

# THE PROCESS OF PROPERTY APPRAISAL

1/1/2014

COOKE COUNTY APPRAISAL DISTRICT



## *The Process of Property Appraisal*

Cooke County Appraisal District (CCAD) is responsible for appraising property at market value for ad valorem taxes.

CCAD is responsible for the appraisal of the following taxing entities

|                             |                  |                   |
|-----------------------------|------------------|-------------------|
| Cooke County                | Lindsay ISD      | Gainesville City  |
| Fm & Lateral Road           | Muenster ISD     | Lindsay City      |
| Gainesville Hospital        | Pilot Point ISD  | Muenster City     |
| Muenster Hospital           | Sivells Bend ISD | Oakridge City     |
| North Central Texas College | Saint Jo ISD     | Pilot Point City  |
| Road & Bridge Fund          | Slidell ISD      | Valley View City  |
| Callisburg ISD              | Valley View ISD  | Clear Creek Water |
| Collinsville ISD            | Walnut Bend ISD  | Muenster Water    |
| Era ISD                     | Whitesboro ISD   |                   |
| Gainesville ISD             | Callisburg City  |                   |

Section 23.01 of the Texas Property Tax Code requires that real and business personal property is appraised at its market value as of January 1 unless otherwise provided in this chapter. Section 1.04(7) defines “market value” as the price at which a property would transfer for cash or its equivalent under prevailing market conditions if:

- 1) Exposed for sale in the open market with a reasonable time for the seller to find a purchaser;
- 2) Both the seller and the purchaser know of all the uses and purposes to which the property is adapted and for which it is capable of being used and of the enforceable restrictions on its use, and
- 3) Both the seller and buyer seek to maximize their gains and neither is in a position to take advantage of the exigencies of the other.

Cooke CAD follows the standards of the International Association of Assessing Officers (**IAAO**) regarding its appraisal practices and procedures, and subscribes to the standards promulgated by the Appraisal Foundation known as the Uniform Standards of Professional Appraisal Practice (**USPAP**) to the extent they are applicable

### **THE APPRAISAL PROCESS**

There are three basic approaches available to the appraiser for the valuation of real property. Ideally, all three approaches are used to establish a final estimate of market value. Quite often, though, one or more of the approaches will be inappropriate to the property being appraised.

The three approaches to value are: sales comparable approach, cost approach, and the income approach.

**The sales comparison approach** follows the up and down trends of the market. It involves using the subject property and comparing it to similar type properties that recently sold. Adjustments are made to the sold properties for any differences from the subject. These adjustments will give the appraiser an estimate of what the market value would be on the subject property. The sales comparison approach is generally the most common approach used for houses and land values. This process is cost prohibited for each property in an appraisal district.

Market analysis is used to examine how physical, economic, governmental, social forces and other influences affect property values. The effect of these forces is also used to identify, classify, and organize comparable properties into smaller manageable sets of properties known as neighborhoods. A “neighborhood” for analysis purposes is defined as a geographic grouping of properties where the physical, economic, governmental and social forces on the properties are generally uniform. Sold properties within a neighborhood are then analyzed to determine how the properties sold, was the sale an arm’s length transaction. Was the property listed on the open market for a reasonable amount of time, both buyer and seller seek to maximize their gains and neither is in a position to take advantage of any pressing or urgent situations.

The **cost approach** is an estimate of what it would cost to reproduce or replacement the same structure less depreciation plus land. Reproduction cost is the cost of constructing a replica using the same material, construction standards, design, and quality of workmanship. Replacement cost is the cost of constructing a substitute structure of equal utility using current materials, design and standards.

Cost information is gathered for local builders and publication such as Marshall and Swift. Schedules are built by the appraisal district that is generally a blend of both cost and market information. Schedule should reflect the different types of construction in housing, commercial properties, and other types of structures.

Depreciation falls into three general categories; physical deterioration, functional obsolescence, and external (economic) obsolescence. **Physical deterioration** is the loss in value due to wear and tear. Proper maintenance can slow the amount of physical depreciation where poor maintenance can increase it. Functional obsolescence is the overall usefulness and desirability of a property. **Functional depreciation** is the loss of value the property experiences from poor or inappropriate architecture, pool floor plans, room sizes, etc. Both physical and functional depreciation are inherent in the property itself. **External (economic) obsolescence** is the result of outside forces. An example of external obsolescence could be the influence the market shifts or governmental actions, restrictions on income, zoning,

$$V = LV + (RCN - D)$$

(Value = Land Value + (Cost New – Depreciation))

$$\$142,084 = \$22,297 + (\$140,150 - 23\%)$$

The **income approach** values property based on the income it is capable of producing. This approach is used primarily for commercial properties. Any investor seeks a return on and a return of invested money. The approach is based on the principle that the value of an investment property is reflected in the amount of income the property will generate. A capitalization rate is used to convert the income stream into one lump-sum value.

An example of a direct income formula is as follows:

- 1) Gross Potential Income (GPI)
- 2) Less Vacancy and Collection Loss (V&C)
- 3) Plus any miscellaneous income (washer/dryer)
- 4) Equals Effective Gross Income (EGI)
- 5) Less allowable expenses
  - a. Insurance
  - b. Property taxes (if not used in developing a capitalization rate)
  - c. Operating and Maintenance expenses
  - d. Reserves for replacement
  - e. Management fees
- 6) Equals Net Operating Income (NOI)
- 7) Divided by Capitalization Rate
- 8) Equals value.

Another way to look at it is the IRV Equation: V = value, I= income, R= rate

$$V = I / R$$
$$R = I / V$$
$$I = R \times V$$

Cooke CAD **land schedules** are developed based on the market approach. Land sales are collected, verified, adjusted, analyzed, and tested. Neighborhoods or areas are defined by the sales, then schedules are developed. If there are no current sales, land to building ratios are another acceptable method of determining the land value. Land schedules can be based on acreage, square footage, per lot basis, per linear foot, etc. Land schedules can be further adjusted by adding site improvement values or by applying plus or minus modifiers for other reasons.

### **HOW MASS APPRAISAL WORKS**

Cooke County Appraisal District appraises property utilizing “**mass**” appraisal. Mass appraisal is a standardized process of valuing a large number of properties, as of a given date, in a manner that allows for statistical testing. The standardized process is accomplished by developing schedules. The schedules are then applied to the individual properties. Cooke CAD **improvement schedules** are developed based on a combination of the cost and market approach. After the schedule has been developed, it is tested for accuracy. The first step in the mass appraisal approach is data collection.

### ***Data Collection / Validation***

Data collection of real property involves recording physical characteristics and economic data of the property. A diligent effort is taken to make sure the characteristics accurately reflect the current status of the property. To effectively evaluate the quality of existing data, field inspections and/or the aerial photos are used to identify structures with the appraiser is unable to physically inspect the property.

Improvement data – such as the square footage of an improvement, year built, the quality of construction, and an estimate of depreciation are all necessary to arrive at an indication of market value. Other characteristics include but are not limited to: the type of foundation, type of roof, type of heating and cooling system, number of baths, number of units, number of rooms, or leasable area. Characteristics are a direct reflection of the improvements. Mass appraisal requires the use of a classification system and all properties are classed according to a specific classification.

The types of information recorded and maintained for Business Personal Property include situs, type, kind, quality and density of inventory, furniture and fixtures, machinery and equipment. Texas Department of Transportation records are obtained annually through a vendor who provides a list of potential commercial use vehicles within the district. The field appraisers conducting on-site inspections use a personal property classification system as a guide to correctly list all personal property that is taxable.

### ***Sources of Data***

The sources of data collection are through inspections of newly constructed and existing improvements, sales validation and field inspections, assignment of 9-1-1 addressing, County Environmental Health office, city permits, electrical installation, drilling of new water well, mechanic liens, appraisal review board hearings, property owner communications, newspapers and publications, and communication with other taxpayers and business owners.

In real property, sales validation may involve on-site inspection by field appraisers to verify the accuracy of the property characteristics at the time of sale, contacting the listing or selling agent and contacting the buyer to confirm information about the sales price. Accuracy in property details and characteristics data is one of the highest goals and is stressed throughout the appraisal process. Sources of purchase prices are gathered through the use of the Multiple Listing Service (MLS), sales letters mailed from Cooke CAD requesting the information, and any other available sources. It is important for the property owner to know that MLS sales are confidential, by state law, unless a protest has been filed by the property owner or the purchase price has been received through another source.

### ***Statistical Analysis***

Statistical analysis is performed to evaluate whether estimated values are equitable and consistent with the market. Ratio studies are conducted on each of the neighborhoods in the district to judge the two primary aspects of mass appraisal accuracy – a supportable estimate of market value and equal and uniformity of values. The first phase involves neighborhood ratio studies that compare the current sales prices within neighborhood properties to the appraised values of the sold properties. Appraisers are responsible for conducting these studies and comparative analysis in their assigned market areas (neighborhoods) or property categories. The sales ratio and comparative analysis of the sales price of property to the appraised value of property forms the basis for determining the level of appraisal for the sold properties.

If the level of appraisal for the sold properties in a neighborhood is outside the acceptable range of ratios, adjustments will be made to all of the properties within that neighborhood. This information is the basis for updating property valuation for an entire area of properties to be re-evaluated.

**An example of the complete calculation is shown on the following pages;**

## Calculation Worksheet

**Property ID**      **Year**      **Supplement**  
                          2015            0  
**Geo ID:** 2311-001-00009  
**Legal Description:**  
                  **Situs:**  
                  **Owner:**  
**Ownership Percentage:** 100.0000000000%  
**Abstract / Subdivision:** 2311  
                  **Improvement Mass Adjustment:** 100.00%  
                  **Land Mass Adjustment:** 100.00%  
                  **Neighborhood:** GVC00003D  
                  **Improvement Mass Adjustment:** 100.00%  
                  **Land Mass Adjustment:** 100.00%

### Values

|                                  |                        |                           |  |
|----------------------------------|------------------------|---------------------------|--|
| Improvement Homesite:            | \$39,802               |                           |  |
| Improvement Non-Homesite:        | \$0                    |                           |  |
| Land Homesite:                   | \$12,079               |                           |  |
| Land Non-Homesite:               | \$0                    |                           |  |
| Ag Market:                       | \$0                    |                           |  |
| Timber Market:                   | \$0                    |                           |  |
| <b>Market:</b>                   | <b>\$51,881</b>        | <b>Market:</b>            | <b>\$51,881</b>                        |
|                                  |                        | <b>Productivity Loss:</b> | <b>\$0</b>                             |
|                                  |                        | <b>Appraised Value:</b>   | <b>\$51,881</b>                        |
|                                  | <b>Total HS Value:</b> | <b>\$51,881</b>           |  |
| <b>HS Cap Base Year:</b>         | 2014                   |                           |  |
| <b>HS Value - Base Cap Year:</b> | \$51,881               |                           |  |
| <b>HS Cap Percentage:</b>        | 10%                    |                           |  |
| <b>HS Cap Increase:</b>          | \$5,188                |                           |  |
| <b>New HS Value:</b>             | \$0                    |                           |  |
| <b>Maximum Allowed HS Value:</b> | <b>\$57,069</b>        | <b>-\$57,069</b>          |  |
|                                  | <b>HS Cap Loss:</b>    | <b>\$0</b>                | <b>HS Cap Loss:</b> <b>\$0</b>         |
|                                  |                        |                           | <b>Assessed Value:</b> <b>\$51,881</b> |

## Calculation Worksheet

### Improvements

Improvement ID: 8004  
Description: RESIDENTIAL  
Type: R RESIDENTIAL  
State Code: A1 REAL RESIDENTIAL SINGLE/FAMILY

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Detail ID: 27599  
Type: MAIN MAIN  
Class: H06F LOW/TRACK FRAME  
Method: R RESIDENTIAL

Area: 1306.0  
Unit Price: \$43.77  
Base Value: \$57,164

| Feature                     | Adjustment |
|-----------------------------|------------|
| Heating/Cooling             | \$0        |
| Total Features Adjustments: | \$0        |
| Calculated Value:           | \$57,164   |
| Adjustment Factor:          | 0.650000   |
| Adjusted Value:             | \$37,157   |
| Units Multiplier:           | 1          |

Detail Value: \$37,157

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Detail ID: 27600  
Type: P02 OPEN PORCH AVG  
Class: \* FEATURE/% OF MAIN  
Method: R RESIDENTIAL

Area: 20.0  
Unit Price: \$8.75  
Base Value: \$175  
Total Features Adjustments: \$0  
Calculated Value: \$175  
Adjustment Factor: 0.650000  
Adjusted Value: \$114  
Units Multiplier: 1

Detail Value: \$114

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# Calculation Worksheet

## Improvements

Improvement ID: 8004  
Description: RESIDENTIAL  
Type: R RESIDENTIAL  
State Code: A1 REAL RESIDENTIAL SINGLE/FAMILY

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Detail ID: 27601  
Type: CA1 CARPORT FAIR  
Class: \* FEATURE/% OF MAIN  
Method: R RESIDENTIAL  
Area: 480.0  
Unit Price: \$4.38  
Base Value: \$2,102  
Total Features Adjustments: \$0  
Calculated Value: \$2,102  
Adjustment Factor: 0.650000  
Adjusted Value: \$1,366  
Units Multiplier: 1

Detail Value: \$1,366

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Detail ID: 27602  
Type: SB3 STORAGE BUILDING GOOD  
Class: SB3 STORAGE BUILDING GOOD  
Method: R RESIDENTIAL  
Area: 256.0  
Unit Price: \$7.00  
Base Value: \$1,792  
Total Features Adjustments: \$0  
Calculated Value: \$1,792  
Adjustment Factor: 0.650000  
Adjusted Value: \$1,165  
Units Multiplier: 1

Detail Value: \$1,165

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### Summary for Improvement ID: 8004

Calculated Value: \$39,802  
Adjustment Factor: 100.0000%  
Adjusted Value: \$39,802  
Mass Adjustment Factor: 100.0000%  
Mass Adjusted Value: \$39,802

Improvement Value: \$39,802

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## Calculation Worksheet

### *Land*

Land Detail ID: 14755  
Type: DGC  
State Code: A1  
Acres: 0.3014  
Square Feet: 13,129.00  
Effective Size:  
Effective Front: 0.00  
Effective Depth: 0.00  
Number of Lots: 0

DGC  
REAL RESIDENTIAL SINGLE/FAMILY

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### *Market*

Appraisal Method: SQ  
Table: DGC  
Unit Price: \$ 0.92

Square Foot 2

Calculated Value: \$12,079  
Total Adjustments: \$0  
Adjusted Value: \$12,079  
Mass Adjustment Factor: 1.000000

Land Detail Market Value: \$12,079