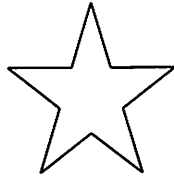


**HEMPHILL
COUNTY**



**APPRAISAL
DISTRICT**

2015/2016 BIENNIAL

REAPPRAISAL PLAN

TABLE OF CONTENTS

ITEM

EXECUTIVE SUMMARY	3
REVALUATION DECISION	4
PERFORMANCE ANALYSIS	5
Ratio Study Results	
Appraisal Accuracy (level of appraisal)	
Appraisal Uniformity (equity)	
ANALYSIS OF AVAILABLE RESOURCES	6
Staffing for Reappraisal Year	
Adopted Budget for 2015	
Existing Practices	
Information Systems (IS) Support	
Existing data and maps	
PLANNING AND ORGANIZATION	6
Calendar of Key Events - 2015	
Calendar of Key Events - 2016	
MASS APPRAISAL SYSTEM	9
Forms and procedures revised	
CAMA System revisions as required	
DATA COLLECTION APPRAISAL YEAR	10

New Construction	
Remodeling	
Re-inspection of universe of properties on a specific Cycle	
Field or office verification of sales data and property Characteristics	
PILOT STUDY BY APPRAISAL YEAR	11
Test new/revised mass appraisal methods	
Ratio Studies by Market Areas	
Test accuracy and reliability in certain market areas	
VALUATION BY APPRAISAL YEAR	11
Market Analysis	
Model specification	
Model calibration	
Calculation of Preliminary values	
Test values for accuracy and uniformity	
THE MASS APPRAISAL REPORT BY TAX YEAR	20
Scope of Work (Written Reappraisal Plan)	
Compliant with STANDARD RULE 6 - 8 of USPAP	
Signed Certification by the Chief Appraiser as required by STANDARD RULE 6 – 9 of USPAP	
VALUE DEFENSE	21

EXECUTIVE SUMMARY

TAX CODE REQUIREMENT

Passage of S. B. 1652 amended the Tax Code to require a written biennial appraisal plan. The following details the changes to the Tax Code:

The Written Plan

Section 6.05, Texas Property Tax Code, is amended by adding Subsection (i) to read as follows:

- (i) To ensure adherence with generally accepted appraisal practices, the Board of Directors of an appraisal district shall develop biennially a written plan for the periodic reappraisal of all property within the boundaries of the district according to the requirements of Section 25.18, Texas Property Tax Code and shall hold a public hearing to consider the proposed plan. Not later than the 10th day before the date of the hearing, the Secretary of the Board shall deliver to the presiding officer of the governing body of each taxing unit participating in the district a written notice of the date, time, and place of the public hearing. Not later than September 15 of each even numbered year, the board shall complete its hearings, make any amendments and by resolution finally approve the plan. Copies of the approved plan shall be distributed to the presiding officer of the governing body of each taxing unit participating in the district and to the comptroller within 60 days of the approval date.

Plan for Periodic Reappraisal

Subsections (a) and (b), Section 25.18, Texas Property Tax Code, are amended to read as follows:

- (a) Each appraisal office shall implement a plan for the periodic reappraisal of property as approved by the board of directors under Section 6.05(i).
- (b) The plan shall provide for the following reappraisal activities for all real and personal property in the district at least once every three years:
 - (1) Identify properties to be appraised through physical inspection or by other reliable means of identification, including deeds or other legal documentation, aerial photographs, land-based photographs, surveys, maps and property sketches;

- (2) Identify and update relevant characteristics of each property on the appraisal records;
- (3) Identify property characteristics that affect property value including:
 - (A) Physical attributes of property, such as size, age, and condition;
 - (B) Legal and economic attributes; and
 - (C) Easements, covenants, leases, reservations, contacts, declarations, special assessments, ordinances or legal restrictions;
- (4) Develop an appraisal model that reflects the relationship among the property characteristics affecting value and determine the contribution of individual property characteristics;
- (5) Apply the conclusions reflected in the model to the characteristics of the properties being appraised and;
- (6) Review the appraisal results to determine value.

REVALUATION DECISION (REAPPRAISAL CYCLE)

The Hemphill County Appraisal District reappraises all property in the district at least once every three years, as required by Section 25.18, Texas Property Tax Code. The Chief Appraiser and Board of Directors endorse by policy this legal requirement. In both 2015 and 2016 the entire universe of properties will be appraised for all taxing entities.

REAPPRAISAL YEAR ACTIVITIES

1. Performance Analysis - The equalized values from previous appraisal year are analyzed with ratio studies to determine appraisal accuracy and appraisal uniformity overall and within property categories. Ratio studies are conducted in compliance with the current *Standard on Ratio Studies* of the International Association of Assessing Officers.
2. Analysis of Available Resources - Staffing and budget requirements for appraisal year 2015 are detailed in the 2015 appraisal district budget, as adopted by the Board of Directors. Existing appraisal practices, which are continued from year to year, will be identified and district management will specify methods utilized to keep these practices current. Computer Assisted Mass Appraisal (CAMA) support is detailed with year specific functions identified and system upgrades scheduled as necessary. Existing maps and data requirements are specified and updates scheduled as required.
3. Planning and Organization - A calendar of key events with critical completion dates is prepared for the district. This calendar identifies the key events for the preparation

of the appraisal roll. A calendar is prepared and included for appraisal years 2015 and 2016. Production standards for field activities are calculated and incorporated in the planning and scheduling process in order to reach goals set by both district management and the Texas Property Tax Code.

4. Mass Appraisal System - Computer Assisted Mass Appraisal (CAMA) system revisions required are specified and scheduled with the district's software vendor. All computer forms and CAMA procedures are reviewed and revised as required.
5. Data Collection Requirements - Field and office procedures are reviewed and revised as required for data collection. Activities scheduled for each appraisal year include new construction, demolition, remodeling, re-inspection of identified problem areas, re-inspection of the universe of properties on a specific cycle, and field or office verification of sales data and property characteristics.
6. Pilot study by appraisal year - Ratio studies are conducted using proposed values each appraisal year. Proposed values in each category are tested for accuracy and reliability using standardized testing procedures and ratio study statistics.
7. Valuation by appraisal year - Using market analysis of comparable sales and locally tested cost data, valuation models will be specified and calibrated in compliance with the supplemental standards from the International Association of Assessing Officers and the *Uniform Standards of Professional Appraisal Practice*. The calculated values will be tested for accuracy and uniformity using ratio studies.
8. The Mass Appraisal Report - Each appraisal year the required Mass Appraisal Report will be prepared and certified by the Chief Appraiser at the conclusion of the appraisal phase of the ad valorem tax calendar (on or about May 15). The Mass Appraisal Report is completed in compliance with STANDARD RULE 6 - 8 of the *Uniform Standards of Professional Practice*. The signed certification of the Chief Appraiser is compliant with STANDARD RULE 6-9 of USPAP.
9. Value Defense - Evidence to be used by the appraisal district to meet its burden of proof for market value and appraisal equity in both informal and formal hearings is specified and tested as applicable.

PERFORMANCE ANALYSIS

In each appraisal year, the previous appraisal year's equalized values are analyzed with ratio studies to determine appraisal accuracy and appraisal uniformity overall. In its annual procedures, the district tests values within state property reporting categories. Ratio studies are conducted in compliance with the current Standard on Ratio Studies from the International Association of Assessing Officers. Mean, median, and weighted mean ratios are calculated as measures of central tendency for properties in each reporting category to measure the level of appraisal (appraisal accuracy). The median ratio is the primary measure of central tendency analyzed in each market area to indicate the level and accuracy of appraisal performance. The

district also calculates the coefficient of dispersion and price related differential in each market area to indicate the uniformity or equity of existing appraisals.

ANALYSIS OF AVAILABLE RESOURCES

Staffing and budget requirements for tax year 2015 are detailed in the 2015 appraisal district budget, as adopted by the Board of Directors.

Existing appraisal practices, which are continued from year to year, are identified and district staff is appropriately trained in order to keep their skills current. In each reappraisal year, real property appraisal cost new tables and depreciation tables are updated and based upon cost data obtained from the Marshall Valuation Service (also known as *Marshall and Swift*). The preliminary values produced by these updates are tested against verified sales data and adjustments are made as necessary to fit the local market. Income studies of commercial real property use type are conducted and models are updated from current market data. This includes a review of economic rents and capitalization rates from the local market, data obtained through the ARB hearing process, and information from published sources.

CAMA support is detailed with year specific functions identified and system upgrades are scheduled with the district's software vendor. Computer generated forms are reviewed for revisions based on year and reappraisal status. Legislative changes are scheduled for completion and also tested through coordination between the district's staff and software vendor in order to make these tools available to the appraisal staff.

The Hemphill County Appraisal District, and all appraisal districts in Texas are specifically hindered when valuing property due to the lack of mandatory sales disclosure. The lack of mandatory sales disclosure restricts the information that is available to CAD's when using the Sales Comparison Approach, especially on the high end of the value spectrum of residential property and also regarding most non-residential real property. The lack of mandatory sales price disclosure also impacts the development of the income approach by restricting the type of data necessary to calculate an overall capitalization rate from sold comparable properties. Should mandatory sales price disclosure become law; all appraisal districts will gain access to the information necessary to enhance accuracy and equity in future appraisals.

PLANNING AND ORGANIZATION

A calendar of key events with critical completion dates is prepared for the district. This calendar identifies the key events for developing the appraisal roll. A separate calendar is prepared for appraisal years 2015 and 2016. Production standards for field activities are calculated and incorporated in the planning and scheduling process. This plan encompasses the normal processes carried out for each year by the district; therefore catastrophic events or significant legislative action may have a detrimental effect to the district's operation and require changes to this plan.

CALENDAR OF KEY EVENTS

2015 APPRAISAL YEAR		
Event	Beginning Date	Ending Date
Roll 2014 to 2015 CAMA System	10/1/2014	10/1/2014
Field Operations/Discovery Process - Appraisal Departments (Review deeds and building permits)	10/15/2014	12/31/2014
A. Drive out City of Canadian and northern county (North of Canadian)	1/1/2015	1/31/2015
B. Drive out south west Hemphill County (South of Canadian)	2/1/2015	2/28/2015
C. Drive out southeast Hemphill County (South of Canadian)	3/1/2015	3/29/2015
Adopt Biennial Reappraisal Plan Covering 2015 and 2016	8/6/2014	8/6/2014
Adopt 2015 Appraisal District Budget	6/4/2014	6/4/2014
TDLR Education Courses RPA tract as necessary	9/13/2014	3/31/2015
Statutory Date of Appraisal (Unless Sept 1 granted for Inventory)	1/1/2015	1/1/2015
Process Exemptions and Special Use Applications	10/1/2014	To Certification
Personal Property Renditions Mailed	1/7/2015	1/7/2015
Preliminary Property Value Study Released	1/31/2015	1/31/2015
PVS Protest Deadline if necessary	3/11/2015	3/11/2015
Conduct Ratio Studies	1/3/2015	3/30/2015
Valuation Review/Error Reports Cleanup	3/30/2015	4/13/2015
Send 25.19 Appraisal Notices	4/26/2015	4/26/2015
Certified Estimates of value Due to School Districts	4/29/2015	4/29/2015
Mail Mineral Notices	4/26/2015	4/26/2015
Mail late Personal Property Notices	5/20/2015	5/20/2015
Turn Over Records to ARB	5/24/2015	5/24/2015
Formal Hearings Scheduled - Depending on Volume	6/28/2015	7/22/2015
Primary Protest Deadline	5/31/2015	5/31/2015
Mineral Import from Vendor	7/19/2015	7/19/2015
Certification of the Appraisal Roll	7/24/2015	7/24/2015

CALENDAR OF KEY EVENTS

2016 APPRAISAL YEAR		
Event	Beginning Date	Ending Date
Roll 2015 to 2016 CAMA System	10/1/2015	10/1/2015
Field Operations/Discovery Process - Appraisal Departments (Review deeds and building permits)	10/15/2015	12/31/2015
A. Drive out City of Canadian and northern county (North of Canadian)	1/1/2016	1/31/2016
B. Drive out South west Hemphill County (South of Canadian)	2/1/2016	2/28/2016
C. Drive out South east Hemphill County (South of Canadian)	3/1/2016	3/29/2016
Adopt Biennial Reappraisal Plan Covering 2017 and 2018	9/10/2016	9/10/2016
Adopt 2016 Appraisal District Budget	6/12/2015	6/12/2015
TDLR Education Courses RPA tract as necessary	9/13/2015	3/31/2016
Statutory Date of Appraisal (Unless Sept 1 granted for Inventory)	1/1/2016	1/1/2016
Process Exemptions and Special Use Applications	10/1/2015	To Certification
Personal Property Renditions Mailed	1/6/2016	1/6/2016
Preliminary Property Value Study Released	1/31/2016	1/31/2016
PVS Protest Deadline if necessary	3/10/2016	3/10/2016
Conduct Ratio Studies	1/3/2016	3/30/2016
Valuation Review/Error Reports Cleanup	3/31/2016	4/14/2016
Send 25.19 Appraisal Notices	4/25/2016	4/25/2016
Certified Estimates of Value Due to School Districts	4/30/2016	4/30/2016
Mail Mineral Notices	4/25/2016	4/25/2016
Mail late personal property notices	5/21/2016	5/21/2016
Turn Over Records to ARB	5/23/2016	5/23/2016
Formal Hearings Scheduled - Depending on Volume	6/27/2016	7/22/2016
Primary Protest Deadline	6/2/2016	6/2/2016
Mineral Import from Vendor	7/21/2016	7/21/2016
Certification of the Appraisal Roll	7/25/2016	7/25/2016

MASS APPRAISAL SYSTEM

Computer Assisted Mass Appraisal (CAMA) system revisions are specified by the Chief Appraiser and scheduled with the district's software vendor. The district currently, and for the foreseeable future, contracts with Pritchard & Abbott for software services. All automated forms and CAMA procedures are reviewed routinely and revised as required. The following details these procedures as it relates to the 2015 and 2016 appraisal years.

REAL PROPERTY VALUATION

Revisions to cost models, income models, and market models are specified, updated, and tested each appraisal year. Deeds are processed on an ongoing basis to transfer ownership, establish the basis for land size, and assign account numbers to newly platted lots as an addition to the appraisal roll. The district will also update and process exemption and special use appraisal applications as necessary and applicable.

Cost schedules are tested with market data (sales) to insure that the appraisal district is in compliance with Texas Property Tax Code, Section 23.011. Replacement cost new tables, as well as depreciation tables, are based on cost data from the Marshall Valuation Service (also known as Marshall and Swift). The resulting schedules are tested for accuracy and uniformity using ratio study tools.

Land tables are updated using current market data (sales) and then tested with a ratio study.

Income, expense, and occupancy data is updated in the income models for each property use category and market area. Cap rate studies are completed using current sales data when available and published sources are also utilized. The resulting models are tested using ratio study tools.

PERSONAL PROPERTY VALUATION

Business Personal Property renditions are reviewed and onsite evaluations are conducted as necessary.

NOTICING PROCESS

Section 25.19 appraisal notice forms are reviewed and edited for updates. These revisions include updates from the Comptroller's Property Tax Division as well as specific legislative changes as required. Updates also include the latest copy of the Comptroller's *Taxpayers Rights and Remedies*.

HEARING PROCESS

Protest hearings are scheduled for June 30 and July 23, depending on the calendar year, in order to certify by July 25 according to law. Standards of documentation are reviewed and amended as required. The appraisal district's hearing documentation is reviewed and updated to reflect the current valuation process and legal requirements.

DATA COLLECTION REQUIREMENTS

IDENTIFICATION AND UPDATE OF RELEVANT CHARACTERISTICS AFFECTING VALUE

Field and office procedures are reviewed and revised as required for the data collection process. Activities scheduled for each appraisal year include the review of new construction, demolition, remodeling, re-inspection of identified problem properties, and re-inspection of the universe of properties.

MARKET AREAS

The City of Canadian as well as the immediately surrounding areas (Buffalo Hills, Locust Rd, Hackberry Trail Rd, etc) represents one market area and rural residential properties represent another market area. Market areas are reviewed annually for presence of competing property characteristics.

NEW CONSTRUCTION /DEMOLITION

New construction field and office review procedures are identified and revised as required in order to complete the data collection phase. Sources of building permit data are confirmed and system input procedures are identified. Building plans and or blueprints are obtained when available and dimensions are entered into the system by data collections staff. The appraisal staff checks the accuracy of the measurements in the field during data review. This critical annual activity is projected and entered on the key events calendar for each appraisal year.

REMODELING

Areas with extensive improvement remodeling are identified, verified, and field activities scheduled to update property characteristic data. Updates to valuation procedures are tested with ratio studies before being finalized in valuation modeling. This field activity is also posted to the key events calendar and is monitored carefully to finish by the established deadlines.

RE-INSPECTION OF THE UNIVERSE OF PROPERTIES

The International Association of Assessing Officers, *Standard on Mass Appraisal of Real Property* specifies that the universe of properties should be re-inspected on a cycle of 4-6 years. The re-inspection includes the use of photography and imagery to augment an individual onsite visit. The annual re-inspection requirements for appraisal years 2015 and 2016 are identified by

property type or property classification and scheduled on the key events calendar as part of the field operation.

FIELD OR OFFICE VERIFICATION OF SALES DATA AND PROPERTY CHARACTERISTICS

Sales information must be verified and property characteristic data contemporaneous with the date of sale is captured in the sale record. The sales ratio tools require that the property that sold must equal the property appraised in order that statistical analysis results will be valid. In the event that these are not equal, the sale is usually excluded from the observation pool in the ratio study.

PILOT STUDY

New and/or revised mass appraisal models are tested. These modeling tests (sales ratio studies) are conducted each appraisal year. Actual test results are compared with anticipated results and those models not performing satisfactorily are refined and retested. The procedures used for model specification and model calibration are in compliance with *Uniform Standards of Professional Appraisal Practice*, STANDARD RULE 6.

VALUATION BY APPRAISAL YEAR

Using market analysis of comparable sales and locally tested cost data, specific income and expense data, and information gathered from renditions, valuation models are specified and calibrated in compliance with the supplemental standards from the International Association of Assessing Officers and the *Uniform Standards of Professional Appraisal Practice*. The calculated values are tested for accuracy and uniformity using ratio studies by market area and property category. Performance standards utilized are those as established by the *IAAO Standard on Ratio Studies*. Property values in all market areas are reviewed each reappraisal year and updated as indicated by existing market data.

The following details the planned valuation methods property type:

RESIDENTIAL REAL PROPERTY

Cost Approach

The district uses a hybrid cost-market approach when valuing residential properties. The comparative unit, also known as the square-foot method, will be used to develop an indication of the basic cost of a structure. Adjustments will then be made for amenities of individual properties based upon characteristics that affect value in the market. The district's cost tables are, and will continue to be, based upon information obtained from the Marshall *Valuation Service*, also known as *Marshall and Swift*. These cost figures are adjusted to the local market to reflect current local labor and material costs. Neighborhood Market Adjustment factors will

be developed from appraisal statistics provided by ratio studies to ensure that estimated values reflect both the supply and demand side of the market in each specific neighborhood. The following equation is the hybrid model used by the district:

$$MV = [RCNLD] MA + LV$$

In the formula above, the replacement cost new less depreciation (RCNLD) of the improvements are multiplied by the appropriate neighborhood market adjustment factor (MA) to arrive at a current improvement value. The current improvement value is added to the land value (LV) to arrive at an estimate of market value (MV). Market adjustments will be applied uniformly within neighborhoods to account for market preferences affecting value in each location throughout the district.

Residential land values will be estimated using the base lot method, square foot method, or acreage method of appraisal. The individual method utilized in each neighborhood is designed to mirror the market in that area. As such, the chosen method for each individual neighborhood will be selected based upon how properties are selling or which method best accounts for perceived differences among the universe of properties. There are four accepted methods for land valuation; the comparable sales approach, allocation by abstraction, allocation by ratio, and the capitalization of ground rent. The district will utilize elements of all of these land valuation methods depending upon market area and availability of market data. In areas where insufficient vacant land sales exist, the district will utilize the allocation methods to establish land values in a neighborhood. The appraisers will develop a base lot or primary land rate and assign land tables to each neighborhood. Land adjustments will be applied to individual properties, where necessary, to adjust for such influences as view, shape, size, and topography, and any other characteristic that affects value in a neighborhood.

If neighborhood statistics indicate that values need to be updated, the appraiser will employ cost calibration to bring the initial values closer to what the market indicates values should be in that area. This process involves comparing the initial depreciated cost figures for properties that sold to the sale contributory improvement values of those properties (Sale Price - Land Value). An adjustment factor is calculated for each property in the data pool and statistics are calculated for the indicated adjustments. The factor that best represents the acceptable range of market value is selected for each neighborhood. The sales used to determine the market adjustment factor will reflect the market influences and conditions for the specified neighborhood, thus producing more representative and supportable values. The market adjustment factor calculated for each neighborhood will be applied uniformly to all properties within that neighborhood and a second set of ratio study statistics will be generated to compare the level and uniformity of values in the neighborhood as adjusted.

Sales Comparison Approach

As indicated in *Property Appraisal and Assessment Administration*, in the absence of a sale of the subject property, sales prices of comparable properties are usually considered the best evidence of market value. The sales comparison approach mimics the behavior of the market by comparing the properties being appraised with comparable properties that have recently sold. Their sales prices will then be adjusted for differences from the subject

and a market value for the subject is estimated from the adjusted sales prices of comparable properties.

Income Approach

The income approach is based on the principle that the value of an investment property reflects the quality and quantity of the income it is expected to generate over its economic life. In other words, value is the estimated present value of future benefits. The appraiser must estimate income from a property and capitalize the income into an estimate of current value.

The model used to estimate the present value of income expected in the future is represented by the following formula known as IRV:

$$\text{Value} = \text{Income/Rate}$$

The income approach is most suitable for types of properties frequently purchased and held for the purpose of producing income, such as apartments, commercial buildings, and office buildings. It is not conducive to the valuation of single-family residential properties as these properties are purchased by consumptive users and therefore, do not routinely generate an income stream.

INVENTORY RESIDENTIAL PROPERTY

Residential improved and vacant property is appraised in compliance with Section 23.12 (a) of the Texas Property Tax Code.

The district does not, at this time, have an inventory of vacant or improved properties that qualify for inventory valuation.

COMMERCIAL AND MULTIFAMILY REAL PROPERTY

MARKET AREAS

Market areas for commercial properties are delineated within the City of Canadian as well as the immediately surrounding areas (Airport Rd, Muddville, etc.). Market areas are reviewed annually for presence of competing property characteristics.

Cost Approach

The cost approach to value will be applied using the comparative unit or square foot method of cost estimating. The following is the basic model that the district utilizes when employing the cost approach:

$$MV = RCNLD + LV$$

This methodology involves the use of national sources of cost data as well as actual cost information gathered from the local market whenever possible. Cost models utilized by the district are based on data obtained by the Marshall Valuation Service also known as *Marshall and Swift*. These costs include comparative base rates, per unit adjustments, and lump sum adjustments as appropriate and necessary to account for the specific factors affecting value. Time and location modifiers will be applied as necessary to adjust cost data to reflect conditions in a specific market as well as changes in costs over a period of time. A cost estimate will be generated by the appraisal staff based upon the cost schedules as they are applied to the specific characteristics of the subject property of the appraisal.

Depreciation schedules have been implemented for economic lives and condition that is typical of each major class of commercial property-by-property use. The schedules utilized by the district are developed using recognized sources and mirror *Marshall and Swift*. These schedules will be tested annually to ensure they will be reflective of current market conditions in Hemphill County. The actual and effective ages of improvements are judged by the appraiser and noted in the improvement records contained within each property record. Effective age estimates will be based on the utility of the improvements relative to the improvement's total economic life, condition, and its competitive position in the marketplace. These adjustments are generally determined during field operations.

Certain adjustment factors such as external and or functional obsolescence will be applied to properties as applicable based upon market data. These adjustments will typically be applied to a specific property type or location and will be developed through ratio studies or other market analyses. Accuracy in the development of the cost schedules, condition ratings, and depreciation schedules usually minimize the necessity of this type of an adjustment factor. The sum total of depreciation, also expressed as the loss in value from all causes, is subtracted from the replacement cost new of the structure to arrive at a replacement cost new less depreciation (RCNLD).

The cost approach requires the district to value the land utilizing one of the four accepted methods of land valuation: the sales comparison approach, allocation by abstraction, allocation by ratio, or the capitalization of ground rent. Once the land is valued by the method deemed most appropriate in terms of the data available, the resulting land value is added to the RCNLD of the improvements to yield an estimate of market value by the cost approach. Any estimate of value completed by the cost approach will be made in accordance with Section 23.011 of the Texas Property Tax Code.

Sales Comparison Approach

Pertinent data from actual sales of properties will be obtained throughout the year and the appraisal staff will analyze the relevant information. This data will be utilized in all aspects of the appraisal process.

Sales of similarly improved properties will provide a basis for the test of depreciation schedules used in the cost approach, rates and multipliers used in the income approach, and as a direct comparison in the sales comparison approach. Improved sales will also be used in ratio studies, which afford the appraiser a means of judging the present level and uniformity of the appraised values. The ratio studies used are in compliance with the current IAAO *Standard on Ratio Studies*.

Based on the market data gathered and analyzed by the appraisal staff, the cost and income models will be calibrated annually. The calibration results will be added to the schedules and models in the CAMA system to apply to all commercial properties in the district as appropriate. Any estimate of value completed by the sales comparison approach will be made in accordance with Section 23.013 of the Texas Property Tax Code.

Income Approach

The income approach to value will be applied to those real properties that are typically viewed by market participants as income producing. Income producing properties are those that are bought and sold based on the property's ability to produce an income; therefore, the price paid for a property is directly related to the amount of income the property is capable of producing. The appraisal staff utilizes income and expense data furnished by property owners; data collected by staff, and information from local market study publications. Income models by property use and neighborhood / market area are developed and deployed for use in valuation.

The following model is the basis for commercial property valuation by the income approach:

$$\begin{array}{r} \text{PGR} \\ -\text{V\&C} \\ \text{EGR} \\ +\text{SI} \\ \text{EGI} \\ -\text{Allowable EXP} \\ -\underline{\text{Reserves for Replacement}} \\ \text{NOI} \end{array}$$

$$\text{Value} = \text{NOI} / \text{CAP Rate}$$

This income model reflects the normalization of an income stream from Potential Gross Rent at 100% occupancy to an indication of Net Operating Income. The process involves estimating the rental producing capacity of the subject property under prudent management (PGR). Market derived vacancy and collections (V&C) losses are subtracted from the potential gross rent to arrive at effective gross rent (EGR). Any net income from secondary property uses (vending income or parking income, etc.) (SI) are added to the effective gross rent to yield an estimate of effective gross income (EGI).

Allowable expenses are the expenses that are recurring annual expenses necessary to operate the property sufficiently to achieve the projected level of effective gross income. These vary by property type and are researched by the appraising staff. Once identified or projected, the allowable expenses are subtracted from the effective gross income. Reserves for replacement are estimated by considering the amortized costs of replacing certain building components whose economic lives are shorter than total economic life of the improvement (carpets, roof cover, air conditioning, etc.). Generally, these are calculated by either dividing the replacement cost new of the item by its economic life, a flat reserve amount per unit justified by the market, or a percentage of EGI; whichever is deemed appropriate. Once all allowable expenses and reserves have been identified or calculated, these amounts are subtracted from the effective gross income to yield an estimate of net operating income (NOI).

Rates and multipliers will be used to convert the income stream into an estimate of market value. These include gross income multipliers, overall capitalization rates, and discount rates. Each of these is used in specific applications. Rates and multipliers also vary between property types, as well as by location, quality, condition, design, age, and other factors. Therefore, application of the various rates and multipliers will be based on a thorough analysis of the market.

Direct Capitalization will be used in the income approach models. This methodology involves dividing the net operating income by the appropriate capitalization rate to arrive at an indication of market value for a specific property. Capitalization rates utilized will be derived from the market as to estimate what a market participant would require from an investment as of the date of appraisal. Additionally, overall capitalization rates may be derived from the summation method, band-of-investment, debt coverage ratio, or obtained from published sources for similar properties. The capitalization rates utilized will relate directly to satisfying the market return requirements of both the debt and equity positions of a real estate investment.

In valuing property by the income approach, the district will consider the income characteristics of all properties, as they are available. Adjustments will be made as necessary and appropriate and the models, schedules, and value indications developed will be made pursuant to section 23.012 of the Texas Property Tax Code.

UTILITIES, RAILROADS, AND PIPELINES

The Hemphill County Appraisal District will contract with an appraisal firm with specific expertise for the valuation of utility, railroad, and pipeline properties. These properties will be reappraised annually by the firm using recognized methods and techniques as required by the *Uniform Standards of Professional Appraisal Practice*. The appraisal models considered in the valuation of these properties will be:

MV -RCN-D
And
Allocated Unit Appraisal

Each of the values produced by these models will be considered and the property value will be allocated to the taxing entities based upon the method that is deemed most appropriate by property type.

The appraisal firm(s) will consider all factors affecting value, conduct physical inspection as necessary, research information from published sources, and receive copies of renditions from property owners in the development of their appraisal. Based upon the information gathered in these processes, data characteristics of these properties will be updated annually in accordance with tax code requirements.

Pritchard & Abbott located at 5912 W. Amarillo Blvd., Amarillo, Texas, as of this reappraisal plan, is the contracted firm for these appraisal services.

MINERAL INTERESTS

The Hemphill County Appraisal District will also contract with an appraisal firm with specific expertise in the appraisal of oil and gas properties to value mineral interests. The appraisal firm will reappraise these properties annually.

The appraisal firm(s) will utilize a form of yield capitalization of the income approach called Discounted Cash Flow Analysis (DCF) in order to accurately value these interests. The factors affecting the value of mineral interests include reserve estimates, production volume and pattern, product prices, operator expenses, and the discount rates applied to discount future income into an indication of present worth.

As mineral reserves are subsurface in nature, this situation makes specific physical inspection unavailable as a method of collecting data. The appraisal firm(s) will collect data from the Texas Railroad Commission, Comptroller of Public Accounts,

and renditions from owners, published sources, and data services to identify characteristics affecting value. All of the information gathered will be considered in the estimation of the value of mineral interests.

Pritchard & Abbott located at 5912 W. Amarillo Blvd., Amarillo, Texas, as of this reappraisal plan, is the contracted firm for mineral appraisal services.

SPECIAL VALUATION PROPERTIES

The Hemphill County Appraisal District values agricultural and wildlife management land in compliance with the Comptroller's *Manual for the Appraisal of Agricultural Land*. This publication prescribes that the cash lease and the share lease methods of appraisal are appropriate when developing productivity value estimates.

The cash lease method is a modified income approach using the lease amount (income per acre) minus expenses (landowner) to yield the "net-to-land" value per acre. "Net-to-land" values will be averaged for a five-year period to give an average "net-to-land" factor that will be divided by the appropriate capitalization rate for the year to give a value per class of agricultural production. The appraisal staff will collect lease data from owners and lessees on an ongoing basis in order to develop "net-to-land" figures by agricultural classification. The appraisal staff also collects data from the Agricultural Advisory Board (AAB). The AAB meets three times per year per Section 6.12 of the Texas Property Tax Code.

BUSINESS AND INDUSTRIAL TANGIBLE PERSONAL PROPERTY

MARKET AREAS

Market areas for business personal properties are delineated within the City of Canadian as well as the immediate surrounding areas. Market areas for business personal property are consistent with those for commercial real property. Market areas are reviewed annually for presence of competing property characteristics.

These property types will be valued each appraisal year by the district's appraisal staff. The appraisal staff engages in an annual canvas field review to identify new businesses to be added to the roll, movement of existing businesses to different locations or business closings, and data review of current property characteristics in property records. Once pertinent data is updated in the field, property rendition forms will be sent to owners in order that they may declare their taxable personal property according to current law. The district will develop an estimate of market value utilizing the information obtained from renditions. Generally, estimates of

value developed for industrial and personal property will be produced and mailed by late April of each appraisal year.

Cost Approach

The primary approach to the valuation of business and industrial personal property will be the cost approach. Cost schedules will be developed by the district's staff and applied to specific business codes. These schedules will be reviewed and updated annually to conform to changing market conditions.

Valuation models will be created and refined using actual original cost data obtained from renditions to derive the replacement cost new (RCN) per applicable unit for a specific category of assets. The data obtained will be compiled for review and models will be built and or adjusted as necessary. The revised models will be tested in accordance to accepted methods and techniques.

These model values will be used specifically to estimate the value of new accounts for which no property owner's rendition is filed. The models will also be utilized to test renditions filed by property owners or their agents. In the event that property rendition information falls significantly outside of a statistical tolerance from the model, further review of the property may be conducted.

The percent good depreciation factors utilized will be based on the depreciation schedules for furniture, fixtures, and equipment as developed by district staff. This mass appraisal percent good depreciation schedule is used to ensure that estimated values are uniform and consistent within the market. RCN and percent good depreciation factors will be utilized to develop value estimates using the following formula:

$$MV = RCN \times \text{PERCENT GOOD FACTOR}$$

Leased equipment and multi-location assets may be valued using original costs and percent good depreciation schedules mentioned above.

Sales Comparison Approach

Business personal property is typically sold as part of the business as a whole, which makes this approach less suitable for valuing most personal property. This approach is generally suitable for the valuation of certain types of vehicles and heavy equipment. Value estimates for vehicles will be based on data furnished by recognized sources such as NADA among others. Any sales of personal property will be considered and appropriate weight will be given based upon individual circumstance.

Income Approach

The income approach has limited use in the appraisal of machinery, equipment, furniture, fixtures, and leasehold improvements because of the difficulty in estimating future net benefits. The exception to this is in the case of leased equipment. When reliable data on equipment leases is available, the income approach may be used to estimate the fair market value of the equipment.

THE MASS APPRAISAL REPORT

Each appraisal year the required Mass Appraisal Report will be prepared and certified by the Chief Appraiser at the conclusion of the appraisal phase of the ad valorem tax calendar (on or about May 15th). The Mass Appraisal Report is completed in compliance with STANDARD RULE 6-8 of the *Uniform Standards of Professional Appraisal Practice*. The signed certification by the Chief Appraiser will be compliant with STANDARD RULE 6-9 of *USPAP*.

VALUE DEFENSE

Evidence to be used by the appraisal district to meet its burden of proof for market value and equity in both informal and formal appraisal review board hearings is specified and tested annually.

A variety of evidence is utilized by the district depending on the property type of the subject of the protest. In addition, the district updates the evidence supplied to an owner, agent, or the Appraisal Review Board to be contemporaneous with the valuation procedures utilized. Some examples of the evidence that may be used include, but are not limited to:

1. Property sales information
2. Property sales adjustment grids
3. Property equity adjustment grids
4. Gross Rent / Income Multiplier data
5. Proforma and actual income data
6. Property characteristics data including photos as applicable
7. Aerial photography
8. Cost approach reports as applicable
9. Property Renditions as applicable
10. Published reports regarding cost, market, or income data
11. Schedules and or models utilized
12. Any other information collected by the district