3 Major Methods of Estimating Value

There are 3 major methods for estimating value of real property. When a licensee arrives at a 'listing presentation', the licensee will have to have done her homework. The prospective seller will want to know the potential value of his or her home.

Choosing a method will depend on the type of property being valued, if the property generates income, if the property is unique, and if the property is brand new, etc. It may even be important to use multiple approaches.

1) Market = Sales comparison approach
   • Compares similar - existing - sold properties.
   • Uses Comparative Market Analysis (CMA)

2) Replacement Cost or Summation approach
   • Rebuild and depreciate a new property to find value of unique properties

3) Income approach - Capitalization approach
   • How much will it rent for?

4) Combination of the 3 approaches (a weighted average)
Which one should I use?

Look at the property and decide which approach to use in the following order:

- Does it have comparable properties?
  - Yes - use the sales comparison approach
  - No - is it unique?
    - Yes - use the cost approach
- Does it produce income?
  - Yes - use the income approach
- Does it have comparable properties and income?
  - Yes - use more than one approach and find a weighted average

Sales Comparison Approach

The most commonly used methods for estimating value is the sales comparison approach. The approach requires the licensee to perform a Comparative Market Analysis (CMA). It is used to value existing single-family homes, vacant land and small income properties.

Value is influenced by recent prices of equally desirable substitutes. The subject property being appraised is compared to similar comparable parcels that have sold recently. Prices are adjusted for any dissimilarities in physical features and amenities such as differences in:

- Property rights (restrictions, leases, others rights to the property).
- Financing,
- Physical features,
- Previous financing and motivations,
- Conditions of sale,
- Date of sale, and
- Location.
The licensee checks tax records (also usually found in the multiple listing service (MLS)) for comparables. He finds as many as possible, 5 or more if possible. These comps have the following characteristics:

* Sold within the last couple of months if possible,
* Same or similar neighborhood,
* Square footage plus or minus 5%,
* Equal number of bedrooms and other rooms,
* Similar lot size.

The approach requires the licensee to adjust the price of the comparables, not the subject property. The appraiser raises and lowers the comparable’s price to match the subject property’s features, judging how much more (or less) a buyer would pay because of the presence (or absence) of a feature based on the principle of contribution. If the comparable is better/superior - he must lower the price of the comp to bring it down to the value of the subject property. If the comparable is worse/inferior - he must raise the price of the comp to raise it up to the value of the subject property.

This approach is used for:

* Appraising existing single-family residences, and
* Appraising vacant land, and
* Appraising small income properties if also weighted with the income approach.

Potential Problems: could be:

a) Similar or comparable properties are not always equally desirable or of the same quality.

b) The licensee must use subjectivity (his/her own opinion) at times.

c) In a slow market it may be hard to find comparables.

d) In exclusive or new neighborhoods, there may not have been many sales.

e) It may be hard to discover the selling motives and financing from previously sold properties.

f) Hard to find comparables in a slow market

g) Hard to find comparables for exclusive homes

h) Hard to find comparables in new neighborhoods

i) Hard to verify the financing and motivations from previously sold properties
Selling motives may cause prices variances very similar properties. Detailed research will help the licensee discover some of the important criteria that may disqualify the com. Was the previous owner a bank? Sometimes it is hard to tell if the bank was a private investor rather than a large institution. Does the previous owner have the same last name as the current owner? Was it a divorce or a death in the family that caused the sale? What did the previous listing mention about the transaction?

i) Family members purchasing properties from other family members

ii) Personal circumstances (death, divorce, job relocation)

iii) Foreclosure sales or the threat of foreclosure

iv) Business expansions when a buyer must have a property due to location

v) All cash or no cash sales

The market or sales comparison approach is one of the three major methods for estimating values, commonly used in estimating value of real estate. This approach compares a subject property’s characteristics with those of comparable properties which have recently sold in similar transactions. The process uses one of several techniques to adjust the prices of the comparable transactions according to the presence, absence, or degree of characteristics which influence value. As such, all sales comparison approach methods are variations on hedonic-type measurements, which determine the value of something as the sum of the value of the various components which contribute utility.

Units of Comparison

The sales comparison relies on the assumption that the attributes or significant features of a property drive its value. For examples, in the case of a single family
residence, such attributes might be floor area, views, distance to amenities, number of bathrooms, lot size, age of the property and condition of property.

**Economic Basis**
The sales comparison approach is based upon the principles of supply and demand, as well as upon the principle of substitution. Supply and demand indicates value through typical market behavior of both buyers and sellers. Substitution indicates that a purchaser would not purchase an improved property for any value higher than it could be replaced for on a site with equivalent utility, assuming no undue delays in construction.

**Examples of Methods**
In practice, the most common sales comparison approach used by estate agents and real estate appraisers uses a small number of recently sold properties in the immediate vicinity of the subject property to estimates the value of its attributes. Adjustments to the comparables may be determined by trend analysis, matched-pairs analysis, or simple surveys of the market.

High priced properties tend to cluster together and therefore one property price is not independent of its neighbor. Given property inflation and price cycles, the comparison technique can become unreliable if too much time passes between transactions. Another factor that could cause problems is the evolving nature of neighborhoods, especially neighborhoods with an increasing number of foreclosures and short sales.\(^{36}\)

**Procedure:**
What is the procedure? Research records to find similar properties, sold recently to a ready, willing and able buyer (not to a lender or from a lender). List the amenities of the subject property (the prospective listing). List the amenities of the comps. Only adjust the price of the comps! Start with the actual sales price of the comps and alter the price to 'create' a price for the subject property. Estimate or research the price for the feature. Use the sales price of the comps and add to the price if the subject property is 'superior' and subtract from the comp if the subject property is 'inferior'. The licensee is attempting to build the sales price for the subject property from the comp sales price.

### Sales Comparison Approach Example 1

<table>
<thead>
<tr>
<th></th>
<th>Subject Property</th>
<th>Comparable A</th>
<th>Comparable B</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Features</strong></td>
<td>415 Elk Drive</td>
<td>255 Kingman</td>
<td>950 Jasper</td>
</tr>
<tr>
<td><strong>Sales Price</strong></td>
<td>?</td>
<td>$162,000</td>
<td>$160,000</td>
</tr>
<tr>
<td><strong>Fireplace</strong></td>
<td>1</td>
<td>2 (-1,000)</td>
<td>2 (-1,000)</td>
</tr>
<tr>
<td><strong>Garage</strong></td>
<td>3</td>
<td>2 (+500)</td>
<td>2 (+500)</td>
</tr>
<tr>
<td><strong>Baths</strong></td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td><strong>Sq foot</strong></td>
<td>2,200</td>
<td>2,100 (+100)</td>
<td>2,200</td>
</tr>
<tr>
<td><strong>Bedrooms</strong></td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td><strong>Lot size</strong></td>
<td>15,000</td>
<td>15,000</td>
<td>16,000 (-500)</td>
</tr>
<tr>
<td><strong>Exterior condition</strong></td>
<td>Stucco</td>
<td>Stucco</td>
<td>Frame (+700)</td>
</tr>
<tr>
<td><strong>Adjustments</strong></td>
<td>-400</td>
<td>-300</td>
<td></td>
</tr>
<tr>
<td><strong>Adjusted Value</strong></td>
<td>$161,600</td>
<td>$159,700</td>
<td></td>
</tr>
</tbody>
</table>

**Using the sales comparison approach, the value of 415 Elk Drive should be approximately somewhere between the range of $159,700 and $161,600.**
Sales Comparison Approach Example 2

<table>
<thead>
<tr>
<th></th>
<th>Subject Property</th>
<th>Comparable A</th>
<th>Comparable B</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Features</strong></td>
<td>222 S Rainbow</td>
<td>280 S Rainbow</td>
<td>210 S Rainbow</td>
</tr>
<tr>
<td><strong>Sales Price</strong></td>
<td>?</td>
<td>$425,000</td>
<td>$435,000</td>
</tr>
<tr>
<td><strong>Fireplace</strong></td>
<td>0</td>
<td>2 (-2,000)</td>
<td>1 (-1,000)</td>
</tr>
<tr>
<td><strong>Garage</strong></td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td><strong>Baths</strong></td>
<td>4</td>
<td>3 (+500)</td>
<td>4</td>
</tr>
<tr>
<td><strong>Sq foot</strong></td>
<td>3,200</td>
<td>3,200</td>
<td>3,250 (-50)</td>
</tr>
<tr>
<td><strong>Bedrooms</strong></td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td><strong>Lot size</strong></td>
<td>15,000</td>
<td>15,000</td>
<td>15,000</td>
</tr>
<tr>
<td><strong>Exterior condition</strong></td>
<td>Stucco</td>
<td>Stucco</td>
<td>Some culture stone (-500)</td>
</tr>
<tr>
<td><strong>Adjustments</strong></td>
<td></td>
<td>-1,500</td>
<td>-1,550</td>
</tr>
<tr>
<td><strong>Adjusted Value</strong></td>
<td>$423,500</td>
<td>$433,450</td>
<td></td>
</tr>
</tbody>
</table>

Using the sales comparison approach, the value of 222 S Rainbow should be approximately somewhere between the range of $423,500 and $433,450.
Evaluating vacant land:
Always use market data approach and consider these factors:

a) Size
b) Shape
  c) Pool ready?
d) Topography (how hilly or flat is it?)
  e) Houses built on hills often have hills in the backyard - great for plants!
  - Bad for pools
f) Soil conditions
g) Caliche
h) Utilities
i) Frontage
  j) River frontage or highway frontage for example, may add or subtract value to a property
k) Often times a property is priced by how much water frontage it has - a piece of land may be valued at a certain dollar value per front foot as long as it is a certain depth.

<table>
<thead>
<tr>
<th>TYPE OF IMPROVEMENT</th>
<th>ESTIMATED COST LABOR + MATERIALS</th>
<th>RECOVERY COST %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Kitchen Remodeling</td>
<td>$800 - $1200</td>
<td>80 - 100%</td>
</tr>
<tr>
<td>Minor Kitchen Remodeling</td>
<td>$300 - $600</td>
<td>80 - 100%</td>
</tr>
<tr>
<td>Bathroom Remodeling</td>
<td>$400 - $600</td>
<td>50 - 75%</td>
</tr>
<tr>
<td>Bathroom Addition</td>
<td>$500 - $1000</td>
<td>50 - 85%</td>
</tr>
<tr>
<td>Bedroom Addition</td>
<td>$6000 - $15000</td>
<td>65 - 85%</td>
</tr>
<tr>
<td>Two Car Garage Addition</td>
<td>$13100 - $18100</td>
<td>33 - 50%</td>
</tr>
<tr>
<td>Two Car Carport Addition</td>
<td>$7600 - $10000</td>
<td>10 - 50%</td>
</tr>
<tr>
<td>Energy Efficient Fireplace</td>
<td>$2600 - $3600</td>
<td>80 - 100%</td>
</tr>
<tr>
<td>Energy Efficient Windows and Doors</td>
<td>$5300 - $8500</td>
<td>0 - 20%</td>
</tr>
<tr>
<td>Exterior Painting</td>
<td>$900 - $2400</td>
<td>30 - 60%</td>
</tr>
<tr>
<td>Exterior Roofing</td>
<td>$6100 - $8000</td>
<td>20 - 40%</td>
</tr>
<tr>
<td>Landscaping Improvements</td>
<td>$500 - $3500</td>
<td>40 - 60%</td>
</tr>
<tr>
<td>Swimming Pool</td>
<td>$9000 - $17500</td>
<td>0 - 40%</td>
</tr>
<tr>
<td>Minor Roofing</td>
<td>$1700 - $2500</td>
<td>0 - 20%</td>
</tr>
<tr>
<td>Major Roofing</td>
<td>$3000 - $4500</td>
<td>0 - 20%</td>
</tr>
<tr>
<td>Patio Addition</td>
<td>$1250 - $4000</td>
<td>35 - 40%</td>
</tr>
<tr>
<td>Interior Painting</td>
<td>$1000 - $3000</td>
<td>30 - 80%</td>
</tr>
</tbody>
</table>

SOURCE: Institute of Real Estate Appraisers
2nd Approach: Replacement Cost Approach

Replacement Cost or Summation approach

In real estate appraisal, the cost approach is one of three basic valuation methods. The fundamental premise of the cost approach is that a potential user of real estate won't, or shouldn't, pay more for a property than it would cost to build an equivalent. The cost of construction minus depreciation, plus land, is an estimate of market value.

It is generally considered that the cost approach gives the best indication of market value when the property in question is new and an appropriate (highest and best) use.

The approach hypothetically create a brand new property and depreciates it. It is an appropriate valuation method for unique properties, non-income producing properties, and special use properties such as churches, schools, stadiums and libraries.

Cost Approach Steps

Step 1: Estimate the current cost of buildings and improvements.
Step 2: Estimate the accrued depreciation from all sources.
Step 3: Deduct the depreciation.
Step 4: Add the estimated land value as if it were vacant.

Cost Approach:

* Is based on the principle of substitution
* hypothetically creates new a property and depreciates it
* appropriate for:
  * unique properties
  * non-income producing properties
  * churches, schools, stadiums, libraries
Creating a new property

How do you hypothetically create a new property? Do you use new methods, new technology, or do you stick with the same methods that the previous contractors used?

What if you were re-building a pyramid? If you were valuating that process using the cost approach, you would probably create 2 costs sheets for the financiers approval. One cost sheet would show the costs involved in creating an exact replica, using today’s technology to build it. One cost sheet would show the costs involved in creating a similar replacement, using new construction methods and materials.

How would you estimate costs? Would you price each item and add them up, or would you estimate the costs per square foot and multiply it times the number of square feet in the structure?

As with most calculations, there are many right ways to accomplish the task.

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**Replacement cost**
- The cost of a similar replacement using new construction methods and materials

**Reproduction cost**
- The cost at current prices for an exact duplicate of the subject property.

**Methods:**

- **Square foot method** - the price of a comparable structure
  
  $74 per square foot x 1,345 square feet = $99,530 (+ land)

- **Unit-in-place method** - price of individual building components such as walls, floors, utilities
  
  $\text{Heat} + \text{Plumbing} + \text{Electrical} + \text{Walls} + \text{etc.}

- **Quantity survey method** - sum of individual materials + indirect costs
  
  $\text{Lumber} + \text{Plaster} + \text{Building permit} + \text{Taxes}$

- **Index method** - percentage increase of construction costs (used as a check only)

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**How is depreciation calculated?**

Depreciation is a noncash expense that reduces the value of an asset as a result of wear and tear, age, or obsolescence. Most assets lose their value over time (in
other words, they depreciate), and must be replaced once the end of their useful life is reached.37

• Loss in value due to any cause
• A condition that negatively affects property

Causes:

I. Physical depreciation or deterioration
   A. Physical wear and tear
   B. Examples: roof has a hole, carpeting is ripped

II. Functional obsolescence
   A. Due to poor design or features
   B. Example: a perfectly good casino is blown up to make way for a larger one
   C. Example: a toilet that works fine is replaced by a toilet that uses less water per flush

III. External obsolescence
   A. Due to poor location or environmental, social or economic factors
   B. External to the property

Is the Depreciation Curable?

- Is the depreciation an old roof? This is physical depreciation and it is curable.
- Is the depreciation a recession? Is the depreciation a neighborhood full of foreclosures? This would be external, environmental or economic depreciation and it is always incurable.
- Is the depreciation a 1 bath 5 bedroom house? This is functional obsolescence or depreciation and it is curable, but it may not be cost effective to fix it.
- Is the depreciation an old Casino on the strip in Las Vegas? This is functional depreciation and it may be smarter to blow it up, than renovate it.

Curable
* physical depreciation

Always Incurable
* External obsolescence - also called environmental or economic depreciation

Sometimes Incurable
* Functional obsolescence if not cost effective

**Cost Approach Example**

**Cost Estimation:**
Cubic foot method: $3 \times 40,000$ cubic feet = $120,000

**Depreciation:**
- Expected life: 20 years
- Depreciation per year: $120,000/20$ years = $6,000$ per year
- 5 year old building: $6,000 \times 5 = 30,000$
- Value - depreciation: $120,000 - 30,000 = 90,000$

**Land:**
- Market value: in area for similar properties is $110,000$ per acre
- Lot size: 60’ X 180’
- Square foot: 60’ X 180’ = 10,800 sq. ft.
- Acres: since 43,560 sq. ft = 1 acre; 10,800/43,560 = approx. 25%
- Value: $110,000 \times .25$ acre = $27,500$

**Value:**
$90,000 + 27,500 = 117,500$

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**Other Cost Approach Examples**

1) **Subject Property: 222 S Rainbow Blvd**

**Land Valuation:**
- 80’ by 320’ @ $800 per front foot = $64,000
- Land improvements = $9,000

**Building Valuation:**
- 2,500 square foot @ $90 per sq. ft. = $225,000

**Depreciation:**
- Physical: new roof = 10,000
- Functional: need to add a bathroom = 5,000
- External: 0

**Value:** $64,000 + 9,000 + 225,000 - 10,000 - 5,000 = 283,000$

2) **Subject Property: 215 N Sahara Ave.**

**Land Valuation:**
- 90’ by 300’ @ $60,000 per acre = (90 \times 300) \div 43,560 \times 60,000 = 37,190$

**Building Valuation:**
- 3,500 square foot @ $70 per sq. ft. = $245,000

**Depreciation:**
- Physical: new carpeting = 40,000
- Functional: new toilets = 500
- External: 0

**Value:** $37,190 + 245,000 - 40,000 - 500 = 241,690$