in September 2000 until December 3, 2002. Because they had not excluded gain on the sale of another home within the 2-year period ending on December 3, 2002, they can exclude the gain on this sale.

Ownership and Use Tests

To claim the exclusion, you must meet the ownership and use tests. This means that during the ***5-year period*** ending on the date of the sale, you must have:

1) ***Owned*** the home for at least ***2 years*** (the ownership test), ***and***
2) ***Lived in*** the home as your main home for at least ***2 years*** (the use test).

Exception. If you owned and lived in the property as your main home for less than 2 years, you can still claim an exclusion in some cases. The maximum amount you can exclude will be reduced. See *Reduced Maximum Exclusion,* earlier.

Example 1 — met use test but not ownership test. From 1993 through August 2001 Donna lived with her parents in a house that her parents owned. On September 1, 2001, she bought this house from her parents. She continued to live there until December 14, 2002, when she sold it at a gain. Although Donna ***lived in*** the property as her main home for more than 2 years, she did not ***own*** it for the required 2 years. She cannot exclude any part of her gain on the sale, unless she sold the property due to a change in place of employment or health.

Example 2 — change in place of employment. Amanda, who is single, bought her first home in August 2000. In December 2001 the company she worked for notified her that she would be transferred to another town in 2002. She continued to live in the home until June 2002, when she sold it at a gain and moved to the new town. Because she owned and lived in the home less than 2 years, she does not meet the ownership and use tests. However, she qualifies to exclude gain because she sold the home due to a change in place of employment. She can use *Worksheet 3,* shown earlier, to figure the maximum amount of gain she can exclude. It will be less than $250,000.

Period of Ownership and Use

The required 2 years of ownership and use during the 5-year period ending on the date of the sale do not have to be continuous.

You meet the tests if you can show that you owned and lived in the property as your main home for either 24 full months or 730 days (365 × 2) during the 5-year period ending on the date of sale.

Example. Susan bought and moved into a house in July 1998. She lived there for 13 months and then moved in with a friend. She moved back into her own house in 2001 and lived there for 12 months until she sold it in July 2002. Susan meets the ownership and use tests because, during the 5-year period ending on the date of sale, she owned the house for 4 years and lived in it for a total of 25 months.

Temporary absence. Short temporary absences for vacations or other seasonal absences, even if you rent out the property during the absences, are counted as periods of use.

Example. Professor Paul Beard, who is single, bought and moved into a house on August 28, 1999. He lived in it as his main home continuously until January 5, 2001, when he went abroad for a 1-year sabbatical leave. During part of the period of leave, the house was unoccupied, and during the rest of the period, he rented it. On January 5, 2002, he sold the house at a gain. Because his leave was not a short temporary absence, he cannot include the period of leave to meet the 2-year use test. He cannot exclude any part of his gain, unless he sold the house due to a change in place of employment or health. Even if he did sell the house due to a change in place of employment or health, he cannot exclude the part of the gain equal to the depreciation he claimed or should have claimed while renting the house. See *Depreciation after May 6, 1997,* later.

Ownership and use tests met at different times. You can meet the ownership and use tests during different 2-year periods. However, you must meet both tests during the 5-year period ending on the date of the sale.

Example. In 1993, Helen Jones lived in a rented apartment. The apartment building was later changed to a condominium, and she bought her apartment on December 1, 1999. In 2000, Helen became ill and on April 14 of that year she moved to her daughter's home. On July 10, 2002, while still living in her daughter's home, she sold her apartment.

Helen can exclude gain on the sale of her apartment because she met the ownership and use tests. Her 5-year period is from July 11, 1997, to July 10, 2002, the date she sold the apartment. She owned her apartment from December 1, 1999, to July 10, 2002 (more than 2 years). She lived in the apartment from July 11, 1997 (the beginning of the 5-year period), to April 14, 2000 (more than 2 years).

Cooperative apartment. If you sold stock in a cooperative housing corporation, the ownership and use tests are met if, during the 5-year period ending on the date of sale, you:

1) Owned the stock for at least 2 years, and
2) Lived in the house or apartment that the stock entitles you to occupy as your main home for at least 2 years.

Exception for individuals with a disability. There is an exception to the use test if, during the 5-year period before the sale of your home:

1) You become physically or mentally unable to care for yourself, and
2) You owned and lived in your home as your main home for a total of at least 1 year.

Under this exception, you are considered to live in your home during any time that you own the home and live in a facility (including a nursing home) that is licensed by a state or political subdivision to care for persons in your condition.

If you meet this exception to the use test, you still have to meet the 2-out-of-5-year ownership test to claim the exclusion.

Gain postponed on sale of previous home. For the ownership and use tests, you may be able to add the time you owned and lived in a previous home to the time you lived in the home on which you wish to exclude gain. You can do this if you postponed all or part of the gain on the sale of the previous home (under rules in effect before May 7, 1997) because of buying the home on which you wish to exclude gain.

Previous home destroyed or condemned. For the ownership and use tests, you add the time you owned and lived in a previous home that was destroyed or condemned to the time you owned and lived in the home on which you wish to exclude gain. This rule applies if any part of the basis of the home you sold depended on the basis of the destroyed or condemned home. Otherwise, you must have owned and lived in the ***same*** home for 2 of the 5 years before the sale to qualify for the exclusion.

Married Persons

If you and your spouse file a joint return for the year of sale, you can exclude gain if either spouse meets the ownership and use tests. (But see *Maximum Amount of Exclusion,* earlier.)

Example 1 — one spouse sells a home. Emily sells her home in June 2002. She marries Jamie later in the year. She meets the ownership and use tests, but Jamie does not. Emily can exclude up to $250,000 of gain on a separate or joint return for 2002.

Example 2 — each spouse sells a home. The facts are the same as in *Example 1* except that Jamie also sells a home in 2002. He meets the ownership and use tests on his home. Emily and Jamie can each exclude up to $250,000 of gain.

Death of spouse before sale. If your spouse died before the date of sale, you are considered to have owned and lived in the property as your main home during any period of time when your spouse owned and lived in it as a main home.

Home transferred from spouse. If your home was transferred to you by your spouse (or former spouse if the transfer was incident to divorce), you are considered to have owned it during any period of time when your spouse owned it.

Use of home after divorce. You are considered to have used property as your main home during any period when:

1) You owned it, and
2) Your spouse or former spouse is allowed to live in it under a divorce or separation instrument.

Business Use or Rental of Home

You may be able to exclude your gain from the sale of a home that you have used for business or to produce rental income. But you must meet the ownership and use tests.

Example 1. On May 30, 1996, Amy bought a house. She moved in on that date and lived in it until May 31, 1998, when she moved out of the house and put it up for rent. The house was rented from June 1, 1998, to March 31, 2000. Amy moved back into the house on April 1, 2000, and lived there until she sold it on January 31, 2002. During the 5-year period ending on the date of the sale (February 1, 1997 – January 31, 2002), Amy owned and lived in the house for more than 2 years as shown in the table below.

Five Year Period	Used as Home	Used as Rental
2/1/97 – 5/31/98	16 months	
6/1/98 – 3/31/00		22 months
4/1/00 – 1/31/02	22 months	
	38 months	22 months

Amy can exclude gain up to $250,000. However, she cannot exclude the part of the gain equal to the depreciation she claimed, or should have claimed, for renting the house, as explained after *Example 2.*

Example 2. William owned and used a house as his main home from 1996 through 1999. On January 1, 2000, he moved to another state. He rented his house from that date until April 30, 2002, when he sold it. During the 5-year period ending on the date of sale (May 1, 1997 – April 30, 2002), William owned and lived in the house for 32 months (more than 2 years). He can exclude gain up to $250,000. However, he cannot exclude the part of the gain equal to the depreciation he claimed, or should have claimed, for renting the house, as explained next.

Depreciation after May 6, 1997. If you were entitled to take depreciation deductions because you used your home for business purposes or as rental property, you cannot exclude the part of your gain equal to any depreciation allowed or allowable as a deduction for periods after May 6, 1997. This gain is reported on Form 4797. If you can show by adequate records or other evidence that the depreciation deduction allowed was less than the amount allowable, the amount you cannot exclude is the amount allowed.

Non-residential use within the home. If the part of your property used for non-residential purposes is within your home, such as a room used as a home office for a business, you are treated as satisfying the use test for the entire property for purposes of the exclusion whether or not you were entitled to claim any depreciation deductions. No allocation of basis and amount realized from the sale is required, but the gain subject to exclusion does not include any gain that must be reported on Form 4797 because of depreciation deductions allowed or allowable after May 6, 1997. See *Property used partly as your home and partly for business or rental during the year of sale,* later.

Example. Ray sold his main home in 2002 at a $30,000 gain. He meets the ownership and use tests to exclude the gain from his income. However, he used part of the home for business in 2001 and claimed $500 depreciation. He can exclude $29,500 ($30,000 – $500) of his gain. He has a taxable gain of $500 **that must be reported on Form 4797**.

Property used partly as your home and partly for business or rental during the year of sale. In the year of sale you may have used part of your property as your home and part of it for business or to produce income. Examples are:

- A working farm on which your house was located,
- An apartment building in which you lived in one unit and rented the others, **or**
- A store building with an upstairs apartment in which you lived

If you sell the entire property, you should consider the transaction as the sale of two properties. The sale of the part of your property used for business or rental is reported on Form 4797.

To determine the amounts to report on Form 4797, you must divide your selling price, selling expenses, and basis between the part of the property used for business or rental and the part used as your home. In the same way, if you qualify to exclude any of the gain on the business or rental part of your home, also divide your maximum exclusion between that part of the property and the part used as your home. If you want to use *Worksheet 2* (shown earlier) to figure your exclusion and taxable gain from each part, fill out a separate *Worksheet 2 (Part 2)* for each.

Excluding gain on the business or rental part of your home. You generally can exclude gain on the part of your home used for business or rental ***if*** you owned and lived in that part of the home for at least 2 years during the 5-year period ending on the date of the sale. If you used a separate *Worksheet 2 (Part 2)* to figure the exclusion for the business or rental part, do not fill out lines 10 and 11 of that *Worksheet 2*. Fill it out only through line 9. Then fill out Form 4797. Enter the exclusion for the business or rental part on Form 4797 as explained in the Form 4797 instructions. (Also see *Example*, below.) If you use Part IV of Schedule D (Form 1040) to figure your tax, first fill out the *Unrecaptured Section 1250 Gain Worksheet* in the Schedule D instructions.

Example. You sold your home on November 1, 2002. You had bought the home in 1992 and had owned and lived in it the entire 5-year period ending on the date of sale. For the first 2½ years of that period, you used the entire house as your main home. For the last 2½ years, you used ¾ (75%) of the house as your main home and ¼ (25%) of the house for business. Your records show:

Purchase price	$ 80,000
Depreciation (on business part; all after 5/7/1997)	1,363
Selling price	160,000
Selling expenses	10,000

Because you meet the ownership and use tests for the entire house, you can claim the exclusion for both the home and business parts. You start by finding the adjusted basis of each part. You determine that three-fourths (75%) of your purchase price was for the part used as your home; one-fourth (25%) was for the part used for business.

	Personal (3/4)	Business (1/4)
Purchase price	$60,000	$20,000
Minus: Depreciation	–0–	1,363
Adjusted basis	$60,000	$18,637

Next, you figure the gain on each part, dividing your selling price and selling expenses between the two parts.

	Personal (3/4)	Business (1/4)
Selling price	$120,000	$40,000
Minus: Selling expenses	7,500	2,500
	112,500	37,500
Minus: Adjusted basis	60,000	18,637
Gain	$ 52,500	$18,863

Then, to figure your taxable gain and exclusion on each part, you decide to fill out a separate *Worksheet 2 (Part 2)* for each part, dividing your maximum exclusion between the two parts. You are single, so the maximum exclusion is $250,000.

	Personal (3/4)	Business (1/4)
Part 2 – Exclusion and Taxable Gain		
6) Depreciation allowed or allowable after May 6, 1997	$–0–	$1,363
7) Subtract line 6 from gain figured above	52,500	17,500
8) Maximum exclusion	$187,500	$62,500
9) Exclusion (smaller of line 7 or line 8)	52,500	17,500
10) Taxable gain (gain figured above minus line 9)	–0–	*
11) Smaller of line 6 or line 10	–0–	*

* Lines 10 and 11 do not need to be filled out for the business part.

Do not report the gain from the part used as your home, because you can exclude all of it. You report the gain from the business part ($18,863) in Part III of Form 4797. You enter your exclusion ($17,500) on line 2 of Form 4797. Your taxable gain from the business part is $1,363 ($18,863 – $17,500).

Special Situations

The situations that follow may affect your exclusion.

Expatriates. You cannot claim the exclusion if the expatriation tax applies to you. The expatriation tax applies to U.S. citizens who have renounced their citizenship (and long-term residents who have ended their residency) if one of their principal purposes was to avoid U.S. taxes. See chapter 4 of Publication 519, *U.S. Tax Guide for Aliens,* for more information about expatriation tax.

Home destroyed or condemned. If your home was destroyed or condemned, any gain (for example, because of insurance proceeds you received) qualifies for the exclusion.

Any part of the gain that cannot be excluded (because it is more than the limit) may be postponed under the rules explained in:

- Publication 547, in the case of a home that was destroyed, or
- Chapter 1 of Publication 544, in the case of a home that was condemned.

Sale of remainder interest. Subject to the other rules in this publication, you can choose to exclude gain from the sale of a remainder interest in your home. If you make this choice, you cannot choose to exclude gain from your sale of any other interest in the home that you sell separately.

Exception for sales to related persons. You cannot exclude gain from the sale of a remainder interest in your home to a related person. Related persons include your brothers and sisters, half-brothers and half-sisters, spouse, ancestors (parents, grandparents, etc.), and lineal descendants (children, grandchildren, etc.). Related persons also include certain corporations, partnerships, trusts, and exempt organizations.

Reporting the Gain

Do ***not*** report the 2002 sale of your main home on your tax return ***unless:***

- You have a gain and you do not qualify to exclude all of it, or
- You have a gain and choose not to exclude it.

If you have any taxable gain on the sale of your main home that cannot be excluded, report the entire gain realized (line 5 of *Worksheet 2*) on Schedule D (Form 1040). Report it on line 1 or line 8 of Schedule D, depending on how long you owned the home. If you qualify for an exclusion (line 9 of *Worksheet 2*), show it on the line directly below the line on which you report the gain. Write "Section 121 exclusion" in column (a) of that line and show the amount of the exclusion in column (f) as a loss (in parentheses).

If you used the home for business or to produce rental income during the year of sale, you must use Form 4797 to report the sale of the business or rental part (or the sale of the entire property if used entirely for business or rental in that year). See *Business Use or Rental of Home,* earlier.

Installment sale. Some sales are made under arrangements that provide for part or all of the selling price to be paid in a later year. These sales are called "installment sales." If you finance the buyer's purchase of your home yourself, instead of having the buyer get a loan or mortgage from a bank, you probably have an installment sale. You may be able to report the part of the gain you cannot exclude on the installment basis.

Use Form 6252, *Installment Sale Income*, to report the sale. Enter your exclusion (line 9 of *Worksheet 2*) on line 15 of Form 6252.

Seller-financed mortgage. If you sell your home and hold a note, mortgage, or other financial agreement, the payments you receive generally consist of both interest and principal. You must report the interest you receive as part of each payment separately as interest income. If the buyer of your home uses the property as a main or second home, you must also report the name, address, and social security number (SSN) of the buyer on line 1 of either Schedule B (Form 1040) or Schedule 1 (Form 1040A). The buyer must give you his or her SSN and you must give the buyer your SSN. Failure to meet these requirements may result in a $50 penalty for each failure. If you or the buyer does not have and is not eligible to get an SSN, see the next discussion.

Individual taxpayer identification number (ITIN). If either you or the buyer of your home is a nonresident or resident alien who does not have and is not eligible to get an SSN, the IRS will issue you (or the buyer) an ITIN. To apply for an ITIN, file Form W–7, *Application for IRS Individual Taxpayer Identification Number*, with the IRS.

If you have to include the buyer's SSN on your return and the buyer does not have and cannot get an SSN, enter the buyer's ITIN. If you have to give an SSN to the buyer and you do not have and cannot get one, give the buyer your ITIN.

An ITIN is for tax use only. It does not entitle the holder to social security benefits or change the holder's employment or immigration status under U.S. law.

More information. For more information on installment sales, see Publication 537, *Installment Sales.*

Illustrated Example

Emily White, a single person, bought a home in 1991. She lived in the home until May 31, 2000, when she moved out of the house and put it up for rent. Emily rented her home until May 31, 2001. She moved back into the house and lived there until she sold it on January 10, 2002.

Emily can exclude gain on the sale of her home because she owned and lived in the home for at least 2 years of the 5-year period ending on the date of the sale.

Emily's records show the following:

1) Original cost	$ 50,000
2) Legal fees for title search	750
3) Back taxes paid for prior owner	1,500
4) Improvements (deck)	2,000
5) Selling price	195,000
6) Commission and expenses of sale	15,000
7) Depreciation claimed after May 6, 1997	1,642

Emily uses *Worksheet 1* to figure the adjusted basis of the home she sold ($52,608). She uses *Worksheet 2* to figure the gain on the sale ($127,392) and the amount of her exclusion ($125,750). Emily cannot exclude $1,642, the part of her gain equal to the depreciation deduction claimed while the house was rented.

Emily reports her gain and exclusion in Part II of Schedule D (Form 1040). She enters $1,642 on line 12 of the *Unrecaptured Section 1250 Gain Worksheet* in the Schedule D (Form 1040) instructions. She has no gains or losses from the sale of property other than the gain from the sale of her home so, after completing that worksheet, she also enters $1,642 on line 19 of Schedule D. She then figures her tax using Part IV of Schedule D.

Emily's completed *Worksheets 1* and *2* and the front page of her Schedule D appear on pages 18 and 19. Page 2 of Schedule D and her *Unrecaptured Section 1250 Gain Worksheet* are not shown.

Worksheet 1. **Adjusted Basis of Home Sold**

Caution: *See if any of the situations listed in* Table 1 *apply to you before you use this worksheet.*

1.	Enter the purchase price of the home sold. (If you filed Form 2119 when you originally acquired that home to postpone gain on the sale of a previous home before May 7, 1997, enter the adjusted basis of the new home from that Form 2119.)			**1.**	$50,000
2.	Seller paid points for home bought after 1990. (See *Seller-paid points.*) Do not include any seller-paid points you already subtracted to arrive at the amount entered on line 1 above			**2.**	
3.	Subtract line 2 from line 1			**3.**	50,000
4.	Settlement fees or closing costs. See *Settlement fees or closing costs.* If line 1 includes the adjusted basis of the new home from Form 2119, go to line 6.				
a.	Abstract and recording fees	**4a.**			
b.	Legal fees (including title search and preparing documents)	**4b.**	750		
c.	Surveys	**4c.**			
d.	Title insurance	**4d.**			
e.	Transfer or stamp taxes	**4e.**			
f.	Amounts that the seller owed that you agreed to pay (back taxes or interest, recording or mortgage fees, and sales commissions)	**4f.**	1,500		
g.	Other	**4g.**			
5.	Add lines 4a through 4g			**5.**	2,250
6.	Cost of additions and improvements. Do not include any additions and improvements included on line 1 above			**6.**	2,000
7.	Special tax assessments paid for local improvements, such as streets and sidewalks			**7.**	
8.	Other increases to basis			**8.**	
9.	Add lines 3, 5, 6, 7, and 8			**9.**	54,250
10.	Depreciation, related to the business use or rental of the home, claimed (or allowable)	**10.**	1,642		
11.	Other decreases to basis (see *Decreases to basis,* earlier.)	**11.**			
12.	Add lines 10 and 11			**12.**	1,642
13.	**ADJUSTED BASIS OF HOME SOLD**. Subtract line 12 from line 9. Enter here and on *Worksheet 2,* line 4			**13.**	$52,608

Worksheet 2. **Gain (or Loss), Exclusion, and Taxable Gain**

Part 1 – Gain (or Loss) on Sale			
1.	Selling price of home	**1.**	$195,000
2.	Selling expenses	**2.**	15,000
3.	Subtract line 2 from line 1	**3.**	180,000
4.	Adjusted basis of home sold (from *Worksheet 1,* line 13)	**4.**	52,608
5.	Subtract line 4 from line 3. This is the **gain (or loss)** on the sale. If this is a loss, stop here	**5.**	127,392
Part 2 – Exclusion and Taxable Gain			
6.	Enter any depreciation allowed or allowable on the property for periods after May 6, 1997. If none, enter zero	**6.**	1,642
7.	Subtract line 6 from line 5. (If the result is less than zero, enter zero.)	**7.**	125,750
8.	If you qualify to exclude gain on the sale, enter your maximum exclusion. (See *Maximum Amount of Exclusion.*) If you do not qualify to exclude gain, enter -0-	**8.**	250,000
9.	Enter the smaller of line 7 or line 8. This is your **exclusion**	**9.**	125,750
10.	Subtract line 9 from line 5. This is your **taxable gain**. Report it as described under *Reporting the Gain* on page 16. If the amount on this line is zero, do not report the sale or exclusion on your tax return. **If the amount on line 6 is more than zero, complete line 11**	**10.**	1,642
11.	Enter the smaller of line 6 or line 10. Enter this amount on line 12 of the *Unrecaptured Section 1250 Gain Worksheet* in the instructions for Schedule D (Form 1040)	**11.**	$1,642

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SCHEDULE D (Form 1040)

Department of the Treasury
Internal Revenue Service

Capital Gains and Losses

► Attach to Form 1040. ► See Instructions for Schedule D (Form 1040).
► Use Schedule D-1 to list additional transactions for lines 1 and 8.

OMB No. 1545-0074
2002
Attachment Sequence No. 12

Name(s) shown on Form 1040: Emily White
Your social security number: 000 00 0000

Part I Short-Term Capital Gains and Losses—Assets Held One Year or Less

(a) Description of property (Example: 100 sh. XYZ Co.)	(b) Date acquired (Mo., day, yr.)	(c) Date sold (Mo., day, yr.)	(d) Sales price (see page D-5 of the instructions)	(e) Cost or other basis (see page D-5 of the instructions)	(f) Gain or (loss) Subtract (e) from (d)
1					
2 Enter your short-term totals, if any, from Schedule D-1, line 2 2					
3 Total short-term sales price amounts. Add lines 1 and 2 in column (d) . . . 3					
4 Short-term gain from Form 6252 and short-term gain or (loss) from Forms 4684, 6781, and 8824 . . . 4					
5 Net short-term gain or (loss) from partnerships, S corporations, estates, and trusts from Schedule(s) K-1 . . . 5					
6 Short-term capital loss carryover. Enter the amount, if any, from line 8 of your 2001 Capital Loss Carryover Worksheet . . . 6					( )
7 **Net short-term capital gain or (loss).** Combine lines 1 through 6 in column (f). 7					

Part II Long-Term Capital Gains and Losses—Assets Held More Than One Year

(a) Description of property (Example: 100 sh. XYZ Co.)	(b) Date acquired (Mo., day, yr.)	(c) Date sold (Mo., day, yr.)	(d) Sales price (see page D-5 of the instructions)	(e) Cost or other basis (see page D-5 of the instructions)	(f) Gain or (loss) Subtract (e) from (d)	(g) 28% rate gain or (loss) * (see instr. below)
8 main home	9/3/91	1/10/02	180,000	52,608	127,392	
section 121 exclusion					(125,750)	
9 Enter your long-term totals, if any, from Schedule D-1, line 9 9						
10 Total long-term sales price amounts. Add lines 8 and 9 in column (d) . . . 10			180,000			
11 Gain from Form 4797, Part I; long-term gain from Forms 2439 and 6252; and long-term gain or (loss) from Forms 4684, 6781, and 8824 . . . 11						
12 Net long-term gain or (loss) from partnerships, S corporations, estates, and trusts from Schedule(s) K-1. . . . 12						
13 Capital gain distributions. See page D-1 of the instructions . . . 13						
14 Long-term capital loss carryover. Enter in both columns (f) and (g) the amount, if any, from line 13 of your 2001 Capital Loss Carryover Worksheet . . . 14					( )	( )
15 Combine lines 8 through 14 in column (g) . . . 15						
16 **Net long-term capital gain or (loss).** Combine lines 8 through 14 in column (f) 16 **Next:** Go to Part III on the back.					1,642	

*28% rate gain or loss includes **all** "collectibles gains and losses" (as defined on page D-6 of the instructions) and up to 50% of the eligible gain on qualified small business stock (see page D-4 of the instructions).

For Paperwork Reduction Act Notice, see Form 1040 instructions. Cat. No. 11338H **Schedule D (Form 1040) 2002**

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Real Estate and Transfer Taxes

When you sell your main home, treat real estate and transfer taxes on that home as discussed in this section.

Real estate taxes. You and the buyer must deduct the real estate taxes on your home for the year of sale according to the number of days in the real property tax year that each owned the home.

- ***You*** are treated as paying the taxes up to, but not including, the date of sale. You can deduct these taxes as an itemized deduction on Schedule A (Form 1040) in the year of sale. It does not matter what part of the taxes you actually paid.
- ***The buyer*** is treated as paying the taxes beginning with the date of sale.

If the buyer paid your share of the taxes (or any delinquent taxes you owed), the payment increases the selling price of your home. The buyer adds the amount paid to his or her basis in the property.

Example. The tax on Dennis and Beth White's home was $620 for the year. Their real property tax year was the calendar year, with payment due August 1. They sold the home on May 7. Dennis and Beth are considered to have paid a proportionate share of the real estate taxes on the home even though they did not actually pay them to the taxing authority.

Dennis and Beth owned their home during the real property tax year for 126 days (January 1 to May 6, the day before the sale). They figure their deduction for taxes as follows.

1.	Enter the total real estate taxes for the real property tax year	$620
2.	Enter the number of days in the real property tax year that you owned the property	126
3.	Divide line 2 by 365	.345
4.	Multiply line 1 by line 3. This is your deduction. Enter it on line 6 of Schedule A (Form 1040)	$214

Since the buyers paid all of the taxes, Dennis and Beth also include the $214 in the home's selling price. The buyers add the $214 to their basis in the home. The buyers can deduct $406 ($620 - $214), the taxes for the part of the year they owned the home.

Form 1099–S. If the person responsible for closing the sale (generally the settlement agent) must file Form 1099–S, the information reported on the form to you and the IRS must include (in box 5) the part of any real estate tax that the buyer can deduct. If you actually paid the taxes for the year of sale, you must subtract the amount shown in box 5 of Form 1099–S from the amount you paid. The result is the amount you can deduct.

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More information. For more information about real estate taxes, see Publication 530.

Transfer taxes. You cannot deduct transfer taxes, stamp taxes, and other incidental taxes and charges on the sale of a home as itemized deductions. However, if you pay these amounts as the seller of the property, they are expenses of the sale and reduce the amount you realize on the sale. If you pay these amounts as the buyer, include them in your cost basis of the property.

Recapture of Federal Subsidy

If you financed your home under a federally subsidized program (loans from tax-exempt qualified mortgage bonds or loans with mortgage credit certificates), you may have to recapture all or part of the benefit you received from that program when you sell or otherwise dispose of your home. You recapture the benefit by increasing your federal income tax for the year of the sale. You may have to pay this recapture tax even if you can exclude your gain from income under the rules discussed earlier; that exclusion does not affect the recapture tax.

Loans subject to recapture rules. The recapture applies to loans that:

1) Came from the proceeds of qualified mortgage bonds, or
2) Were based on mortgage credit certificates.

The recapture also applies to assumptions of these loans.

Federal subsidy benefit. If you received a mortgage loan from the proceeds of a tax-exempt bond, you received the benefit of a lower interest rate than was customarily charged on other mortgage loans. If you received a mortgage credit certificate with your mortgage loan, you were able to reduce your federal income taxes by a mortgage interest tax credit. Both of these benefits are federal mortgage subsidies.

Sale or other disposition. The sale or other disposition of your home includes an exchange, involuntary conversion, or any other disposition.

For example, if you ***give away*** your home (other than to your spouse or ex-spouse incident to divorce), you are considered to have "sold" it. You figure your recapture tax as if you had sold your home for its fair market value on the date you gave it away.

When the recapture applies. The recapture of the federal mortgage subsidy applies only if you meet ***both*** of the following conditions.

1) You sell or otherwise dispose of your home:
   a) At a gain, and
   b) During the first 9 years after the date you closed your mortgage loan.

2) Your income for the year of disposition is more than that year's adjusted qualifying income for your family size for that year (related to the income requirements a person must meet to qualify for the federally subsidized program).

When recapture does not apply. The recapture does ***not*** apply if any of the following situations apply to you:

- Your mortgage loan was a qualified home improvement loan of not more than $15,000,
- The home is disposed of as a result of your death,
- You dispose of the home more than 9 years after the date you closed your mortgage loan,
- You transfer the home to your spouse, or to your former spouse incident to a divorce, where no gain is included in your income,
- You dispose of the home at a loss,
- Your home is destroyed by a casualty, and you repair it or replace it on its original site within 2 years after the end of the tax year when the destruction happened, or
- You refinance your mortgage loan (unless you later meet the conditions listed previously under *When the recapture applies*).

Notice of amounts. At or near the time of settlement of your mortgage loan, you should receive a notice that provides the federally subsidized amount and other information you will need to figure your recapture tax.

How to figure and report the recapture. The recapture tax is figured on **Form 8828.** If you sell your home and your mortgage loan is subject to the recapture rules, you must file Form 8828 even if you do not owe a recapture tax. Attach Form 8828 to your Form 1040. For more information, see Form 8828 and its instructions.

How To Get Tax Help

You can get help with unresolved tax issues, order free publications and forms, ask tax questions, and get more information from the IRS in several ways. By selecting the method that is best for you, you will have quick and easy access to tax help.

Contacting your Taxpayer Advocate. If you have attempted to deal with an IRS problem unsuccessfully, you should contact your Taxpayer Advocate.

The Taxpayer Advocate represents your interests and concerns within the IRS by protecting your rights and resolving problems that have not been fixed through normal channels. While Taxpayer Advocates cannot change the tax law or make a technical tax decision, they can clear up problems that resulted from previous contacts and ensure that your case is given a complete and impartial review.

To contact your Taxpayer Advocate:

- Call the Taxpayer Advocate at **1–877–777–4778.**
- Call, write, or fax the Taxpayer Advocate office in your area.
- Call **1–800–829–4059** if you are a TTY/TDD user.

For more information, see Publication 1546, *The Taxpayer Advocate Service of the IRS.*

Free tax services. To find out what services are available, get Publication 910, *Guide to Free Tax Services.* It contains a list of free tax publications and an index of tax topics. It also describes other free tax information services, including tax education and assistance programs and a list of TeleTax topics.

Personal computer. With your personal computer and modem, you can access the IRS on the Internet at **www.irs.gov**. While visiting our web site, you can:

- See answers to frequently asked tax questions or request help by e-mail.
- Download forms and publications or search for forms and publications by topic or keyword.
- Order IRS products on-line.
- View forms that may be filled in electronically, print the completed form, and then save the form for recordkeeping.
- View Internal Revenue Bulletins published in the last few years.
- Search regulations and the Internal Revenue Code.
- Receive our electronic newsletters on hot tax issues and news.
- Learn about the benefits of filing electronically (IRS e-file).
- Get information on starting and operating a small business.

You can also reach us with your computer using File Transfer Protocol at **ftp.irs.gov**.

TaxFax Service. Using the phone attached to your fax machine, you can receive forms and instructions by calling **703–368–9694.** Follow the directions from the prompts. When you order forms, enter the catalog number for the form you need. The items you request will be faxed to you.

For help with transmission problems, call the FedWorld Help Desk at **703–487–4608.**

Phone. Many services are available by phone.

- *Ordering forms, instructions, and publications.* Call **1–800–829–3676** to order current and prior year forms, instructions, and publications.
- *Asking tax questions.* Call the IRS with your tax questions at **1–800–829–1040.**
- *Solving problems.* Take advantage of Everyday Tax Solutions service by calling your local IRS office to set up an in-person appointment at your convenience. Check your local directory assistance or **www.irs.gov** for the numbers.
- *TTY/TDD equipment.* If you have access to TTY/TDD equipment, call **1–800–829– 4059** to ask tax questions or to order forms and publications.
- *TeleTax topics.* Call **1–800–829–4477** to listen to pre-recorded messages covering various tax topics.

Evaluating the quality of our telephone services. To ensure that IRS representatives give accurate, courteous, and professional answers, we use several methods to evaluate the quality of our telephone services. One method is for a second IRS representative to sometimes listen in on or record telephone calls. Another is to ask some callers to complete a short survey at the end of the call.

Walk-in. Many products and services are available on a walk-in basis.

- *Products.* You can walk in to many post offices, libraries, and IRS offices to pick up certain forms, instructions, and publications. Some IRS offices, libraries, grocery stores, copy centers, city and county governments, credit unions, and office supply stores have an extensive collection of products available to print from a CD-ROM or photocopy from reproducible proofs. Also, some IRS offices and libraries have the Internal Revenue Code, regulations, Internal Revenue Bulletins, and Cumulative Bulletins available for research purposes.
- *Services.* You can walk in to your local IRS office to ask tax questions or get help with a tax problem. Now you can set up an appointment by calling your local IRS office number and, at the prompt, leaving a message requesting Everyday Tax Solutions help. A representative will call you back within 2 business days to schedule an in-person appointment at your convenience.

Mail. You can send your order for forms, instructions, and publications to the Distribution Center nearest to you and receive a response within 10 workdays after your request is received. Find the address that applies to your part of the country.

- **Western part of U.S.:**
  Western Area Distribution Center
  Rancho Cordova, CA 95743–0001
- **Central part of U.S.:**
  Central Area Distribution Center
  P.O. Box 8903
  Bloomington, IL 61702–8903
- **Eastern part of U.S. and foreign addresses:**
  Eastern Area Distribution Center
  P.O. Box 85074
  Richmond, VA 23261–5074

CD-ROM for tax products. You can order IRS Publication 1796, *Federal Tax Products on CD-ROM,* and obtain:

- Current tax forms, instructions, and publications.
- Prior-year tax forms and instructions.
- Popular tax forms that may be filled in electronically, printed out for submission, and saved for recordkeeping.
- Internal Revenue Bulletins.

The CD-ROM can be purchased from National Technical Information Service (NTIS) by calling **1–877–233–6767** or on the Internet at **http://www.irs.gov/cdorders.** The first release is available in early January and the final release is available in late February.

CD-ROM for small businesses. IRS Publication 3207, *Small Business Resource Guide,* is a must for every small business owner or any taxpayer about to start a business. This handy, interactive CD contains all the business tax forms, instructions and publications needed to successfully manage a business. In addition, the CD provides an abundance of other helpful information, such as how to prepare a business plan, finding financing for your business, and much more. The design of the CD makes finding information easy and quick and incorporates file formats and browsers that can be run on virtually any desktop or laptop computer.

It is available in March. You can get a free copy by calling **1-800-829-3676** or by visiting the website at **www.irs.gov/smallbiz**.

Index

To help us develop a more useful index, please let us know if you have ideas for index entries. See "Comments and Suggestions" in the "Introduction" for the ways you can reach us.

Tax Publications for Individual Taxpayers

See *How To Get Tax Help* for a variety of ways to get publications, including by computer, phone, and mail.

General Guides

- **1** Your Rights as a Taxpayer
- **17** Your Federal Income Tax (For Individuals)
- **334** Tax Guide for Small Business (For Individuals Who Use Schedule C or C-EZ)
- **509** Tax Calendars for 2003
- **553** Highlights of 2002 Tax Changes
- **910** Guide to Free Tax Services

Specialized Publications

- **3** Armed Forces' Tax Guide
- **54** Tax Guide for U.S. Citizens and Residents Aliens Abroad
- **225** Farmer's Tax Guide
- **378** Fuel Tax Credits and Refunds
- **463** Travel, Entertainment, Gift, and Car Expenses
- **501** Exemptions, Standard Deduction, and Filing Information
- **502** Medical and Dental Expenses
- **503** Child and Dependent Care Expenses
- **504** Divorced or Separated Individuals
- **505** Tax Withholding and Estimated Tax
- **508** Tax Benefits for Work-Related Education
- **514** Foreign Tax Credit for Individuals
- **516** U.S. Government Civilian Employees Stationed Abroad
- **517** Social Security and Other Information for Members of the Clergy and Religious Workers
- **519** U.S. Tax Guide for Aliens
- **520** Scholarships and Fellowships
- **521** Moving Expenses
- **523** Selling Your Home
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- **536** Net Operating Losses (NOLs) for Individuals, Estates, and Trusts
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- **544** Sales and Other Dispositions of Assets
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- **550** Investment Income and Expenses
- **551** Basis of Assets
- **552** Recordkeeping for Individuals
- **554** Older Americans' Tax Guide
- **555** Community Property
- **556** Examination of Returns, Appeal Rights, and Claims for Refund
- **559** Survivors, Executors, and Administrators
- **561** Determining the Value of Donated Property
- **564** Mutual Fund Distributions
- **570** Tax Guide for Individuals With Income From U.S. Possessions
- **571** Tax-Sheltered Annuity Plans (403(b) Plans)
- **575** Pension and Annuity Income
- **584** Casualty, Disaster, and Theft Loss Workbook (Personal-Use Property)
- **587** Business Use of Your Home (Including Use by Day-Care Providers)
- **590** Individual Retirement Arrangements (IRAs)
- **593** Tax Highlights for U.S. Citizens and Residents Going Abroad
- **594** The IRS Collection Process
- **595** Tax Highlights for Commercial Fishermen
- **596** Earned Income Credit (EIC)
- **721** Tax Guide to U.S. Civil Service Retirement Benefits
- **901** U.S. Tax Treaties
- **907** Tax Highlights for Persons with Disabilities
- **908** Bankruptcy Tax Guide
- **911** Direct Sellers
- **915** Social Security and Equivalent Railroad Retirement Benefits
- **919** How Do I Adjust My Tax Withholding?
- **925** Passive Activity and At-Risk Rules
- **926** Household Employer's Tax Guide
- **929** Tax Rules for Children and Dependents
- **936** Home Mortgage Interest Deduction
- **946** How To Depreciate Property
- **947** Practice Before the IRS and Power of Attorney
- **950** Introduction to Estate and Gift Taxes
- **967** IRS Will Figure Your Tax
- **968** Tax Benefits for Adoption
- **969** Medical Savings Accounts (MSAs)
- **970** Tax Benefits for Education
- **971** Innocent Spouse Relief
- **972** Child Tax Credit (For Individuals Sent Here From the Form 1040 or 1040A Instructions)
- **1542** Per Diem Rates
- **1544** Reporting Cash Payments of Over $10,000
- **1546** The Taxpayer Advocate Service of the IRS

Spanish Language Publications

- **1SP** Derechos del Contribuyente
- **579SP** Cómo Preparar la Declaración de Impuesto Federal
- **594SP** Comprendiendo el Proceso de Cobro
- **596SP** Crédito por Ingreso del Trabajo
- **850** English-Spanish Glossary of Words and Phrases Used in Publications Issued by the Internal Revenue Service
- **1544SP** Informe de Pagos en Efectivo en Exceso de $10,000 (Recibidos en una Ocupación o Negocio)

Commonly Used Tax Forms

See *How To Get Tax Help* for a variety of ways to get forms, including by computer, fax, phone, and mail. For fax orders only, use the catalog number when ordering.

Form Number and Title	Catalog Number
1040 U.S. Individual Income Tax Return	11320
Sch A&B Itemized Deductions & Interest and Ordinary Dividends	11330
Sch C Profit or Loss From Business	11334
Sch C-EZ Net Profit From Business	14374
Sch D Capital Gains and Losses	11338
Sch D-1 Continuation Sheet for Schedule D	10424
Sch E Supplemental Income and Loss	11344
Sch EIC Earned Income Credit	13339
Sch F Profit or Loss From Farming	11346
Sch H Household Employment Taxes	12187
Sch J Farm Income Averaging	25513
Sch R Credit for the Elderly or the Disabled	11359
Sch SE Self-Employment Tax	11358
1040A U.S. Individual Income Tax Return	11327
Sch 1 Interest and Ordinary Dividends for Form 1040A Filers	12075
Sch 2 Child and Dependent Care Expenses for Form 1040A Filers	10749
Sch 3 Credit for the Elderly or the Disabled for Form 1040A Filers	12064
1040EZ Income Tax Return for Single and Joint Filers With No Dependents	11329
1040-ES Estimated Tax for Individuals	11340
1040X Amended U.S. Individual Income Tax Return	11360

Form Number and Title	Catalog Number
2106 Employee Business Expenses	11700
2106-EZ Unreimbursed Employee Business Expenses	20604
2210 Underpayment of Estimated Tax by Individuals, Estates, and Trusts	11744
2441 Child and Dependent Care Expenses	11862
2848 Power of Attorney and Declaration of Representative	11980
3903 Moving Expenses	12490
4562 Depreciation and Amortization	12906
4868 Application for Automatic Extension of Time To File U.S. Individual Income Tax Return	13141
4952 Investment Interest Expense Deduction	13177
5329 Additional Taxes on Qualified Plans (Including IRAs) and Other Tax-Favored Accounts	13329
6251 Alternative Minimum Tax—Individuals	13600
8283 Noncash Charitable Contributions	62299
8582 Passive Activity Loss Limitations	63704
8606 Nondeductible IRAs	63966
8812 Additional Child Tax Credit	10644
8822 Change of Address	12081
8829 Expenses for Business Use of Your Home	13232
8863 Education Credits	25379
9465 Installment Agreement Request	14842

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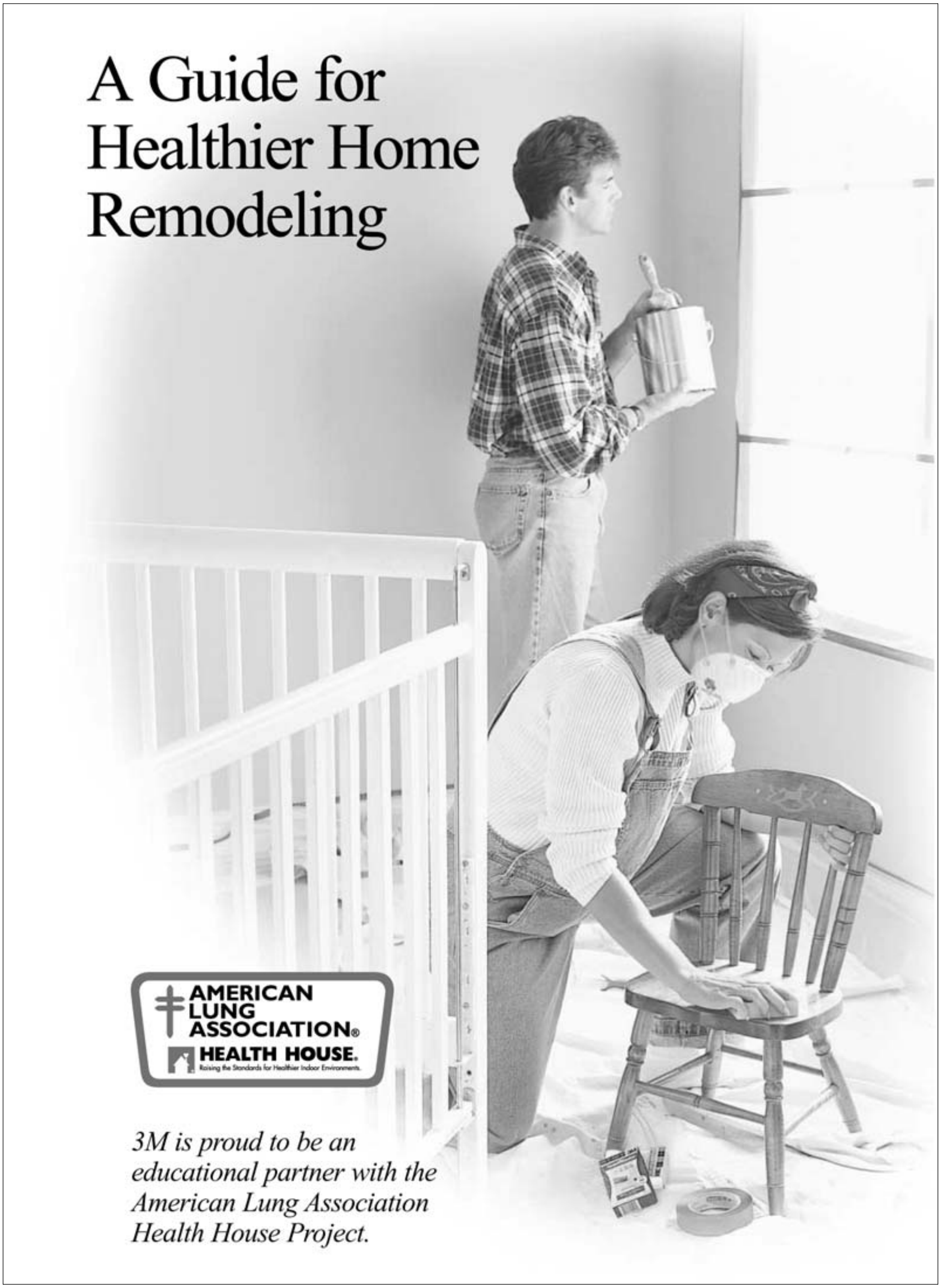
Appendix B

A Guide for Healthier Home Remodeling

A Guide for Healthier Home Remodeling is reproduced with permission from the 3M Company and the American Lung Association Health House.


A Guide for
Healthier Home
Remodeling
AMERICAN
LUNG
ASSOCIATION®
HEALTH HOUSE®
Raising the Standards for Healthier Indoor Environments.
3M is proud to be an
educational partner with the
American Lung Association
Health House Project.

This booklet is a publication of 3M and the Health House Project—a program of the American Lung Association.

3M has entered into a partnership with the American Lung Association and its Health House Project to educate consumers about ways they can improve home air quality. 3M is a founding partner of the American Lung Association Health House Project.

The goal of the Health House Project is to raise the standards for home environments. This is accomplished through national demonstration homes, consumer, builder and site inspector training, and educational partnerships and alliances. Health House demonstration homes are designed with an emphasis on improving air quality and are built with special considerations for the indoor and outdoor environment. Filtrete™ Filters from 3M are used in Health House national demonstration sites.

* 3M, the American Lung Association and the Health House Project do not intend any of the tips in this booklet to be construed as medical advice, or to serve as a substitute for medical treatment or consultation. Neither the American Lung Association nor its Health House Project endorse products.

Introduction

Make a healthy indoor environment part of your remodeling plan.

If you're considering a major home remodeling or renovation project, it's essential to develop a game plan to help control levels of air pollution inside the home. That's because common renovation and remodeling tasks—such as sanding, sawing, painting and installing drywall—may result in higher levels of potentially harmful particles in your living environment. In addition, biological contaminants from insects and rodents may become exposed during renovations. Such exposure can pose serious health risks, especially for those with allergies and asthma.

The good news is there are many steps homeowners and contractors can take to reduce elevated levels of dust, mold, radon and other particles often associated with major remodeling and renovation projects. Following the tips in this booklet can help create a healthier indoor environment—both during your renovation and well into the future.

What to consider *before* the renovation/ remodeling project

Discuss existing issues or concerns with contractors during the bidding process. Issues to consider include radon, asbestos, heating, ventilating and air conditioning systems (HVAC), humidity levels and lead-based paint and odors from existing wood burning equipment.

Home improvement projects provide a good opportunity to have your home measured for radon levels. If levels are high, your home inspector can install a ventilation pipe that draws the radon from below your house and disperses it into the air outside.

Remodeling projects can increase the amount of dust and levels of other particles within the home. People with asthma or allergies, especially children, may want to consider living elsewhere during a major remodeling project.

Home improvement projects provide an excellent opportunity to have furnaces and other appliances checked by a professional. They should be checked for safety, efficiency and possible upgrades.

Consider ventilation requirements for the whole house at the time of remodeling. Ventilation draws fresh air from the outdoors to dilute the indoor air that may be contaminated by high levels of dust, lead-based paint, etc.

Make sure carbon monoxide detectors are in place and operating properly—especially if the remodeling project includes furnace replacement, temporary heating/ventilation or repair of existing equipment.

When considering room additions, have a contractor evaluate the existing heating and cooling system to determine if it needs cleaning.

Before hiring a contractor, check references, warranties and licensing. Also confirm how long the contractor has been in business and make sure he/she has experience in your type of project.

What to consider *during* the renovation/ remodeling project

Reducing Levels of Dust and Other Common Household Contaminants

Isolate work areas from the living space with plastic sheeting or zipper doors.

Use an exhaust fan in the work area to help prevent contaminants from entering the living space.

Have a plan for appropriate removal and disposal of debris, so construction debris doesn't spread into occupied spaces.

If you have pets, limit their access to the remodeling area so they don't track contaminants throughout the home.

If there is asbestos or lead-based paint in your home, hire a professional to remove these materials. Attempting to remove asbestos or lead-based paint by yourself can increase your exposure.

Use a high efficiency furnace filter—such as the Filtrete™ Ultra Allergen Reduction Filter from 3M. It contains electrostatically charged fibers that capture up to 30 times more smoke, pet dander and other pollutants than the typical fiberglass filter.

Run the furnace fan continuously—regardless of the outdoor temperature—to ensure proper air circulation and continuous filtration.

Shut off the air ducts in the work area so that the dust and contaminants are not drawn into the living area.

Remodeling projects can generate a significant amount of dust and particles within your home. Be sure to change your furnace filter more often.

Vacuuming can help reduce particles that have settled onto the floor and carpeting. Consider vacuuming every day during the remodeling project. Use a high efficiency vacuum or a central vacuum ducted to the outside. Be sure to check the warranty of your vacuum before you clean large amounts of construction debris.

Consider using a respirator to help reduce exposure to dust from sanding wood, drywall or non-lead based paints.

Sweep work areas at least daily to minimize debris and reduce the spread of dust particles.

Use a woven microfiber cleaning cloth. These cloths attract and capture particles such as lint and dust.

Even if isolation strategies are used during demolition work, area filters should be used to protect the environment and workers from contaminants. A room air cleaner or even a box fan with a high efficiency filter attached can be used to help reduce contaminants in the air.

Controlling Moisture

High levels of moisture in the home can lead to mold growth. Exposure to mold may result in respiratory and other health problems—particularly for those who are allergic to this substance. To control moisture levels during home renovation and remodeling projects, follow these tips:

Keep humidity in your home between 30 and 60 percent, especially during remodeling projects, to prevent mold growth that can cause allergies.

If you're unsure of the relative humidity (RH) levels in your home, you can purchase an inexpensive digital indoor humidity gauge.

- **Cooling season** (summer months): RH should be below 60% (optimum 30–50%).
- **Heating season** (winter months): RH should be at 30% (may need to be lowered at temperatures below 10°F).

Seal large leaks between living areas and the attic, basement and crawl spaces. Reducing air leakage can reduce energy costs and help better control of relative humidity.

Cover lumber to prevent moisture from being absorbed into the wood. Finished wood should be acclimated to indoor conditions prior to installation.

Make sure windows are properly sealed during installation.

Route water away from house via landscaping and rain gutters. Downspouts should extend several feet away from the house so that rainwater flows away from the home. When landscaping, make sure land slopes away from the home to reduce moisture problems.

Other Tips

Carefully consider your options when choosing paint, stains and finishes for your home. Some low volatile organic compound (VOC) paints, stains and finishes may reduce odors.

Do not occupy a recently painted room until it's been thoroughly ventilated for several days.

During landscaping projects, don't place pollen-producing plants near windows or other air inlets.

Don't allow anyone to smoke in the home or on the premises.

What to consider *after* the renovation/ remodeling project

Once a home remodeling or renovation project is complete, it's important to maintain good indoor air quality. Keep in mind that many home improvement products, such as paint, can release trace amounts of gases for months after application. To combat indoor air pollution year-round, consider the following tips:

Don't permit recyclable items such as newspapers, rags, cans and bottles to accumulate in your living space. These products can be sources of toxic vapors, unpleasant odors and bacteria. Store them in a covered area outdoors and recycle frequently.

Hang dry-cleaned items, like draperies, on an outdoor clothesline before bringing them inside. This will help air out cleaning solvents.

Never store more than a few pieces of firewood indoors. Drying firewood often increases humidity levels and releases mold spores that can contaminate your entire house.

Use a high efficiency furnace filter and change it on a regular basis—ideally every two to three months.

Other resources on healthier home remodeling

- American Lung Association:
  www.lungusa.org
  1-800-586-4872

- American Lung Association Health House Project:
  www.healthhouse.org
  1-877-521-1491

- Partnership for Advancing Technology in Housing:
  www.pathnet.org
  202-708-4277

- National Association of Home Builders: www.nahb.com
  1-800-368-5242

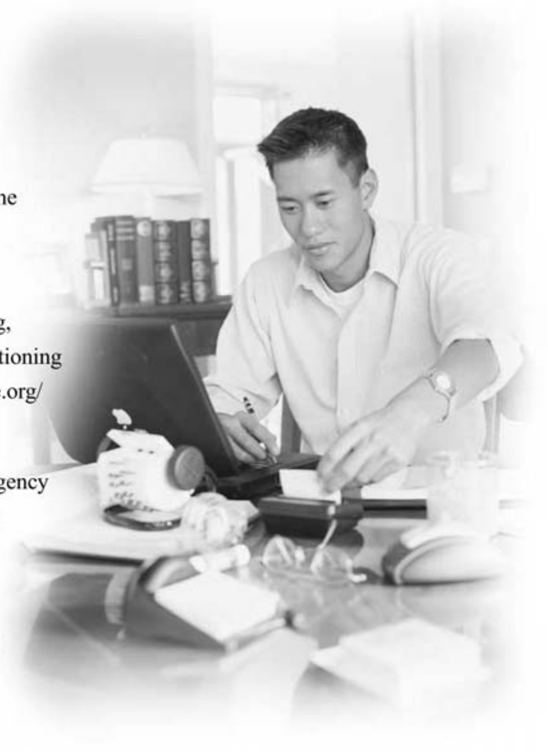
- American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.: www.ashrae.org/
  1-800-527-4723

- Environmental Protection Agency Office of Air and Radiation:
  www.epa.gov/iaq/
  1-800-438-4318

- U.S. Department of Energy:
  www.energy.gov/
  1-800-342-5363

- U.S. Department of Housing and Urban Development: www.hud.gov/
  202-708-1112

- National Association of the Remodeling Industry, Inc.:
  www.nari.org/
  847-298-9200



For dozens more tips on how to reduce indoor air pollution, the American Lung Association Health House Project and 3M are offering "A Guide for Creating a Healthier Home."

Both booklets (*A Guide for Healthier Home Remodeling* and *A Guide for Creating a Healthier Home*) can be obtained free-of-charge by:

- Sending an e-mail with your name and mailing address to: 3mfiltrete@3mservice.montagenet.com
- Calling 1-800-388-3458.

For additional information on air quality and related issues, visit:

- www.lungusa.org
- www.healthhouse.org
- www.filtrete.com

40% Pre-consumer waste paper
10% Post-consumer waste paper

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Appendix C

AIA Document A101-1997: Standard Form of Agreement between Owner and Contractor

INSTRUCTIONS

AIA DOCUMENT A101-1997

Standard Form of Agreement Between Owner and Contractor where the basis of payment is a STIPULATED SUM

GENERAL INFORMATION

PURPOSE. AIA Document A101-1997 is intended for use on construction projects where the basis of payment is a stipulated sum (fixed price). It is suitable for any arrangement between the Owner and Contractor where the cost has been set in advance, either by bidding or by negotiation.

RELATED DOCUMENTS. This document has been prepared for use in conjunction with AIA Document A201-1997, General Conditions of the Contract for Construction, which is adopted into A101-1997 by a specific reference. This integrated set of documents is suitable for most projects; however, for projects of limited scope, use of AIA Document A107-1997 may be considered.

The A101-1997 document is used as one part of the Contract Documents that memorialize the Contract for Construction between the Owner and the Contractor. The other Contract Documents are:

General Conditions (i.e., A201-1997)
Supplementary Conditions
Drawings
Specifications
Modifications

Although the AIA does not produce standard documents for Supplementary Conditions, Drawings or Specifications, a variety of model and guide documents are available, including AIA's MASTERSPEC and AIA Document A511, Guide for Supplementary Conditions.

AIA Document A101-1997 is published in conjunction with the following related documents:

A201-1997, General Conditions of the Contract for Construction
A401-1997, Standard Form of Agreement Between Contractor and Subcontractor
A511, Guide for Supplementary Conditions
A701-1997, Instructions to Bidders
B141-1997, Standard Form of Agreement Between Owner and Architect
B151-1997, Abbreviated Standard Form of Agreement Between Owner and Architect
C141-1997, Standard Form of Agreement Between Architect and Consultant
C142-1997, Abbreviated Standard Form of Agreement Between Architect and Consultant

DISPUTE RESOLUTION—MEDIATION AND ARBITRATION. Through its adoption by reference of AIA Document A201-1997, this document contains provisions for mediation and arbitration of claims and disputes. Mediation is a non-binding process, but is mandatory under the terms of this agreement. Arbitration is mandatory under the terms of this agreement and binding in most states and under the Federal Arbitration Act. In a minority of states, arbitration provisions relating to future disputes are not enforceable but the parties may agree to arbitrate after the dispute arises. Even in those states, under certain circumstances (for example, in a transaction involving interstate commerce), arbitration provisions may be enforceable under the Federal Arbitration Act.

The AIA does not administer dispute resolution processes. To submit disputes to mediation or arbitration or to obtain copies of the applicable mediation or arbitration rules, write to the American Arbitration Association or call (800) 778-7879. The American Arbitration Association may also be contacted at *http://www.adr.org*.

WHY USE AIA CONTRACT DOCUMENTS? AIA contract documents are the product of a consensus-building process aimed at balancing the interests of all parties on the construction project. The documents reflect actual industry practices, not theory. They are state-of-the-art legal documents, regularly revised to keep up with changes in law and the industry—yet they are written, as far as possible, in everyday language. Finally, AIA contract documents are flexible: they are intended to be modified to fit individual projects, but in such a way that modifications are easily distinguished from the original, printed language.

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For further information on AIA's approach to drafting contract documents, see AIA Document M120, Document Drafting Principles.

USE OF NON-AIA FORMS. If a combination of AIA documents and non-AIA documents is to be used, particular care must be taken to achieve consistency of language and intent among documents.

LETTER FORMS OF AGREEMENT. Letter forms of agreement are generally discouraged by the AIA, as is the performance of a part or the whole of the Work on the basis of oral agreements or understandings. The standard AIA agreement forms have been developed through more than 100 years of experience and have been tested repeatedly in the courts. In addition, the standard forms have been carefully coordinated with other AIA documents.

STANDARD FORMS. Most AIA documents published since 1906 have contained in their titles the words "Standard Form." The term "standard" is not meant to imply that a uniform set of contractual requirements is mandatory for AIA members or others in the construction industry. Rather, the AIA standard documents are intended to be used as fair and balanced baselines from which the parties can negotiate their bargains. As such, the documents have won general acceptance within the construction industry and have been uniformly interpreted by the courts. Within an industry spanning 50 states—each free to adopt different, and perhaps contradictory, laws affecting that industry—AIA documents form the basis for a generally consistent body of construction law.

USE OF CURRENT DOCUMENTS. Prior to using any AIA document, the user should consult an AIA component chapter or a current AIA Documents Price List to determine the current edition of each document.

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A101-1997 may not be reproduced for Project Manuals. Rather, if a user wishes to include it as an example in a Project Manual, the normal practice is to purchase a quantity of the original forms and bind one in each of the Project Manuals. Modifications may be accomplished through the use of separate Supplementary Conditions.

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CHANGES FROM THE PREVIOUS EDITION

A101-1997 revises the 1987 edition of A101 to reflect changes made in AIA Document A201-1997. It incorporates alterations proposed by architects, contractors, owners and professional consultants. The following are some of the significant changes made to the contents from the 1987 edition of A101:

THROUGHOUT: References in A101-1997 to the General Conditions refer specifically to A201-1997.

ARTICLE 2: The blank for exceptions to the Contractor's scope of Work has been eliminated.

ARTICLE 3: New emphasis is placed on the need to coordinate the date of commencement with the date of Substantial Completion. Space is also provided for bonus payments for early completion.

ARTICLE 5: Both progress payments and final payment are now covered in this article, entitled Payments. Payment of amounts not in dispute under Construction Change Directives is mandatory, as is release of retainage on completed Work at Substantial Completion. Advance payment to suppliers for materials and equipment not yet stored at the site is only permitted with the Owner's approval.

ARTICLE 6: Space is provided for identification of the Owner's and Contractor's representatives. Ten days' notice is required before a representative is changed.

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USING THE A101-1997 FORM

Prospective bidders should be informed of any additional provisions which may be included in A101-1997, such as for liquidated damages or for stored materials, by an appropriate notice in the Bidding Documents and the provisions for Supplementary Conditions.

MODIFICATIONS. Users are encouraged to consult their legal and insurance advisers before completing an AIA document. Particularly with respect to contractor's licensing laws, duties imposed by building codes, interest charges, arbitration and indemnification, this document may require modification with the assistance of legal counsel to fully comply with state or local laws regulating these matters.

Generally, necessary modifications may be accomplished by writing or typing the appropriate terms in the blank spaces provided on the form or by Supplementary Conditions, or by amendments included in the Project Manual and referenced in this document. The form may also be modified by striking out language directly on the original form. Care must be taken in making these kinds of deletions, however. Under NO circumstances should printed language be struck out in such a way as to render it illegible (as, for example, with blocking tape, correction fluid or X's that completely obscure the text). This may raise suspicions of concealment or suggest that the completed and signed document has been tampered with. Handwritten changes should be initialed by both parties to the contract.

It is definitely not recommended practice to retype the standard document. Besides being outside the limited license for reproduction granted under these Instructions, retyping can introduce typographical errors and cloud the legal interpretation given to a standard clause when blended with modifications, thereby eliminating one of the principal advantages of standard form documents. By merely reviewing the modifications to be made to a standard form document, parties familiar with that document can quickly understand the essence of the proposed relationship. Commercial exchanges are greatly simplified and expedited, good-faith dealing is encouraged, and otherwise latent clauses are exposed for scrutiny. In this way, contracting parties can more confidently and fairly measure their risks.

COVER PAGE

Date: The date represents the date the Agreement becomes effective. It may be the date an original oral agreement was reached, the date the Agreement was originally submitted to the Owner, the date authorizing action was taken or the date of actual execution. It will be the date from which the Contract Time is measured unless a different date is inserted under Paragraph 3.1.

Parties: Parties to the Agreement should be identified using the full address and legal name under which this Agreement is to be executed, including a designation of the legal status of both parties (sole proprietorship, partnership, joint venture, unincorporated association, limited partnership or corporation [general, limited liability, closed or professional], etc.). Where appropriate, a copy of the resolution authorizing the individual to act on behalf of the firm or entity should be attached. Other information may be added, such as telephone numbers and electronic addresses.

Project: The proposed Project should be described in sufficient detail to identify: (1) the official name or title of the facility; (2) the location of the site; (3) the proposed building usage; and (4) the size, capacity or scope of the Project.

Architect: As in the other Contract Documents, the Architect's full legal or corporate title should be used.

ARTICLE 2—THE WORK OF THIS CONTRACT

If portions of the Work are to be performed by persons or entities other than the Contractor, these should be indicated in the Supplementary Conditions.

ARTICLE 3—DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

The following items should be included as appropriate:

PARAGRAPH 3.1 The date of commencement of the Work should be inserted if it is different from the date of the Agreement. It should not be earlier than the date of execution (signing) of the Agreement. After the first sentence, enter either the specific date of commencement of the Work, or if a notice to proceed is to be used, enter the sentence, "The date of commencement shall be stipulated by the notice to proceed." When time of performance is to be strictly enforced, the statement of starting time should be carefully weighed.

PARAGRAPH 3.3 The time within which Substantial Completion of the Work is to be achieved may be expressed as a number of days (preferably calendar days) or as a specified date. If a specified date is used and the date of commencement is to be given in a notice to proceed, these dates must be carefully coordinated to allow sufficient time for completion of the Work.

Any requirements for earlier Substantial Completion of portions of the Work should be entered here if not specified elsewhere in the Contract Documents.

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Optionally, insert any provisions for liquidated damages relating to failure to complete on time, or for bonus payments for early completion. Liquidated damages are not a penalty to be inflicted on the Contractor, but must bear an actual and reasonably estimable relationship to the Owner's loss if construction is not completed on time. There is little or no legal precedent to support the proposition of linking a bonus with a penalty. If liquidated damages are to be assessed because delayed construction will result in actual loss to the Owner, the amount of damages due for each day lost should be entered in the Supplementary Conditions or the Agreement. Factors such as confidentiality or the need to inform subcontractors about the amount of liquidated damages will help determine the placement of such language.

If provision for liquidated damages is included, it should be carefully drafted by the Owner's attorney. Such a provision may be based on the following sample language:

"The Contractor and the Contractor's surety, if any, shall be liable for and shall pay the Owner the sums hereinafter stipulated as liquidated damages for each calendar day of delay until the Work is substantially complete: Dollars ($)."

For further information on liquidated damages, penalties and bonus provisions, see AIA Document A511, Guide for Supplementary Conditions.

ARTICLE 4—CONTRACT SUM

PARAGRAPH 4.1 Enter the Contract Sum payable to the Contractor.

PARAGRAPH 4.2 Identify any alternates described in the Contract Documents and accepted by the Owner. If decisions on alternates are to be made subsequent to execution of A101-1997, attach a schedule showing the amount of each alternate and the date it expires.

PARAGRAPH 4.3 Enter any unit prices, cash allowances or cash contingency allowances.

If unit prices are not covered in greater detail elsewhere in the Contract Documents, the following provision for unit prices is suggested:

"The unit prices listed below shall determine the value of extra Work or changes in the Work, as applicable. They shall be considered complete and shall include all material and equipment, labor, installation costs, overhead and profit. Unit prices shall be used uniformly for additions or deductions."

Specific allowances for overhead and profit on Change Orders may be included under this paragraph to forestall disputes over future Change Order costs.

ARTICLE 5—PAYMENTS

SUBPARAGRAPH 5.1.2 Insert the time period covered by each Application for Payment if it differs from the one given.

SUBPARAGRAPH 5.1.3 Insert the time schedule for presenting Applications for Payment, and indicate due dates for making progress payments.

The last day upon which Work may be included in an Application should normally be no less than 14 days prior to the payment date, in consideration of the 7 days required for the Architect's evaluation of an Application and issuance of a Certificate for Payment and the time subsequently accorded the Owner to make Payment in Article 9 of A201. The Contractor may prefer a few additional days to prepare the Application.

Due dates for payment should be acceptable to both the Owner and Contractor. They should allow sufficient time for the Contractor to prepare an Application for Payment, for the Architect to certify payment, and for the Owner to make payment. They should also be in accordance with time limits established by this Article and Article 9 of A201-1997.

CLAUSE 5.1.6.1 Indicate the percent retainage, if any, to be withheld when computing the amount of each progress payment.

The Owner frequently pays the Contractor the bulk of the earned sum when payments fall due, retaining a percentage to ensure faithful performance. These percentages may vary with circumstances and localities. The AIA endorses the practice of reducing retainage as rapidly as possible, consistent with the continued protection of all affected parties. See AIA Document A511, Guide for Supplementary Conditions, for a complete discussion.

CLAUSE 5.1.6.2 Insert any additional retainage to be withheld from that portion of the Contract Sum allocable to materials and equipment stored at the site.

Payment for materials stored off the site should be provided for in a specific agreement and enumerated in Paragraph 7.6. Provisions regarding transportation to the site and insurance protecting the Owner's interests should be included.

SUBPARAGRAPH 5.1.8 Describe any arrangements to reduce or limit retainages indicated in Clauses 5.1.6.1 and 5.1.6.2, if not explained elsewhere in the Contract Documents.

A provision for reducing retainage should provide that the reduction will be made only if the Architect judges that the Work is progressing satisfactorily. If the Contractor has furnished a bond, demonstration of the surety's consent to reduction in or partial release of retainage must be provided before such reduction is effected. Use of AIA Document G707A is recommended.

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SUBPARAGRAPH 5.2.2 Insert the date by which Owner shall make final payment, if it differs from the one stated.

When final payment is requested, the Architect should ascertain that all claims have been settled or should define those which remain unsettled. The Architect should obtain the Contractor's certification required by Article 9 of A201-1997 and must determine that, to the best of the Architect's knowledge and belief and according to the Architect's final inspection, the requirements of the Contract have been fulfilled.

ARTICLE 7—MISCELLANEOUS PROVISIONS

PARAGRAPH 7.2 Enter any agreed-upon interest rate for overdue payments.

PARAGRAPH 7.3 Identify the Owner's representative and indicate how that person may be contacted.

PARAGRAPH 7.4 Identify the Contractor's representative and indicate how that person may be contacted.

PARAGRAPH 7.6 Insert other provisions here.

ARTICLE 8—ENUMERATION OF CONTRACT DOCUMENTS

A detailed enumeration of all Contract Documents must be made in this article.

EXECUTION OF THE AGREEMENT.

The Agreement should be executed in not less than triplicate by the Owner and the Contractor. The persons executing the Agreement should indicate the capacity in which they are acting (i.e., president, secretary, partner, etc.) and the authority under which they are executing the Agreement. Where appropriate, a copy of the resolution authorizing the individual to act on behalf of the firm or entity should be attached.

SAMPLE

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1997 EDITION

AIA DOCUMENT A101-1997

Standard Form of Agreement Between Owner and Contractor where the basis of payment is a STIPULATED SUM

AGREEMENT made as of the day of
in the year
(In words, indicate day, month and year)

BETWEEN the Owner:
(Name, address and other information)

and the Contractor:
(Name, address and other information)

The Project is:
(Name and location)

The Architect is:
(Name, address and other information)

The Owner and Contractor agree as follows.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

AIA Document A201-1997, General Conditions of the Contract for Construction, is adopted in this document by reference. Do not use with other general conditions unless this document is modified.

This document has been approved and endorsed by The Associated General Contractors of America.

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OWNER-CONTRACTOR AGREEMENT

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ARTICLE 1 THE CONTRACT DOCUMENTS

The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of this Agreement, other documents listed in this Agreement and Modifications issued after execution of this Agreement; these form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral. An enumeration of the Contract Documents, other than Modifications, appears in Article 8.

ARTICLE 2 THE WORK OF THIS CONTRACT

The Contractor shall fully execute the Work described in the Contract Documents, except to the extent specifically indicated in the Contract Documents to be the responsibility of others.

ARTICLE 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

3.1 The date of commencement of the Work shall be the date of this Agreement unless a different date is stated below or provision is made for the date to be fixed in a notice to proceed issued by the Owner.
(Insert the date of commencement if it differs from the date of this Agreement or, if applicable, state that the date will be fixed in a notice to proceed.)

If, prior to the commencement of the Work, the Owner requires time to file mortgages, mechanic's liens and other security interests, the Owner's time requirement shall be as follows:

3.2 The Contract Time shall be measured from the date of commencement.

3.3 The Contractor shall achieve Substantial Completion of the entire Work not later than days from the date of commencement, or as follows:
(Insert number of calendar days. Alternatively, a calendar date may be used when coordinated with the date of commencement. Unless stated elsewhere in the Contract Documents, insert any requirements for earlier Substantial Completion of certain portions of the Work.)

, subject to adjustments of this Contract Time as provided in the Contract Documents.
(Insert provisions, if any, for liquidated damages relating to failure to complete on time or for bonus payments for early completion of the Work.)

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OWNER-CONTRACTOR AGREEMENT

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ARTICLE 4 CONTRACT SUM

4.1 The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor's performance of the Contract. The Contract Sum shall be

Dollars ($),

subject to additions and deductions as provided in the Contract Documents.

4.2 The Contract Sum is based upon the following alternates, if any, which are described in the Contract Documents and are hereby accepted by the Owner:
(State the numbers or other identification of accepted alternates. If decisions on other alternates are to be made by the Owner subsequent to the execution of this Agreement, attach a schedule of such other alternates showing the amount for each and the date when that amount expires.)

4.3 Unit prices, if any, are as follows:

ARTICLE 5 PAYMENTS

5.1 PROGRESS PAYMENTS

5.1.1 Based upon Applications for Payment submitted to the Architect by the Contractor and Certificates for Payment issued by the Architect, the Owner shall make progress payments on account of the Contract Sum to the Contractor as provided below and elsewhere in the Contract Documents.

5.1.2 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month, or as follows:

5.1.3 Provided that an Application for Payment is received by the Architect not later than the day of a month, the Owner shall make payment to the Contractor not later than the day of the month. If an Application for Payment is received by the Architect after the application date fixed above, payment shall be made by the Owner not later than days after the Architect receives the Application for Payment.

5.1.4 Each Application for Payment shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Contract Sum among the various portions of the Work. The schedule of values shall be prepared in such form and supported by such data to substantiate its accuracy as the Architect may require. This schedule, unless objected to by the Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment.

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AIA DOCUMENT A101-1997
OWNER-CONTRACTOR AGREEMENT

The American Institute of Architects
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5.1.5 Applications for Payment shall indicate the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment.

5.1.6 Subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

.1 Take that portion of the Contract Sum properly allocable to completed Work as determined by multiplying the percentage completion of each portion of the Work by the share of the Contract Sum allocated to that portion of the Work in the schedule of values, less retainage of percent (%). Pending final determination of cost to the Owner of changes in the Work, amounts not in dispute shall be included as provided in Subparagraph 7.3.8 of AIA Document A201-1997;

.2 Add that portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction (or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing), less retainage of percent (%);

.3 Subtract the aggregate of previous payments made by the Owner; and

.4 Subtract amounts, if any, for which the Architect has withheld or nullified a Certificate for Payment as provided in Paragraph 9.5 of AIA Document A201-1997.

5.1.7 The progress payment amount determined in accordance with Subparagraph 5.1.6 shall be further modified under the following circumstances:

.1 Add, upon Substantial Completion of the Work, a sum sufficient to increase the total payments to the full amount of the Contract Sum, less such amounts as the Architect shall determine for incomplete Work, retainage applicable to such work and unsettled claims; and *(Subparagraph 9.8.5 of AIA Document A201-1997 requires release of applicable retainage upon Substantial Completion of Work with consent of surety, if any.)*

.2 Add, if final completion of the Work is thereafter materially delayed through no fault of the Contractor, any additional amounts payable in accordance with Subparagraph 9.10.3 of AIA Document A201-1997.

5.1.8 Reduction or limitation of retainage, if any, shall be as follows:
(If it is intended, prior to Substantial Completion of the entire Work, to reduce or limit the retainage resulting from the percentages inserted in Clauses 5.1.6.1 and 5.1.6.2 above, and this is not explained elsewhere in the Contract Documents, insert here provisions for such reduction or limitation.)

5.1.9 Except with the Owner's prior approval, the Contractor shall not make advance payments to suppliers for materials or equipment which have not been delivered and stored at the site.

5.2 FINAL PAYMENT

5.2.1 Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when:

.1 the Contractor has fully performed the Contract except for the Contractor's responsibility to correct Work as provided in Subparagraph 12.2.2 of AIA Document A201-1997, and to satisfy other requirements, if any, which extend beyond final payment; and

.2 a final Certificate for Payment has been issued by the Architect.

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5.2.2 The Owner's final payment to the Contractor shall be made no later than 30 days after the issuance of the Architect's final Certificate for Payment, or as follows:

ARTICLE 6 TERMINATION OR SUSPENSION

6.1 The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of AIA Document A201-1997.

6.2 The Work may be suspended by the Owner as provided in Article 14 of AIA Document A201-1997.

ARTICLE 7 MISCELLANEOUS PROVISIONS

7.1 Where reference is made in this Agreement to a provision of AIA Document A201-1997 or another Contract Document, the reference refers to that provision as amended or supplemented by other provisions of the Contract Documents.

7.2 Payments due and unpaid under the Contract shall bear interest from the date payment is due at the rate stated below, or in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.
(Insert rate of interest agreed upon, if any.)

(Usury laws and requirements under the Federal Truth in Lending Act, similar state and local consumer credit laws and other regulations at the Owner's and Contractor's principal places of business, the location of the Project and elsewhere may affect the validity of this provision. Legal advice should be obtained with respect to deletions or modifications, and also regarding requirements such as written disclosures or waivers.)

7.3 The Owner's representative is:
(Name, address and other information)

7.4 The Contractor's representative is:
(Name, address and other information)

7.5 Neither the Owner's nor the Contractor's representative shall be changed without ten days' written notice to the other party.

7.6 Other provisions:

SAMPLE

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ARTICLE 8 ENUMERATION OF CONTRACT DOCUMENTS

8.1 The Contract Documents, except for Modifications issued after execution of this Agreement, are enumerated as follows:

8.1.1 The Agreement is this executed 1997 edition of the Standard Form of Agreement Between Owner and Contractor, AIA Document A101-1997.

8.1.2 The General Conditions are the 1997 edition of the General Conditions of the Contract for Construction, AIA Document A201-1997.

8.1.3 The Supplementary and other Conditions of the Contract are those contained in the Project Manual dated , and are as follows:

Document	Title	Pages

8.1.4 The Specifications are those contained in the Project Manual dated as in Subparagraph 8.1.3, and are as follows:
(Either list the Specifications here or refer to an exhibit attached to this Agreement.)

Section	Title	Pages

8.1.5 The Drawings are as follows, and are dated unless a different date is shown below:
(Either list the Drawings here or refer to an exhibit attached to this Agreement.)

Number	Title	Date

SAMPLE

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8.1.6 The Addenda, if any, are as follows:

Number	Date	Pages

Portions of Addenda relating to bidding requirements are not part of the Contract Documents unless the bidding requirements are also enumerated in this Article 8.

8.1.7 Other documents, if any, forming part of the Contract Documents are as follows:
(List here any additional documents that are intended to form part of the Contract Documents. AIA Document A201-1997 provides that bidding requirements such as advertisement or invitation to bid, Instructions to Bidders, sample forms and the Contractor's bid are not part of the Contract Documents unless enumerated in this Agreement. They should be listed here only if intended to be part of the Contract Documents.)

This Agreement is entered into as of the day and year first written above and is executed in at least three original copies, of which one is to be delivered to the Contractor, one to the Architect for use in the administration of the Contract, and the remainder to the Owner.

OWNER *(Signature)* **CONTRACTOR** *(Signature)*

(Printed name and title) *(Printed name and title)*

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Appendix D

Upgrade or Install an Irrigation System

Jason Gesner, Certified Irrigation Specialist

A well-developed landscape is a significant asset to your property. A well-designed and maintained irrigation system is essential to the health of your landscape. Whether you are upgrading existing landscape and irrigation or starting from scratch, design the landscape and irrigation system together to determine water demand and ensure that your system can properly deliver the water needed. An in-ground irrigation system is recommended if you are concerned about the aesthetics of your landscape and accurate watering. In this appendix, I will discuss in-ground systems almost exclusively.

Water Conservation

Water is one of our most precious resources, and its availability and use are becoming increasingly limited in many areas. Some regions already mandate water restrictions—know if yours does, and abide by them. Fix or replace a system with leaks. Design your system to be water conserving, and be water-wise when programming your clock (watering in the early morning or at night reduces evaporation and enables your plants to get all the water they need). Even in areas where water is plentiful, being water-wise may save you money.

Tools and Supplies

You will need the following hardware items:

(continued)

(Continued)

- Clamps (crimp and steel screw).
- Crimp pliers.
- Fittings (adapters, nipples, insert 90-degree els, insert tees, pressure reducers, vacuum breaker for water tap, Teflon tape, pipe dope, primer, and glue for PVC).
- Flathead screwdriver.
- Handsaw (for cutting PVC pipe or modifying a valve box).
- Irrigation clock.
- Pick (if your ground is hard).
- Polyurethane pipe (possibly polyvinyl chloride [PVC] and copper pipe as well) and poly cutter.
- Landscape marker paint.
- Marker flags.
- Rain sensor (if desired).
- Sprinkler heads with distributor literature about nozzle performance.
- Tape measure.
- Trenching shovel.
- Valves (the exact number and type depends on your design).
- Valve box.
- UF wiring.
- Watertight wire connectors.
- Wire stripper.

When to Turn to a Professional

Turn to a professional if any of the following conditions applies to you or your property.

- You have an in-ground system and you live in a cold climate. (A landscaping firm can winterize the system before winter and restart it in spring for a minimal fee.)
- Your water source is a well or a ditch. (A landscaping firm can help you address complicated pump, storage, and filtration options.)

(continued)

(Continued)

- You need to install an AVB water tap (a plumber will ensure the tap adheres to local legal codes) or copper pipe.
- You cannot install an exterior clock yourself. (An electrician will do the hard-wiring safely.) If you plan to have a landscaping firm manage the property, an exterior clock is recommended so in-house access by technicians is not required.

Common Mistakes

- Building a system that calls for more water than your source can deliver (the system doesn't function properly).
- Trenching through tree root systems (the tree dies or is stressed for years).
- Not calling for a utility locate (utility lines are cut, resulting in additional cost and possibly personal injury).
- Not researching local water usage, plumbing, and electrical codes before designing your irrigation system and purchasing equipment.
- Not using a sprinkler head that matches zone water needs (the system delivers too much or too little water; overwatering can kill plants more quickly than underwatering).
- Not programming your clock correctly (the incorrect length of time results in the system's delivering too much or too little water; having your system on during peak municipal water use times, that is, between 7:00 A.M. and 9:00 A.M., results in low water pressure and fast evaporation).
- Not winterizing your system by blowing out lines if you live in a cold climate (water left in pipes expands when it freezes and cracks pipes).

Assess Your Landscape

If you are starting from scratch, you'll need to know your landscape design before planning irrigation. Even if you aren't starting from scratch, evaluate your existing landscape. Elements of the landscape that affect your irrigation design include grass square footage and plant water needs and layout. Assess what type of plants (including grasses, shrubs, and trees) you have or want to plant. If your yard or garden is established, determine how old it is. Established plants may need less water. Also, plants with large root systems will need protection during house or landscape construction. For example, construction and contractor parking can compact and stress tree or shrub root systems. Help stressed plants recover by doing supplemental deep-root watering. Note any irrigation repairs that need to be done after construction. If exterior painting is involved, plan to protect plants with tarps.

Assess Your Irrigation System and Irrigation Needs

To get started on designing or upgrading any irrigation system, check local ordinances for landscape restrictions and water-usage limits. Ask the city what the main water street pressure is in your neighborhood; it is helpful to know this when you tap into your house main. Next, determine what repairs will be needed on your existing system. If your system is very old, it may be time to replace it because old pipes and fittings can deteriorate and leak without detection, resulting in water waste. Old sprinkler-head designs may distribute water across a zone less efficiently. Because new equipment delivers better precipitation rates and more accurate water coverage, upgrading is encouraged.

Know Your Water Sources

Do you have residential/city water available? Do you have access to a well or a ditch? If your sole water source is a well or ditch, you will have to address pump, storage, and filtration needs, which can be complicated for the average homeowner. You may wish to consult an irrigation professional for guidance and instruction. In general, working with irrigation professionals can prevent installation of an inadequate system. If your system fails after your new landscape is planted, you will end up dragging hoses around to keep things alive and possibly have to replace dead plants.

If your sole water source is residential/city water, and you are installing a new irrigation system, you need to determine static water pressure, working water pressure, and gallons-per-minute (GPM). For each of these tests, make sure *all* water sources within your property are not in use. If any source beside the one(s) you are testing is in use, your readings will not be accurate.

1. Measure static water pressure from an outside hose bib, for example, a faucet on an outside wall. You will need a pounds-per-square-inch (PSI) pressure gauge

that can be connected to the hose bib. Turn on the water faucet fully and record the PSI reading.

2. To determine working water pressure, find two hose bibs (water sources) on opposite sides of the house. Attach the PSI gauge to the first hose bib and turn it on. At the same time, turn on the second hose bib. Record the reading on the PSI gauge now. This PSI is your working water pressure, which you need to know when designing your irrigation system.
3. Determine GPM by first checking that all valves from water sources are open to the second hose bib at which you're checking. These include the street meter valve and the house gate valve, normally located in the basement. Again, no other water source should be in use within the residence, or water pressure will be reduced and the test invalid. Turn on the hose bib full blast. Place a three-gallon bucket (or mark three gallons in a larger one) under the flow and use a stopwatch or wristwatch to time how long it takes to fill three gallons. For example, if it takes 6 seconds, the flow rate is 30 GPM (60 seconds divided by 6 seconds times 3 gallons equals 30 GPM). If the flow is above 25 GPM and your working pressure is 65 PSI or more, you are in good shape.

Now that you know your static water pressure, working water pressure, and GPM, you have the base information needed for your irrigation design.

Design and Installation

Keep your landscape design close at hand when designing your irrigation system. The components of design and installation are listed below in roughly the order in which you should approach the project.

#1: Tap

When you are done with your irrigation design, determine the point of connection to the water source or tap. It is prohibited to plumb directly into house domestic piping without using a backflow prevention device outside before the irrigation valves, also known as a master valve or atmospheric vacuum breaker (AVB). You connect your house water source to the atmospheric vacuum breaker (AVB) using the water tap. The AVB prevents dirty irrigation water from flowing back into domestic drinking water in the case of city domestic-pressure drop, for instance, a street-main break or fire hydrants in use nearby. You may want to enlist the help of a local plumber to install your water tap according to local codes. Instruct the plumber to tee off the house main between the entry from city residential water lines and the house pressure reducer, if you have one. This enables unobstructed flow and pressure for your irrigation. The house main is normally located in the basement on the side of the house closest to the street. Have the plumber install a shutoff valve with drain for your new pipe and then plumb straight through the wall to the AVB outside.

After installation of the AVB, you will install piping down to the zone valves. Long-lasting and durable copper pipe is preferred, but you can also use PVC pipe (you will need PVC primer, glue, and a saw). If you are using copper pipe and do not have tools, materials, or experience, consult your plumber. The pipe configuration under your zone valves, called the manifold, should include a drain for maintenance, emergency drainage, and winterizing. A valve box is installed over the zone valves for protection and aesthetics.

#2: Irrigation Valve

An individual irrigation valve manages each zone. The system clock manages the valve's operation. Valves are protected in valve boxes that are installed in the ground at appropriate locations. The PSI and GPM you figured out earlier will determine the size of valve you will use in each zone. (Valves can be above ground, but this may detract from the visual appeal of your landscape.) An irrigation-supply or hardware store will have literature that can help you understand what valves you need. If you have 40 GPM, choose the valve that performs within that GPM range. The sprinkler zone operating off that valve should not exceed the 40 GPM total precipitation rate. *Note:* When using drip lines or microjets, a 15 or 20 GPM pressure reducer needs to be installed right after the valve being used for that drip zone so the water pressure doesn't blow the drip or microjet off the zone pipe.

#3: Valve Boxes

Above-ground valves with manifolds can be used instead of underground valve boxes, but these are not as aesthetically appealing and are vulnerable to lawn mower damage and vandalism. Valve boxes are easy to install and may require modifications to fit over your zone's pipe configuration and mainline from the tap. Just use a handsaw to cut out notches as needed to fit. Use duct tape to seal any gaps to prevent dirt from entering the box. The manifold should also have a drain for maintenance and winterization (also critical for draining the tap). Dig a small hole under the manifold for water to collect.

#4: Wiring

Wiring the valves is very simple, and for most manufactured valves only 24 volts is required. Direct underground burial of UF wire without a conduit is safe with less then 30 volts. Always check local codes before designing your system. Count the number of valves in your design to determine the type and footage of wire you will need from valve box to clock. Always include an extra wire strand when possible for future additional valves and or troubleshooting a potential short. The UF wire is composed of different-colored wires that you will use to identify valves when wiring in the controller or clock and includes a common white wire. For example, if you have four valves, use number six UF. You will have a separate color wire for each of the four valves, an additional wire should you need an additional valve in the future, and the white common wire spliced to all four that are in use. Direct burial of watertight wire connectors is recommended to prevent shorts should precipitation accumulate or flooding occur within the valve box. Lay the wire loosely in the trench and bundle up any extra in the valve box under the controller. The extra wire gives you flexibility when connecting or if a wire is accidentally pulled during construction.

#5: Sprinkler Zone

Because of varying water demands for different types of plants, your overall design is divided into zones. You will design the irrigation in each zone so that its sprinkler heads, low-gallon microjets, or drip lines deliver the appropriate amount of water for that zone's plant type, for example, turf, shrubs, flowers, or trees. You will also schedule your system's irrigation clock based on the different zones in your overall landscape. Some zones will have shorter watering periods than others, especially if big trees are present. When designating zones, first determine the borders of the property and landscape to be irrigated. Outline the edges of the different types of plants or turf to create your different watering zones. Pop-up spray heads are most common and have different nozzles to help direct the water stream in the right direction. Simple drip irrigation can also be used. In a grass area, you will use turf sprinklers with low projectile coverage. If the landscape has many different angles, custom adjustable nozzles can be purchased, but they can be expensive. Keep in mind that each type of sprinkler-head nozzle has a different precipitation rate. If you have a large turf area, you might consider larger sprinklers, such as rotor sprinkler heads with interchangeable nozzles already installed in the sprinkler body. Use literature from your local sprinkler distributor or hardware store for guidance on sprinkler-precipitation rate performance and which types of sprinkler heads or nozzles to use for your design. You will need your GPM, working water pressure, and the size of the area to be irrigated (or the landscape design if you have it) as reference.

#6: Layout on Site

By referring to your irrigation design, mark the sprinkler zones by placing different-colored flags in each one. With landscape marker paint, mark where to dig the pipe trenches. Keep in mind: (a) hand dig around utility locates if they are in an area where you will trench, and avoid having a trench follow a utility line; (b) refer to the landscape plan so you do not install pipe where you plan to plant a tree or large shrub; and (c) do not trench within the drip line of any existing tree.

Trees Are Our Friends

A mature tree is a great asset to your property. Most plants are easily replaceable, but not a 20- or 30-year-old tree. In some climates, shade from established trees can greatly reduce water usage. To assess a tree's drip line, look up at its branches from underneath and note the location of the tip of the furthest branch from the trunk. If you need to dig within a tree's drip line, cleanly cut roots straight and do *not* treat cut ends. Deep-root water the tree consistently for a few weeks, but do not overwater.

You may need to dig under existing sidewalks or a driveway. Before laying new sidewalks or a new driveway, install a cheap, rigid plastic, four-inch pipe and feed your irrigation pipe through it. This pipe can also be used to run wiring for walkway or path exterior lights.

Review distributor literature about coverage footage for the sprinklers you chose. Start measuring footage and marking the sprinkler heads in your landscape plan on the ground, making sure the spacing is correct between each head by using a tape measure. You want your water coverage to be "head to head," which means that each sprinkler head waters the base of the head next to it. This applies in both shrub zones and turf zones. Keep in mind not to exceed your GPM when adding up the sprinkler precipitation rates per zone (see Figure D.1).

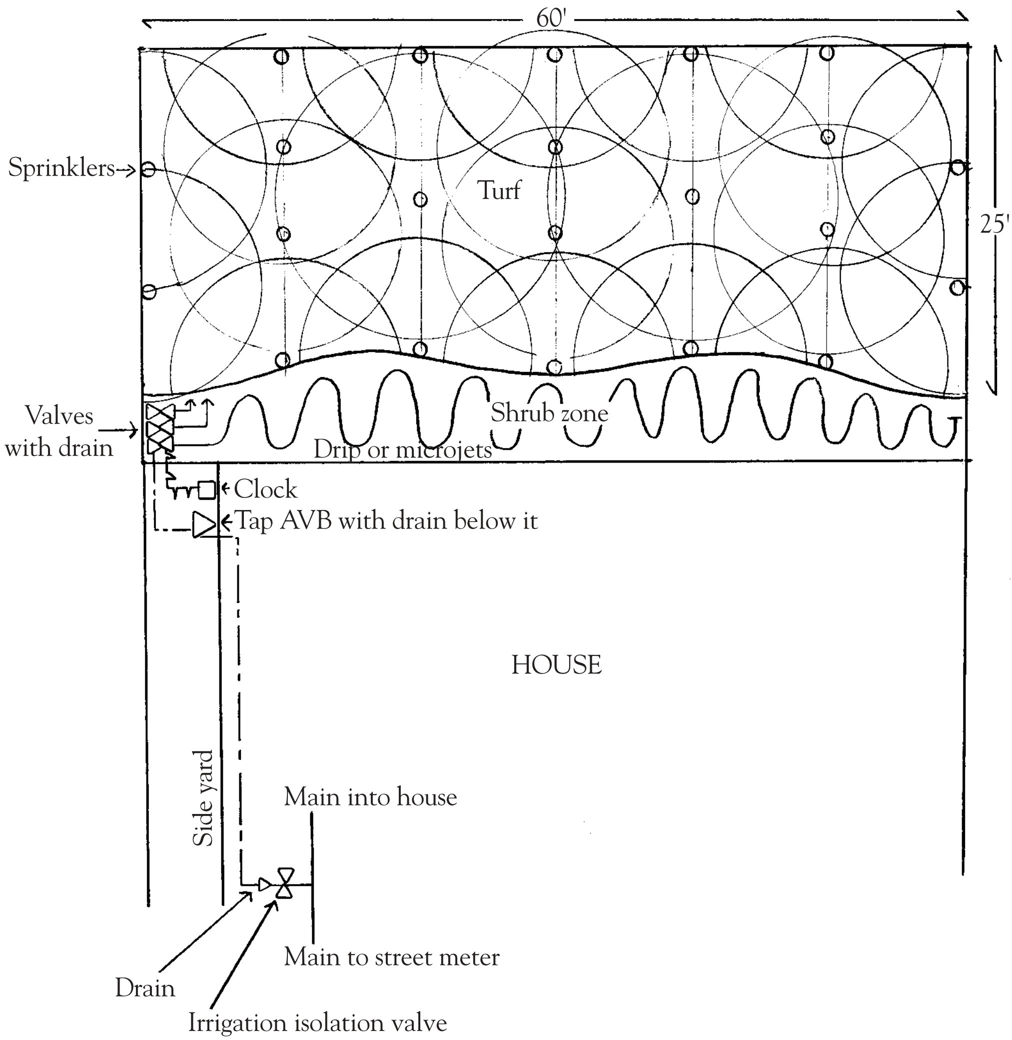

Figure D.1 **Sample irrigation plan**

#7: Irrigation Pipe

Flexible polyurethane ("poly") pipe is recommended. The size of pipe you use correlates to the water volume and pressure desired (see the following list).

3/4″ pipe size = 0–12 GPM.

1″ pipe size = 12–21 GPM.

1 1/4′′ pipe size = 21–34 GPM.

1 1/2′′ pipe size = 34–52 GPM.

2′′ pipe size = 52–98 GPM.

#8: Sprinkler Heads

I recommend that you keep full-circle spray heads separate from half- or quarter-circle spray heads when designing each sprinkler zone. Full-circle spray heads release three times the GPM of the others, and mixing and matching the different types of heads in a zone will result in over- and underwatered spots in that area.

To accent a new stone front walk and entranceway, one homeowner built a berm in an area adjacent to the walk that had previously been grass. She planted shrubs and tall plants to draw the eye up the entrance masonry. High retractable sprinklers were used in that zone to provide water coverage over and through the tall plants. *Note:* Berms and slopes provide excellent drainage, and plants love them!

#9: Schedule 40 Insert Fittings for Pipe, Valve, Drip Pressure Reducers, and Sprinkler Connections

Many parts are needed to connect your system pipes, and two different types of clamp are required to secure the connections. A screw clamp connects the poly pipe to the valve (where you have high pressure), and a crimp clamp connects pipes to the various fittings. Looking at your plan, count the fittings you will need. Total the adapters from valves to poly pipe, tees, reducers, and elbows, and from 90-degree el fittings from poly pipe to sprinklers with nipples between them. No Teflon tape or pipe dope is needed within the zone, but it is recommended on the connection from valve to adapter that goes to the poly pipe or the drip pressure reducer on the pressure side.

#10: Trenching

You will need to dig trenches in which to lay the main water pipe from your tap source, zone irrigation pipe, and wires connecting each valve to the system clock. *Important:* Before you do any digging, call for utility locates and have utility lines on your property marked in paint and flagged. Anyone can request this free service by phoning 1–800–422–1987. If you feel fit and adventurous, dig by hand with a trenching shovel. If the house has been remodeled, however, construction traffic has likely compacted soil around it, making hand digging difficult. Renting a trenching machine is recommended (most rental companies will deliver a trencher and instruct you in its operation). When trenching, keep not only the location of utilities in mind, but also think about combining pipe for different zones in one trench to cut down on digging from one area to the next. Also, plan to lay wiring in the mainline trench. Trenching can be hard on the back even with a machine. Design your trench layout wisely.

#11: Irrigation Clock

The irrigation clock is used to manage the watering of your property automatically. An electrician's assistance may be required for installation of your clock. Most clocks also include a battery as backup to operate programs in case electric power to the house is lost. Automatic watering protects your landscape investment when you are not at the house for extended periods of time and simplifies day-to-day care. The clock operates the electric valves installed in each zone. Clocks come in different sizes and designs, enabling different approaches to watering on a variety of landscapes. To purchase the proper clock for your system, you need to know how many stations your design contains (e.g., one to four stations or one to eight). Consider purchasing a clock with an extra station so you can accommodate the addition of a new valve in the future.

Solid-state controllers are simple and reliable, and directions for connecting the valve wires are very simple to follow. Try to be consistent throughout your system when wiring. *Example:* Plan a schedule for your irrigation times and wire accordingly. Wire your clock so that high-water-demand zones (turf) start first, followed by lower-demand zones (shrubs), and end the watering cycle with the zone that has the least GPM and pressure demand (drip or microjet zones). Consider the peak water-usage times of the people in the house and work around them. To conserve water and avoid overwatering your plants, you can install a sensor that automatically shuts off the system in the event of rain.

Recommended Resources

Books

Axelrod, Jerold L. *Time-Saver Concise Plans for Adding On and Remodeling*. New York: McGraw-Hill, 2000.

[Editors of *Fine Wordworking*]. *The Basics of Craftmanship: Essentials of Woodworking*. Newton, Conn.: The Taunton Press, 1999.

Buchanan, Rita. *Taylor's Master Guide to Landscaping*. Boston, Mass.: Houghton Mifflin, 2000.

Ching, Francis D. K. *Architectural Graphics*. 4th ed. Hoboken, N.J.: John Wiley & Sons, 2002.

Ching, Francis D. K., and Cassandra Adams. *Building Construction Illustrated*. 3d ed. Hoboken, N.J.: John Wiley & Sons, 2000.

De Chiara, Joseph, Julius Panero, and Martin Zelnik. *Time-Saver Standards for Interior Design and Space Planning*. 2d ed. New York: McGraw-Hill, 2001.

Hayward, Gordon. *Garden Paths: Inspiring Designs and Practical Projects*. Willowdale, Ont.: Firefly Books, 1993.

Hufnagel, James A. *The Stanley Complete Step-by-Step Book of Home Repair and Improvement*. New York City: Round Stone Press (a division of Simon & Schuster), 1993.

Ideas for Great Patios & Decks. Menlo Park, Calif.: Sunset Books, 1994.

Miller, Mark R., Rex Miller, and Glenn E. Baker. *Carpentry & Construction*. 3d ed. New York: McGraw-Hill, 1999.

Nelson, Christine, with Joseph R. Carter. *Deck & Patio Styles*. Lincolnwood, Ill.: Publications International, 1996.

Periodicals

Better Homes and Gardens

Coastal Living

Consumer Reports

Country Living

Dwell

Elle Decor

Home

House & Garden

House Beautiful

Metropolitan Home

Natural Home

Southern Living

Sunset Magazine

This Old House

Web Sites

www.aia.org. The official Web site of the American Institute of Architects. It includes features like "What An Architect Can Do For You" and "Find An Architect" and the option to purchase over 80 forms and contracts that define contractual relationships and terms in design and construction projects.

www.alca.org. Where to find a landscaping contractor near you from the Associated Landscape Contractors of America's database. The ALCA also provides professional certification to landscape contractors.

www.apld.org. The Association of Professional Landscape Designers' Web site. APLD is the only national group that provides professional certification to landscape designers—you can search their member list to find a reputable landscape designer near you.

www.asla.org. The Web site for the American Society of Landscape Architects. Browse this Web site for tips on selecting a landscape architect, and search the member list for landscape architects near you.

www.bizrate.com. The comparison shopping Web site. See the Home & Garden section for price comparisons on such things as appliances, home lighting, tools, and garden supplies.

www.consumerreports.org. *Consumer Reports'* Web site offers lots of free consumer advice, plus more if you subscribe to the magazine. A terrific resource for unbiased product reviews and rankings of home products like appliances, gardening equipment, cabinets, countertops, and even adjustable rate mortgages!

www.craftsman-book.com. This on-line bookstore specializes in books related to the construction industry and construction projects. You can also search a construction cost– estimating database right from the home page.

www.creativehomeowner.com. Check out this publisher's Web site for its current titles, especially the region-by-region *Home Landscaping* series.

www.homedepot.com. This company says it opens a store every 45 days, so one is likely to be near you. Check out the Web site for its free in-store how-to clinics (such as "You Can Lay Ceramic Tile"). It also has a new on-line Kitchen & Bath Design Center where you can "build" a kitchen design to your liking.

www.irs.gov. Uncle Sam's official tax Web site. Search the Internal Revenue Service's Web site for helpful tax information, including updates on tax codes.

www.kbdn.net. The Web site for *Kitchen & Bath Design News*. Search for trends, buyer's guides, and resource books related to kitchen and bath design projects. You can also subscribe to its to-the-trade print magazine.

www.kitchens.com. All about kitchen remodeling and design, including budget and planning tips, kitchen products and materials, and noteworthy trends. The Web site also features a locator service to find kitchen design professionals in your area.

www.lifestylesbookclubs.com. Go to this Web site to find the Architects and Designers Book Service section. This book club offers a good selection of current how-to design, architecture, and landscaping books at special prices for subscribers.

www.lowes.com. Lowe's is another large home improvement supply retailer. Check out special features on its Web site, including remodeling and gardening how-to advice. This Web site can also be viewed in Spanish.

www.nahb.com. The National Association of Home Builders's official Web site. Check it out to learn about trends in new homebuilding (you may want to incorporate popular features in your own home renovations). You can also access its online bookstore (www.builderbooks.com).

www.nari.org. The official Web site for the National Association of the Remodeling Industry. This is a great site to visit to monitor popular trends in home renovation. You can also check the member list for contractors and professional remodelers in your area.

www.realtor.org. Search the National Association of Realtors's Web site for a realtor, plus helpful tips on home buying and selling.

www.sears.com. Lots of deals and great financing/rebate offers on appliances, tools, and lawn and garden products. You can also investigate its home services, including cabinet refacing, plumbing and electrical services, and home remodeling services. Its related Web sites, www.kenmore.com (for appliances) and www.craftsman.com (for tools), are also helpful.

www.springhillnursery.com. A fun Web site to peruse for different bulbs, perennials, and other plant options for your garden (at reasonable prices). Their Web site and mail-order catalog give lots of helpful hints (like what plants deer avoid!) and the best plants for your region.

www.thisoldhouse.com. All sorts of great information, and not just on old houses. One nifty feature of this Web site allows you to calculate materials needed for a given renovation project (for example, how much carpet you'll need for a certain size room). You can also find a listing of topics for recent *This Old House* television shows, plus how-to advice on specific home renovation projects.

www.whiteflowerfarm.com. Another mail-order nursery with a fabulous array of ornamental and edible plants (not just white flowers!). They also showcase tools and garden supplies and provide helpful garden tips.

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