

Executing the Transaction: An Engineer's Guide to the Home Purchasing Process



FIRST PRINCIPLES
PARTNERS



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REALTY



First Principles Partners rejects the standard sales-driven approach. Instead, we treat your real estate transaction like a high-stakes project: defining constraints, modeling scenarios, and executing with precision.

Applying Engineering Experience to the Home Buying Process

- **Data-Driven Clarity:** We replace speculation with simulation. Using raw market data and proprietary financial modeling, we help you evaluate options based on math, not marketing. This framework equips you to isolate the variables that matter—optimizing for maximum utility and long-term asset performance.
- **Project Management Precision:** A real estate closing is a complex system of dependencies—lenders, inspectors, title officers, etc. We act as your Project Lead, managing the critical path to identify bottlenecks before they become delays. We optimize the workflow to minimize friction and execution interruptions for each step of the process.
- **The “White Box” Approach:** The real estate market is often a 'Black Box' of opacity. We pry it open. We filter the noise and translate complex dynamics into clear inputs. We don't just give you a recommendation; we show you the source code—the 'why' behind the 'what'—so you can execute based on verification, not just faith.

Agent Matching



We match you with a vetted agent who respects the data-driven approach. You run the numbers with us; they handle the tours and contracts.

Loan Application



A data-focused real estate project requires solid financing. Apply directly with our preferred lending partners to build your budget.

Strategy Sessions



Unsure of your next step? Let's spend 20 minutes defining your variables before diving deep. We will devise a plan that works best for your needs.

Analysis Toolkit



Use our free Real Estate Data Analysis Models and documents to start analyzing your numbers—allowing you to start your journey confidently.

Project Roadmap

1

Strategize a Plan

Discuss the details of the real estate investment you're interested in, including price and location. First Principles Partners will identify your needs and help you engineer your real estate dreams by acting as your project manager through the home-buying process.



2

Get Pre-Approved

You will need pay stubs, W2s, and bank statements. Knowing what you can afford is critical to a successful home-buying experience.



3

Connect with Your Agent and Begin Touring Properties

First Principles Partners will connect you with a qualified, knowledgeable real estate agent prepared to help you make a well-informed decision. Once you sign the Buyer Representation Agreement, your agent will be able to take you to view homes that meet your criteria from a comprehensive list of suitable options.



4

Make an Offer

Your agent will prepare the offer based on the price and terms you choose. First Principles Partners is available to answer questions or concerns as you take this step towards owning your future.



5

Negotiations and Contract

Negotiations may take place to reach an agreement with the seller. In most cases, the contract provides you with a timeline to obtain financing and time to inspect the physical condition of the home. First Principles Partners remains a partner, guiding you through these timelines and processes.

6

In Escrow

You and the seller have agreed to the price and terms. The home is effectively held for you until closing.



7

Preparing for Closing

First Principles Partners will help ensure that all due diligence is performed to the highest standard. Prior to closing, an appraisal will take place, an inspection will be conducted, and loan terms will be reviewed with your lender. As you finalize your loan, review documents, and consider the findings from the inspection, First Principles Partners will work with your agent to ensure no details are overlooked.



8

Closing

A title company or an attorney typically acts as an independent third party to facilitate the closing. Once the funds and ownership are transferred, First Principles Partners remains a resource dedicated to assisting you with your dynamic real estate needs over time.



Buyer Preparation



Key Considerations

Loan Options

Down Payment

Budget

Closing Costs

HOA Fees

Neighborhood Restrictions

Natural Disasters

Air and Water Quality

Home Insurance

School Districts

Zoning Laws

Crime Rate

Commute

Future Development Plans

Property Taxes

Growth Potential

Environmental Hazards

Access to Healthcare

Proximity to Amenities

Common Mortgage Options

Conventional Loans

For Buyers with Good to Excellent Credit

More Flexibility and Lower Interest Rates

Not Backed by a Government Agency

Avoid Mortgage Insurance with 20%+ Down

VA Loans

For Active-Duty Military, Veterans, and Eligible Spouses

No Down Payment and No Mortgage Insurance

Competitive Interest Rates and Limited Closing Costs

Flexible Credit

FHA Loans

Popular Among First-Time Home Buyers

Down Payments as Low as 3.5%

Easier Credit Qualifications

Mortgage Insurance Required for the Life of the Loan

Our Analysis Toolkit



Start running the numbers with our free calculators.

Loan Preparation



Your mortgage lender will conduct an in-depth analysis of your finances to ensure that you meet all of their underwriting guidelines and can afford your new mortgage payment. Streamline your approval process by ensuring you have all applicable documents for all borrowers on the application ahead of time.

Document Checklist

- Recent pay stubs; W-2 forms from the past two years
- If self-employed:
 - Year-to-date profit and loss statement
 - Documents to show unpaid accounts receivable
- 1099 forms from the past two years
- Bank statements for all your checking and savings accounts
- Statements for all investment accounts:
 - 401(k)s CDs
 - IRAs Brokerage accounts
- The company name, account number and type, unpaid balance, and monthly payment for all liabilities, including:
 - Credit cards Auto loans
 - Student loans Medical bills
 - Personal loans
- Accumulated cash value from life insurance, if applicable
- Down payment gift letters, if applicable
- Alimony and child support, if applicable
- If you have income from a rental property:
 - Documentation of rental income
 - Copy of lease
 - Property appraisal report
- Proof of monthly job-related expenses, if applicable
- Copy of driver's license
- Copy of Social Security card
- Rental history, including contact information for previous landlords
- Immigration paperwork, if applicable

If you own another property, also prepare:

- Address
- Property value
- Status of property
- Intended occupancy
- Monthly expenses related to property

If you have an outstanding mortgage:

- Lender name and account number
- Type of loan
- Monthly payment amount
- Unpaid balance on the loan
- Credit limit, if applicable

Start Your Loan
Application with
Our Preferred
Partners



Comparison Tool



Use this tool to note pros / cons, likes / dislikes, or general comments on various aspects of each viewed property.

	Home 1	Home 2	Home 3	Home 4
Address				
Asking Price				
Lot Size				
Square Footage				
# of Bedrooms				
# of Bathrooms				
Proximity				
Neighborhood				
Exterior				
Garage				
Floor Plan				
Living Room(s)				
Dining Room(s)				
Kitchen				
Bedrooms				
Bathrooms				
Laundry Room				
Attic / Basement				
Major Repairs				
Overall				

Inspection Guide



Purchasing a home is an important decision. Use this checklist to note the quality of each property as you consider whether or not to put in an offer. Professional inspections will confirm observations, provide further details, and give an opportunity to ask questions.

Exterior Considerations

Yes No

- Is the paint in good condition?
- Is the siding in good condition?
- Are all windows in good condition with appropriate seals intact?
- Do all doors open and close properly with all seals intact?
- Does the garage door operate properly and have a working safety sensor installed?
- Are there any visible cracks, shifts, or water damage that may be affecting the foundation?
- Is there any visible mold or built up moisture?
- Are there any missing shingles or visible damage to the roof?
- Are gutters and downspouts firmly attached and free of any damage?
- Does the chimney appear to be in good condition?
- Are skylights and other ventilation elements properly sealed and free of visible damage?
- Does drainage appear to be traveling away from the house?
- Are there any visible signs of standing water near or around the house?
- Does the patio and/or deck appear to be in good condition? Are there signs of rotting wood?
- Are trees and other major vegetation healthy?
- Are any trees or plants hanging too close to the roof or power lines, or encroaching on the foundation?
- Does the irrigation system work properly with no noticeable leaks or damage?
- Is the fence and/or walls in good condition with no damage?
- Are the driveway and any walkways free of cracks and damage?
- Are there any signs of pests or rodents that pose a concern to the property?

Estimated cost of repairs needing to be made in the next year:

Estimated cost of repairs needing to be made in the next five years:

Interior Considerations

Yes No

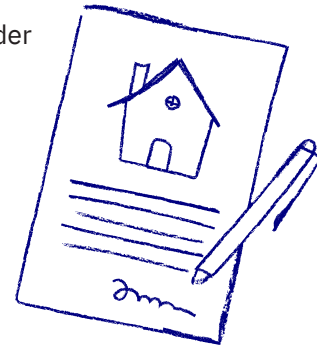
- Are there any signs of leaks in the roof of the attic? Is there standing water in the attic?
- Is there enough insulation and adequate ventilation in the attic?
- Are there any signs of rodents or any holes / cracks large enough for rodents to enter?
- Do all doors, walls, and ceilings appear straight and level?
- Are there any visible stains, cracks, or damage to any of the doors, walls, or ceilings?
- Is there any damage or warping to the paint, baseboards, or molding?
- Does the flooring have any tears, cracks, scratching, or other damage?
- Are there any signs of leaks, mold, water damage, moisture, mustiness, or standing water in the home?
- Are there any signs of pests, termites, or rodents in the home?
- Do all windows and doors open and close properly?
- Has the presence of any hazardous materials been disclosed such as asbestos, lead paint, etc.?
- Are all appliances in working condition and free of visible damage?
- Is the garbage disposal working properly with no noticeable leaks?
- Are all electrical switches working and free of obvious malfunctions?
- Have the outlets been grounded?
- Is the panel updated and expandable for additional appliances or a potential remodel?
- Is there knob-and-tube wiring?
- Has the sewer line been scoped to check for potential cracks or damage?
- Is the water heater an appropriate size for the home without signs of rust or damage?
- Is the water pressure acceptable?
- Are there any signs of damage or leaks from plumbing systems?
- Are all sinks, tubs, and showers draining properly with no signs of clogs?
- If there's a sump pump, is it working properly?
- Is the age of the furnace and AC unit acceptable and are they free of visible signs of damage?
- Do all interior rooms, including the basement, have proper vents and adequate insulation?
- Are all rooms holding the proper temperature?

Estimated cost of repairs needing to be made in the next year:

Estimated cost of repairs needing to be made in the next five years:

Preparing for Closing Day

- Review the Closing Disclosure from your lender
- Coordinate with your lender to secure necessary funds for closing costs and down payment
- Schedule and complete a thorough home inspection
- Coordinate and address any negotiation points arising from the inspection with the seller
- Arrange and complete the home appraisal process
- Ensure you have homeowners insurance in place and provide details to your lender
- Collect essential documents, including IDs, and required paperwork
- Clear title and provide the title search results to your mortgage lender
- Purchase title insurance if desired
- Arrange for utilities to transfer to your name
- Confirm completion of contingencies
- Schedule a final walk-through of the property
- Change your address with relevant parties and notify them about the move if necessary



On Closing Day

- Bring valid photo ID
- Bring proof of homeowners' insurance
- Bring a copy of the contract with the seller
- Bring home inspection report
- Bring any necessary documents the bank requires to approve your loan
- Provide necessary funds for closing
- Sign all necessary paperwork, including loan agreement, deed, etc.
- Receive keys once documents are signed and funds are transferred
- Duplicate closing documents to be stored in a safe place
- Change locks and codes for added security



Post-Closing Guide



Home Operations

- Schedule start date for electricity, water, gas, trash, sewer, etc.
- Schedule a setup and start date for cable and internet
- Change all exterior locks (or re-key), reset garage and door codes, and set up home security
- Install new batteries in smoke / CO detectors and locate or purchase fire extinguishers
- Identify and label the main water shut-off, gas valve, and electrical panel; change HVAC filter

Address Change

- Financial address updates including bank(s) / credit union(s), credit cards, investment accounts, retirement accounts, social security, etc.
- Update your driver's license / state ID card - if moving out of state, check required documents needed before visiting the local DMV / RMV
- Additional address updates for current / previous schools, doctors, insurance providers, professional licenses, subscriptions, etc.
- Update your car's title and registration - check if a VIN verification or an emissions / safety inspection is required
- Update your voter registration and check local deadlines if there is an upcoming election
- File Form 8822 with the IRS to ensure tax correspondence reaches you
- Update your address with your state's Department of Revenue
- Program your new address into your primary GPS systems

Family Logistics

- Identify local emergency services
- Meet immediate neighbors
- Register children for school or childcare, if applicable - prepare proof of residency, immunization records, etc.
- Register with local doctor(s), optometrist, dentist, and veterinarian as applicable
- Verify new doctor(s) are in-network and formalize a "Records Release" request from your previous doctor(s)
- Transfer active prescriptions to a local pharmacy
- If applicable, update pet microchip information and check if local pet licensing is required in your area



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Learn more on our website:



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