

OCHILTREE APPRAISAL DISTRICT  
2015 – 2016 REAPPRAISAL PLAN  
AND MASS APPRAISAL REPORT

## Table of Contents

Introduction_____	5
Scope of Responsibility_____	5
Property Damages in a Disaster Area_____	7
Personnel Resources_____	7
Data_____	8
Organization_____	8
Reappraisal Schedules_____	8
Independent Performance Test_____	10
Ochiltree Appraisal Process_____	11
Appraisal Responsibilities_____	11
Appraisal Resources_____	11
Data Collection Procedures_____	12
Data Maintenance_____	12
Individual Value Review Procedures_____	13
Field Review_____	13
Office Review_____	13
Performance Test_____	13
Residential Appraisal Valuation Process_____	13
Appraisal Resources_____	14
Valuation Approach_____	14
Land Analysis_____	14
Area analysis_____	15
Market Area Definition_____	15
Neighborhood and Market Analysis_____	15
Highest and Best Use Analysis_____	16
Valuation and Statistical Analysis (Model Calibration)_____	16
Cost Schedules_____	16
Sales Information_____	17
Statistical Analysis_____	17
Market and Cost Reconciliation and Valuation_____	18

Treatment of Residence Homesteads_____	20
Individual Value Review Procedures_____	20
Field Review_____	20
Office Review_____	20
Performance Tests_____	21
Sales Ratio Studies_____	21
Management Review Process_____	21
Commercial and Industrial Property Valuation Process - 2015_____	21
Introduction_____	21
Appraisal Responsibility_____	21
Appraisal Resources_____	21
Preliminary Analysis_____	22
Market Study_____	22
Valuation Approach (Model Specification)_____	22
Area Analysis_____	22
Neighborhood Analysis_____	22
Highest and Best Use Analysis_____	23
Market Analysis_____	23
Data Collection / Validation_____	24
Data Collection Manuals_____	24
Sources of Data_____	24
Valuation Analysis (Model Price Calibration)_____	25
Cost Schedules_____	25
Income Models_____	26
Sales Comparison (Market) Approach_____	28
Final Valuation Schedules_____	28
Statistical and Capitalization Analysis_____	28
Individual Value Review Procedures_____	29
Field Review_____	29
Office Review_____	30
Performance Tests_____	30

Sales Ratio Studies_____	31
Comparative Appraisal Analysis_____	31
Commercial and Industrial Property Valuation Process – 2016_____	31
Business Personal Property Valuation Process - 2015_____	31
Introduction_____	31
Appraisal Responsibility_____	31
Performance Tests_____	35
Ratio Studies_____	35
Business Personal Property Valuation Process – 2016_____	35
Minerals (Oil and Gas Reserves) Valuation Process_____	35
Introduction_____	35
Appraisal Responsibility_____	35
Appraisal Resources_____	35
Valuation and Statistical Analysis (model calibration)_____	36
Pricing, Operating Expenses & Reserve Analysis_____	36
Value Review Procedures_____	37
Utility Property Valuation Process - 2015_____	38
Introduction_____	38
Appraisal Responsibility_____	38
Appraisal Resources_____	38
Valuation and Statistical Analysis (model calibration)_____	39
Approaches to Valuation, Reconciliation_____	39
Value Review Procedures_____	39
Utility and Pipeline Property Valuation Process – 2016_____	40
Limiting Conditions_____	40
Certification Statement_____	41

**Ochiltree Appraisal District**  
**2015 – 2016 Reappraisal Plan**  
**And Mass Appraisal Report**

**Introduction**

**Scope of Responsibility**

The Ochiltree Appraisal District has prepared and published this reappraisal plan and appraisal report to provide our Board of Directors, citizens and taxpayers with a better understanding of the district's responsibilities and activities. This report has several parts: a general introduction and then, several sections describing the appraisal effort by the appraisal district.

The Ochiltree County Appraisal District (CAD) is a political subdivision of the State of Texas created effective January 1, 1980. The provisions of the Texas Property Tax Code govern the legal, statutory, and administrative requirements of the appraisal district. The Ochiltree Appraisal District has its own board of directors, appointed by the taxing units within the boundaries of Ochiltree County, constituting the district's governing body. The chief appraiser, appointed by the board of directors is the chief administrator and chief executive officer of the appraisal district.

The appraisal district is responsible for property tax appraisal and exemption administration for approximately nine (9) jurisdictions or taxing units in Ochiltree County. Each taxing unit, such as the county, city, school, junior college, water district, etc., sets its own tax rate to generate revenue to pay for operating budgets and public services such as police and fire protection, public schools, road maintenance, courts and water and sewer system. Our appraisal district also administers various types of property tax exemptions such as those for homeowners, the elderly, the disabled, disabled veterans, charitable or religious organizations, pollution control, minimum value, freeport and vehicles used to produce income. We, in addition, maintain records on abatements, tax deferrals, historical designated properties and public improvement district (PID) boundaries and Tax Increment Reinvestment Zone (TIRZ) values.

Except as otherwise provided by the Texas Property Tax Code, all taxable property is appraised at its "market value" as of January 1<sup>st</sup>. Under the tax code, Sec 1.04(7), "market value" means the price, at which a property would transfer for cash, or its equivalent, if:

- Exposed for sale in the open market with a reasonable time for the seller to find a purchaser:
- 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
- Both the seller and purchaser seek to maximize their gains and neither is in a position to take advantage of the exigencies of the other.

The Texas Property Tax Code defines special appraisal provisions for the valuation of residential homestead property (Sec. 23.23), productivity (Sec. 23.41), real property inventory (Sec. 23.12), dealer inventory (Sec 23.121, 23.124, 23.1241 and 23.127), nominal value (Sec 23.18) or restricted use property (Sec 23.83 and 23.93), low income housing (Sec 23.215) and allocation of interstate property (Sec 21.03). The owner of real or personal property inventory may elect to have the inventory appraised at its market value as of September 1<sup>st</sup> of the year preceding the tax year to which the appraisal applies by filing an application with chief appraiser before August 1 of the preceding year requesting that the inventory be appraised as of September 1<sup>st</sup> (Sec 23.12(f)).

The Texas Property Tax Code, Section 25.18, requires the appraisal district to implement a written plan to update appraised values for real property and personal property at least once every three years. The written plan is adopted by the appraisal district's boards of directors as required by Sec 6.05 in the Texas Property Tax Code. The district's current policy is to conduct a general reappraisal of real property at least every three years.

1. Three-Year Cycle: the CAD is divided into three areas. Each year, all real residential and commercial property with one of the areas will be reappraised, regardless of any ratio study report finding. These areas are identified as follows:
  - a. Area One: All Abstracts (rural land) East of Highway 83 within Ochiltree County, Texas including that portion of the City of Perryton, The City of Booker, The Town of Twichel and Town of Huntoon. To be completed in 2016.
  - b. Area Two: All Abstracts (rural land) West of Highway 83 and South of Highway 70 within Ochiltree County, Texas including that in that portion of the City of Perryton, The Town of Farnsworth and the Town of Waka. To be completed in 2015.
  - c. Area Three: All Abstracts (rural land) North of Highway 70 and East of Highway 83 within Ochiltree County, Texas including that portion of the City of Perryton. To be completed in 2015.
2. Annual Ratio Reports: In addition to the three year cycle stated above, ratio studies shall be performed annually to determine areas or categories of properties within the CAD which need to be reappraised with the current year.

However, some appraised values are reviewed annually and are subject to change for purposes of reflecting current market value and equalization. Personal property, minerals and utility properties are appraised every year.

The appraised value of real estate is calculated using specific characteristic information about each property. Using computer-assisted mass appraisal programs, and recognized appraisal methods and techniques, we compare that information with the data for similar properties, and with recent cost and market data.

The district 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 Standard of Professional Appraisal Practice (USPAP) to the extent they are applicable.

### **Property Damaged in a Disaster Area**

In the case of a disaster in which part or all of the area declared by the governor as a disaster area falls within one or more of the taxing entities in this CAD, and in the event that one or more of the entities (by vote of its board) authorizes a reappraisal pursuant to Section 23.02 of the Texas Property Code, this appraisal office will complete a reappraisal of the affected property as soon as practicable.

The following data will be included on the appraisal records in accordance with requirements of the law:

- 1) The date of the disaster;
- 2) The appraisal value of the property after the disaster; and
- 3) If not all taxing entities authorize the reappraisal, a listing of those to which the reappraisal applies.

Cost for the reappraisal will be borne by the taxing entity or entities that authorized the reappraisal. In a case in which more than one entity is involved, the cost will be charged proportionately to each based on the percentage the preceding year's total dollar amount of taxes for each entity bears to the total of all the entities' taxes which are requesting the reappraisal.

If property that is damaged in a disaster is reappraised as described above, the governing body shall provide for prorating the taxes for the year/years in which the disaster occurred according the methods described in Section 23.02 of the Texas Property Code.

### **Personnel Resources**

The Chief Appraiser is primarily responsible for overall planning, organizing, staffing, coordinating, and controlling the district operations. The Ochiltree Appraisal District staff consists of 5 full-time employees and two to three part-time contract labor workers as needed for support. The full-time employees consist of the following classifications.

- 1 – Chief Appraiser
- 1 – Assistant Chief Appraiser
- 3 – Support Personnel

The district operates with a philosophy of "team work" and our mission is to uphold and enforce the Texas Property Tax Code and to be public servants to the community in a fair and equal manner. The district promotes the highest standard of ethical conduct as described in the board of Tax Professional Examiners Rule 628 and maintains the confidentiality of specific information as mandated by the Texas Property Tax Code.

The Operations Department's function is to plan, organize, direct and control the business support functions related to human resources, budget, finance, records management, purchasing, fixed assets, facilities, postal services, tax collection and oil and gas production. The Appraisal Department is responsible for the valuation of all real and personal property. The property types appraised include residential, commercial, business personal, industrial and manufactured housing. The Information Technology Department is responsible for systems analysis and application, records maintenance, information assistance to the public, programming, production, staff education and training. The district's appraisers are registered with the Texas Board of Tax Professional Examiners and have earned the Registered Professional Appraiser (RPA) designation. A minimum of 75 hours of continuing education units must be taken every five years to include classes on Ethics and Uniform Standards of Professional

Appraisal Practices (USPAP). Additionally, all appraisal personnel receive extensive training in data gathering processes used in fieldwork and statistical analyses of all types of property to ensure equality and uniformity of appraisal of all types of property. The Chief Appraiser and Assistant Chief Appraiser meet regularly with staff to introduce new procedures and regularly monitor appraisal activity to ensure that all personnel are following standardized appraisal procedures.

## **Data**

The Ochiltree Appraisal District is responsible for establishing and maintaining approximately 35,000 real, oil and gas and personal property accounts covering 975 square miles within the Ochiltree County boundaries. This data includes property characteristic and ownership and exemption information. Property characteristic data on new construction is updated through an annual field effort and in cooperation with the code enforcement offices of the city of Perryton. Property characteristic data on existing property is maintained through a field review and inspection. Sales are researched through the local multiple listing service, the district's sales letter, new construction and account review through field inspection, telephone conversation or visitation in office. General trends in some classification of property are acquired through various sources, internal surveys conducted by district personnel, questionnaires to buyer, seller, current owner and vendors.

## **Organization**

Field inspections are carried out by the field appraiser and or the Chief Appraiser as directed by the Chief Appraiser. The field appraiser or Chief Appraiser physically inspects areas required by the reappraisal cycle, checks all existing data, works building permits, takes photographs of improvements, draws plans of new improvements for entry into computer, rechecks any property on which a question or problem has arisen. Other duties may be required and will be executed upon direction of the Chief Appraiser.

Data entry of field work notes and sketches is performed by appraisal district staff.

The Chief Appraiser performs market analysis. Sales data is gathered throughout the year from deed records, sales and confirmation letters from property owners, and other sources. The market data is analyzed, sales data is confirmed, outliers are identified, existing classification system is reviewed, market schedules are reviewed and updated as necessary, and final market schedules are applied to the universe of properties.

## **2015 - 2016 Reappraisal Schedule**

**January thru December:** Assumed names that are filed for any new business are received weekly. This information is used to verify the name and address of any new business in Ochiltree County CAD. The recorded easements filed at the County Clerk's office are also used to verify activity in Category J with lessor and lessee for each easement. In early January the renditions are mailed. As the renditions are completed and returned the appraisal of those properties are completed. This process is completed in late April to early May so the Notices of Appraised Value can be mailed.

**January through December:** Monthly production information and monthly product price sale information of Oil and Gas (Category G) economic analysis calculation is the most important information for estimating the economic analysis for

each well/lease. The appraisal district receives monthly the wells (leases) production data. New wells/leases are added monthly. Price data is received monthly for use in the economic analysis calculation. Well production data for November will be received in late January. The new November production data for wells/leases after being added to the roll will initiate economic analysis (appraisal) of active well/leases in Ochiltree County. Economic analysis for each well/lease calculation will begin in late January. Wells/leases added prior to January will be added to the roll as production is reported monthly. At the same time, wells/leases that are already on record are reviewed. The operators of the wells are contacted and requested to provide division of interest listings for all of the new wells/leases and many of the current wells/leases. During this time, deeds and other documents recorded by the county clerk are reviewed and any ownership changes that pertain to mineral interest are made on the OCAD records. Economic analysis information on each well/lease is printed to send to well operators as a "heads up" regarding the value that would most likely be applied to each particular well/lease.

**March through May:**

All ownership changes are reviewed against court documents to ascertain correctness and final adjustments are made to names and addresses so that these will be correct on the notices of value. Records on the tax software are reconciled to records on the well value side. Changes in value are made when the chief appraiser gets new well information either from production data changes or from operators who provide revised expense data. Operators may send new divisions of interest listings on all wells that they operate in Ochiltree County. These are reviewed against CAD records and adjustments made to percentage ownership, especially reviewing the working interest percentage on both software programs. At this time, the yearly Oil and Gas Submission Report to the Comptroller's office is started with the initial information for the year. Notices are prepared and sent.

**January thru December:**

Recorded records from the Ochiltree County Clerk's office are sent by email daily. On Friday of each week a sale/purchase information letter is sent to grantor and grantee. The sales information letter is used to gather information regarding the size of the building/home, if the improvement has been remodeled or improved on, and the sale/purchase price. The sale/purchase information letter for rural land gathers information on irrigation or dryland by gathering information on active or abandoned irrigation wells. The size and the production capacity of the irrigation well/wells. The locations of irrigation wells and the size and location of sprinkler systems if applicable are used to determine if onsite reviews are required whether or not they are in Reappraisal Plan location for this year. Homestead exemption applications, special-use valuation applications, and other exemptions are mailed with reference to the changes in ownership.

- April:** The above described information is used in the ratio study. The ratio study is an information gathering device to provide information used to develop schedules for the current appraisal year.
- September:** The building permits for the City of Perryton and the City of Booker are provided by the City of Perryton and the City of Booker. Appraisal cards are compiled with each building permit for the outside inspection.
- January thru March:** A final year building permit supply is received by the appraisal district in January and all new properties are added. New additions to established properties are identified and added. The sales information is studied and any individual properties that need to be checked and any additions to established properties are added. In this time frame also properties that have received any changes in use or values are checked in addition to the areas that are scheduled in the reappraisal plan. New property annexed to the cities of Perryton or Booker are identified, site reviewed and added to the roll. When all information is gathered and processed schedules are adjusted and are ready to calculate.
- March and April:** The ratio study is reviewed for any changes that would indicate any further adjustments that are needed and schedules are calculated and tested. At this time the appraiser will make any necessary onsite visits or any last minute changes to the schedules. When the Chief Appraiser is confident the schedules are completed with all changes and adjustments and the addition of all new property changes, the process for calculating and printing the Notice of Appraised Value begins.
- Mid to late September:** Ochiltree County Ag Advisory Board meets to discuss crop and livestock information with the Ochiltree County Appraisal District for common operational information.
- October thru November:** The chief appraiser gathers product information which includes crop acreage information, crop yield information, crop price information, summer fallow acreage and other miscellaneous information.
- Late November:** The chief appraiser calculates the five year averages of share and cash lease budget information to complete 1-d-1 agricultural values for the next year.

### **Independent Performance Test**

The State Comptroller's Property Tax Division (PTD) conducts an annual property value study (PVS) of each of the school districts and the appraisal district's office. As a part of this annual study, the code also requires the Comptroller to: use sales and recognized auditing and sampling techniques; review the district's appraisal methods, standards and procedures to determine whether the district used recognized standards and practices; test the validity of school district taxable valued in the district and presume the appraisal roll values are correct when values are certified; and, determine the level and uniformity of property tax appraisal in the district. The methodology used in the property value study includes stratified samples to improve sample representatives and techniques or procedures of measuring uniformity. This study utilizes statistical analysis of sold properties (sale ratio studies) and appraisals of unsold properties (appraisal ratio studies) as a basis for assessment ratio reporting. For the appraisal district, the reported

measures include median level of appraisal for accuracy in smaller samples; coefficient of dispersion (COD) for the measure of appraisal uniformity and equity; the percentage of properties within 10% of the median, the percentage of properties within 25% of the median, and price-related differential (PRD) for properties overall which measures bias and by state category: A - residential, B - multi-living unit property, C - unimproved land, D - value of agricultural land and F1 - commercial improved property. The study also includes L1 - business personal property.

Annual Studies are developed for the independent school district located entirely within the district boundaries and the two independent school districts located partially within the district boundaries. The preliminary results of this study are released in January in the year following the year of certification. The final results of this study are certified to the Education Commissioner of the Texas Education Agency (TEA) in the following July of each year for the certified year under study. This outside third party ratio study provides additional assistance to the appraisal district on determining the areas of market activity or changing market conditions.

## **Ochiltree Appraisal Process**

### **Appraisal Responsibilities**

The field appraisal staff is responsible for collecting and maintaining property characteristic data for classification, valuation and other purposes on all real and personal property. A physical description of the property is maintained in the appraisal record on all personal property, land and building property. The appraisal department is responsible for administering, planning and coordination the appraisers to collect data and maintain all commercial, residential, mobile homes and personal property which are located in the boundaries of the Ochiltree Appraisal District. The goal is to field inspect business personal property annually, residential in Ochiltree County every three years and one-third of the commercial property each year. Meeting this goal is dependent on legislative changes and market trends.

### **Appraisal Resources**

The appraisal district's personnel consist of 2 full-time management, supervisor and field appraisers, 3 appraisal assistants and 1 contract part-time appraisal assistant. Sources of data used by field appraisers

include the property characteristic information contained in the district's iValorem and PHD computer system. The information is printed on an appraisal record card, or personal property worksheets.

Other data used includes maps, sales data, fire and damage reports, building permits, condemnation reports, photos, assumed name certificates, appraisal and real estate publications, septic system reports, county meter reports, 911 Emergency District address reports and actual cost and income information from the property owner.

The district receives and collects data information through field review of neighborhoods, the new construction field review by the field appraisers, building permits from the city of Perryton, from data request mailed by the district, city of Perryton hotel/motel occupancy report, local commercial surveys conducted by real estate brokers, from sales data received through the local multiple listing service, from ARB hearings, newspaper articles, local publications, correspondence from the property owner via telephone, mail, e-mail, 911 address assignments, pictometry, the Internet, from fee appraisals provided to the district, from local economic influences and disasters, from periodic regional seminars and meetings with other North Texas Central Appraisal Districts.

## **Data Collection Procedures**

Data collection procedures have been established for the residential, commercial and personal property areas. The field appraisers are assigned to specific areas to work in Ochiltree County to conduct field inspections. There are periods of time; however, where all field appraisers will conduct field inspections in an area of priority as demanded to accomplish the field activity.

Appraisers conduct field inspections and record any changes in information on a real property appraisal card or a personal property worksheet. Field inspections are also conducted from the building permit information transferred into the district's iValorem system that produces a paper record worksheet used in the field by the field appraisers.

Requests for reappraisal made by property owners are captured on the district's recheck file that is utilized for the current appraisal year as well as upon certification of the appraisal roll for the upcoming appraisal year. The field appraisers utilize a Commercial Field Worksheet for Business Personal and a Mobile Home Field Worksheet for field data collection. These utility forms ensure that the quality of the data collected is complete and concise in establishing accurate values of all types of property. The district emphasizes the importance of accurate collection of data and daily review of fieldwork by the senior appraisers helps to maintain the standard required on the various field activities that is the responsibility of each appraiser. The daily review references consistency, areas of additional training on identified procedures and re-evaluating procedures based on the iValorem updates to the system or technology or industry equipment and tools to replace existing methods of data collection.

Property owners are one of the best sources for identifying incorrect data that generates a field check. Frequently, the property owner provides reliable data to allow correction of records without having to send an appraiser on-site. For the property owner, letters are sometimes submitted notifying the district of inaccurate data. Properties identified in this manner are added to a work file and inspected at the earliest opportunity. Accuracy and validity in property descriptions and characteristic data is the highest goal and is stressed throughout the appraisal process from year to year. Appraisal opinion quality and validity relies on data accuracy as its foundation.

The quality of the data used is extremely important in estimating market values of taxable property. While work performance standards are established and upheld for the various field activities, quality of data is emphasized as the goal and responsibility of each appraiser. New appraisers are trained in the specifics of data collection the classification system set forth and recognized as "rules" to follow. Experienced appraisers are routinely re-trained in listing procedures prior to major field projects such as new construction, sales validation or data review. A quality assurance process exists through supervisory review of the work being performed by the field appraisers. Quality assurance supervision is charged with the responsibility of ensuring that appraisers follow listing procedures, identify training issues and provide uniform training throughout the field appraisal staff.

## **Data Maintenance**

The field appraiser is responsible for the data entry of his/her fieldwork into the computer file. This responsibility includes not only data entry, but also quality assurance. The majority of the data collected in the field is input by computer staff with supervision by the field appraiser. Data updates and file modification for the property descriptions and input accuracy is conducted as the responsibility of the field appraiser and appraisal supervisors.

## **Individual Value Review Procedures**

### **Field Review**

The date of last inspection and the CAD appraiser responsible are listed on the iValorem record or property card. If a property owner or a jurisdiction disputes the district's records concerning this data during a hearing, via a telephone call or other correspondence received, the record may be corrected based on the evidence provided or an on-site inspection may be conducted. Typically, a field inspection is requested to verify this information for the current year's valuation or for the next year's valuation. Every year a field review of real property located in certain areas or neighborhoods in the jurisdiction is done during the data review/re-list field effort. A field review is performed on all personal property accounts, with available situs, each year.

### **Office Review**

Office reviews are completed on properties where updated information has been received from the owner of the property and is considered accurate and correct. Data mailers, sent en masse, or at the request of the property owner, frequently verify some property characteristics or current condition of the property. When the property data is verified in this manner, and considered accurate and correct, field inspections may not be required. The personal property department mails property rendition forms in January of each year to assist in the annual review of the property.

### **Performance Test**

The property appraisers are responsible for conducting ratio studies and comparative analysis. Ratio studies are conducted on property located within certain neighborhoods or districts by appraisal staff. The sale ratio and comparative analysis of sale property to appraised property forms the basis for determining the level of appraisal and market influences and factors for the neighborhood. This information is the basis for updating property valuation for the entire area of property to be evaluated. Field appraisers, in many cases, may conduct field inspections to ensure the accuracy of the property descriptions at the time of sale for the study. This inspection is to ensure that the ratios produced are accurate for the property sold and that appraised values utilized in the study are based on accurate property data characteristics observed at the time of the sale. Also, property inspections are performed to discover if property characteristics had changed as of the sale date or subsequent to the sale date. Sale ratios should be based on the value of the property as of the date of sale not after a subsequent or substantial change was made to the property after the negotiation and agreement in price was concluded. Properly performed ratio studies are a good reflection of the level of appraisal for the district.

## **Residential Appraisal Valuation Process**

The residential appraisers are responsible for developing equal and uniform market values for residential improved and vacant property. There are approximately 3,200 residential improved parcels and 2,600 vacant land parcels that include agricultural parcels in Ochiltree County.

The district subscribes to Marshall and Swift (M&S), a nationwide value estimator, Residential Cost Handbook for cost figures. Marshall and Swift are dedicated to providing the appraisal industry with the most current and accurate building cost data. Periodic updates are provided for building cost, market trends and evaluate industry standards from M&S. The residential cost figures are loaded into the district's iValorem

system and have been modified and customized to fit Ochiltree County local residential building and labor market with an area modifier. The characteristics data collected on each residential dwelling drives the computer-assisted mass appraisal approach to valuation. The district's cost schedules are updated as required.

### **Appraisal Resources**

- **Personnel** – The residential appraisal staff consists of four appraisers and four appraisal assistants. The following appraisers are responsible for researching and estimating the market value of residential property:

Terry Symons – Chief Appraiser RPA, RTC

Kay Rodgers – Assistant Chief Appraiser RPA

Stephanie Hessman – Appraiser Trainee

Loretta Mick – Appraiser Trainee

Charlene Chapman – Appraiser Trainee

Donnie Dendy – Appraisal Assistant

- **Data** - An individualized set of data characteristics for each residential dwelling and multiple family units in this district are collected in the field and data entered to the computer. The property characteristic data drives the application of computer-assisted mass appraisal (CAMA) under the Cost, Market and Income Approaches to property valuation.

### **Valuation Approach**

#### **Land Analysis**

Residential land valuation analysis is conducted prior to neighborhood sales analysis. The value of the land component is estimated based on available market sales for comparable and competing land under similar usage. A comparison and analysis of comparable land sales is conducted based on a comparison of land characteristics found to influence the market price of land located in the neighborhood. A computerized land table file stores the land information required to consistently value individual parcels within neighborhoods given known land characteristics. Specific land influences are considered where necessary, and depending on neighborhood and individual lot or tract characteristics, to adjust parcels outside the neighborhood norm for such factors as access, view, shape, size and topography. Inventory lots are appraised as provided by Section 23.12 of the Texas Property Tax Code. The appraisers use abstraction and allocation methods to ensure that estimated land values best reflect the contributory market value of the land to the overall property value.

## **Area Analysis**

Data on regional economic forces such as demographic patterns, regional locational factors, employment and income patterns, general trends in real property prices and rents, interest rate trends, availability of vacant land and construction trends and costs are collected from private vendors and public sources and provide the field appraiser a current economic outlook on the real estate market. Information is gleaned from real estate publications and sources such as continuing education in the form of TAAO, TAAD and IAAO classes.

### **Ochiltree County Appraisal District Market Area Definition**

The market areas of Ochiltree County Appraisal District are defined as the City of Booker, City of Farnsworth, City of Perryton including fringe areas, City of Waka, and Huntoon. The District uses a county-wide market area for appraising categories D and E. Market areas are reviewed annually for the presence of competing property characteristics.

### **Neighborhood and Market Analysis**

Neighborhood analysis involves the examination of how physical, economic, governmental and social forces and other influences affect property values. The effects of these forces are also used to identify, classify, and stratify comparable properties into smaller, manageable subsets of the universe of properties known as neighborhoods. Residential valuation and neighborhood analysis is conducted on various market areas within each of the political entities known as Independent School Districts (ISD). Analysis of comparable market sales forms the basis of estimating market activity and the level of supply and demand affecting market prices for any given market area, neighborhood or district. Market sales indicate the effects of these market forces and are interpreted by the appraiser into an indication of market price ranges and indications of property component change considering a given time period relative to the date of appraisal. Cost and Market Approaches to estimate value are the basic techniques utilized to interpret these sales. For multiple family properties the Income Approach to value is also utilized to estimate an opinion of value for investment level residential property.

The first step in neighborhood analysis is the identification of a group of properties that share certain common traits. A "neighborhood" for analysis purposes is defined as the largest geographic grouping of properties where the property's physical, economic, governmental and social forces are generally similar and uniform. Geographic stratification accommodates the local supply and demand factors that vary across a jurisdiction. Once a neighborhood with similar characteristics has been identified, the next step is to define its boundaries. This process is known as "delineation". Some factors used in neighborhood delineation include location, sales price range, lot size, age of dwelling, quality of construction and condition of dwelling, square footage of living area and story height. Delineation can involve the physical drawing of neighborhood boundary lines on a map, but it can also involve statistical separation or stratification based on attribute analysis.

Part of neighborhood analysis is the consideration of discernible patterns of growth that influence a neighborhood's individual market. Few neighborhoods are fixed in character. Each neighborhood may be characterized as being in a stage of growth, stability or decline. The growth period is a time of development and construction. As new neighborhoods in a community are developed, they compete with existing

neighborhoods. An added supply of new homes tends to induce population shift from older homes to new homes. In the period of stability, or equilibrium, the forces of supply and demand are about equal. Generally, in the stage of equilibrium, older neighborhoods can be more desirable due to their stability of residential

character and proximity to the workplace and other community facilities. The period of decline reflects diminishing demand or desirability. During decline, general neighborhoods may also experience renewal, reorganization, rebuilding or restoration, which promotes increased demand and economic desirability.

Neighborhood identification and delineation is the cornerstone of the residential valuation system at the district. All the residential analysis work done in association with the residential valuation process is neighborhood specific. Neighborhoods are field inspected and delineated based on observable aspects of homogeneity. Neighborhood delineation is periodically reviewed to determine if further neighborhood delineation is warranted. Whereas neighborhoods involve similar properties in the same location, a neighborhood group is simply defined as similar neighborhoods in similar locations. Each residential neighborhood is assigned to a neighborhood group based on observable aspects of homogeneity between neighborhoods. Neighborhood grouping is highly beneficial in cost-derived areas of limited or no sales, or use in direct sales comparison analysis. Neighborhood groups, or clustered neighborhoods, increase the available market data by linking comparable properties outside a given neighborhood. Sales ratio analysis, discussed below, is performed on a neighborhood basis, and in soft sale areas on a neighborhood group basis.

### **Highest and Best Use Analysis**

The highest and best use of property is the reasonable and probably use that supports the highest present value as of the date of the appraisal. The highest and best use must be physically possible, legal, financially feasible and productive to its maximum. The highest and best use of residential property is normally its current use. This is due in part to the fact that residential development, in many areas, through use of deed restrictions and zoning, precludes other land uses. Residential valuation undertakes reassessment of highest and best use in transition areas and areas of mixed residential and commercial use. In transition areas with ongoing gentrification, the appraiser reviews the existing residential property use and makes a determination regarding highest and best use. Once the conclusion is made that the highest and best use remains residential, further highest and best use analysis is done to decide the type of residential use on a neighborhood basis. As an example, it may be determined in a transition area that older, non-remodeled homes are economic misimprovements, and the highest and best use of such property is the construction of new dwellings. In areas of mixed residential and commercial use, the appraiser reviews properties in these areas on a periodic basis to determine if changes in the real estate market require reassessment of the highest and best use of a select population of properties.

### **Valuation and Statistical Analysis (Model Calibration)**

#### **Cost Schedules**

All residential parcels in the district are valued with a replacement cost estimated from identical cost schedules based on the improvement classification system using a comparative unit method. The district's residential cost schedules are estimated from Marshall and Swift, a nationally recognized cost estimator service. These cost estimates are compared with sales of new improvements and evaluated from year to year and indexed for neighborhood factors and influences that affect the total replacement cost of the improvements in a smaller market area based on evidence taken from a sample of market sales. The cost schedules are reviewed regularly as a result of recent state legislation requiring that the appraisal district cost schedules be within a range of plus or minus 10% from nationally recognized cost schedules.

A review of the residential cost schedule is performed annually. As part of this review and evaluation process of the estimated replacement cost, newly constructed sold properties representing various levels of quality of construction in the district are considered. The property data characteristics of these properties are verified and photographs are taken of the samples. CAD replacement costs are compared against Marshall & Swift, a nationally recognized cost estimator, and the indicated replacement cost abstracted from these market sales of comparably improved structures. The results of this comparison are analyzed using statistical measures, including stratification by quality and reviewing estimated building costs plus land to sales prices. As a result of this analysis, a new regional multiplier or economic index factor and indications of neighborhood economic factors are developed for use in the district's cost schedule to be in compliance with local building costs as reflected by the local market.

### **Sales Information**

A sales file for the storage of "snapshot" sales data at the time of sale is maintained for real property. Residential vacant land sales, along with commercial improved and vacant land sales are maintained in a sales information system. Residential improved and vacant sales are collected from a variety of sources, including: district questionnaires sent to buyer and seller, field discovery, protest hearings, Board of Realtor's Multiple Listing Service, various sale vendors, builders, realtors and the Texas Comptroller of Public Accounts. A system of type, source, validity and verification codes has been established to define salient facts related to a property's purchase or transfer and to help determine relevant market sale prices. The effect of time as an influence on price was considered by paired comparison and applied in the ratio study to the sales as indicated within each neighborhood area.

Neighborhood sales reports are generated as an analysis tool for the appraiser in the development and estimation of market price ranges and property component value estimates. Abstraction and allocation of property components based on sales of similar property is an important analysis tool to interpret market sales under the cost and market approaches to value. These analysis tools help determine and estimate the effects of change, with regard to price, as indicated by sale prices for similar property within the current market.

Monthly time adjustments are estimated based on comparative analysis using paired comparison of sold property. Sales of the same property were considered and analyzed for any indication of price change attributed to a time change or influence. Property characteristics, financing and conditions of sale were compared for each property sold in the pairing of property to isolate only the time factor as an influence on price.

### **Statistical Analysis**

The residential valuation appraisers perform statistical analysis annually to evaluate whether estimated values are equitable and consistent with the market. Ratio studies are conducted on each of the residential valuation neighborhoods in the district to judge the two primary aspects of mass appraisal accuracy - level and uniformity of value. Appraisal statistics of central tendency generated from sales ratios are evaluated and analyzed for each neighborhood. The level of appraised values is determined by the weighted mean ratio for sales of individual properties within a neighborhood, and a comparison of neighborhood weighted means reflect the general level of appraised value between comparable neighborhoods.

The appraiser, through the sales ratio analysis process, reviews every neighborhood annually. The first phase involves neighborhood ratio studies that compare the recent sales prices of neighborhood properties to the appraised values of these sold properties. This set of ratio studies affords the appraiser an excellent means of judging the present level of appraised value and uniformity of the sales. The appraiser, based on the sales

ratio statistics and designated parameters for valuation update, makes a preliminary decision as to whether the value level in a neighborhood needs to be updated or whether the level of market value in a neighborhood is at an acceptable level.

The analysis of trends that exist in neighborhood economics and the characteristics that shape the estimated market values are measured with linear regression statistics. Our iValorem system is being developed to generate these statistics.

### **Market and Cost Reconciliation and Valuation**

Neighborhood analysis of market sales to achieve an acceptable sale ratio or level of appraisal is also the reconciliation of the market and cost approaches to valuation. Market factors are developed from appraisal statistics provided from market analyses and ratio studies and are used to ensure that estimated values are consistent with the market and to reconcile cost indicators. The district's primary approach to the valuation of residential properties uses a hybrid cost-sales comparison approach. This type of approach accounts for neighborhood market influences not particularly specified in a purely cost model.

The following equation denotes the hybrid model used:

$$MV = LV + (RCN - AD)$$

Whereas, in accordance with the cost approach, the estimated market value (MV) of the property equals the land value (LV) plus the replacement cost new (RCN) of property improvements less accrued depreciation (AD).

As the cost approach separately estimates both land and building contributory values and uses depreciated replacement costs, which reflect only the supply side of the market, it is expected that adjustments to the cost values may be needed to bring the level of appraisal to an acceptable standard as indicated by market sales. Thus, demand side economic factors and influences may be observed and considered. These market, or location adjustments, may be abstracted and applied uniformly within neighborhoods to account for locational variances between market areas or across a jurisdiction. Whereas, in accordance with the Market Approach, the estimated market value (MV) of the property equals the basic unit of property, under comparison, times the market price range per unit for sales of comparable property. For residential property, the unit of comparison is typically the price per square foot of living area or the price indicated for the improvement contribution. This analysis for the hybrid model is based on both the cost and market approaches as a correlation of indications of property valuation. A significant unknown for these two indications of value is determined to be the rate of change for the improvement contribution to total property value. The measure of change for this property component can best be reflected and based in the annualized accrued depreciation rate. This cost related factor is most appropriately measured by sales of similar property. The market approach, when improvements are abstracted from the sale price, indicates the depreciated value of the improvement component, in effect, measuring changes in accrued depreciation a cost factor. The level of improvement contribution to the property is measured by abstraction of comparable market sales, which is the property sale price less land value. The primary unknown for the cost approach is to accurately measure accrued depreciation affecting the amount of loss attributed to the improvements

as age increases and condition changes. This evaluation of cost results in the depreciated value of the improvement component based on age and condition. The evaluation of this market and cost information is the basis of reconciliation and indication of property valuation under this hybrid model.

When the appraiser reviews a neighborhood, the appraiser reviews and evaluates a ratio study that compares recent sales prices of properties, appropriately adjusted for the effects of time, within a delineated neighborhood, with the value of the properties based on the estimated depreciated replacement cost of improvements plus land value. The calculated ratio derived from the sum of the sold properties' estimated value divided by the sum of the time adjusted sales prices indicates the neighborhood level of appraisal based on sold properties. This ratio is compared to the acceptable appraisal ratio, 96% to 100%, to determine the level of appraisal for each neighborhood. If the level of appraisal for the neighborhood is outside the acceptable range of ratios, adjustments to the neighborhood are made.

If reappraisal of the neighborhood is indicated, the appraiser analyzes available market sales, appropriately adjusted for the apparent effects of time, by market abstraction of property components. This abstraction of property components allows the appraiser to focus on the rate of change for the improvement contribution to the property by providing a basis for calculating accrued depreciation attributed to the improvement contribution. This impact on value is usually the most significant factor affecting the property value and the most important unknown to determine by market analysis. Abstraction of the improvement component from the adjusted sale price for a property indicates the effect of overall market suggested influences and factors on the price of improvements that were a part of this property, recently sold. Comparing this indicated price or value allocation for the improvement with the estimated replacement cost new of the improvement indicates any loss in value due to accrued forms of physical, functional or economic obsolescence.

This is a market driven measure of accrued depreciation and results in a true and relevant measure of improvement marketability, particularly when based on multiple sales that indicate the trending of this rate of change over certain classes of improvements with certain neighborhoods. Based on this market analysis, the appraiser estimates the annual rate of depreciation for given improvement descriptions considering age and observed condition. Once estimated, the appraiser recalculates the improvement value of all property with the sale sample to consider and review the effects on the neighborhood sale ratio. After an acceptable level of appraisal is achieved within the sale sample, the entire neighborhood of property is recalculated utilizing the indicated depreciation rates taken from market sales. This depreciation factor is the basis for trending all improvement values and when combined with any other site improvements and land value, brings the estimated property value through the cost approach closer to actual market prices as evidenced by recent sale prices available within a given neighborhood. Therefore, based on analysis of recent sales located within a given neighborhood, estimated property values will reflect the market influences and conditions only for the specified neighborhood, thus producing more representative and supportable values. The estimated property values calculated for each neighborhood are based on market indicated factors applied uniformly using a neighborhood modifier to all properties within a neighborhood. Finally, with all the market-trend factors applied, a final ratio study is generated that compares recent sale prices with the proposed appraised values for these sold properties. From this set of ratio studies, the appraiser judges the appraisal level and uniformity in both update and non-update neighborhoods and verifies appraised values against overall trends as exhibited by the local market, and finally, for the school district as a whole.

### **Treatment of Residence Homesteads**

Beginning in 1998, the State of Texas implemented a constitutional classification scheme concerning the appraisal of residential property that receives a residence homestead exemption. Under that law, beginning in the second year a property receives a homestead exemption; any increases in the assessed value of that property are "capped." The value for tax purposes (assessed value) of a qualified residence homestead will be the LESSER of:

- the market value; or
- 110 Percent of the previous year's value (HB 438, effective January 1, 2008); PLUS the value of any improvements added since the last reappraisal.

Appraised values of capped properties must be recomputed annually. If a capped property sells, the cap automatically expires as of January 1<sup>st</sup> of the year following sale of the property and the property is appraised at its market value. An analogous provision applies to new homes. While a developer owns them, unoccupied residences may be partially complete and appraised as part of an inventory. This valuation is estimated using the district's land value and the percentage of completion for the improvement contribution that usually is similar to the developer's construction costs as a basis of completion on the valuation date. However, in the year following changes in completion, occupancy, or sale, they are appraised at market value.

### **Individual Value Review Procedures**

#### **Field Review**

The appraiser identifies individual properties in critical need of field review through sales ratio analysis. Sold properties are field reviewed on a monthly and periodic basis to check for accuracy of data characteristics.

As the district's parcel count has increased through new home construction, and the homes constructed in the boom years of the late 70's and early 80's experience remodeling, the appraisers are required to perform the field activity associated with transitioning and high demand neighborhoods. Increased sales activity has also resulted in a more substantial field effort on the part of the appraisers to review and resolve sales outliers. Additionally, the appraiser frequently field reviews subjective data items such as quality of construction, condition, and physical, functional and economic obsolescence, factors contributing significantly to the market value of the property. After preliminary estimates of value have been determined in targeted areas, the appraiser takes valuation documents to the field to test the computer-assisted values against his/her own appraisal judgment. During this review, the appraiser is able to physically inspect both sold properties and unsold properties for comparability and consistency of values.

#### **Office Review**

Once field review is completed, the appraiser conducts a routine valuation review of all properties as outlined in the discussion of ratio studies and market analysis. Valuation reports comparing previous values against proposed and final values are generated for all residential improved and vacant properties. The percentage of value difference are noted for each property within a delineated neighborhood allowing the appraiser to identify, research and resolve value anomalies before final appraised values are released. Previous values resulting from a hearing protest are individually reviewed to determine if the value remains appropriate for the current year.

Once the appraiser is satisfied with the level and uniformity of value for each neighborhood within his area of responsibility, the estimates of value are used for current year Notices of Appraised Value.

## **Performance Tests**

### **Sales Ratio Studies**

The primary analytical tool used by the appraisers to measure and improve performance is the ratio study. The district ensures that the appraised values that it produces meet the standards of accuracy in several ways. Overall sales ratios are generated for each neighborhood to allow the appraiser to review general market trends within their area of responsibility, and provide an indication of market appreciation over a specified period of time. The PC-based ratio studies are designed to emulate the findings of the state comptroller's annual property value study for category "A" property.

### **Management Review Process**

Once the proposed value estimates are finalized, the appraiser reviews the sales ratios by neighborhood and presents pertinent valuation data, such as weighted sales ratio and pricing trends, to the appraisal supervisors and the Chief Appraiser for final review and approval. This review includes comparison of level of value between related neighborhoods within and across jurisdiction lines. The primary objective of this review is to ensure that the proposed values have met preset appraisal guidelines appropriate for the tax year in question.

## **Commercial and Industrial Property valuation Process - 2015**

### **Introduction**

#### **Appraisal Responsibility**

This mass appraisal assignment includes all of the commercially described real property which falls within the responsibility of the commercial valuation appraisers of the Ochiltree Appraisal District. There are approximately 433 commercial improved parcels and 15 vacant commercial land parcels in Ochiltree County. Certified appraisers appraise the fee simple interest of properties according to statute and court decisions. However, the affect of easements, restrictions, encumbrances, leases, contracts or special assessments are considered on an individual basis, as is the appraisalment of any non exempt taxable fractional interests in real property (i.e. certain multi-family housing projects). Fractional interests or partial holdings of real property are appraised in fee simple for the whole property and divided programmatically based on their prorated interests.

#### **Appraisal Resources**

- Personnel - The improved real property appraisal responsibilities are categorized according to major property types of multi-family or apartment, office, retail, warehouse and special use (i.e. hotels, hospitals and, nursing homes).

The following appraisers are responsible for estimating the market value of commercial and industrial property:

- Pritchard and Abbott, Inc. Valuation Consultants
- Data - The data used by the commercial appraisers includes verified sales of vacant land and improved properties and the pertinent data obtained from each (sales price levels, capitalization rates, income multipliers, equity dividend rates, marketing period, etc.). Other data used by the appraisers includes actual income and expense data (typically obtained through the hearings process), actual contract rental data, leasing information (commissions, tenant finish, length of terms, etc.), and actual construction cost data. In addition to the actual data obtained from specific properties, market data publications are also reviewed to provide additional support for market trends.

## **Preliminary Analysis**

### **Market Study**

Market studies are utilized to test new or existing procedures or valuation modifications in a limited sample of properties located in the district and are also considered and become the basis of updating whenever substantial changes in valuation are made. These studies target certain types of improved property to evaluate current market prices for rents and for sales of commercial and industrial real property. These comparable sale studies and ratio studies reveal whether the valuation system is producing accurate and reliable value estimates or whether procedural and economic modifications are required. The appraiser implements this methodology when developing cost approach, market approach, and income approach models.

Ochiltree Appraisal District coordinates its discovery and valuation activities with adjoining appraisal districts. Numerous field trips, interviews and data exchanges with adjacent appraisal districts have been conducted to ensure compliance with state statutes. In addition, Ochiltree Appraisal District administration and personnel interact with other appraisal officials through professional trade organizations including the International Association of Assessing Officers, Texas Association of Appraisal Districts and the Texas Association of Assessing Officers. District staff strives to maintain appraisal skills and professionalism by continuing education in the form of courses that are offered by several professional associations such as Texas Association of Assessing Officers (TAAO), Texas Association of Appraisal Districts (TAAD) and International Association of Assessing Officers (IAAO) courses.

### **Valuation Approach (Model Specification)**

#### **Area Analysis**

Area data on regional economic forces such as demographic patterns, regional locational factors, employment and income patterns, general trends in real property prices and rents, interest rate trends, availability of vacant land, and construction trends and costs are collected from private vendors and public sources.

#### **Neighborhood Analysis**

The neighborhood and market areas are comprised of land area and commercially classed properties located within the boundaries of this appraisal district. These areas consist of a wide variety of property types including multiple-family residential, commercial and industrial. Neighborhood and area analysis involves the examination of how physical, economic, governmental and social forces and other influences may affect

property values within subgroups of property locations. The effects of these forces are also used to identify, classify, and organize comparable properties into smaller, manageable subsets of the universe of properties known as neighborhoods. In the mass appraisal of commercial and industrial properties these subsets of a universe of properties are generally referred to as neighborhood groups or economic groups.

Economic areas are defined by each of the improved property use types (apartment, office, retail, warehouse and special use) based upon an analysis of similar economic or market forces. These include but are not limited to similarities of rental rates, classification of projects (known as building class by area commercial market experts), date of construction, overall market activity or other pertinent influences. Economic area identification and delineation by each major property use type is the benchmark of the commercial valuation system. All income model valuation (income approach to value estimates) is economic area specific. Economic areas are periodically reviewed to determine if delineation is required. The geographic boundaries as well as income, occupancy and expense levels and capitalization rates by age within each economic area for all commercial use types and its corresponding income model have been estimated for these properties.

### **Highest and Best Use Analysis**

The highest and best use is the most reasonable and probable use that generates the highest net return on investment to land and present value of the real estate as of the date of valuation. The highest and best use of any given property must be physically possible, legally permissible, financially feasible, and maximally productive. For improved properties, highest and best use is evaluated as improved and as if the site were still vacant. This perspective assists in determining if the existing improvements have a transitional use, interim use, nonconforming use, multiple uses, speculative use, excess land, or a different optimum use if the site were vacant. For vacant tracts of land within this jurisdiction, the highest and best use is considered speculative based on the surrounding land uses. Improved properties reflect a wide variety of highest and best uses which include, but are not limited to: office, retail, apartment, warehouse, light industrial, special purpose, or interim uses. In many instances, the property's current use is the same as its highest and best use. This analysis ensures that an accurate estimate of market value (sometimes referred to as value in exchange) is derived.

On the other hand, value in use represents the value of a property to a specific user for a specific purpose. This perspective for value may be significantly different than market value, which approximates market price under the following assumptions: (1) no coercion of undue influence over the buyer or seller in an attempt to force the purchase or sale, (2) well-informed buyers and sellers acting in their own best interests, (3) a reasonable time for the transaction to take place, and (4) payment in cash or its equivalent.

### **Market Analysis**

A market analysis relates directly to examining market forces affecting supply and demand.

This study involves the relationships between social, economic, environmental, governmental, and site conditions. Current market activity including sales of commercial properties, new construction, new leases, lease rates, absorption rates, vacancies, allowable expenses (inclusive of replacement reserves), expense ratio trends, capitalization rate studies are analyzed to determine market ranges in price, operating costs and investment return expectations.

## **Data Collection / Validation**

### **Data Collection Manuals**

Data collection and documentation for Commercial/Industrial property is continually updated, providing a uniform system of iteming the multitude of components comprising improved properties. All properties located in Ochiltree Appraisal District are coded according to a specific classification system and the approaches to value are structured and calibrated based on this coding system.

Annually, after the sales of property have been researched, verified, keyed into the database, and quality control has been completed, the sales data is summarized and produced into list form. The confirmed sales reports, known as the Commercial Improved and Vacant Land sales listings categorize the sales by property and use type, and sort the data by location and chronological order. Many of these sales are available to the public for use during protest hearings, and are also used by Ochiltree Appraisal District appraisers during the hearings process.

### **Sources of Data**

In terms of commercial sales data, Ochiltree Appraisal District receives a copy of the deeds recorded in Ochiltree County that convey commercially classed properties. These deeds involving a change in commercial ownership are entered into the sales information system and researched in an attempt to obtain the pertinent sale information. Other sources of sale data include the protest hearings process and local, regional and national real estate and financial publications.

For those properties involved in a transfer of commercial ownership, a sale file is produced which begins the research and verification process. The initial step in sales verification involves a computer-generated questionnaire, which is mailed to both parties in the transaction (Grantor and Grantee). If a questionnaire is answered and returned, the documented responses are recorded into the computerized sales database system. If no information is provided, verification of many transactions is then attempted via phone calls to parties thought to be knowledgeable of the specifics of the sale. Other sources contacted are the brokers involved in the sale, property managers or commercial vendors. In other instances, sales verification is obtained from local appraisers or others that may have the desired information. Finally, closing statements are often provided during the hearings process. The actual closing statement is the most reliable and preferred method of sales verification.

### **Valuation Analysis (Model Price Calibration)**

Model calibration involves the process of periodically adjusting the mass appraisal formula, tables and schedules to reflect current local market conditions. Once the models have undergone the specification process, adjustments can be made to reflect new construction procedures, materials and/or costs, which can vary from year to year. The basic structure of a mass appraisal model can be valid over an extended period of time, with trending factors utilized for updating the data to the current market conditions. However, at some point, if the adjustment process becomes too involved, the model calibration technique can mandate new model specifications or a revised model structure.

### **Cost Schedules**

The iValorem System contains a cost approach that utilizes the following data to arrive at a cost value for improvements. The cost approach to value is applied to improved real property utilizing the comparative unit method. This methodology involves the utilization of national cost data reporting services as well as actual cost information on local comparable properties whenever possible. Cost models are typically developed based on the Marshall Valuation Service which indicate estimated hard or direct costs of various improvement types. Cost models include the derivation of replacement cost new (RCN) of all improvements represented within the district. These include comparative base rates, per unit adjustments and lump sum adjustments for variations in property description, design, and types of improvement construction. This approach and analysis also employs the sales comparison approach in the evaluation of soft or indirect costs of construction. Evaluating market sales of newly developed improved property is an important part of understanding total replacement cost of improvements. What total costs may be involved in the development of the property, as well as any portion of cost attributed to entrepreneurial profit can only be revealed by market analysis of pricing acceptance levels. In addition, market related land valuation for the underlying land value is important in understanding and analyzing improved sales for all development costs and for the abstraction of improvement costs for construction and development. Time and location modifiers are necessary to adjust cost data to reflect conditions in a specific market and changes in costs over a period of time. Because a national cost service is used as a basis for the cost models, location modifiers and estimates of soft cost factors are necessary to adjust base costs specifically for various types of improvements located Ochiltree County. Thusly, local modifiers are additional cost factors applied to replacement cost estimated by the national cost service. Estimated replacement cost new will reflect all costs of construction and development for various improvements located in Ochiltree Appraisal District as of the date of appraisal.

Accrued depreciation is the sum of all forms of loss affecting the contributory value of the improvements. It is the measured loss against replacement cost new taken from all forms of physical deterioration, functional and economic obsolescence. Accrued depreciation is estimated and developed based on losses typical for each property type at that specific age. Depreciation estimates have been implemented for what is typical of each major class of commercial property by economic life categories. Estimates of accrued depreciation have been calculated for improvements with a range of variable years expected life based on observed condition considering actual age.

These estimates are continually tested to ensure they are reflective of current market conditions. The actual and effective ages of improvements are noted in iValorem. Effective age estimates are based on the utility of the improvements relative to where the improvement lies on the scale of its total economic life and its competitive position in the marketplace. Effective age estimates are considered and reflected based on observed condition and given actual age.

Additional forms of depreciation such as external and/or functional obsolescence can be applied if observed. A depreciation calculation override can be used if the condition or effective age of a property varies from the norm by appropriately noting the physical condition and functional utility ratings on the property data characteristics. These adjustments are typically applied to a specific condition adequacy or deficiency, property type or location and can be developed via ratio studies or other market analyses.

The result of estimating accrued depreciation and deducting that from the estimated replacement cost new of improvements indicates the estimated contributory value of the improvements. Adding the estimated land value, as if vacant, to the contributory value of the improvements indicates a property value by the cost approach. Given relevant cost estimates and market related measures of accrued depreciation, the indicated value of the property by the cost approach becomes a very reliable valuation technique.

### **Income Models**

The iValorem System contains an Income Approach that utilizes the following data to arrive at an income value. The income approach to value is applied to those real properties which are typically viewed by market participants as "income producing", and for which the income methodology is considered a leading value indicator. The first step in the income approach pertains to the estimation of market rent on a per unit basis. This is derived primarily from actual rent data furnished by property owners and from local market surveys conducted by the district and by information from area rent study reviews. This per unit rental rate multiplied by the number of units results in the estimate of potential gross rent.

A vacancy and collection loss allowance is the next item to consider in the income approach. The projected vacancy and collection loss allowance is established from actual data furnished by property owners and local market survey trends. This allowance accounts for periodic fluctuations in occupancy, both above and below an estimated stabilized level. This feature may also provide for a reasonable lease-up period for multi-tenant properties, where applicable. The market derived stabilized vacancy and collection loss allowance is subtracted from the potential gross rent estimate to yield an indication of estimated annual effective gross rent to the property.

Next, a secondary income or service income is considered and, if applicable, calculated as a percentage of stabilized effective gross rent. Secondary income represents parking income, escalations, reimbursements, and other miscellaneous income generated by the operations of real property. The secondary income estimate is derived from actual data collected and available market information. The secondary income estimate is then added to effective gross rent to arrive at an effective gross income, when applicable.

Allowable expenses and expense ratio estimates are based on a study of the local market, with the assumption of prudent management. An allowance for non-recoverable expenses such as leasing costs and tenant improvements may be included in the expenses. A non-recoverable expense represents costs that the owner pays to lease rental space. Relevant expense ratios are developed for different types of commercial property based on use and market experience. For instance, retail properties are most frequently leased on a triple-net basis, whereby the tenant is responsible for all operating expenses, such as ad valorem taxes, insurance, and common area and property maintenance. In comparison, a general office building is most often leased on a base year expense stop. This lease type stipulates that the owner is responsible for all expenses incurred during the first year of the lease. As a result, expense ratios are implemented and estimated based on observed market experience in operating various types of commercial property.

Another form of allowable expense is the replacement of short-lived items (such as roof or floor coverings, air conditioning or major mechanical equipment or appliances) requiring expenditures of lump sum costs. When these capital expenditures are analyzed for consistency and adjusted, they may be applied on an annualized basis as stabilized expenses. When performed according to local market practices by commercial property type, these expenses when annualized are known as replacement reserves. For some types of property, typical management does not reflect expensing reserves and is dependent on local and industry practices.

Subtracting the allowable expenses (inclusive of non-recoverable expenses and replacement reserves when applicable) from the annual effective gross income yields an estimate of annual net operating income to the property.

Return rates and income multipliers are used to convert operating income expectations into an estimate of market value for the property under the income approach. These include income multipliers, overall capitalization rates, and discount rates. Each of these multipliers or return rates are considered and used in specific applications. Rates and multipliers may vary between property types, as well as by location, quality, condition, design, age, and other factors. Therefore, application of the various rates and multipliers must be based on a thorough analysis of the market for individual income property types and uses. These procedures are supported and documented based on analysis of market sales for these property types.

Capitalization analysis is used in the income approach models to form an indication of value. This methodology involves the direct capitalization of net operating income as an indication of market value for a specific property. Capitalization rates applicable for direct capitalization method and yield rates for estimating terminal cap rates for discounted cash flow analysis are derived from the market. Sales of improved properties from which actual income and expense data are obtained provide a very good indication of property return expectations a specific market participant is requiring from an investment at a specific point in time. In addition, overall capitalization rates can be derived and estimated from the built-up method (band-of-investment). This method relates to satisfying estimated market return requirements of both the debt and equity positions in a real estate investment. This information is obtained from available sales of property, local lending sources, and from real estate and financial publications.

Rent loss concessions are estimated for specific properties with vacancy problems. A rent loss concession accounts for the impact of lost rental income while the building is moving toward stabilized occupancy. The rent loss is calculated by multiplying the rental rate by the percent difference of the property's stabilized occupancy and its actual occupancy. Build out allowances (for first generation space or retrofit/second generation space as appropriate) and leasing expenses are added to the rent loss estimate. The total adjusted loss from these real property operations is discounted using an acceptable risk rate. The discounted value (inclusive of rent loss due to extraordinary vacancy, build out allowances and leasing commissions) becomes the rent loss concession and is deducted from the value indication of the property at stabilized occupancy. A variation of this technique allows a rent loss deduction to be estimated for every year that the property's actual occupancy is less than stabilized occupancy.

### **Sales Comparison (Market) Approach**

The iValorem System contains a market sales analysis with a recap of the cost, market and income approaches. Although all three of the approaches to value are based on market data, the Sales Comparison Approach is most frequently referred to as the Market Approach. This approach is utilized not only for estimating land value but also in comparing sales of similarly improved properties to parcels on the appraisal roll. As previously discussed in the Data Collection/Validation section of this report, pertinent data from actual sales of properties, both vacant and improved, is pursued throughout the year in order to obtain relevant information that can be used in all aspects of valuation. Sales of similarly improved properties can provide a basis for the depreciation schedules in the Cost Approach, rates and multipliers used in the Income Approach, and as a direct comparison in the Sales Comparison Approach. Improved sales are also used in ratio studies, which afford the appraiser an excellent means of judging the present level and uniformity of the appraised values.

### **Final Valuation Schedules**

Based on the market data analysis and review discussed previously in the cost, income and sales approaches, the cost and income models are calibrated and finalized. The calibration results are keyed to the schedules and models in the iValorem system for utilization on all commercial properties in the district. Market factors reflected within the cost and income approaches are evaluated and confirmed based on market sales of commercial and industrial properties. The appraisers review the cost, income, and sales comparison approaches to value for each of the types of properties with available sales information. The final valuation of a property is estimated based on reconciling these indications of value considering the weight of the market information available for evaluation and analysis in these approaches to value.

### **Statistical and Capitalization Analysis**

Statistical analysis of final values is an essential component of quality control. This methodology represents a comparison of the final value against the standard and provides a concise measurement of the appraisal performance. Statistical comparisons of many different standards are used including sales of similar properties, the previous year's appraised value, audit trails, value change analysis and sales ratio analysis.

Appraisal statistics of central tendency and dispersion generated from sales ratios are calculated for each property type with available sales data. These summary statistics including, but not limited to, the weighted mean,

provide the appraisers an analytical tool by which to determine both the level and uniformity of Appraised value of a particular property type. The level of appraised values can be determined by the weighted mean for individual properties within a specific type, and a comparison of weighted means can reflect the general level of appraised value.

The appraisers review every commercial property type annually through the sales ratio analysis process. The first phase involves ratio studies that compare the recent sales prices of properties to the appraised values of the sold properties. This set of ratio studies affords the appraiser an excellent means of judging the present level of appraised value and uniformity of the appraised values. The appraiser, based on the sales ratio statistics and designated parameters for valuation update, makes a preliminary decision as to whether the value level of a particular property type needs to be updated in an upcoming reappraisal, or whether the level of market value is at an acceptable level.

Potential gross rent estimates, occupancy levels, secondary income, allowable expenses (inclusive of replacement reserves), net operating income and capitalization rate and multipliers are continuously reviewed. Income model estimates and conclusions are compared to actual information obtained on individual commercial and industrial income properties during the protest hearings process, as well as with information from published sources and area property managers and owners.

## **Individual Value Review Procedures**

### **Field Review**

The date of last inspection, extent of that inspection, and the Ochiltree Appraisal District appraiser responsible are listed in the iValorem system. If a property owner disputes the District's records concerning this data in a protest hearing, iValorem may be altered based on the credibility of the evidence provided. Normally, a new field check is then requested to verify this information for the current year's valuation or for the next year's valuation. In addition, if a building permit is filed for a particular property indicating a change in characteristics, that property is added to a work file for review

Commercial appraisers are somewhat limited in the time available to field review all commercial properties of a specific use type. However, a major effort is made by appraisers to field review as many properties as possible or economic areas experiencing large numbers of remodels, renovations, or retrofits, changes in occupancy levels or rental rates, new leasing activity, new construction, or wide variations in sale prices. Field review of real property accounts is accomplished at a rate of one third of the total accounts each year. Additionally, the appraisers frequently field review subjective data items such as building class, quality of construction (known as cost modifiers), condition, and physical, functional and economic obsolescence factors contributing significantly to the market value of the property. In some cases field reviews are warranted when sharp changes in occupancy or rental rate levels occur between building classes or between economic areas. With preliminary estimates of value in these targeted areas, the appraisers test computer assisted values against their own appraisal judgment. While in the field, the appraisers physically inspect sold and unsold properties for comparability and consistency of values.

## **Office Review**

Office reviews are completed on properties subject to field inspections and are performed in compliance with the guidelines required by the existing classification system. Office reviews are typically limited by the available market data presented for final value analysis. These reviews summarize the pertinent data of each property as well as comparing the previous value to the proposed value conclusions of the various approaches to value. These evaluations and reviews show proposed value changes, income model attributes or overrides, economic factor (cost overrides) and special factors affecting the property valuation such as new construction status, and a three years sales history (USPAP property history requirement for non residential property). The appraiser may review methodology for appropriateness to ascertain that it was completed in accordance with USPAP or more stringent statutory and district policies. This review is performed after preliminary ratio statistics have been applied. If the ratio statistics are generally acceptable overall the review process is focused primarily on locating skewed results on an individual basis. Previous values resulting from protest hearings are individually reviewed to determine if the value remains appropriate for the current year based on market conditions. Each appraiser's review is limited to properties in their area of responsibility by property type (improved) or geographic area (commercial vacant land).

Once the appraiser is satisfied with the level and uniformity of value for each commercial property within their area of responsibility, the estimates of value are used for current year Notices of Appraised Value. Each parcel is subjected to the value parameters appropriate for its use type.

## **Performance Tests**

The primary tool used to measure mass appraisal performance is the ratio study. A ratio study compares appraised values to market prices. In a ratio study, market values (value in exchange) are typically represented with the range of sale prices, i.e. a sales ratio study. Independent, expert appraisals may also be used to represent market values in a ratio study, i.e. an appraisal ratio study. If there are not enough examples of market price to provide necessary representation, independent appraisals can be used as indicators for market value. This can be particularly useful for commercial or industrial real property for which sales are limited. In addition, appraisal ratio studies can be used for properties statutorily not appraised at market value, but reflect the use-value requirement. Examples of this are multi-family housing projects subject to subsidized rent provisions or other governmental guarantees as provided by legislative statutes (affordable housing) or agricultural lands to be appraised on the basis of productivity or use value.

The Ochiltree Appraisal District has adopted the policies of the IAAO Standard on Ratio Studies, circa July 2006 regarding its ratio study standards and practices. Ratio studies generally have six basic steps: (1) determination of the purpose and objectives, (2) data collection and preparation, (3) comparing appraisal and market data, (4) stratification, (5) statistical analysis and (6) evaluation and application of the results.

## **Sales Ratio Studies**

Sales ratio studies are an integral part of estimating equitable and accurate market values, and ultimately property assessments for these taxing jurisdictions. The primary uses of sale ratio studies include the determination of a need for general reappraisal; prioritizing selected groups of property types for reappraisal; identification of potential problems with appraisal procedures; assist in market analyses; and, to calibrate models used to estimate appraised values during valuation or reappraisal cycles. However, these studies cannot be used to judge the accuracy of an individual property appraised value. The Ochiltree County Appraisal Review Board may make individual value adjustments based on unequal appraisal (ratio) protest evidence submitted on a case-by-case basis during the hearing process.

Overall sales ratios are generated by use type semi-annually (or more often in specific areas) to allow appraisers to review general market trends in their area of responsibility and for the Property Study from the Property Tax Division of the Comptroller's Office. In many cases, field checks may be conducted to ensure the ratios produced are accurate and the appraised values utilized are based on accurate property data characteristics. These ratio studies aid the appraisers by providing an indication of market activity by economic area or changing market conditions (appreciation or depreciation).

## **Comparative Appraisal Analysis**

The commercial appraiser performs an average unit value comparison in addition to a traditional ratio study. These studies are performed on commercially classed properties by property use type (such as apartment, office, retail and warehouse usage or special use). The objective to this evaluation is to determine appraisal performance of sold and unsold properties. Appraisers average unit prices of sales and average unit appraised values of the same parcels and the comparison of average value changes of sold and unsold properties. These studies are conducted on substrata such as building class and on properties located within various economic areas. In this way, overall appraisal performance is evaluated geographically, by specific property type to discern whether sold parcels have been selectively appraised. When sold parcels and unsold parcels are appraised equally, the average unit values are similar. These sales and equity studies are performed prior to final appraisal and to annual noticing.

## **Commercial and Industrial Property Valuation Process – 2016**

The 2016 Property Valuation Process is described in the attach S.B. 1652 Reappraisal Plan provided by Pritchard & Abbott, Inc. Valuation Consultants. By contract Categories B and F appraisal valuation will be performed by Pritchard & Abbott, Inc. By contract this property will be annually appraised by property valuation consultants.

## **Business Personal Property Valuation Process - 2015**

### **Introduction**

### **Appraisal Responsibility**

There are four different personal property types appraised by the district's personal property section: Business Personal Property accounts; leased assets; vehicles and aircraft; and multi-location assets.

- Personnel - The personal property staff consists of four appraisers and two support staff.

Field Appraisers

## Appraisal Assistants

The district maintains the tangible personal property in a separate database from the real property. Business personal property, leased accounts and business accounts with multiple locations are the different types of personal property. There are approximately 1,600 plus personal property accounts located in Ochiltree County. The reappraisal on personal property accounts is conducted annually to comply with Section 22 of the Texas Property Tax Code.

The business personal property appraisal staff collects and maintains certain data on each personal property account during the annual field review. The data is entered in to the district's tangible computer system personal property worksheet.

The personal property account is classified by the State Use Code to describe the business type; then, the district has furthered stratified these codes by adding the Standard Industrial Classification (SIC) codes that are established by the federal government. The SIC codes group business types that have similar personal property characteristics. The SIC code enables the district to comparably value similar businesses and to analyze the level of uniformity and level of appraisal of all personal property accounts.

As soon as possible after January 1<sup>st</sup> of each year, the business personal property rendition with definitions for the various fields to be completed by the business owner for each account is mailed to the business owner of record. Included in the mailing is a Guide to Personal Property Rendition that explains the requirements of mandatory rendition in Senate Bill 340 and Section 22.01 of the Texas Property Tax Code.

Prior to the January 1<sup>st</sup> mailing, the district researches various sources of data available to the district for discovery of new businesses or changes in existing business operations or location. The sources available to the district are several websites for Texas Sales Tax Permits, Texas State Comptroller's Corporation search, TxDOT website for heavy moving permits and wireless radio tower locator registry with the FCC. Other sources for discovery of new businesses are Just Texas Commercial registry for commercial vehicles and trailers; publications such as The Perryton Herald Newspaper, local companies telephone books and county filed Assume Name certificates as well as word of mouth from commercial brokers, commercial developers and other businesses' renditions for lease companies. The field appraisers also conduct review of business personal accounts to verify new businesses and existing businesses by an annual drive-out. The field review locates new businesses that would not be found through another source and other useful information on existing businesses.

The district utilizes the Marshall and Swift commercial valuation manual for developing the different department codes of personal property depreciation tables as well as the accepted accounting practices followed in the local metropolitan area. The depreciation tables that correspond to the department code are loaded into the tangible database. The district utilizes Furniture and Fixtures; Computers; Passenger Vehicles and Light Trucks and Vans; Hi-tech Equipment; Heavy Duty Trucks; Machinery and Equipment, Leasehold and Signs; Communication Towers and Billboards as the department codes. The industrial personal properties or larger commercial properties use appropriate depreciation tables and trending factors for each specialized property. The business personal property depreciation table is updated annually.

The Ochiltree CAD's primary approach to the valuation of business personal property is the cost approach. The replacement cost new (RCN) is reported by the property owner with the year acquired and the appraiser enters this information into the rendition worksheet on the tangible system along with a description for each line item listed on the owner's rendered personal property for each account. The appraiser will verify the department code in which the owner has listed each line item. The appraiser will adjust department codes as necessary on the rendition worksheet and not on the property owner's submitted rendition. The computerized calculation will show the depreciated value of the asset. The district uses the depreciated value of the asset as a general practice in the valuation of each account to ensure equalization and a level of uniformity for all business personal property accounts.

At the time that the filed rendition is received via mail or in person, the rendition is date stamped as date received and imaged into the account history record file in the EC Imaging database. The rendition is given to the assigned appraiser to review for reappraisal. The owner's rendered value or opinion of market value of each item on the rendition is entered into the rendered value column on the rendition worksheet. The appraiser may use their judgment in a special situation to use the owner's rendered or opinion of market value instead of the depreciated value calculated by the computer. The appraiser will place a check mark in the use rendered column to override the depreciated value. A note addressing the judgment call is entered in to the account note as a reference.

In the event that a property owner fails to comply with Senate Bill 340 and not render the business personal property for the business, the appraiser will compare the non-rendered account with comparable rendered property within the same PCA code for an accurate appraised value to maintain the level of appraisal and level of uniformity among the business personal property accounts. The appraiser will research the properties with current filed renditions to place an appraised value for the property. All non-rendered personal property accounts are reappraised with a current appraised value using this comparison prior to the printing and mailing of the business personal property rendition forms. The appraiser may place notes on each account that is reappraised and define the changes in appraised value. New business personal property accounts follow the same procedure for the valuing process.

The district places account flags to identify each property that has not rendered timely as mandated in Senate Bill 340 to receive the 10 percent penalty for not filing timely. The appraiser places an account flag on each account that the property owner files a written request for the mandatory automatic extension filing deadline date of May 15<sup>th</sup> and an extension filing deadline date of May 30<sup>th</sup> when the owner provide good cause to the chief appraiser. The chief appraiser has the discretion to approve or deny the May 30<sup>th</sup> extension. Both extension deadlines must be filed in writing to the district prior the rendition-filing deadline of April 15 as provided in the Texas Property Tax Code Sec 22.23. The appraisal district staff notifies with a letter the granting of the extension request or in the case of denying the May 30 extension request. The letter is imaged in to the account record as verification of acknowledging the request.

The appraiser may request in writing to the property owner additional information or clarification to the information provided in the rendition. The property owner has 21 days to respond without penalty to the request. There is a 10 percent penalty imposed on the account upon failure to respond by the property owner after the twenty-one days pass. The appraiser will place a value on the account using their best judgment with the information provided and comparing the property with rendered accounts in the same SIC category. A workflow process that measures the number of days the request is begun on the date that the letter is mailed. A Notice of Appraised Value is mailed after the twenty-one days has expired when the date is after April 15 or the granted request for extension dates.

Each personal property account is audited by one of the office staff to ensure accuracy and consistency of the information entered into the computer rendition worksheet; and, the appropriate columns are completed to ensure a correct value is calculated for the appraised value.

The field appraisers and senior appraiser will research the Assumed Name Certificates recorded and filed after January 1 each year to identify new business personal property accounts for the next year.

The appraisal assistants will assist in researching the Motor Vehicle Registration list, telephone books by categories to help in the discovery of new business personal property accounts.

The field appraisers annually obtain contact lists for leased tenant space for office buildings, shopping centers/strip, consigned merchandise location, airport and taxing-jurisdiction owned property and conduct a review of accounts for each location and space.

The annual lists are compiled for in-home daycare, warehouse storage, aircraft, real estate agents and VIT accounts for review. Letters requesting tenant lists are mailed and upon receipt are verified against the tangible appraisal roll for changes from the prior year.

The field appraisers will conduct a field review by street to verify the business personal roll within the city limits of Perryton and the area of Booker located in Ochiltree County. The appraisers conducting the rural property reappraisal work the business personal property outside of the city limits of Perryton and Booker.

The field appraiser researches the returned mail received after the annual business personal property renditions are mailed for the current year.

## Performance Tests

### Ratio Studies

Each year the Property Tax Division of the state comptroller's office conducts a property value study (PVS). The PVS is a ratio study used to gauge appraisal district performance. Results from the PVS play a part in school funding. Rather than a sales ratio study, the personal property PVS is a ratio study using state cost and depreciation schedules to develop comparative personal property values. These values are then compared to Ochiltree Appraisal District personal property values and ratios are indicated.

### Business Personal Property Valuation Process – 2016

The 2016 Property Valuation Process is described in the attached S.B. 1652 Reappraisal Plan provided by Pritchard and Abbott, Inc. Valuation Consultants. By contract Category L appraisal valuations will annually be appraised by contracted valuation consultants.

### Minerals (Oil and Gas Reserves) Valuation Process

## INTRODUCTION

### Appraisal Responsibility

Minerals-in-place (oil and gas reserves) are real property. Appraisal of minerals, oil and gas reserves, is based on estimating the present value of the economically recoverable reserves of oil and gas. Mineral rights are property rights and may be separable property interests from the land surface property rights. Minerals being produced are a tangible asset and are appraised for ad valorem taxation. The valuation of minerals-in-place is based on estimating the discounted net present value of the oil and gas production over the economic life of the well(s). Basically, this method of valuation is an income approach using discounted cash flow analysis methodology. Oil and Gas Properties are also marketed based on proven reserves and the unit of comparison in this market is considered in barrels of oil or in cubic feet of natural gas. The market approach is based on sales of property based on barrels of proven reserves.

Mineral interests are commonly divided into property interests known as working interests and royalty interests. The valuation of this property begins with the valuation of the mineral lease and is divided into the property interests according to division orders for each lease. It is the goal and purpose of the CAD to identify every producing mineral property interest within the district and estimate the market value of each property interest listed on the roll.

### Appraisal Resources

- **Personnel** - The mineral property staff consists of one appraiser 2 support staff.
  - Terry Symons - Mineral and Utility Property Supervisor and Appraiser
  - Charlene Chapman – Mineral Property Clerk and Data Gatherer
  - Loretta Mick – Pipeline and Utility support staff
- **Data** - A common set of data characteristics for each mineral property account in Ochiltree CAD is collected from the Texas Railroad Commission Records and data entered to the district's computer. The

Property characteristic data drives the computer-assisted mineral property appraisal system. Railroad Commission records are searched to discover new leases as of January 1 of the year and legal descriptions are gathered to determine the location of the lease within Ochiltree CAD jurisdictional boundaries. Records are also reviewed for changes in production for existing wells and for abandoned wells with salvage value for equipment, tanks, and tubular goods. Production history for each mineral lease is gathered from IHS Energy production records and from the Texas Railroad Commission. Division Orders on each lease are requested annually from lease operators and checked against the appraisal roll for accuracy of owner name, address, and ownership percentage interest. To assist with operating information, an annual Confidential Lease Operating Expense Survey is mailed to the operator of each active lease requesting lease-specific operating information on oil and gas pricing, operating expenses, and possible market sales of leases.

To assist with the economic parameters influencing these properties, general economic data is gathered for the valuation process. The method of appraisal for minerals-in-place is the discounted cash flow method which looks at the net present value of operating the lease. Current interest rates, market rates of return and levels of discounting the investment are factors to consider when evaluating the returns necessary to attract investment capital for this type property. Capitalization rates are estimated based on data from the general market for oil and gas property. West Texas Intermediate Crude product prices are tracked on a daily basis from Plains Marketing, a regional product gathering and marketing company and the primary buyer for oil and gas produced in the area. Other capital market information and return rates for investors participating in the oil and gas market is taken from the Oil and Gas Journal, Ibbotson's SBBI Valuation Edition, Wall Street Journal, Mergent Bond Record, Moody's Corporate Bond Yield Averages, and Value Line Investment Survey "Ratings and Reports".

## **VALUATION AND STATISTICAL ANALYSIS (model calibration)**

### **Pricing, Operating Expenses and Reserve Analysis**

Crude oil and natural gas prices are important information in the valuation of mineral property because these prices help determine income to the lease and are a significant factor in determining the economic life of the production from the lease. Price analysis and estimates for crude oil and natural gas produced is based on the previous year's average price as per Texas Property Tax Code (Sec. 23.175). Prices paid for production for each lease is analyzed and averaged to evaluate the estimated average for each lease.

Lease operating expenses are estimated based on rendered information and actual operating cost and expense from surveys of lease operators in Ochiltree CAD. Decline curve analysis estimates the rate of production decline and is formulated using past production operating expenses and recent operating parameters such as water production, lease repairs, and secondary recovery efforts. Current operating income and expenses for the lease are considered and estimated in a discounted cash flow model to allow the appraiser to evaluate and estimate the net present value of producing oil and gas from the lease. Capitalization rates and discounting return rates are estimated for each lease based upon the particular risks inherent with production of oil and gas from that property. These risks may vary considerably from one lease to another depending on several factors influencing the production from that particular lease. The discounted cash flow model method will allow the appraiser to evaluate current market value of the lease based on the estimated recoverable reserves. This methodology is approved and recommended by the Property Tax Division of the Comptroller's Office and is a recognized method of appraisal by industry standards. We have utilized the discounted cash flow model to estimate the market value of each lease located in Ochiltree CAD.

### **Value Review Procedures**

The method of value review for this type of property is based on the review of the factors estimated within the discounted cash flow analysis methodology such as the discount rate, product prices, and operating expenses. Evaluation and verification of these economic factors as to their validity within current economic times and based on current capital requirements for investment in this type property is re-confirmed and reviewed for reasonableness. Sales of mineral properties are considered but adequate sale data is usually not available due to difficulty in confirming sales. The market for this type of property is neither an active nor an efficient market, there are very few participants and pricing information is mostly confidential. There is no central source for tracking these transactions and property owners are reluctant to reveal market information concerning prices paid or terms of the transaction. Because of a lack of market sales on mineral property, appraised values are regularly compared to similar properties within the same production field, field of exploration, strata of formation, or production history and expense level.

Ratio studies are a source of comparison to evaluation level and uniformity of appraisal. When market sales are available the ratio study is based on a comparison of the appraised value to the sale price. For mineral property, which lacks available market sales, a ratio study is a comparison of another appraisal opinion with the opinion of the district to determine level and uniformity of appraisal. The Property Tax Division of the Comptroller's Office conducts an annual ratio study of selected mineral properties to gauge the districts appraisal performance. The PTD utilizes the same valuation methodology to appraise individual mineral properties. This opinion of value is then utilized as market evidence with the same significance as if the property sold for that value. The estimated value of the property by Ochiltree CAD is compared to the appraisal by the PTD to calculate the ratio and the indicated level of appraisal. This study indicates the median and mean levels of appraisal for mineral property and is considered reliable as a review and evaluation tool.

## **Utility Property Valuation Process - 2015**

### **INTRODUCTION**

#### **Appraisal Responsibility**

Utility properties are the tangible assets of various businesses including electric production, transmission, and distribution companies, railroads, petroleum product gathering and delivery pipelines, telephone and communication providers and others. The valuation of these properties is considered to be complex due to the involvement of both tangible and intangible property elements that comprise these businesses and due to the size of some of the utilities that are regional and national companies. The appraisal of these companies becomes complex when considering the valuation of the property as a unit in place, evaluating the property by the approaches to value at the company level. Once the estimated value of the unit is estimated, the estimated market value is allocated based on the tangible property assets that are located within Ochiltree CAD.

#### **Appraisal Resources**

- Pritchard and Abbott, Inc. Valuation Consultants

Data - A common set of data characteristics for each utility property account in Ochiltree CAD is collected from the various government regulatory agency records, field inspections, and property owner renditions. This data is entered to the district's computer. Individual company financial information is gathered through industry specific governmental filings such as Federal Energy Regulatory Commission Reports, Securities and Exchange Commission 10-k filings, and Public Utility Commission publications. Other company information is gathered from annual reports, internal appraisals, and other in-house and industry publications. Property owner renditions are requested to document and list property owned and located in our particular jurisdictions (i.e.: track mileage, number of meters, pipeline size and mileage, substation and transmission capacity, etc.). The property characteristic data drives the computer-assisted appraisal of the property.

The appraisal of utility property utilizes three-approach analysis to form an opinion of value for the property. Financial and capital market information is pertinent to understanding factors affecting valuation of complex property. Gathering financial data to attempt to understand investor and corporate attitudes for capital return expectations giving considering return components such as current interest rates, capital debt structure, bond market rates, and capital supply and demand trends. These financial factors result in overall return rates and capital structure for these companies and affects capitalization rates. The weighted average cost of capital is the most commonly used method of estimating capitalization rates for utility properties. Capitalization rates are estimated using capital return expectations from various publications: Ibbotson's SBI Valuation Edition, Wall Street Journal, Mergent Bond Record, Moody's Corporate Bond Yield

Averages, Value Line Investment Survey "Ratings and Reports". Industry specific information is also gathered from web sites, publications, periodicals, and reference manuals. Ochiltree CAD utilizes the weighted average cost of capital to estimate the capitalization rate for utility appraisal under the income approach.

## **VALUATION AND STATISTICAL ANALYSIS (model calibration)**

### **Approaches to Valuation, Reconciliation**

Valuation of tangible assets for utility companies relies primarily on indications of value based on the cost and income approaches to value under the unit value approach. This methodology involves developing and estimating market value considering the entirety of the company's tangible assets and resolving an allocated value for that portion of specific tangible assets located in particular tax jurisdictions. The valuation opinion is based on three approach analysis utilized for the indicated unit appraisal of all company tangible assets, then an estimated allocation of unit value for only assets located in the district and particular jurisdictions. This methodology is approved and recommended by the Property Tax Division of the Comptroller's Office and is an accepted standard within the industry and appraisal community.

### **Value Review Procedures**

Review of the valuation of utility property is based on verifying economic and financial factors utilized in the methodology as relevant to current capital markets and that these factors reflect current return expectations. Market sales of utility properties do occur and are a good source for comparison and review when the price of the tangible assets can be abstracted or allocated from the selling price. Typically, the sale of utility companies involve significant intangible property assets such as customer base, goodwill, favorable contracts, name recognition, etc. and the contributory value and allocation of these assets is subjective and unknown. In Texas, intangible property assets are exempt from taxation and must not be included on the appraisal roll as taxable property. Therefore, because of the lack of specific market information on sales of utility properties, appraised value is regularly compared to the valuation of similar property within the same set of property characteristics, business type and size. More of comparison for equity concerns on valuation rather than the full recognition of a market level certainty about appraisal level. Of course, the estimated value is based on recognized methodology for considering the valuation of these tangible assets, but true market confirmation of these factors may not be possible due to minimal market knowledge and experience.

Ratio studies are also a method of review for relevance of appraisal valuation to market value. Again, in the absence of full disclosure of prices paid and without the abstraction of prices paid for the tangible asset components from recent utility property acquisitions or sales, market based analysis and review is not possible. Ratio studies for utility property must rely on a comparison of one appraisal opinion as the basis for the reasonable property valuation with the district's appraised value to determine the ratio for level and uniformity of appraisal. The PTD conducts the annual ratio study of selected utility properties to gauge the appraisal district's performance. The PTD utilizes the same valuation methodology to estimate appraisal valuations of utility properties and the results, when compared to the appraisal valuation estimated by Ochiltree CAD for these properties yield ratios. This ratio study of certain utility properties indicates the level and uniformity of appraisal for this category of property.

### **Utility and Pipeline Property Valuation Process – 2016**

The 2016 Property Valuation Process is described in the attached S.B. 1652 Reappraisal Plan provided by Pritchard and Abbott, Inc. Valuation Consultants. By contract Category J appraisal valuations will be performed by Pritchard and Abbott, Inc. By contract these properties will be annually appraised by property valuation consultants.

### **LIMITING CONDITIONS**

The appraised value estimates provided by the district are subject to the following conditions:

1. The appraisals were prepared exclusively for ad valorem tax purposes.
2. The property characteristic data upon which the appraisals are based is assumed to be correct. Exterior inspections of the property appraised were performed as staff resources and time allowed. Some interior inspections of property appraised were performed at the request of the property owner and required by the district for clarification purposes and to correct property descriptions.
3. Validation of sales transactions was attempted through questionnaires to buyer and seller, telephone survey and field review. In the absence of such confirmation, residential sales data obtained from vendors was considered reliable.

**Certification Statement:**

"I, Terry Symons, Chief Appraiser for the Ochiltree County Appraisal District, solemnly swear that I have made or caused to be made a diligent inquiry to ascertain all property in the district subject to appraisal by me, and that I have included in the records all property that I am aware of at an appraised value which, to the best of my knowledge and belief, was determined as required by law."

\_\_\_\_\_  
Terry Symons  
Chief Appraiser

\_\_\_\_\_  
Date

Approved by \_\_\_\_\_  
Chairman Date

\_\_\_\_\_  
Vice-Chairman Date