

# **CARSON COUNTY APPRAISAL DISTRICT 2015/2016**

## **REAPPRAISAL PLAN** Texas Tax Code, Section 6.05

**Adopted September 3, 2014**

To adopt a plan the BOD must take the following steps:

- Hold a public hearing with required notice,
- Approve a plan by Sept.15 of each even-numbered year, and
- Distribute copies to participating taxing units and to the Comptroller within 60 days of the approval date.

(E-mail to: Elizabeth Alvarado)  
(1-800-252-9121, Press 1 for agency directory, Ext 3-6642)  
Emailed: 09/14/2012 to PTAD  
Emailed 9/14/2012 to Taxing Units

# Table of Contents

**Page: Item:**

5	Introduction
5	Scope of Responsibility
6	Personnel Resources
7	Data
7	Independent Performance Test
8	Plans for Period Reappraisal Requirement
9	Reappraisal Cycle
9	Performance Analysis
9	Analysis of Available Resources
9	Planning and Organization
9	Mass Appraisal System
9	Data Collection Requirements
10	New Construction/Demolition
10	Remodeling
10	Re-inspection of Problematic Market Areas
10	Re-inspection of the Universe of Properties
10	Field of Office Verification of Sales Data and Property Characteristics
10	Legal Attributes Affecting Value
11	Pilot Study / Modeling
12	Planning a Reappraisal
12	Steps in a Reappraisal

13	Market/Neighborhood Areas of Carson County
13	Inspection of Properties
14	Valuation by Tax Year
14	Residential Valuation Process
18	Inventory for Residential Property
18	Treatment of Residence Homesteads
19	Mass Appraisal of Land
20	Commercial Real Property
23	Business Personal Property Valuation Process
25	Mobile Homes
25	Industrial Personal Property Valuation
26	Utility Property Valuation
26	Minerals (Oil & Gas Reserves) Valuation
29	Monitoring Contracted Appraisal Performance
30	Steps for Evaluating Contractor's Property Discovery Process
30	Special Use Property Valuation-Agricultural/Wildlife
31	The Mass Appraisal Report
32	Appraisal Notices
32	Hearing Process
32	Value Defense
32	ARB's Role in the Property Tax System
33	Preparing the Appraisal Roll
33	2015 Calendar of Key Events and Completion Dates
39	2016 Reappraisal Schedule

- 39     Limiting Conditions
- 39     Certification Statement
- 40     Resolution to Adopt 2015-2016 Reappraisal Plan

**Attachments:**

2015 Adopted Carson CAD Budget

Pritchard and Abbott, Inc. - Reappraisal Plan

# **Carson Appraisal District**

## **2015 – 2016 Reappraisal Plan**

### **Introduction**

The Carson County Appraisal District has prepared this reappraisal plan to provide our Board of Directors, citizens and taxpayers with a better understanding of the district's responsibilities and activities. This plan attempts to outline the necessary work required to complete a reappraisal over the next two years. As we progress into the actual reappraisal process, we reserve the right to modify the plan as required in order to meet the requirements for this office as set forth in the Property Tax Code. This report has several parts: a general introduction and then, several sections describing the appraisal effort by the appraisal district.

The Carson County Appraisal District (CCAD) 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 Carson CAD has its own board of directors, appointed by the taxing units within the boundaries of Carson 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.

### **Scope of Responsibility**

The appraisal district is responsible for property tax appraisal and exemption administration for nine (9) jurisdictions or taxing units in Carson County. Each taxing unit, such as the county, city, school, 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, freeport exemptions and vehicles used to produce income. We, in addition, maintain records on abatements, tax deferrals, and historical designated properties.

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> of each year. 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 the 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 the 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 biennial written appraisal plan for reappraising all properties at least once every three years. The written plan is adopted by the appraisal district's board of directors as required by Sec 6.05 of the Texas Property Tax Code.

Passage of Senate Bill 1652 amended Section 6.05 of the Texas Property Tax code by adding Subsection (i) to read as follows:

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

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.

### **Personnel Resources**

The Chief Appraiser is primarily responsible for overall organizing, staffing, coordinating, and controlling the district operations. The Carson Appraisal District staff consists of 3 full-time and one part-time position. The full-time employees consist of the following classifications:

Chief Appraiser: Registered Professional Appraiser

**Registered Tax Assessor-Collector  
Certified Tax Administrator**

**Appraiser: Registered Professional Appraiser**

**Collector: Registered Tax Collector**

The district's appraisers are registered with the Texas Department of Licensing and Regulation and have earned the Registered Professional Appraiser (RPA) designation. A minimum of 120 hours of continuing education units must be taken every five years with no more than 45 hours during a one year period to include classes on Ethics and Uniform Standards of Professional Appraisal Practices (USPAP). The Chief Appraiser meets regularly with staff to introduce new procedures and regularly monitor appraisal activity to ensure that all personnel are following standardized appraisal procedures

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.

**Data**

The Carson County Appraisal District is responsible for establishing and maintaining approximately 22,000 real, oil and gas and personal property accounts covering 961 square miles within the Carson 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. Property characteristic data on existing property is maintained through a field review and inspection. Sales are researched through 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.

**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.

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.

### **Plan for Periodic Reappraisal Requirement**

Senate Bill 1652 amends Section 25.18, Subsections (a) and (b) to read as follows:

- (a) Each appraisal office shall implement the Plan for Periodic Reappraisal of property approved by the board of directors under Section 6.05(i).
- (b) The plan shall provide for the following reappraisal activities for all real and personal property in the district at least once every three years:
  - 1. identifying properties to be appraised through physical inspection or by other reliable means of identification, including deeds or other legal documentation, aerial photographs, land-based photographs, surveys, maps, and property sketches;
  - 2. identifying and updating relevant characteristics of each property in the appraisal records;
  - 3. defining market areas in the district;
  - 4. identifying property characteristics that affect property value in each market area, including:
    - a. the location and market area of property;
    - b. physical attributes of property, such as size, age, and condition;
    - c. legal and economic attributes; and
    - d. easements, covenants, leases, reservations, contracts, declarations, special assessments, ordinances, or legal restrictions;
  - 5. developing an appraisal model that reflects the relationship among the property characteristics affecting value in each market area and determines the contribution of individual property characteristics;
    - a. applying the conclusions reflected in the model to the characteristics of the properties being appraised; and
    - b. reviewing the appraisal results to determine value.



## **Reappraisal Cycle**

The CARSON CAD, by policy adopted by the Board of Directors and the Chief Appraiser, reappraises all property in the district every year. The reappraisal year consists of a complete inspection of all properties in the district. Tax year 2015 is a reappraisal year and tax year 2016 is a reappraisal year.

## **Performance Analysis**

Performance Analysis – the equalized values from the previous tax year are analyzed with ratio studies to determine the appraisal accuracy and appraisal uniformity overall and by market area within property reporting categories. Ratio studies are conducted in compliance with the current *Standard on Ratio Studies* of the International Association of Assessing Officers.

## **Analysis of Available Resources**

Staffing and budget requirements for tax year 2015 are detailed in the 2014 budget, as adopted by the Board of Directors and attached to the written biennial plan by reference.

Existing appraisal practices, which are continued from year to year, are identified and methods utilized to keep these practices current are specified

Information Systems (IS) support is detailed and system upgrades are scheduled. Existing maps and data requirements are continually updated and kept current.

## **Planning and Organization**

A calendar of key events with critical completion dates is prepared for each area of work. This calendar identifies key events for appraisal, clerical, customer service, and information systems. A calendar is prepared for tax years 2015 and 2016. Production standards for field activities are calculated and incorporated in the planning and scheduling process.

## **Mass Appraisal System**

Computer Assisted Mass Appraisal (CAMA) system revisions are completed by the Information Systems Software Provider. System revisions and procedures are performed by the Provider. Carson County Appraisal District contracted with the firm of PRITCHARD & ABBOTT, INC. for these services.

## **Data Collection Requirements**

Field and office procedures are reviewed and revised as required for data collection. Activities scheduled for each tax year include new construction, demolition, remodeling, re-inspection of problematic market areas, inspection of the universe of properties on an annual cycle, and field or office verification of sales data and property characteristics.

### **New Construction/Demolition**

New construction field and office review procedures are identified and revised as required. Sources of building permits are confirmed. The City of Panhandle, City of Groom, and the City of White Deer provides a listing of permits issued during the previous year. The Town of Skellytown does not issue building permits. Cities that issue permits are a valuable source of information regarding new construction and demolition in the Carson County area. Local publications, field inspections, and Mechanic's Liens can help identify and locate new construction accounts, also.

### **Remodeling**

Properties with extensive improvement remodeling are identified and field inspections are scheduled to update property characteristic data.

### **Re-inspection of Problematic Market Areas**

Real property market areas, by property classification, are tested for low or high ratio sales and/or high coefficients of dispersion. Market areas that fail any or all of these tests are determined to be problematic. Field inspections are scheduled to verify and/or correct property characteristic data. Additional sales data is reviewed and researched if available.

### **Re-inspection of the Universe of Properties**

The International Association of Assessing Officers' *Standard on Mass Appraisal of Real Property* specifies that the universe of properties should be re-inspected on a cycle of 3 years. The re-inspection includes physically viewing improvements for physical condition, accuracy of measurements, for buildings that have been omitted, torn down or added since the last inspection, photographing, and verifying the accuracy of the existing data. The inspection will also verify land use and characteristics that may have changed from the previous inspection. The field appraiser has an appraisal card of each property to be inspected and makes notes of changes, depreciation changes, remodeling, additions, etc.

### **Field or Office Verification of Sales Data and Property Characteristics**

Sales information must be verified, such as, the actual date the sale transaction occurred. Since the State of Texas does not require disclosure of sale price, the district obtains prices through deeds, voluntarily disclosed closing statements or fee appraisals usually submitted as evidence in a protest hearing, buyer and seller sale questionnaires or third party sources, such as real estate agents and fee appraisers.

### **Legal Attributes Affecting Value**

The Carson CAD will identify and note elements of recorded conveyance that will affect the use or value of a property to a degree as described by law. The district will monitor

the enactment or changes of governmental restrictions affecting property value, such as zoning, special assessments, and other legal restrictions.

### **Pilot Study / Modeling**

Market areas with extensive improvement and remodeling are identified, verified to update property characteristic data. Information gathered through the previous year is combined with permit information and field activities. The results are tested with ratio studies before finalized in the valuation modeling process.

Models are calibrated by adjusting mass appraisal formulas, tables and schedules to the current market. Calibration of models differs in each approach to value:

**Cost:** Setting/updating base rates, depreciation tables, time and location modifiers and market adjustments to reflect supply and demand factors.

**Income:** Developing/updating market rents, vacancy and collection rates, cap rates and income modifiers by property type.

**Sales Comparison:** Develop/update land valuation tables, sales comparison adjustments such as physical and location differences.

These modeling tests (sales ratio studies) are conducted each tax year. Proposed values on each category are tested for accuracy and reliability. Actual test results are compared with anticipated results and those models not performing satisfactorily are refined and retested. The procedures used for model specification (market area) and model calibration (increase/decrease) should be in compliance with USPAP, STANDARD RULE 6. Standard Rule 6 states, "In developing mass appraisal, the appraiser must be aware of, understand, and correctly employ those generally accepted methods and techniques necessary to produce and communicate credible appraisals." The appraisal model used to determine property value is listed as follows:

1. **Market Value of Residential Property =**  
*Replacement Cost New x Total Percent Good + Depreciated Additive Values + Land Value*  
(Adjusted by Market Indicators as determined by Sales Data, as available)
2. **Market Value of Commercial Property =**  
*Replacement Cost New x Total Percent Good+ Depreciated Additive Values+ Land Value*  
(Adjusted by Market Indicators as determined by Sales Data, as available)
3. **Market Value of Manufactured Housing=**  
*Replacement Cost New x Total Percent Good+ Depreciated Additive Values*
4. **Market Value of Commercial Personal Property=**  
*Units x (Price/Unit of Inventory) + Units x (Price/Unit of FFE x Percent Good) +Additive Values*

5. **Market Value of Vacant Lots or Acreage=**  
*Units x Price/Unit*  
 (As determined by Market Transactions)
6. **1-D-1 Special Use Valuation (Ag Value) =**  
*Units x Value per Acre of Agricultural Use*  
 (As determined by Net Income per Acre/State Mandated Cap Rate)

### **Planning a Reappraisal**

Variation in reappraisal requirements requires CARSON County Appraisal District to carefully plan its work before beginning any reappraisal. Although the planning process may vary in specifics, it should involve five (5) basic steps:

1. Assess current performance.
2. Set reappraisal goals.
3. Assess available resources and determine needs.
4. Re-evaluate goals and adjust as necessary.
5. Develop a work plan.

### **Steps in a Reappraisal**

The International Association of Assessing Officers (IAAO) textbook, Property Appraisal and Assessment Administration, lists ten steps in a reappraisal. These steps outline those activities performed by CARSON County Appraisal District for the completion of periodic reappraisals. Activities are listed below in the order in which they occur:

1. **Performance Analysis:**
  - ¶ Ratio study
  - ¶ Equity of existing values
  - ¶ Consistency of values with market activity
2. **Revaluation Decision:**
  - ¶ Statutory – at least once every three years
  - ¶ Administrative policy
3. **Analysis of Available Resources:**
  - ¶ Staffing
  - ¶ Budget
  - ¶ Existing practices
  - ¶ Information system support
  - ¶ Existing data and maps
4. **Planning and Organization**
  - ¶ Target completion dates
  - ¶ Identify performance objectives
  - ¶ Specific action plans and schedules
  - ¶ Identify critical activities with completion dates
  - ¶ Set production standards for field activities
5. **Mass Appraisal System:**
  - ¶ Forms and procedures revised as necessary

- ¶ CAMA (computer assisted mass appraisal) system revisions as required
- 6. Conduct Pilot Study
  - ¶ Test new/revised appraisal methods as applicable
  - ¶ Conduct ratio studies
  - ¶ Determine if values are accurate and reliable
- 7. Data Collection
  - ¶ Building permits and other sources of new construction
  - ¶ Check properties that have undergone remodeling
  - ¶ Reinspection of problematic properties
  - ¶ Reinspection of universe of properties on a cyclic basis
- 8. Valuation:
  - ¶ Market analysis (based on ratio studies)
  - ¶ Schedules development
  - ¶ Application of revised schedules
  - ¶ Calculation of preliminary values
  - ¶ Tests of values for accuracy and uniformity
- 9. The Mass Appraisal Report
  - ¶ Establish scope of work
  - ¶ Compliance with Standards Rule 6 - 7 of USPAP
  - ¶ Signed certification by the chief appraiser as required by Standards Rule 6 - USPAP
- 10. Value Defense:
  - ¶ Prepare and deliver notices of value to property owners
  - ¶ Hold informal hearings
  - ¶ Schedule and hold formal appeal hearings

**\*\*Note—the burden of proof (evidence) of market values and equity falls on the appraisal district.\*\***

### **Market/Neighborhood Areas of Carson County**

Carson County has four different neighborhoods/market areas within the county. They are the cities of Panhandle, White Deer, Groom, the Town of Skellytown and the Fritch area. The Carson CAD uses these areas when analyzing market values for categories A, B, C, F, and M's. These categories include residential, multi-family, vacant lots, commercial properties, and mobile homes.

The market area for Carson County is county wide. The Carson CAD uses the school districts of Panhandle, White Deer, and Groom when analyzing market values for land, which include categories D and E.

### **Inspection of Properties**

Section 25.18 of the Texas Property Tax Code, provides for the reappraisal of all property within the district at least once every three (3) years.

The Carson County Appraisal District's plan is to inspect and reappraise all properties within the boundaries of the appraisal district each year.

All income producing personal property, minerals, utilities and industrial properties within the CAD are appraised on an annual basis, also.

### **Annual Ratio Reports:**

Ratio studies shall be performed annually. Any areas or categories whose ratios are above or below statutory requirements shall be analyzed and schedules adjusted accordingly.

### **Organization:**

Field inspections are carried out by the field appraiser as directed by the chief appraiser. The field appraiser physically inspects all areas, 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 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.

## **Valuation by Tax Year**

For each tax year, using market analysis of comparable sales and income and expense data, the valuation models are specified and calibrated in compliance with the supplemental standards from the International Association of Assessing Officers and the *Uniform Standards of Professional Appraisal Practice* (USPAP). The calculated values are tested for accuracy and uniformity using ratio studies. Performance standards are those as established by the IAAO Standard on Ratio Studies. Property values in all market areas are analyzed and updated each appraisal year as required for level and uniformity of value.

## **Residential Valuation Process**

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 review 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.

### **Area Analysis**

Data on regional economic forces such as demographic patterns, regional location 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. The analysis of this type will provide the field appraiser a current economic outlook on the real estate market.

The appraiser, through the sales ratio analysis process, reviews the neighborhoods/market areas annually. The first phase involves neighborhood ratio studies that compare the recent sales prices of neighborhood properties to the appraised values of the sold properties. These ratios provide the appraiser with 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.

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

The highest and best use is the most reasonable and probable use that supports the highest 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. 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 the 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.

### **Valuation Methods Used**

#### **Cost Approach**

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:

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

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 of the improvements (RCN) less accrued depreciation (AD), multiplied by the local adjustment multiplier (LA).

The cost approach separately estimates both the land and the 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 tables may be needed to bring the level of appraisal to an acceptable standard as indicated by the market sales data. Thus, the demand side economic factors and influences may be observed and considered. These market, or local adjustments, may be abstracted and applied uniformly within neighborhoods to account for locational variances between market areas across a jurisdiction. In accordance with the Market Approach, the estimated market value (MV) of the property equals the basic unit of property, under comparison, multiplied by 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 has been determined to be the rate of change for the improvement's contribution to total property value. The measure of change for this component can best be reflected in the annualized accrued depreciation table. This cost adjustment factor is most appropriately measured by sales of similar properties. In the Market Approach, when the improvements are abstracted from the sale price, it indicates the depreciated value of the improvement component, measuring changes in the accrued depreciation 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. The evaluation of cost results in the depreciated value of the improvement component based on age and condition. The reconciliation of both the market and cost information is the basis of an indication of the property value 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, within a delineated neighborhood. The value of the properties' used in the study is 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 sales prices indicates the neighborhood level of appraisal based on sold properties. These ratio studies are used 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. An overall appraisal ratio between the ranges of 96% to 100% is considered to be acceptable.

If reappraisal of the neighborhood is indicated, the appraiser analyzes available market sales, appropriately adjusted for the 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 is usually the most significant factor affecting property value and the most important unknown factor to be determined by market analysis. Abstraction of the land component from the sale price indicates the effect of overall market influences and factors on the price of improvements that were a part of a recently sold property. 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 forces.

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 within certain neighborhoods. Based on this market analysis, the appraiser estimates the annual rate of depreciation for the improvements based on the age and observed condition. Once estimated, the appraiser recalculates the improvement value of all property within 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 using the cost approach closer to actual market prices as evidenced by recent sale prices available within a 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 all neighborhoods and verifies appraised values against overall trends as exhibited by the local market.

### **Sales Comparison Approach**

In the absence of a sale of the subject, sale prices of comparable properties are usually considered the best evidence of market value. The sales comparison approach models the behavior of the market by comparing the properties being appraised with comparable properties that have recently sold. Their sale prices will then be adjusted for differences from the subject and a market value for the subject is estimated from the adjusted sales prices of comparable properties.

### **Income Approach**

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

The model used to estimate the present value of income expected in the future is represented by the following formulas:

$$\text{Value} = \text{Income} / \text{Rate}, \text{ or } \text{Income} = \text{Rate} \times \text{Value}, \text{ or } \text{Rate} = \text{Income} / \text{Value}$$

The income approach is most suitable for types of properties frequently purchased and held for the purpose of producing income, such as apartments, motels, commercial buildings and office buildings. It is not conducive to the valuation of single-family residential properties that are seldom rented, or where market demand factors such as personal preferences or location unduly influence the market.

The income information is generally either non-existent or not available to validate the accuracy or the results. Therefore the income approach is not used but is considered when information is provided by the property owner.

### **Inventory for Residential Property**

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

In general, the district uses its own land value estimates and the actual itemized construction, labor, and material costs, plus other soft or indirect costs to estimate market value as of the assessment date. The market values of improved inventory will be reviewed annually and inventory consideration will be eliminated when ownership transfers to the property owner. As with improved inventory, full market value will be applied once the vacant land is absorbed and ownership transfers for the purpose of residential construction.

### **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 homestead exemption. Under the new law, beginning in the second year a property receives a homestead exemption; increases in the value of that property are "capped." The value for tax purposes (appraised value) of a qualified residence homestead will be the LESSER of

- the market value; or
- the preceding year's appraised value;  
PLUS 10 percent for each year since the property was re-appraised; PLUS the value of any improvements added since the last re-appraisal.

Values of capped properties must be recomputed annually. If a capped property sells, the cap automatically expires as of January 1st of the following year. In that following year, that home is reappraised at its market value to bring its appraisal into uniformity with other properties.

## **Mass Appraisal of Land**

The real market value of the land must be listed separately from all buildings, structures and improvements for ad valorem purposes. This requires a separate land valuation. The valuation of land can be separated into three basic functions:

- Identification;
- Analysis; and
- Valuation.

Highest and best use, anticipation, supply and demand, balance, substitution, assemblage, and plottage are principles of appraisal that affect land value. The assessment roll shall include the property classification code number for each individual parcel of locally assessed real property in the county. Property classification provides a standard method of organizing sales ratio and adjustments to maintain assessment levels at 100 percent of market value. Property classification is based on the highest and best use of the land.

### **Land Analysis**

Residential land analysis is conducted by the appraisers. The appraisers assign each unique neighborhood to a square foot, front foot, or acre land value. Each lot may be adjusted by a percent good or an economic factor. Specific land influences are used, where necessary, to adjust parcels outside the neighborhood norm for such factors as view, shape, size, and topography, among others. The appraisers use the sales comparison approach, abstraction and allocation methods to insure that the land values created best reflect the contributory market value of the land to the overall property value.

### **Land Valuation Techniques**

#### **Sales Comparison Approach**

The techniques used for the appraisal of residential and commercial land are the same as those used for other urban land. There are seven steps in the mass appraisal of land:

1. Establish a base appraisal date;
2. Define neighborhood boundaries;
3. Gather and verify land sales data;
4. Establish base lot value;
5. Establish on-site development values;
6. Develop adjustments; and
7. Develop neighborhood land schedule.

Prior to reappraisal, review sales and record any other pertinent information.

#### **Allocation Procedure**

The allocation procedure may be considered when no current vacant land sales are available in the reappraisal area. However, use this method with caution as it is less reliable than direct sales comparison. Under the allocation procedure, an estimate is made of the value that land contributes to the total property value. This land value can be estimated from the appraiser's knowledge of the market based upon:

- Previous years' land values,
- Analysis of new construction sites from similar neighborhoods, and
- Land-to-building ratios from similar neighborhoods.

**Example:**

Your estimate of land values compared to total property values is 20 percent in a given residential neighborhood. The allocation is 4:1 or four parts improvement to one part land. For example, on an \$80,000 improved property, the contributory land value would represent 20 percent, or one-fifth, of the total value. Thus, the estimated land value would be  $\$80,000 \times .20 = \$16,000$ .

**Abstraction Procedure**

The abstraction procedure uses the cost approach to subtract the improvement value from the total property value. Using this method, you would subtract the depreciated replacement cost of the improvements from the total property value to arrive at an indicated land value.

**Example:**

Sales price of property - \$80,000  
 Replacement cost new estimate - \$100,000  
 Less accrued depreciation – \$36,000  
 Estimated value of improvements - \$64,000  
 Indicated land value -  $(\$80,000 - \$64,000) \$16,000$

This procedure should be applied to a large enough sample of properties in the neighborhood to give a range of values. The extraction method is less reliable than the direct comparison approach and should be used with caution.

Land schedules are updated using current market data (sales) and then tested with ratio study tools. Value schedules are developed and tested on a pilot basis with ratio study tools. Typically, in Carson County there are not enough Category C sales to create a sales ratio study on a yearly basis. However, when appraisers and staff see an escalation in demand on vacant lots values, the schedules will be adjusted appropriately.

## **Commercial Real Property**

Commercial properties will be valued by the cost approach, the income approach, or the market approach as deemed most appropriate pursuant to Section 23.0101.

**Valuation Methods Used**

**Cost Approach**

The cost approach to value is applied to improved real estate 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 indicates estimated hard or direct costs of various improvement types. Cost models reflect 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. Because a national cost service is used as a basis for the cost models, local modifiers and estimates of soft cost factors are necessary to adjust these base costs specifically for various types of improvements located in appraisal district. These developed local modifiers and additional cost factors are applied to the replacement cost estimated by the national cost service.

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. 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 the given actual age and the improvements economic remaining life. The actual age of the improvements will be noted in the CAMA software.

Adjustment factors such as external and functional obsolescence will be applied, if warranted. A depreciation factor will be applied if the condition or effective age of a property is found to be necessary. This depreciation is indicated by appropriately noting the physical condition and functional utility on the property characteristics. These adjustments will typically be applied to a specific property type or location and will be developed through ratio studies or other market analysis.

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. By 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.

### **Sales Comparison Approach**

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 similar properties to parcels on the appraisal roll.

The district does not use the Sales Comparison Approach at this time. The lack of commercial property that has sold in the market makes this approach undesirable.

## **Income Approach**

The income approach to value can be 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. Market data can be derived from actual rent data furnished by property owners and from local market surveys conducted by the district. 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. 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 the real property. The secondary income estimate is derived from actual data that has been 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.

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.

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 can be 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.

As stated earlier the income approach is usually not employed by the Carson CAD but is considered when the necessary information is provided by the property owner.

### **Business Personal Property Valuation Process**

There are three different types of business personal property types appraised by the appraisal district: Business Personal Property Accounts, leased assets, and business vehicles and aircraft.

The field appraiser collects and maintains certain data on each personal property account during the annual field review. The data is then entered into the computer system.

In January of each year, business personal property renditions are mailed to each business owner of record. Included in the mailing is a Guide to Personal Property Rendition that explains the requirements of mandatory renditions in Senate Bill 340 and Section 22.01 of the Texas Property Tax Code. Personal property data collection procedures are highly dependent on the renditions that are received in the office.

The district researches various sources of data available to the district for discovery of new businesses or changes in existing business operations or location. Sources available to the district are 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 Panhandle Herald, The Groom News, local 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 district utilizes the Marshall and Swift commercial valuation manual for developing the different category codes of personal property depreciation tables as well as the accepted accounting practices followed in the local area. The depreciation tables that correspond to the category code are loaded into the base. The district utilizes Furniture and Fixtures; Computers and Printers; Passenger Vehicles and Light Trucks and Vans; Heavy Duty Trucks; Machinery and Equipment, Leasehold and Signs; Communication Towers and Billboards as the category codes. The industrial personal properties or larger commercial properties are contracted to Pritchard and Abbott, Inc. for valuation.

The Carson 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 computer system. The appraiser may use their judgment in a special situation to use the owner's rendered opinion of value instead of the depreciated value calculated by the computer. The appraiser will then override the depreciated value. The judgment call is entered onto the account note as a reference.

In the event that a property owner fails to render the business personal property, the district flags each property that has not rendered timely as mandated to receive the 10 percent penalty for not filing timely.

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 after the 21 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 category.

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

### **Cost Approach**

Cost schedules are developed analyzing cost data from property owner renditions, state schedules, and published cost guides. The cost schedules will be reviewed as necessary to conform to changing market conditions. The schedules are typically in a price per square foot format, but some exceptions are in an alternate price per unit format, such as per room value for hotels.

The replacement cost new (RCN) is either developed from property owner reported



historical cost or from CAD newly developed valuation models. The trending factors used by the CAD to develop RCN will be based on published valuation guides. The percent good depreciation factors will also be based on published valuation guides. The index factors and percent good depreciation factors will be used to develop present value factors (PVF), by year of acquisition, as follows:

$$\text{PVF} = \text{INDEX FACTOR} \times \text{PERCENT GOOD FACTOR}$$

The PVF is applied to reported historical cost as follows:

$$\text{MARKET VALUE ESTIMATE} = \text{PVF} \times \text{HISTORICAL COST}$$

This mass appraisal PVF schedule will help to ensure that estimated values are uniform and consistent within the market and reflect current economic pressures of supply and demand.

#### **Sales Comparison Approach**

Business personal property is typically sold as part of the business as a whole and not by itself, which makes this approach unsuitable for valuing most personal property. This approach is only suitable for the valuation of certain types of vehicles and heavy equipment. An appraiser using published market guides such as NADA book values will appraise these types of properties.

#### **Income Approach**

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

#### **Mobile Homes**

Real and personal property mobile homes will be valued using the cost approach. Marshall & Swift will be used primarily to update cost schedules for mobile homes.

According to Section 25.08(e), of the Texas Property Tax Code, a manufactured home placed on land owned by the same person will not be considered as real property unless the owner has filed a "Statement of Ownership" with the county clerk. Unless this statement is filed, the manufactured home will be carried in our records as personal property.

#### **Industrial Personal Property Valuation**

Industrial Personal Property is the tangible assets of various businesses that are used in

the generation of an income stream. In general, modeling considerations applicable to commercial properties also apply to industrial properties. Except for warehouses, however, there are rarely enough sales of industrial properties for modeling. The valuation of these properties is, by contract, provided by Pritchard and Abbott, Inc.

The plan provides for annual reappraisal of all industrial business personal property located in the district and identifying properties to be appraised through inspection. The appraiser may also refer to other documents, both public and also confidential, to assist in identification of these properties. Such documents might include but are not limited to the previous year's appraisal roll, vehicle listing services and private directories.

### **Approach to Valuation**

Personal property is appraised using replacement/reproduction cost new less depreciation models. Income approach models are used when economic and/or subject property income is made available, and a market data model is used when appropriate market sales information is available.

Year-to-year property value changes for the subject property are examined using computer-assisted statistical review. These types of property are also subject to review by the Property Tax Division of the Texas Comptroller's Office through their annual Property Value Study.

### **Utility Property Valuation**

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. The appraisal of these companies becomes complex when considering the valuation of the property as a unit in place. 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 the appraisal district. The valuation of these properties is, by contract, provided by Pritchard and Abbott, Inc.

The plan provides for annual reappraisal of all utility, railroad and pipeline property located in the district. Utility, railroad and pipeline properties that are susceptible to inspection are identified by inspection. The appraiser may also refer to other documents, both public and also confidential to assist in identification of these properties. Additional data may be obtained through public sources, regulatory reports and through analysis of comparable properties. These types of property are also subject to review by the Property Tax Division of the Texas Comptroller's Office through their annual Property Value Study.

### **Minerals (Oil & Gas Reserves) Valuation**

### **Appraisal Responsibility**

This mass appraisal assignment includes all of the property classed a minerals which falls within the responsibility of the mineral valuation of the Carson County Appraisal District and located within the boundaries of a taxing jurisdiction. These properties are under contract to be appraised by Pritchard and Abbott, Inc. Mineral appraisers appraise the property according to the statute. However, the effect of easements, restrictions encumbrances, leases, contracts or special assessments are considered on an individual basis, as is the appraisal of any non-exempt taxable fractional interests in real property. Fractional interest 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 mineral properties are appraised by Pritchard and Abbott, Inc., a contracted appraisal firm.
- **Data** – The mineral properties are appraised by the contract appraisal staff using data collected from a variety of sources. Among these data sources are: Gas prices from the Comptroller, production from the Rail Road Commission, average gas prices from industry, and data from the operators of the properties.

#### **Area Analysis**

The scope of market forces affecting mineral products tends to extend beyond regional considerations. The global market effects the valuation of the property. Appraisers must study and analyze the current and future market in order to appraise the properties appropriately.

#### **Neighborhood Analysis**

Not applicable to mineral properties.

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

The highest and best use of a mineral property is for it to be in production. The properties are appraised based on their highest and best use.

#### **Market Analysis**

Market analysis is the basis for determining the future worth of the recoverable reserves of a mineral property. However, each property may have unique properties which are taken into consideration when estimating the final value of the property.

#### **Data Collection**

Data is collected yearly from the Comptroller of public accounts, the Rail Road Commission of Texas, and individual operators within the county. All of this information is pooled together to get an accurate picture of each mineral property.

#### **Appraisal Method**

All mineral properties are appraised as described by the property tax code and laws. Mineral properties are appraised using a discounted cash flow method as prescribed by the Texas Comptroller of Public Accounts.

Appraisal of an oil and gas property for ad valorem tax purposes in the state of Texas is based on the total value of the economically recoverable oil and gas reserves as of January 1st of each year. **The value is not based on past or future income, nor is it based on production;** but, it is a value based on an estimate of the present value of the oil and gas in the reservoir, waiting to be produced.

There are no rule-of-thumb methods for determining the present value of the future net income from a mineral property. The value can only be determined by preparing an analytical appraisal of the property.

Reserve evaluation is not an exact science. At best, it is an estimate of the volumes recoverable by a particular method. Although oil and gas are depleting assets, the estimate of reserves can be understated initially. Also, different recovery methods, product prices and operating expenses, to name a few, can increase or decrease the estimated remaining recoverable reserves after the original estimate.

The basic elements necessary for the valuation of oil and gas reserves are:

- 1. Rate they will be produced
- 2. Rate of decline
- 3. Price of the products
- 4. Cost to produce the reserves
- 5. Discount rate

Remaining oil and gas reserves are generally estimated by extrapolation of production trends. This is normally called decline curve analysis. The basic assumption is that the condition which shaped the production curve in the past will continue to shape it in the future. Of course, this requires proper weight being given to the immediate past. The decline curve is projected to the point where the production rate will generate just enough income to meet operating expenses. This is called the economic limit. The decline curve provides both the rate of production and the rate of decline.

The price of the oil is based on the weighted average price paid for oil in the geographic area from which it is produced during the previous twelve months. The price of gas is generally available on a lease by lease basis from the State Comptroller's office for the same period of time. The cost to produce includes state taxes, local taxes and operating costs. Information on operating costs may be obtained from the operator and are always reviewed by the appraiser.

Pritchard & Abbott, Inc. uses a base discount factor of 17% for oil and 18% for gas. These factors can be increased based on various risks

All of this data, plus other information is then entered into the computer. The estimated annual lease production is multiplied by the price of the product in order to obtain the annual gross income. The cost to produce is subtracted from the gross income, yielding the net income. This income stream is then discounted at a rate which reflects the time value of money. The resulting income stream is now a realistic basis for estimating the

market value of the property.

The estimated present property value is the sum of the present worth net incomes for all the future years, plus the value of the equipment.

### **Monitoring Contracted Appraisal Performance**

Carson County Appraisal District employs the following steps to review, verify and evaluate Appraisal services for companies who contract with the district for services:

1. Verify scope of work per contractual terms in comparison to CCAD's responsibility i.e. type of value desired, given date, appraiser's perspective.
2. Verify that contractors assigned to CCAD jobs are properly registered and certified with Texas Department of Licensing and Regulation (TDLR) as required to perform appraisals for ad valorem tax purposes in Texas.
3. Contact responsible parties within the contracting company and inquire as to methodologies and approaches considered and used for each type of property being appraised by contractor. This inquiry should proceed far enough so that all CCAD employees thoroughly understand why the contractor has chosen which approach for which type of property. All exceptions and departures from USPAP guidelines by contractor should be thoroughly discussed to CCAD's satisfaction.
4. Inquire as to whether the contractor is referencing all appropriate data sources applicable to the type of property being appraised. Examples include Texas Railroad commission for oil and gas production data, or Federal Surface Transportation Board annual reports for Class I railroads.
5. Inquire as to whether the contractor is following all laws and statutory provisions applicable to the type of property being appraised. Examples include Property Tax Code 23.175 provisions regarding oil gas price forecasts to be incorporated into discounted cash flow appraisals of mineral interests, or the various laws regarding business personal property rendition compliance.
6. Inquires as to whether contractor's methods and conclusions of value satisfy in the broadest sense the statutory definition of fair market value per Property Tax Code 1.04(7). For example, does the contractor employ methods and procedures that allow the contractor to arrive at an appropriate amount of replacement cost new (for cost-based schedules) and depreciation in all its forms? Does the payout calculation on a sample of oil and gas mineral interest appraisals appear reasonable or in line with industry norms? The thrust of this inquiry is not for CCAD to explicitly tell the contractor what value to derive for any particular property, but instead only to ensure the contractor is following all appropriate and generally accepted appraisal practice to the fullest extent possible.

7. Inquire as to whether the contractor is having meetings or otherwise corresponding with the taxpayers as needed to informally resolve valuation disputes. Request the Contractor provide the nature and substance of such contract with the taxpayer so that CCAD can be assured the contractor is making all reasonable effort to afford taxpayers with ample opportunity to present their facts and opinions and be dealt with in a professional, fair and impartial manner.
8. Does the contractor make their staff freely available for any scheduled ARB hearings? Does the contractor attend these hearings with an open mind, present testimony in a professional and helpful demeanor, and otherwise appropriately and responsibly represent CCAD in these proceedings?
9. Does the contractor follow through on agreements made with taxpayers in informal meetings or formal hearings?
10. Does the contractor provide final values for certification, including all documentation required, in a timely manner per statutory and contractual obligations, in the form and content desired by CCAD?
11. Does the contractor assist CCAD in working with, and resolving any disputes with the Property Tax Assistance Division (PTAD) per contractual obligations?

### **Steps for Evaluating Contractor's Property Discovery Process**

1. Contact responsible parties within the contracted company (appraiser, division order analyst, etc.) and inquire on progress being made to discover new property for the current tax year. For mineral appraisals, the main data source is the Texas Railroad Commission's production records as reported monthly by operators. For industrial, utility, and related personal property, data sources are more diverse and may include, but are not limited to: state or federal agencies (Texas Railroad Commission, Texas comptroller, Public Utility Commission, Federal Energy Regulatory Commission, etc.), renditions, knowledgeable local third-parties, industry and trade publications, newspaper articles, permits and personal inspection and other fieldwork.
2. Request list, if desired, from contractor of all new properties discovered for comparison/verification with any independent list developed in-house.
3. Relay any discrepancies found in step 2 to contractor, if desired or necessary, for remedial action. Consult with contractor's staff or management for corrections and/or improvements or enhancements to contractor's discovery process.
4. Repeat steps 2 and 3 as needed.

### **Special Use Property Valuation-Agricultural/Wildlife Property**

#### **Agricultural 1-d-1 Use**

Texas Constitution provides for the special valuation of "open space land devoted to farm or ranch purposes." In other words, undeveloped non-agricultural land does not qualify.

This is a special valuation for land that is devoted to agricultural production. Agricultural or productivity value is based on the land's capacity to produce crops or livestock instead of its value on the real estate market. Although this lower value reduces the taxes on the property, a "rollback" of these taxes will take place when the land stops being used for an agricultural purpose. The rollback recaptures, with interest, the taxes saved for the five (5) years preceding the change in use. Because of the penalty, this valuation is of questionable benefit if your usage is short term or if you have plans to develop the tract within the next six (6) years.

The appraisal district values agricultural land in compliance with the Property Tax Code's *Manual for the Appraisal of Agricultural Land*, which states that the cash lease method and the share lease method of appraisal are appropriate for all land types.

The cash lease method is a modified income approach using the lease amount (income per acre) minus expenses (landowner) to give the "net-to-land" value per acre. "Net-to-land" values will be averaged for a five-year period to give an average "net-to-land" factor that will be divided by the capitalization rate for the year to give a value per class of agricultural production. The valuation of these properties is, by contract, provided by Pritchard and Abbott, Inc.

### **Wildlife Management**

Texas also has a Wildlife Management program. Under this program there are two main qualifications; one that the land must already have an agricultural exemption and the other is that the owner must use the land to propagate a sustaining breeding, migrating or wintering population of indigenous wild animals. A wildlife management plan must be filed with the district to obtain a wildlife management special use evaluation. The district also requires that an annual report be submitted on all parcels with a wildlife management special use evaluation. Forms are available at the district office or on line at the:

Texas Parks and Wildlife Office web site [www.tpwd.state.tx.us](http://www.tpwd.state.tx.us)

### **Field Review**

Field reviews are done by the field appraisers. All applications for agricultural exemptions automatically generate a field review. Properties are inspected for minimum requirement to validate the agricultural exemption.

## **The Mass Appraisal Report**

Each Tax Year the mass appraisal report is prepared and certified by the chief appraiser at the conclusion of the appraisal phase of the ad valorem tax calendar (on or about May 15<sup>th</sup>). The mass appraisal report is completed in compliance with USPAP Standard Rule 6-8. The signed certification by the chief appraiser is compliant with USPAP Rule 6-9.

## **Appraisal Notices**

25.19 appraisal notice forms are provided by the IS Provider. The Provider reviews and edits for updates and changes required by legislative mandates.

The district publishes, in the local newspaper, information about the notices and how to protest. The district makes available the latest copy of the Comptroller's pamphlet *Taxpayer's Rights, Remedies, and Responsibilities*.

## **Hearing Process**

Protest hearing scheduling for informal and formal Appraisal Review Board hearings is reviewed and updated as required. Revisions and enhancements to existing hearing procedures are reviewed and updated to ensure efficiency and compliance with House Bill 201.

## **Value Defense**

Evidence to be used by the appraisal district to meet its burden of proof for market value and equity in both informal and formal Appraisal Review Board hearings will be developed and provided to the property owner or agent in compliance with HB 201. After a protest is received and verified, the Appraisal Review Board will schedule hearings and provide written notice to the property owner or agent of the date and time of the formal hearing. Once a protest is scheduled for a hearing, the district's evidence will be generated and be made available to the property owner or agent upon written request.

Carson CAD encourages property owners to meet with the district appraisal staff to try and resolve disputes in an informal setting before a formal ARB hearing. Sometimes a mutually agreeable solution to an owner's protest at these informal meetings results in a settlement and the property owner waives any further right to a formal protest before the Appraisal Review Board.

## **The ARB's Role in the Property Tax System**

The appraisal review board (ARB) is the judicial part of the system. The ARB is a separate body from the appraisal office and serves a different function. It hears and resolves disputes over appraisal matters.

The ARB only has authority over matters submitted to it. The ARB has no role in the day to day operations of the appraisal office or in appraising property.

Except where it is deciding a protest, challenge or a correction motion, the ARB has no authority to change a value or correct the appraisal records directly. In a challenge, it must order the chief appraiser to reappraise or correct the records related to the challenge. Only in resolving taxpayer protests can the ARB make changes or set a value on its own. Such a change only affects the property in question.



## **Preparing the Appraisal Roll**

The chief appraiser shall notify each taxing unit in writing by April 1 of the form in which the roll will be provided to each unit.

Not later than April 30, the chief appraiser shall prepare and certify to each taxing unit an “estimate” of taxable value, unless a taxing unit elects not to receive an estimate.

By July 25, the chief appraiser shall prepare and certify to each taxing unit that part of the appraisal roll that lists the property taxable by the unit. The part certified to the taxing unit is the appraisal roll for the unit.

### **2015 Calendar of Events and Completion Dates**

2015 is a MAP Year – 2016 is a PVS Year

#### **2014**

- Oct 1    Mail 2014 tax statements (Sec 31.01)  
Appraiser begins inspection of the rural areas for 2015– Completion date Dec 1  
Notify each entity of actual allocation for 2014 budget  
Mail depository bids – even years
- Oct 3    Begin short forms reports after EARS acceptance  
Print tax rolls for each taxing unit  
Request less than \$1 list from P&A
- Oct 7    Deliver tax rolls to each taxing unit
- Oct 16   P&A agricultural meeting – Completion date Oct 18
- Oct 15   Review all forms and renditions for changes
- Nov 16-18 TRCA Conference
- Nov 20   BOD meeting or at the call of the BOD
- Nov 30   Request P&A to update appraiser name and date in the computer system  
1<sup>st</sup> half of split payments due
- Dec 3    Tax sale (if needed)
- Dec 9-10 Institute on Property Taxation/CPA
- Dec 15   Begin planning sales ratio studies for 2015 in all areas within the CAD  
Begin gathering sales data from all available sources for 2015

**Dec 31 Taxing Units 1<sup>st</sup> quarterly payment due (Sec 6.06)**

**2015**

- Jan 1** Chief Appraiser eligibility notification due  
Date which determines 2015 taxable value and exemption status (Sec 23.01)  
Tax lien attaches to all properties (Sec 32.01)  
Rendition period begins thru April 15  
Deed records are worked weekly throughout the year  
Homestead applications, special-use valuation applications, exemption applications, and other required forms are mailed as needed
- Jan 2** E-mail publications packet to newspapers (after review)  
Publish "Penalty and Interest" Press Release  
Publish "Availability of Electronic Communications" Press Release  
Publish "Available Exemptions"  
Mail 2015 rendition forms – Completion date Jan 15  
(Appraiser works renditions/personal property as received)  
Appraiser begins inspection of the Town of Skellytown – Completion date Jan 4<sup>th</sup>
- Jan 7** Appraiser begins inspection of the City of Groom – Completion date Jan 11<sup>th</sup>
- Jan 10** Delinquency date changes if tax bills are not mailed by this date (Sec 31.04)
- Jan 14** Appraiser begins inspection of the City of White Deer – Completion date Jan 18<sup>th</sup>
- Jan 16** BOD Meeting or at the call of the BOD
- Jan 21** Appraiser begins inspection of the City of Panhandle – Completion date Feb 1<sup>st</sup>
- Jan 31** Certification of preliminary Property Value Study Results
- Feb 1** Begin review of Comptrollers' Prelim Property Value Study  
Electronic Property Transaction Submission (EPTS) due  
Schedule P&A's Ag Advisory Committee Meeting  
2<sup>nd</sup> mailing of tax bills – Completion date Jan 18  
Over 65 1st quarter payment due (Sec 31.031)
- Feb 15-18** TAAD Conference
- Mar 4** Begin reviewing ratio studies by neighborhoods for 2015  
Study CAD values and sales information

- Identify necessary schedule adjustments
- Publish "Productivity Appraisal" information
- Publish "Rendition" information
- Mar 11 Property Value Study appeal deadline  
Publish "Notices of Value" to be mailed
- Mar 20 BOD meeting or at the call of the BOD
- Mar 25-26 ARB training in Amarillo
- Mar 26-27 P&A User's Meeting in Fort Worth
- Mar 31 Taxing Units 2<sup>nd</sup> quarter payment due (Sec 6.06)
- Apr 1 Last day (or as soon thereafter as practicable) to send notices of appraised value on single family residential homesteads  
Process and send by mail ARB procedures to protesters  
Respond to property owners' inquiries, protests, and questions from notice mailings  
Notify taxing units of the form the tax roll will be provided (Sec 26.01)  
Over 65 2<sup>nd</sup> quarter payment due (Sec 31.031)  
Request P&A to update over 65 tax ceilings  
Continue running sales ratio reports  
Refine sales analysis and mass appraisal schedules  
Statistically test schedules  
Complete data entry of all reappraisal and maintenance changes  
Finalize all field work and data collection activities  
Publish "Elderly Homeowners may defer Property Taxes"  
Operations Survey released from PTAD
- April 10 Prepare "estimate of total taxable value" for taxing units
- Apr 15 Deadline for property owners to file renditions unless a written request was filed for an extension
- Apr 30 Deadline for exemptions, ag-use, rendition extensions  
Add rendition penalty to all accounts without renditions or an extension request  
Deliver an "estimate of total taxable value" to the taxing units  
Protest deadline or 30 days after delivery of notice, whichever is later
- May 1 Prepare to Mail Notices of Value to all remaining property owners (Sec 25.19) - Completion May 15  
Publish Notice of Protest procedures (Sec 41.42, 41.70)  
Generate various reports for proofing  
Deadline for homestead exemptions

- Review and verify accounts appraised by P&A
- Review unrendered business personal business accounts with penalty
- May 6 P&A Order Mineral Notices – Completion May 13
- May 9 P&A delivers Mineral Notices to appraisal office – Completion May 13
- May 15 BOD meeting or at the call of the BOD  
Deadline for rendition extensions granted on utility and mineral properties  
Prepare appraisal records for ARB (Sec 25.1, 25.22)  
Deadline for mailing all Notices of Appraised Value (Sec 25.19) – Completion date May 15th  
Process and send by mail ARB procedures for protesting  
Respond to property owners' inquiries, protest, and questions from notice mailings  
Begin preparing Mass Appraisal Report - Completion date June 1st
- Jun 1 P&A Mineral/Industrial load  
Send 3<sup>rd</sup> statement to property owners with notification of penalty  
Over 65 3rd quarter payment due (Sec 31.031)
- Jun 13 Deliver 2016 proposed budget to the BOD and taxing units (Sec 6.06)
- Jun 15 Deadline for chief appraiser to submit proposed budget to BOD and taxing units
- Jun 19 Mineral/Industrial protest deadline
- Jun 25 ARB Organizational Meeting (9:00 am)  
ARB reviews rolling stock – Deadline June 30 (Sec 24.35)
- Jun 30 Report reinvestment/abatement to CPA  
Deadline for filing mobile home tax liens  
2<sup>nd</sup> half of split payments due (Sec 31.03)  
Taxing unit 3rd quarter payment due (Sec 6.06)  
Deadline for taxing units to adopt optional percentage homestead exemptions
- Jul 1 Deadline for PTAD "test" file submission (optional)  
12% penalty added to unpaid 2014 tax statements (Sec 33.01)  
PBFC&M mails delinquent letters
- Jul 4 ARB protest hearings  
ARB approves appraisal records, if protested value is 5% or less of the total market value (Sec 41.12)

Enter all changes as ordered by the ARB and notify other CAD's if the ordered change falls into an overlapping area  
PBFC&M 1<sup>st</sup> mailing of delinquent letters

- Jul 11 ARB protest hearings, if needed
- Jul 15 Certify appraisal roll to taxing units – Deadline Jul 25  
P&A Certification – Deadline July 15  
Send ETR information requests to taxing units
- Jul 17 BOD meeting or at the call of the BOD
- Jul 20 Deadline for ARB to approve appraisal rolls  
Print Assessment Rolls for each taxing unit
- Jul 26 Railroad rolling stock values certified
- Jul 31 PRB submission deadline  
Submit appraisal roll and estimated collection rate to governing bodies (Sec 26.04)
- Aug 1 Electronic Appraisal Roll Submission (EARS) due  
Electronic Property Transaction (sales) Submission (EPTS) due  
Begin preparing effective tax rate calculations the for taxing units –  
Deadline Aug 8 (except for schools)  
Over 65 4<sup>th</sup> quarterly payments due (Sec 31.031)  
Collector submits estimated collection rate to governing bodies or asap (Sec 26.04)
- Aug 11 Mail depository bids (even years)
- Aug 12-13 TAAD Legislative Update
- Aug 15 PTAD final PVS findings submitted to Education Commissioner
- Aug 30-Sep 2 TAAO/ICTA Conferences
- Aug 26 Submit notice of public hearing to adopt 2016 proposed budget to newspapers for publication on the 30<sup>th</sup>  
Submit notice of public hearing to adopt the 2016 proposed budget to taxing units
- Sep 1 Preliminary MAP Reports released to Chief Appraisers  
Deadline for taxing units to adopt tax rates  
Farm and Ranch Surveys Released from PTAD
- Sep 2 P&A builds Mineral/Industrial tape for load

- Sep 3 PBFC&M's 2nd mailing of delinquent letters
  
- Sep 11 Adopt 2016 Budget – Deadline Sep 15  
Adopt Reappraisal Plan (even years)
  
- Sep 14 P&A will lock database to pull Carson County Tax Roll  
Send approved tax rates to P&A for Lost Value Reports of O/65  
Order tax statements from P&A  
Order Tax Rolls from P&A
  
- Sep 15 Reappraisal plans due in even-numbered years  
Deadline for BOD to adopt the budget
  
- Sep 18 Print tax rolls for each taxing unit  
Print appraisal cards
  
- Sep 30 Taxing Units 4<sup>th</sup> quarter payment due (Sec 6.06)
  
- Oct 1 Farm & Ranch Survey due  
Mail 2015 tax statements (Sec 31.01)  
Appraiser begins inspection of the rural areas beginning with Survey B-4  
and driven in the geographical order of the appraisal cards – Completion  
date Dec 1  
Mail depository bids – even years
  
- Oct 3 Send taxing units actual allocations for 2015 budget  
Request less than \$1 list from P&A
  
- Oct 7 Deliver tax rolls to each taxing unit  
Begin short form reports
  
- Oct 14 P&A agricultural meeting – Completion date Oct 18
  
- Oct 15 Review all forms and renditions for changes
  
- Nov 1 Remaining data due from CAD's for final MAP reports
  
- Nov 11-12 TRCA Conference
  
- Nov 20 BOD meeting or at the call of the BOD
  
- Nov 30 Request P&A to update appraiser name and date in the computer system  
1<sup>st</sup> half of split payments due
  
- Dec 3 Tax sale (if needed)

Dec 10-11 Institute on Property Taxation/CPA

Dec 15 Release of Pre-Preliminary PVS data

Dec 31 Biennial property tax report issued in even-numbered years  
Taxing Unit 1<sup>st</sup> quarterly payment due (Sec 6.06)

## **2016 Reappraisal Schedule**

The same timetable and duties apply in each year, but dates may vary. The chief appraiser and CAD staff shall continue to complete the same duties and reappraisal steps as outlined for 2015. The Carson CAD reserves the right to modify the dates as needed in order to meet the requirements for this office.

## **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.
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.
4. Mike Darnell (Registered Professional Appraiser) provided significant mass appraisal assistance to the person signing this certification.
5. Ratio study results are available at the Carson County Appraisal District.

## **Certification Statement**

"I, Donita Davis, Chief Appraiser for the Carson 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."

---

Donita Davis, Chief Appraiser,  
RPA, RTA, CTA

**RESOLUTION TO ADOPT 2015-2016 REAPPRAISAL PLANS**

**No. 2014-9-3**

A RESOLUTION BY THE BOARD OF DIRECTORS OF THE CARSON COUNTY APPRAISAL DISTRICT TO ENSURE ADHERENCE WITH GENERALLY ACCEPTED APPRAISAL PRACTICES ACCORDING TO THE TEXAS PROPERTY TAX CODE, SECTION 6.05, (i).

WHEREAS passage of S.B. 1652 relating to the administration of ad valorem taxation amended the Property Tax Code, Section 6.05 by adding Subsection (i) to read as follows:

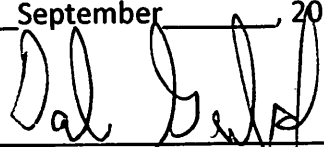
(i) To ensure adherence with generally accepted appraisal practices, the board of directors of an appraisal district shall develop biennially a written plan for the periodic reappraisal of all property within the boundaries of the district according to the requirements of Section 25.18 and shall hold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

NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE CARSON COUNTY APPRAISAL DISTRICT:

That the attached Reappraisal Plan shall be implemented by the Carson County Appraisal District to comply with the Property Tax Code, Section 6.05, (i).

PASSED AND APPROVED IN REGULAR SESSION BY THE BOARD OF DIRECTORS OF THE CARSON COUNTY APPRAISAL DISTRICT ON THIS 3rd DAY OF

September, 2014.



Dale Gabel, President



ATTEST: Sherry Kramer, Secretary



# Carson County Appraisal District Adopted Budget for 2015

Adopted September 3, 2014

<u>CATEGORY</u>	Appraisal Budget	Collections Budget	Total
<b>Salaries</b>			
Chief Appraiser	\$ 57,683		
Appraiser/Mapper	\$ 41,778		
Tax Collector/Mapper		\$ 32,323	
Bookkeeper	\$ 20,000		\$ 151,784
<b>Personal Days</b>	\$ 270	\$ 90	\$ 360
<b>Auto Allowance</b>	\$ 3,500		\$ 3,500
<b>FICA</b>			
Bookkeeper	\$ 1,240		\$ 1,240
<b>Plan A Medicare</b>			
Chief Appraiser	\$ 836		
Appraiser	\$ 606		
Collector		\$ 469	
Bookkeeper	\$ 290		\$ 2,201
<b>Unemployment Insurance</b>	\$ 75	\$ 25	\$ 100
<b>Retirement</b>			
Chief Appraiser	\$ 4,413		
Appraiser	\$ 3,196		
Collector		\$ 2,472	
Bookkeeper	\$ 1,530		\$ 11,611
<b>Group Health Insurance</b>			
Chief Appraiser	\$ 6,000		
Appraiser	\$ 6,000		
Collector		\$ -	
Bookkeeper	\$ 6,000		\$ 18,000
<b>Vision and Dental</b>			
Chief Appraiser	\$ 1,000		
Appraiser	\$ 1,000		
Collector		\$ 1,000	
Bookkeeper	\$ 1,000		\$ 4,000
<b>Life Insurance</b>			
Chief Appraiser	\$ 240		
Appraiser	\$ 240		
Collector		\$ 240	
	\$ 240		\$ 960
<b>Workmen's Compensation</b>	\$ 900	\$ 300	\$ 1,200
<b>Legal Notice &amp; Advertising</b>	\$ 3,200	\$ 300	\$ 3,500
<b>Building Maintenance</b>	\$ 3,600	\$ 900	\$ 4,500
<b>Contingencies</b>	\$ 1,500	\$ 500	\$ 2,000
<b>Deed Records</b>	\$ 600	\$ -	\$ 600
<b>Collection Costs</b>	\$ -	\$ 2,500	\$ 2,500
<b>Dues &amp; Subscriptions</b>	\$ 4,600	\$ 900	\$ 5,500
<b>Insurance &amp; Bonds</b>	\$ 2,400	\$ 600	\$ 3,000

Capital Outlay	\$	4,000	\$	1,000	\$	5,000
Richo Copier	\$	1,800	\$	600	\$	2,400
Legal Services	\$	4,400	\$	600	\$	5,000
Office Supplies	\$	6,600	\$	1,400	\$	8,000
Board of Directors	\$	400	\$	-	\$	400
Appraisal Review Board	\$	1,500	\$	-	\$	1,500
Postage	\$	3,300	\$	5,580	\$	8,880
Accounting & Auditing	\$	3,300	\$	3,400	\$	6,700
Equipment & Maintenance	\$	4,000	\$	1,000	\$	5,000
Janitorial	\$	1,680	\$	420	\$	2,100
Data Processing	\$	35,200	\$	8,800	\$	44,000
Valuation Engineers	\$	91,079	\$	-	\$	91,079
Agricultural Services	\$	6,000	\$	-	\$	6,000
GIS Mapping System	\$	8,900	\$	-	\$	8,900
Internet Service	\$	1,000	\$	500	\$	1,500
Website Hosting	\$	1,300	\$	500	\$	1,800
Travel & Training	\$	9,000	\$	1,000	\$	10,000
Telephone	\$	3,000	\$	1,000	\$	4,000
Utilities	\$	4,000	\$	1,400	\$	5,400
<b>Total</b>	<b>\$</b>	<b>364,396</b>	<b>\$</b>	<b>69,819</b>	<b>\$</b>	<b>434,215</b>



**PRITCHARD & ABBOTT, INC.**  
**VALUATION CONSULTANTS**

## **S.B. 1652\* BIENNIAL REAPPRAISAL PLAN**

**FOR THE ANNUAL APPRAISAL FOR  
AD VALOREM TAX PURPOSES OF  
MINERAL, INDUSTRIAL, UTILITY AND  
RELATED PERSONAL PROPERTY**

**For Tax Years:**

**2015 and 2016**

**Originally Printed: July 1, 2014**

\*Senate Bill 1652 passed by the Texas Legislature, 79th Regular Session in 2005, amending Section 6.05 of the Texas Property Tax Code, by adding Subsection (i).



TABLE OF CONTENTS

<u>Item</u>	<u>Page</u>
P&A POLICY STATEMENT .....	2
PREAMBLE .....	4
ETHICS RULE .....	5
RECORD KEEPING RULE .....	8
SCOPE OF WORK RULE .....	9
JURISDICTIONAL EXCEPTION RULE .....	11
MASS APPRAISAL (USPAP STANDARD 6) .....	12
REAPPRAISAL OF MINERAL PROPERTY .....	15
REAPPRAISAL OF INDUSTRIAL, UTILITY AND RELATED PERSONAL PROPERTY .....	21

**POLICY STATEMENT OF PRITCHARD & ABBOTT, INC., ON THE  
REAPPRAISAL OF MINERAL, INDUSTRIAL, UTILITY AND RELATED PERSONAL PROPERTY**

In 2005, the Texas Legislature, in 79<sup>th</sup> Regular Session, authorized in S.B. 1652 the amending of section 6.05 of the Texas Property Tax Code by adding Subsection (i), as follows:

*"Requires the board of directors of an appraisal district (board), to ensure adherence with generally accepted appraisal practices, to develop biennially a written plan for the periodic appraisal of all property within the boundaries of the district according to the requirements of 25.18 (Periodic Reappraisals) and requires the board to hold a public hearing to consider the proposed plan. Requires the secretary of the board, not later than the 10th day before the date of the hearing, to deliver to the presiding officer of the governing body of each taxing unit participating in the district a written notice of the date, time, and place for the hearing. Requires the board, not later than September 15 of each even-numbered year, to complete its hearings, make amendments, and by resolution finally approve the plan. Requires copies of the approved plan to be distributed to the presiding officer of the governing body of each taxing unit participating in the district and to the comptroller within 60 days of the approval date." (Bill Analysis per Senate Research Center)*

Pritchard & Abbott, Inc., (P&A), a privately held company engaged primarily, but not wholly, in the ad valorem tax valuation industry endorses Uniform Standards of Professional Appraisal Practice (USPAP) as the basis for the production of sound appraisals. Insofar as the statutory requirement to appraise groups (or a "universe") of real and personal property within an established period of time using standardized procedures--and subjecting the resulting appraisals to statistical measures--is the definition of mass appraisal, P&A subscribes to USPAP Standard 6 (Mass Appraisal, Development and Reporting) whenever applicable in the development and defense of values. When circumstances clearly dictate the use of single property appraisal procedures, P&A adheres to the spirit and intent of the remaining USPAP Standards within all appropriate, practical, and/or contractual limitations or specifications.

The USPAP definition of "appraiser" is one who is expected to perform valuation services competently and in a manner that is independent, impartial, and objective. USPAP Advisory Opinion 21 states that this expectation (by clients and intended users of appraisal reports) is the basis that creates an ethical obligation to comply with USPAP, even if not legally required.

The majority of property types that P&A typically appraises for ad valorem tax purposes are categorized as unique, complex, and/or "special purpose" properties (mineral interests, industrial, utility, and related personal property). These categories of properties do not normally provide sufficient market data of reliable quality and/or quantity to support the rigorous use of all USPAP-prescribed mass appraisal mandates (Standard 6), particularly with regards to some, but not all, of the model calibration and statistical performance testing confines. However, P&A does employ elements of mass appraisal techniques with regards to the definition and identification of property characteristics and model specification and application.

Residential real estate property appraisers most frequently apply mass appraisal methods within the sales comparison (market) approach to value. Through the use of standardized data collection (i.e., actual market sales), specification and calibration of mass appraisal models, tables, and schedules are possible. Through ratio study analysis and other performance measures, a cumulative summary of valuation accuracy can thus be produced in order to calibrate the appraisal model(s). Where sufficient data of reliable quality exists, mass appraisal is also used for other types of real estate property such as farms, vacant lots, and some commercial uses (e.g., apartments, offices, and small retail).

P&A will clearly state or otherwise make known all extraordinary assumptions, limiting conditions, hypothetical assumptions, and/or jurisdictional exceptions in its appraisals as they are conveyed to our clients. The client and all intended users should be aware the appraisals are by definition "limited" versus "complete." In addition, all appraisal reports, unless otherwise contracted for by the client, will be of a "summary" nature vs. "self-contained" whereas concise explanations of appraisal methods and results are emphasized for purpose of transparency, brevity and clarity. The use of limited appraisals in conjunction with summary reports in no way implies non-compliance with USPAP. P&A believes, with its vast experience and expertise in these areas of appraisal, that all values rendered are credible, competent, uniform and consistent; and most importantly for ad valorem tax purposes, achieved in a cost-efficient and timely manner.

Per previous ASB comments under Standard 6-2(b) *[scope of work... special limiting conditions]*:

*"Although appraisers in ad valorem taxation should not be held accountable for limitations beyond their control, they are required by this specific requirement to identify cost constraints and to take appropriate steps to secure sufficient funding to produce appraisals that comply with these standards. Expenditure levels for assessment administration are a function of a number of factors. Fiscal constraints may impact data completeness and accuracy, valuation methods, and valuation accuracy. Although appraisers should seek adequate funding and disclose the impact of fiscal constraints on the mass appraisal process, they are not responsible for constraints beyond their control."*

In any event, however, it is not P&A's intent to allow constraints, fiscal or otherwise, to limit the scope of work to such a degree that the mass appraisal results are not credible within the context of the intended use(s) of the appraisal.

## PREAMBLE

The purpose of USPAP is to establish requirements and conditions for ethical, thorough, and transparent property valuation services. Valuation services pertain to all aspects of property value and include services performed by appraisers and other professionals including attorneys, accountants, insurance estimators, auctioneers, or brokers. Valuation services include appraisal, appraisal review, and appraisal consulting. The primary intent of these Standards is to promote and maintain a high level of public trust in professional appraisal practice.

It is essential that professional appraisers develop and communicate their analyses, opinions, and conclusions to intended users of their services in a manner that is meaningful and not misleading. The importance of the role of the appraiser places ethical obligations upon those who serve in this capacity. These USPAP Standards reflect the current standards of the appraisal profession.

These Standards are for both appraisers and users of appraisal services. To maintain a high level of professional practice, appraisers observe these Standards. However, these Standards do not in themselves establish which individuals or assignments must comply. The Appraisal Foundation nor its Appraisal Standards Board is not a government entity with the power to make, judge, or enforce law. Compliance with USPAP is only required when either the service or the appraiser is obligated to comply by law or regulation, or by agreement with the client or intended users. When not obligated, individuals may still choose to comply.

USPAP addresses the ethical and performance obligations of appraisers through DEFINITIONS, Rules, Standards, Standards Rules, and Statements. USPAP Standards deal with the procedures to be followed in performing an appraisal or appraisal review and the manner in which each is communicated. A brief description of the USPAP Standards are as follows:

- **Standards Rules 1 and 2:** establish requirements for the development and communication of a real property appraisal.
- **Standards Rule 3:** establishes requirements for the development and communication of an appraisal review.
- **Standards Rules 4 and 5:** retired in 2014.
- **Standards Rule 6:** establishes requirements for the development and communication of a mass appraisal.
- **Standards Rules 7 and 8:** establish requirements for the development and communication of a personal property appraisal.
- **Standards Rules 9 and 10:** establish requirements for the development and communication of a business or intangible asset appraisal.

Section 23.01(b) [*Appraisals Generally*] of the Texas Property Tax Code states:

*"The market value of property shall be determined by the application of generally accepted appraisal methods and techniques. If the Appraisal District determines the appraised value of a property using mass appraisal standards, the mass appraisal standards must comply with the Uniform Standards of Professional Appraisal Practice...." (underline added for emphasis)*

Consequently, USPAP Standards Rule 6 is assumed to be the applicable standard for ad valorem tax purposes in Texas, if mass appraisal practices are in fact being used to appraise the subject property. USPAP Advisory Opinion 32 suggests several USPAP standards other than Standard 6 can or should apply in ad valorem tax work. However, it appears that an appraiser engaged in ad valorem tax work in Texas is not specifically required by law to follow these USPAP standards if in fact mass appraisal practices have not been used to appraise the subject property. In this case it could be deemed appropriate to invoke the Jurisdictional Exception Rule which is applicable when there is a contradiction between the requirements of USPAP and the law or regulation of a jurisdiction. Please see the P&A Policy Statement on USPAP as provided elsewhere in this report for a more detailed discussion regarding this matter.



## ETHICS RULE

Because of the fiduciary responsibilities inherent in professional appraisal practice, the appraiser must observe the highest standards of professional ethics. This Ethics Rule is divided into three sections:

- Conduct;
- Management;
- Confidentiality.

This Rule emphasizes the personal obligations and responsibilities of the individual appraiser. However, it should be noted that groups and organizations *which are comprised of individual appraisers engaged in appraisal practice* effectively share the same ethical obligations. To the extent the group or organization does not follow USPAP Standards when legally required, individual appraisers should take steps that are appropriate under the circumstances to ensure compliance with USPAP.

Compliance with these Standards is required when either the service or the appraiser is obligated by law or regulation, or by agreement with the client or intended users, to comply. Compliance is also required when an individual, by choice, represents that he or she is performing the service as an appraiser.

An appraiser must not misrepresent his or her role when providing valuation services that are outside of appraisal practice.

Honesty, impartiality, and professional competency are required of all appraisers under USPAP Standards. To document recognition and acceptance of his or her USPAP-related responsibilities in communicating an appraisal, appraisal review, or appraisal consulting assignment completed under USPAP, an appraiser is required to certify compliance with these Standards.

### CONDUCT

An appraiser must perform assignments with impartiality, objectivity, and independence, and without accommodation of personal interests.

An appraiser must perform ethically and competently in accordance with USPAP and not engage in conduct that is unlawful, unethical, or improper. An appraiser who could reasonably be perceived to act as a disinterested third party in rendering an unbiased appraisal, review, or consulting service must perform assignments with impartiality, objectivity, and independence and without accommodation of personal interests; in short, the appraiser must not perform an assignment with bias.

An appraiser must not advocate the cause or interest of any party or issue, or accept an assignment that includes the reporting of predetermined opinions and conclusions.

An appraiser must not misrepresent his or her role when providing valuation services that are outside of appraisal practice, must not engage in criminal conduct, and must not perform an appraisal assignment in a grossly negligent manner.

An appraiser is required to avoid any action that could be considered misleading or fraudulent. In particular, it is unethical for an appraiser to use or communicate a misleading or fraudulent report or to knowingly permit an employee or other person to communicate a misleading or fraudulent report.

An appraiser must not use or rely on unsupported conclusions relating to characteristics such as race, color, religion, national origin, gender, marital status, familial status, age, receipt of public assistance income, handicap, or an unsupported conclusion that homogeneity of such characteristics is necessary to maximize value.

If known prior to accepting an assignment, and/or if discovered at any time during the assignment, an appraiser must disclose to the client, and in each subsequent report certification:

- any current or prospective interest in the subject property or parties involved; and
- any services regarding the subject property performed by the appraiser within the three year period immediately preceding acceptance of the assignment, as an appraiser or in any other capacity.

The appraiser can agree with the client to keep the mere occurrence of a prior appraisal assignment confidential. If an appraiser has agreed with the client not to disclose that he or she has appraised a property, the appraiser must decline all subsequent assignment that fall with the three year period. In assignments in which there is no report, only the initial disclosure to the client is required.

Presumably all parties in ad valorem tax appraisal will be aware of the ongoing yearly nature of the appraisal assignments performed by valuation consulting firms like Pritchard & Abbott, Inc.--i.e., it will not be confidential-- so that this particular conduct instruction is more or less a moot point (regarding the three year period discussed) if the prior service is in fact the ad valorem tax appraisals performed in previous tax years.

#### MANAGEMENT

The payment of a fee, commission, or a thing of value by the appraiser in connection with the procurement of an assignment must be disclosed. This disclosure must appear in the certification and in any transmittal letter in which conclusions of value are stated; however, the disclosure of the amount paid is not required. Intra-company payments to employees of groups or organizations involved in appraisal practice for business development do not require disclosure.

It is unethical for an appraiser to accept compensation for performing an assignment when it is contingent upon the reporting of a predetermined result, a direction in assignment results that favors the cause of the client, the amount of a value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the appraiser's opinions and specific to the assignment's purpose.

Advertising for or soliciting assignments in a manner that is false, misleading, or exaggerated is unethical. Decisions regarding finder or referral fees, contingent compensation, and advertising may not be the responsibility of an individual appraiser, but for a particular assignment it is the responsibility of the individual appraiser to ascertain that there has been no breach of ethics, that the assignment consulting assignment has been prepared in accordance with USPAP Standards, and that the report can be properly certified when required by USPAP Standards Rules 2-3, 3-3, 5-3, 6-9, 8-3, or 10-3.

An appraiser must affix, or authorize the use of, his or her signature to certify recognition and acceptance of his or her USPAP responsibilities in an appraisal, appraisal review, or appraisal consulting assignment. An appraiser may authorize the use of his or her signature only on an assignment-by-assignment basis.

In addition, an appraiser must not affix the signature of another appraiser without his or her consent. An appraiser must exercise due care to prevent unauthorized use of his or her signature. However, an appraiser exercising such care is not responsible for unauthorized use of his or her signature.

#### CONFIDENTIALITY

An appraiser must protect the confidential nature of the appraiser-property owner relationship.

An appraiser must act in good faith with regard to the legitimate interests of the client in the use of confidential information and in the communication of assignment results.

An appraiser must be aware of, and comply with, all confidentiality and privacy laws and regulations applicable in an assignment.

An appraiser must not disclose confidential factual data obtained from a property owner to anyone other than:

1. The client;
2. Persons specifically authorized by the client;

## RECORD KEEPING RULE

An appraiser must prepare a workfile for each appraisal, appraisal review, and consulting assignment. The workfile must include the identity, by name and type, of any intended users; true copies of any written reports, summaries of any oral reports or testimony, and all other data, information, and documentation necessary to support the appraiser's opinions and conclusions and to show compliance with this rule and all other applicable USPAP Standards.

A workfile preserves evidence of the appraiser's consideration of all applicable data and statements required by USPAP and other information as may be required to support the findings and conclusions of the appraiser.

A photocopy or an electronic copy of the entire actual written appraisal, review, or consulting report sent or delivered to a property owner or review committee satisfies the requirements of a true copy. Care should be exercised in the selection of the form, style, and type of medium for written records, which may be handwritten and informal, to ensure they are retrievable by the appraiser throughout the applicable retention period.

A workfile must be in existence prior to and contemporaneous with the issuance of a written or oral report. A written summary of an oral report must be added to the workfile within a reasonable time after the issuance of the oral report.

A workfile must be made available by the appraiser when required by due process of law. An appraiser must have custody of his or her workfile, or make appropriate workfile retention, access, and retrieval arrangements with the party having custody of the workfile. An appraiser having custody of a workfile must allow other appraisers with workfile obligations related to an assignment appropriate access and retrieval for the purpose of:

- submission to state appraiser regulatory agencies;
- compliance with due process of law;
- submission to a duly authorized professional peer review committee; or
- compliance with retrieval arrangements.

An appraiser who willfully or knowingly fails to comply with the obligations of this Record Keeping Rule is in violation of the Ethics Rule.

## SCOPE OF WORK RULE

For each appraisal, appraisal review, and appraisal consulting assignment, an appraiser must:

1. Identify the problem to be solved;
2. Determine and perform the scope of work necessary to develop credible assignment results; and
3. Disclose the scope of work in the report.

An appraiser must properly identify the problem to be solved in order to determine the appropriate scope of work. The appraiser must be prepared to demonstrate that the scope of work is sufficient to produce credible assignment results.

Scope of work includes, but is not limited to:

- the extent to which the property is identified;
- the extent to which tangible property is inspected;
- the type and extent of data researched; and
- the type and extent of analyses applied to arrive at opinions or conclusions.

Appraisers have broad flexibility and significant responsibility in determining the appropriate scope of work for an appraisal, appraisal review, and appraisal consulting assignment. Credible assignment results require support by relevant evidence and logic. The credibility of assignment results is always measured in the context of the intended use.

### PROBLEM IDENTIFICATION

An appraiser must gather and analyze information about those assignment elements that are necessary to properly identify the appraisal, appraisal review or appraisal consulting problem to be solved. The assignment elements necessary for problem identification are addressed in the Standards Rule 6-2:

- client and any other intended users;
- intended use of the appraiser's opinions and conclusions;
- type and definition of value;
- effective date of the appraiser's opinions and conclusions;
- subject of the assignment and its relevant characteristics; and
- assignment conditions.

This information provides the appraiser with the basis for determining the type and extent of research and analyses to include in the development of an appraisal. Similar information is necessary for problem identification in appraisal review and appraisal consulting assignments. Assignment conditions include:

- assumptions;
- extraordinary assumptions;
- hypothetical conditions;
- laws and regulations;
- jurisdictional exceptions; and
- other conditions that affect the scope of work.

### SCOPE OF WORK ACCEPTABILITY

The scope of work must include the research and analyses that are necessary to develop credible assignment results. The scope of work is acceptable when it meets or exceeds:

- the expectations of parties who are regularly intended users for similar assignments; and
- what an appraiser's peers' actions would be in performing the same or a similar assignment.

Determining the scope of work is an ongoing process in an assignment. Information or conditions discovered during the course of an assignment might cause the appraiser to reconsider the scope of work. An appraiser must be prepared to support the decision to exclude any investigation, information, method, or technique that would appear relevant to the client, another intended user, or the appraiser's peers.

An appraiser must not allow assignment conditions to limit the scope of work to such a degree that the assignment results are not credible in the context of the intended use. In addition, the appraiser must not allow the intended use of an assignment or a client's objectives to cause the assignment results to be biased.

#### **DISCLOSURE OBLIGATIONS**

The report must contain sufficient information to allow intended users to understand the scope of work performed. Proper disclosure is required because clients and other intended users may rely on the assignment results. Sufficient information includes disclosure of research and analyses performed or not performed.

## JURISDICTIONAL EXCEPTION RULE

If any applicable law or regulation precludes compliance with any part of USPAP, only that part of USPAP becomes void for that assignment. When compliance with USPAP is required by federal law or regulation, no part of USPAP can be voided by a law or regulation of a state or local jurisdiction. *When an appraiser properly follows this Rule in disregarding a part of USPAP, there is no violation of USPAP.*

In an assignment involving a jurisdictional exception, an appraiser must:

- identify the law or regulation that precludes compliance with USPAP;
- comply with that law or regulation;
- clearly and conspicuously disclose in the report the part of USPAP that is voided by that law or regulation; and
- cite in the report the law or regulation requiring this exception to USPAP compliance.

The purpose of the Jurisdictional Exception Rule is strictly limited to providing a saving or severability clause intended to preserve the balance of USPAP if one or more of its parts are determined as contrary to law or public policy of a jurisdiction. By logical extension, there can be no violation of USPAP by an appraiser who disregards, with proper disclosure, only the part or parts of USPAP that are void and of no force and effect in a particular assignment by operation of legal authority.

It is misleading for an appraiser to disregard a part or parts of USPAP as void and of no force and effect in a particular assignment without identifying the part or parts disregarded and the legal authority justifying this action in the appraiser's report.

"Law" includes constitutions, legislative and court-made law, and administrative rules (such as from the Office of the Texas Comptroller of Public Accounts) and ordinances. "Regulations" include rules or orders having legal force, issued by an administrative agency. Instructions from a client or attorney do not establish a jurisdictional exception.

A jurisdictional exception prevalent in Texas is that appraisers are seeking to establish "fair market value" as defined by the Texas Property Tax Code instead of "market value" as found in the USPAP definitions section.

## MASS APPRAISAL, DEVELOPMENT AND REPORTING (General Discussion)

In developing a mass appraisal, an appraiser must be aware of, understand, and correctly employ those recognized methods and techniques necessary to produce and communicate credible mass appraisals.

Standard 6 applies to all mass appraisals of real and personal property regardless of the purpose or use of such appraisals. It is directed toward the substantive aspects of developing and communicating competent analyses, opinions, and conclusions in the mass appraisal of properties, whether real property or personal property. Mass appraisals can be prepared with or without computer assistance. The Jurisdictional Exception Rule may apply to several sections of Standard 6 because ad valorem tax administration is subject to various state, county, and municipal laws. The reporting and jurisdictional exceptions applicable to public mass appraisals prepared for purposes of ad valorem taxation do not apply to mass appraisals prepared for other purposes.

A mass appraisal includes:

- identifying properties to be appraised;
- defining market areas of consistent behavior that applies to properties;
- identifying characteristics (supply and demand) that affect the creation of value in that market area;
- developing a model structure that reflects the relationship among the characteristics affecting value in the market area;
- calibrating the model structure to determine the contribution of the individual characteristics affecting value;
- applying the conclusions reflected in the model to the characteristics of the properties being appraised; and
- reviewing the mass appraisal results.

**The Jurisdictional Exception Rule may apply to several sections of Standard 6 because ad valorem tax administration is subject to various state, county, and municipal laws.**

As previously stated in the P&A Policy Statement (pages 2 and 3 of this report), it may not be possible or practicable for all the mass appraisal attributes listed above to be rigorously applied to the many types of complex and/or unique properties that P&A typically appraises. Often there are contractual limitations on the scope of work needed or required. More prevalently, these types of properties do not normally provide a reliable database of market transactions (or details of transactions) necessary for statistically supportable calibration of appraisal models and review of appraisal results. Generally these two functions are effectively accomplished through annual extended review meetings with taxpayers (and clients) who provide data, sometimes confidentially, that allows for appraisal models to be adjusted where necessary. Nevertheless, and not withstanding whether P&A implicitly or explicitly employs or reports all attributes listed above, in all cases P&A at the minimum employs tenants of “generally accepted appraisal methods” which are the genesis of USPAP Standards.

Per USPAP guidelines, P&A will make known all departures and jurisdictional exceptions when invoked (if an appraisal method or specific requirement is applicable but not necessary to attain credible results in a particular assignment).

The various sections of Standard 6 are briefly summarized below:

- **Standard 6-1:** Establishes the appraiser’s technical and ethical framework. Specifically, appraisers must recognize and use established principles, methods and techniques of appraisal in a careful manner while not committing substantial errors of fact or negligence that would materially affect the appraisal results and not give a credible estimate of fair market value. To this end appraisers must continuously improve his or her skills to maintain proficiency and keep abreast of any new developments in the real and personal property appraisal profession. This Standards Rule does not imply that competence requires perfection, as perfection is impossible to attain. Instead, it requires appraisers to employ every reasonable effort with regards to due diligence and due care.
- **Standard 6-2:** Defines the introductory framework requirements of developing a mass appraisal, focusing on the identification and/or definition of: client(s), intended users, effective date, scope of work, extraordinary assumptions,

hypothetical conditions, the type and definition of value being developed (typically “fair market value” for ad valorem tax purposes), characteristics of the property being appraised in relation to the type and definition of value and intended use, the characteristics of the property’s market, the property’s real or personal attributes, fractional interest applicability, highest and best use analysis along with other land-related considerations, and any other economic considerations relevant to the property.

- **Standard 6-3:** Defines requirements for developing and specifying appropriate mass appraisal data and elements applicable for real and personal property. For real property, the data and elements include: existing land use regulations, reasonably probable modification of such regulations, economic supply and demand, the physical adaptability of the real estate, neighborhood trends, and highest and best use analysis. For personal property, the relevant data and elements include: identification of industry trends, trade level, highest and best use, and recognition of the appropriate market consistent with the type and definition of value.
- **Standard 6-4:** Further defines requirements for developing mass appraisal models, focusing on development of standardized data collection forms, procedures, and training materials that are used uniformly on the universe of properties under consideration. This rule specifies that appraisers employ recognized techniques for specifying and calibrating mass appraisal models. Model specification is the formal development of a model in a statement or mathematical equation, including all due considerations for physical, functional, and external market factors as they may affect the appraisal. These models must accurately represent the relationship between property value and supply and demand factors, as represented by quantitative and qualitative property characteristics. Models may be specified incorporating the income, market, and/or cost approaches to value and may be tabular, mathematical, linear, nonlinear, or any other structure suitable for representing the observable property characteristics. Model calibration refers to the process of analyzing sets of property and market data to determine the specific parameters of a model.
- **Standard 6-5:** Defines requirements for collection of sufficient factual data, in both qualitative and quantitative terms, necessary to produce credible appraisal results. The property characteristics collected must be contemporaneous with the effective date of the appraisal. The data collection program should incorporate a quality control procedure, including checks and audits of the data to ensure current and consistent records. This rule also calls for calls for an appraiser, in developing income and expense statement and cashflow projections, to weigh historical information and trends, current market factors affecting such trends, and reasonably anticipated events, such as competition from developments either planned or under construction. Terms and conditions of any leases should be analyzed, as well as the need for and extent of any physical inspection of the properties being appraised.
- **Standard 6-6:** Defines requirements for application of a calibrated model to the property being appraised. This rule calls for: the appraiser to recognize methods or techniques based on the cost, market, and income approaches for improved parcels; the appraiser the value sites by recognized methods or techniques such as allocation method, abstraction method, capitalization of ground rent, and land residual; the appraiser to develop value of leased fee or leasehold estates with consideration for terms and conditions of existing leases, and, when applicable by law, as if held in fee simple whereas market rents are substituted for actual contract rents; the appraiser to analyze the effect on value, if any, of the assemblage of the various parcels, divided interests, or component parts of a property; the appraiser to analyze anticipated public or private improvements located on or off the site, and analyze the effect on value, if any, of such anticipated improvements to the extent they are reflected in market actions.
- **Standard 6-7:** Defines the reconciliation process of a mass appraisal. Specifically, appraisers must analyze the results and/or applicability of the various approaches used while ensuring that, on an overall basis, standards of reasonableness and accuracy are maintained with the appraisal model selected (underline added for emphasis). It is implicit in mass appraisal that, even when properly specified and calibrated models are used, some individual value conclusions will not meet standards of reasonableness, consistency, and accuracy.
- **Standard 6-8:** Defines requirements of a mass appraisal written report (elements of which are further detailed in the next three sections of this report that discuss P&A appraisal procedures with regards to specific categories of property).
- **Standard 6-9:** Defines requirements for appraiser certification of the mass appraisal written report.



**REAPPRAISAL PLAN OF MINERAL, INDUSTRIAL, UTILITY AND RELATED PERSONAL PROPERTY  
PRITCHARD & ABBOTT, INC.  
TAX YEARS 2015 AND 2016**

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The following sections of this report discuss in detail the various elements of the mass appraisal written report as required by USPAP Standard 6-8, with regards to P&A appraisal of Mineral Interests, Industrial-Utility-Personal Property, and Real Estate.

## REAPPRAISAL OF MINERAL INTERESTS

*Note: This section, in conjunction with any attached or separately provided P&A-generated appraisal reports specific to the subject property or properties, constitutes the "mass appraisal written report" as required by USPAP Standards Rule 6-8. USPAP Standards Rule 6-9 (certification) can be found at the end of this report. USPAP Standards Rules 6-1 through 6-7 (instructions and explanations regarding the development, application, and reconciliation of mass appraisal values), as they apply to P&A mass appraisal procedures, are discussed below. USPAP DOES NOT DICTATE THE FORM, FORMAT, OR STYLE OF APPRAISAL REPORTS, WHICH ARE FUNCTIONS OF THE NEEDS OF USERS AND PROVIDERS OF APPRAISAL SERVICES. USPAP ALSO DOES NOT MANDATE THAT EACH APPRAISAL REPORT BE LENGTHY AND FULL OF DISCLAIMERS. Readers should note that all P&A reports, unless stated otherwise, are of a "summary" nature versus "self-contained," whereas additional documentation and detail may be available per certain Texas Property Tax Code provisions.*

### INTRODUCTION

**Definition of Appraisal Responsibility (Scope of Effort):** The Mineral Valuation Department of Pritchard & Abbott, Inc. ("P&A" hereinafter), is responsible for developing credible values for mineral interests (full or fractional percentage ownership of oil and gas leasehold interest, the amount and type of which are legally and/or contractually created and specified through deeds and leases, etal.) associated with producing (or capable of producing) leases. Mineral interests are typically considered real property because of their derivation from the bundle of rights associated with original fee simple ownership of land. Typically all the mineral interests that apply to a single producing lease are consolidated by type (working vs. royalty) with each type then appraised for full value which is then distributed to the various fractional decimal interest owners prorata to their individual type and percentage amount.

P&A's typical client is a governmental entity charged with appraisal responsibility for ad valorem tax purposes, although other types of clients (private businesses, individuals, etc.) occasionally contract for appraisal services which are strictly for various non-ad valorem tax purposes so that no conflicts of interest are created with P&A's core ad valorem tax work.

Intended users of our reports are typically the client(s) for which we are under direct contract and taxpayers or their agents who own and/or represent the subject property being appraised. Potential other users include parties involved in adjudication of valuation disputes (review board members, lawyers, judges, etc.), governmental agencies which periodically review our appraisals for various statutory purposes (such as the Texas Comptroller's Office) and private parties who may obtain copies of our appraisals through Open Records Requests made to governmental agencies.

***This section of P&A's Biennial Reappraisal Plan is not applicable to any mineral or mineral interest property that an appraisal district appraises outside of P&A's appraisal services, in which case the appraisal district's overall Biennial Reappraisal Plan should be referenced.***

P&A makes the **Extraordinary Assumption** that all properties appraised for ad valorem tax purposes are marketable whereas ownership and title to property are free of encumbrances and other restrictions that would affect fair market value to an extent not obvious to the general marketplace. If and/or when we are made aware of any encumbrances, etc., these would be taken into account in our appraisal in which case the extraordinary assumption stated above would be revoked.

P&A is typically under contract to determine current market value or "fair market value" of said mineral interests. Fair market value is typically described as the price at which a property would sell for if:

- exposed in the open market with a reasonable time for the seller to find a purchaser;
- both the buyer and seller know of all the uses and purposes to which the property is, or can be, adapted and of the enforceable restrictions on its use; and

- both the buyer and seller seek to maximize their gains and neither is in a position to take advantage of the exigencies of the other. [Exigencies are pressing or urgent conditions that leave one party at a disadvantage to the other.]

For ad valorem tax purposes the effective date is usually legislatively specified by the particular State in which we are working - for example, in Texas the lien date is January 1 per the Texas Property Tax Code. For ad valorem tax purposes, the date of the appraisals and reports are typically several months past the effective date, thereby leaving open the possibility that a retrospective approach is appropriate under limited and prescribed circumstances (information after the effective date being applicable only if it confirms a trend or other appraisal condition that existed and was generally known as of the effective date).

P&A believes this section of this report, in conjunction with any attached or separately provided P&A-generated report(s), meets the USPAP definition of "typical practice"; i.e., it satisfies a level of work that is consistent with:

- the expectations of participants in the market for the same or similar appraisal services; and
- what P&A's peers' actions would be in performing the same or similar appraisal services in compliance with USPAP.

**Legal and Statutory Requirements:** In Texas, the provisions of the Texas Property Tax Code and other relevant legislative measures involving appraisal administration and procedures control the work of P&A as an extension of the Appraisal District. Other states in which P&A is employed will have similar controlling legislation, regulatory agencies, and governmental entities. P&A is responsible for appraising property on the basis of its fair market value as of the stated effective date (January 1 in Texas) for ad valorem tax purposes for each taxing unit that imposes ad valorem taxes on property in the contracted Appraisal District. All mineral properties (interests) are reappraised annually. The definition of Fair Market Value is provided and promulgated for use in ad valorem tax work in Texas by the Texas Property Tax Code, and therefore as a **Jurisdictional Exception** supercedes the definition of "market value" as found in USPAP definitions.

NOTE: IN TEXAS, P&A BELIEVES THE PROPERTY BEING APPRAISED AND PLACED ON THE TAX ROLL IS THE INTEREST AND NOT THE OIL OR GAS MINERAL ITSELF, PER PROPERTY TAX CODE SECTION 1.04(2)(F). WHILE OIL AND GAS RESERVES CERTAINLY HAVE VALUE, THE FACT IS THAT IT IS THE INTERESTS IN THESE MINERALS THAT ARE BOUGHT AND SOLD, NOT THE MINERALS THEMSELVES. THE SALE OF MINERALS AS THEY ARE EXTRACTED FROM THE SUBSURFACE OF THE LAND WHERE THEY RESIDE AS MINERALS IN PLACE "MONETIZES" THE INTEREST AND THUS GIVES THE INTEREST ITS VALUE. WHENEVER P&A REFERS TO "MINERAL PROPERTIES" IN THIS REPORT OR IN ANY OTHER SETTING, IT IS THE MINERAL INTEREST, AND NOT THE MINERAL ITSELF, THAT IS THE SUBJECT OF THE REFERENCE.

**Administrative Requirements:** P&A endorses the principals of the International Association of Assessing Officers (IAAO) regarding its appraisal practices and procedures. P&A also endorses, and follows when possible, the standards promulgated by the Appraisal Foundation known as the Uniform Standards of Professional Appraisal Practice (USPAP). In all cases where IAAO and/or USPAP requirements cannot be satisfied for reasons of practicality or irrelevancy, P&A subscribes to "generally accepted appraisal methods and techniques" so that its value conclusions are credible and defensible. P&A submits annual or biannual contract bids to the Appraisal District Board of Directors or the Office of the Chief Appraiser and is bound to produce appraisal estimates on mineral properties within the cost constraints of said bid. Any appraisal practices and procedures followed by P&A not explicitly defined or allowed through IAAO or USPAP requirements are specified by the Texas Property Tax Code or at the specific request or direction of the Office of the Chief Appraiser.

#### Appraisal Resources

**Personnel:** The Mineral Valuation Division staff consists of competent Petroleum Engineers, Geologists, and Appraisers. All personnel are Registered Professional Appraisers with the State of Texas, or are progressing towards this designation within the allowable time frames prescribed by the Texas Department of Licensing and Regulation (TDLR) and/or other licensing and regulatory agencies as applicable.

**Data:** For each mineral property a common set of data characteristics (i.e. historical production, price and expense data) is collected from various sources and entered into P&A's mainframe computer system. Historical production data and price data is available through state agencies (Texas Railroad Commission, Texas Comptroller, et al.) or private firms who gather, format and repackage such data for sale commercially. Each property's characteristic data drives the computer-assisted mass appraisal approach to valuation.

**Information Systems:** The mainframe systems are augmented by the databases that serve the various in-house and 3<sup>rd</sup>-party applications on desktop personal computers. In addition, communication and dissemination of appraisals and other information is available to the taxpayer and client through electronic means including internet and other phone-line connectivity. The appraiser supervising any given contract fields many of the public's questions or redirects them to the proper department personnel.

### VALUATION APPROACH (MODEL SPECIFICATION)

**Concepts of Value:** The valuation of oil and gas properties is not an exact science, and exact accuracy is not attainable due to many factors. Nevertheless, standards of reasonable performance do exist, and there are usually reliable means of measuring and applying these standards.

Petroleum properties are subject to depletion, and capital investment must be returned before economic exhaustion of the resource (mineral reserves). The examination of petroleum properties involves understanding the geology of the resource (producing and non-producing), type of reservoir energy, the methods of secondary and enhanced recovery (if applicable), and the surface treatment and marketability of the produced petroleum product(s).

Evaluation of mineral properties is a continuous process; the value as of the lien date merely represents a "snapshot" in time. The potential value of mineral interests derived from sale of minerals to be extracted from the ground change with mineral price fluctuation in the open market, changes in extraction technology, costs of extraction, and other variables such as the value of money.

#### Approaches to Value for Petroleum Property

**Cost Approach:** The use of cost data in an appraisal for market value is based upon the economic principle of substitution. The cost approach typically derives value by a model that begins with replacement cost new (RCN) and then applies depreciation in all its forms (physical depreciation, functional and economic obsolescence). This method is difficult to apply to oil and gas properties since lease acquisition and development may bear no relation to present worth. Though very useful in the appraisal of many other types of properties, the cost approach is not readily applicable to mineral properties. [Keep in mind that the property actually being appraised is the mineral interest and not the oil and gas reserves themselves. Trying to apply the cost approach to evaluation of mineral interests is like trying to apply the cost approach to land; it is a moot point because both are real properties that are inherently non-replaceable.] As a general rule, and for the reasons stated above, Pritchard & Abbott, Inc., does not employ the cost approach in the appraisal of mineral interests.

**Market Approach:** This approach may be defined as one which uses data available from actual transactions recorded in the market place itself; i.e., sales of comparable properties from which a comparison to the subject property can be made. Ideally, this approach's main advantage involves not only an opinion but an opinion supported by the actual spending of money. Although at first glance this approach seems to more closely incorporate the aspects of fair market value per its classical definition, there are two factors that severely limit the usefulness of the market approach for appraising oil and gas properties. First, oil and gas property sales data is seldom disclosed (in non-disclosure states such as Texas); consequently there is usually a severe lack of market data sufficient for meaningful statistical analysis. Second, all conditions of each sale must be known and carefully investigated to be sure one does have a comparative indicator of value per fair market value perquisites.

Many times when these properties do change hands, it is generally through company mergers and acquisitions where other assets in addition to oil and gas reserves are involved; this further complicates the analysis whereby a total purchase price must be allocated to the individual components - a speculative and somewhat arbitrary task at best. In the case of oil and gas

properties, a scarcity of sales requires that every evidence of market data be investigated and analyzed. Factors relative to the sale of oil and gas properties are:

- current production and estimated declines forecast by the buyer;
- estimated probable and potential reserves;
- general lease and legal information which defines privileges or limitation of the equity sold;
- undeveloped potential such as secondary recovery prospects;
- proximity to other production already operated by the purchaser;
- contingencies and other cash equivalents; and
- other factors such as size of property, gravity of oil, etc.

In the event that all these factors are available for analysis, the consensus effort would be tantamount to performing an income approach to value (or trying to duplicate the buyer's income approach to value), thereby making the market approach somewhat moot in its applicability. As a general rule, and for the reasons stated above, Pritchard & Abbott, Inc., rarely employs a rigorous application of the market approach in the appraisal of mineral interests.

**Income Approach:** This approach to value most readily yields itself to the appraisal of mineral interests. Data is readily available whereby a model can be created that reasonably estimates a future income stream to the property. This future income may then be converted (discounted) into an estimate of current value. Many refer to this as a capitalization method, because capitalization is the process of converting an income stream into a capital sum (value). As with any method, the final value is no better than the reliability of the input data. The underlying assumption is that people purchase the property for the future income the property will yield. If the land or improvements are of any residual value after the cessation of oil and gas production, that value should also be included (if those components are also being appraised).

The relevant income that should be used is the expected future net income. Assumptions of this method are:

- Past income and expenses are not a consideration, except insofar as they may be a guide to estimating future net income.
- That the producing life as well as the reserves (quantity of the minerals) are estimated for the property.
- Future income is less valuable than current income, and so future net income must be discounted to make it equivalent to the present income. This discount factor reflects the premium of present money over future money, i.e., interest rate, liquidity, investment management, and risk.

As a general rule, and for the reasons stated above, Pritchard & Abbott, Inc., relies predominantly on the income approach to value in the appraisal of mineral interests.

## DATA COLLECTION/VALIDATION

**Sources of Data:** The main source of P&A's property data is data from the Railroad Commission of Texas as reported by operators. As a monthly activity, the data processing department receives data tapes or electronic files which have updated and new well and production data. Other discovery tools are fieldwork by appraisers, financial data from operators, information from chief appraisers, tax assessors, trade publications and city and local newspapers. Other members of the public often provide P&A information regarding new wells and other useful facts related to property valuation.

Another crucial set of data to obtain is the ownership of these mineral interests. Typically a mineral lease is fractionated and executed with several if not many owners. This information is typically requested (under a promise of confidentiality concerning owners' personal information) from pipeline purchasers and/or other entities (such as operators) who have the responsibility of disbursing the income to the mineral interest owners. Another source of ownership information is through the taxpayers themselves who file deeds of ownership transfer and/or correspond with P&A or the appraisal district directly.

**Data Collection Procedures:** Electronic and field data collection requires organization, planning and supervision of the appraisal staff. Data collection procedures for mineral properties are generally accomplished globally by the company; i.e., production and price data for the entire state is downloaded at one time into the computer system. Appraisers also

individually gather and record specific and particular information to the appraisal file records, which serves as the basis for the valuation of mineral properties. P&A is divided into four district offices covering different geographic areas. Each office has a district manager, appraisal and ownership maintenance staff, and clerical staff as appropriate. While overall standards of performance are established and upheld for the various district offices, quality of data is emphasized as the goal and responsibility of each appraiser.

### **VALUATION ANALYSIS (MODEL CALIBRATION)**

Appropriate revisions and/or enhancements of schedules or discounted cash flow software are annually made and then tested prior to the appraisals being performed. Calibration typically involves performing multiple discounted cash flow tests for leases with varying parameter input to check the correlation and relationship of such indicators as: Dollars of Value Per Barrel of Reserves; Dollars of Value Per Daily Average Barrel Produced; Dollars of Expense Per Daily Average Barrel Produced; Years Payout of Purchase Price (Fair Market Value). In a more classical calibration procedure, the validity of values by P&A's income approach to value is tested against actual market transactions, if and when these transactions and verifiable details of these transactions are disclosed to P&A. Of course these transactions must be analyzed for meeting all requisites of fair market value definition. Any conclusions of this analysis are then compared to industry benchmarks for reasonableness before being incorporated into the calibration procedure.

### **INDIVIDUAL VALUE REVIEW PROCEDURES**

Individual property values are reviewed several times in the appraisal process. P&A's discounted cashflow software dynamically generates various benchmark indicators that the appraiser reviews concurrent with the value being generated. These benchmarks often prompt the appraiser to reevaluate some or all of the parameters of data entry so as to arrive at a value more indicative of industry standards. Examples of indicators are dollars of value per barrel of oil reserve, years payout, etc. In addition to appraiser review, taxpayers are afforded the opportunity to review the appraised values, either before or after Notices of Appraised Value are prepared. Operators routinely meet with P&A's appraisers to review parameters and to provide data not readily available to P&A through public or commercial sources, such as individual lease operating expense and reserve figures. And of course, all property values are subject to review through normal protest and Appraisal Review Board procedures, with P&A acting as an extension of the Office of the Chief Appraiser.

### **PERFORMANCE TESTS**

An independent test of the appraisal performance of properties appraised by P&A is conducted by the State of Texas Comptroller's Office through the annual Property Value Study for school funding purposes. This study determines the degree of uniformity and the median level of appraisal for mineral properties. School jurisdictions are given an opportunity to appeal any preliminary findings. After the appeal process is resolved, the Comptroller publishes a report of the findings of the study, including in the report the median level of appraisal, the coefficient of dispersion around the median level of appraisal and any other standard statistical measures that the Comptroller considers appropriate.

### **CALENDAR OF EVENTS/DELIVERABLES TO CLIENT**

As an appraisal contractor, the calendar of events and/or deliverables is largely dependent upon the client's needs and requirements. That said, P&A generally follows the property tax calendar as promulgated by the Property Tax Assistance Division (PTAD) whereas certain work activities must be accomplished by certain deadlines as specified by the Property Tax Code. P&A's contracts typically involve compensation being received from the client only after completion of certain events or deliverables. For example, the CAD may make quarterly payments per the following schedule:

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- **Performance Tests** occurs later in the tax year after certification of values.

## REAPPRAISAL OF INDUSTRIAL, UTILITY, AND RELATED PERSONAL PROPERTY

*Note: This section, in conjunction with any attached or separately provided P&A-generated appraisal reports specific to the subject property or properties, constitutes the "mass appraisal written report" as required by USPAP Standards Rule 6-8. USPAP Standards Rule 6-9 (certification) can be found at the end of this report. USPAP Standards Rules 6-1 through 6-7 (instructions and explanations regarding the development, application, and reconciliation of mass appraisal values), as they apply to P&A mass appraisal procedures, are discussed below. USPAP DOES NOT DICTATE THE FORM, FORMAT, OR STYLE OF APPRAISAL REPORTS, WHICH ARE FUNCTIONS OF THE NEEDS OF USERS AND PROVIDERS OF APPRAISAL SERVICES. USPAP ALSO DOES NOT MANDATE THAT EACH APPRAISAL REPORT BE LENGTHY AND FULL OF DISCLAIMERS. Readers should note that all P&A reports, unless stated otherwise, are of a "summary" nature versus "self-contained," whereas additional documentation and detail may be available per certain Texas Property Tax Code provisions.*

### INTRODUCTION

**Definition of Appraisal Responsibility:** The Engineering Services Department of Pritchard & Abbott, Inc. (P&A) is responsible for developing fair and uniform market values for industrial, utility and personal properties.

P&A's typical client is a governmental entity charged with appraisal responsibility for ad valorem tax purposes, although other types of clients (private businesses, individuals, etc.) occasionally contract for appraisal services which are strictly for various non-ad valorem tax purposes so that no conflicts of interest are created with P&A's core ad valorem tax work.

Intended users of our reports are typically the client(s) for which we are under direct contract and taxpayers or their agents who own and/or represent the subject property being appraised. Potential other users include parties involved in adjudication of valuation disputes (review board members, lawyers, judges, etc.), governmental agencies which periodically review our appraisals for various statutory purposes (such as the Texas Comptroller's Office) and private parties who may obtain copies of our appraisals through Open Records Requests made to governmental agencies.

P&A believes this section of this report, in conjunction with any attached or separately provided P&A-generated report(s), meets the USPAP definition of "typical practice"; i.e., it satisfies a level of work that is consistent with:

- the expectations of participants in the market for the same or similar appraisal services; and
- what P&A's peers' actions would be in performing the same or similar appraisal services in compliance with USPAP.

*This section of P&A's Biennial Reappraisal Plan is not applicable to any Industrial, Utility, or related Personal Property that an appraisal district appraises outside of P&A's appraisal services, in which case the appraisal district's overall Biennial Reappraisal Plan should be referenced.*

P&A makes the **Extraordinary Assumption** that all properties appraised for ad valorem tax purposes are marketable whereas ownership and title to property are free of encumbrances and other restrictions that would affect fair market value to an extent not obvious to the general marketplace. If and/or when we are made aware of any encumbrances, etc., these would be taken into account in our appraisal in which case the extraordinary assumption stated above would be revoked.

**Legal and Statutory Requirements:** The provisions of the Texas Property Tax Code and relevant legislative measures involving appraisal administration and procedures control the work of P&A as a subcontractor to the Appraisal District. P&A is responsible for appraising property on the basis of its market value as of January 1 for ad valorem tax purposes for each taxing unit that imposes ad valorem taxes on property in the contracted Appraisal District. All industrial, utility and personal



properties are reappraised annually. The definition of Fair Market Value is provided and promulgated for use in ad valorem tax work in Texas by the Texas Property Tax Code, and therefore as a Jurisdictional Exception supercedes the definition of "market value" as found in USPAP definitions.

**Administrative Requirements:** P&A follows generally accepted and/or recognized appraisal practices and when applicable, the standards of the International Association of Assessing Officers (IAAO) regarding its appraisal practices and procedures. P&A, when applicable, also subscribes to the standards promulgated by the Appraisal Foundation known as the Uniform Standards of Professional Appraisal Practice (USPAP). P&A submits annual or biannual contract bids to the Office of the Chief Appraiser and is bound to produce appraisal estimates on industrial, utility and personal properties within the cost constraints of said bid. Any appraisal practices and procedures followed by P&A not explicitly defined through IAAO or USPAP requirements are specified by the Texas Property Tax Code and/or at the specific request or direction of the Office of the Chief Appraiser.

### Appraisal Resources

**Personnel:** The Engineering Services Department and P&A's appraisal staff consists of appraisers with degrees in engineering, business and accounting. All personnel are Registered Professional Appraisers with the State of Texas, or are progressing towards this designation as prescribed by the Texas Department of Licensing and Regulation (TDLR).

**Data:** A set of data characteristics (i.e. original cost, year of acquisition, quantities, capacities, net operating income, property description, etc.) for each industrial, utility and personal property is collected from various sources. This data is maintained in either hard copy or computer files. Each property's characteristic data drives the appropriate computer-assisted appraisal approach to valuation.

**Information Systems:** P&A's mainframe computer system is composed of in-house custom software augmented by schedules and databases that reside as various applications on personal computers (PC). P&A offers a variety of systems for providing property owners and public entities with information services.

### VALUATION APPROACH (MODEL SPECIFICATION)

**Concepts of Value:** The valuation of industrial, utility and personal properties is not an exact science, and exact accuracy is not attainable due to many factors. These are considered complex properties and some are considered Special Purpose properties. Nevertheless, standards of reasonable performance do exist, and there are reliable means of measuring and applying these standards.

The evaluation and appraisal of industrial, utility and personal property relies heavily on the discovery of the property followed by the application of recognized appraisal techniques. The property is subject to inflation and depreciation in all forms. The appraisal of industrial and personal property involves understanding petroleum, chemical, steel, electrical power, lumber and paper industry processes along with a myriad of other industrial processes. Economic potential for this property usually follows either the specific industry or the general business economy. The appraisal of utility properties involves understanding telecommunications, electrical transmission and distribution, petroleum pipelines and the railroad industry. Utility properties are subject to regulation and economic obsolescence. The examination of utility property involves the understanding of the present value of future income in a regulated environment.

The goal for valuation of industrial, utility and personal properties is to appraise all taxable property at "fair market value". The Texas Property Tax Code defines Fair Market value as the price at which a property would transfer for cash or its equivalent under prevailing market conditions 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.

### **Approaches to Value for Industrial, Utility, and Personal Property**

**Cost Approach:** The use of cost data in an appraisal for market value is based upon the economic principle of substitution. This method is most readily applicable to the appraisal of industrial and personal property and some utility property. Under this method, the market value of property equals the value of the land plus the current cost of improvements less accrued depreciation. An inventory of the plant improvements and machinery and equipment is maintained by personally inspecting each facility every year. As a general rule, and for the reasons stated above, Pritchard & Abbott, Inc., relies predominantly on the cost approach to value in the appraisal of industrial, utility, and personal property.

**Market Approach:** This approach is characterized as one that uses sales data available from actual transactions in the market place. There are two factors that severely limit the usefulness of the market approach for appraising industrial, utility and personal properties. First, the property sales data is seldom disclosed; consequently there is insufficient market data for these properties available for meaningful statistical analysis. Second, all conditions of sale must be known and carefully investigated to be sure one does have a comparative indicator of value. Many times when these properties do change hands, it is generally through company mergers and acquisitions where other assets and intangibles in addition to the industrial, utility and personal property are involved. The complexity of these sales presents unique challenges and hindrances to the process of allocation of value to the individual components of the transaction.

In the case of industrial, utility and personal properties, a scarcity of sales requires that all evidence of market data be investigated and analyzed. Factors relative to the sale of these properties are:

- plant capacity and current production; terms of sale, cash or equivalent;
- complexity of property;
- age of property;
- proximity to other industry already operated by the purchaser; and
- other factors such as capital investment in the property.

As a general rule, and for the reasons stated above, Pritchard & Abbott, Inc., rarely employs a rigorous application of the market approach in the appraisal of industrial, utility, and personal property.

**Income Approach:** This approach to value most readily yields itself to all income generating assets, especially utility properties. Data for utility properties is available from annual reports submitted to regulatory agencies whereby future income may be estimated, and then this future income may be converted into an estimate of value. The valuation of an entire company by this method is sometimes referred to as a Unit Value. Many refer to this as a capitalization method, because capitalization is the process of converting an income stream into a capital sum (value). As with any method, the final value estimate is no better than the reliability of the input data. The underlying assumption is that people purchase the property for the future income the property will yield.

The relevant income that should be used in the valuation model is the expected future net operating income after depreciation but before interest expense (adjustments for Federal Income Taxes may or may not be required). Assumptions of this method are:

- Past income and expenses are a consideration, insofar as they may be a guide to future income, subject to regulation and competition.
- The economic life of the property can be estimated.
- The future production, revenues and expenses can be accurately forecasted. Future income is less valuable than current income, and so future net income must be discounted to make it equivalent to the present income. This discount factor reflects the premium of present money over future money, i.e., interest rate, liquidity, investment management, and risk.

As a general rule, and for the reasons stated above, Pritchard & Abbott, Inc., employs the income approach in the appraisal of industrial and utility property only when quantifiable levels of income are able to be reliably determined and/or projected for the subject property. P&A does not employ the income approach in the appraisal of personal property.

#### DATA COLLECTION/VALIDATION

Sources of Data: The main source of P&A's property data for industrial and personal property is through fieldwork by the appraisers and commercially/publicly available schedules developed on current costs. Data for performing utility appraisals is typically provided by the taxpayer or is otherwise available at various regulatory agencies (Texas Railroad Commission, Public Utilities Commission, FERC, et al.). Other discovery tools are financial data from annual reports, information from chief appraisers, renditions, tax assessors, trade publications and city and local newspapers. Other members of the public often provide P&A information regarding new industry and other useful facts related to property valuation.

Data Collection Procedures: Electronic and field data collection requires organization, planning and supervision of the appraisal staff. Data collection procedures have been established for industrial and personal properties. Appraisers gather and record information in the mainframe system, where customized programs serve as the basis for the valuation of industrial, utility and personal properties. P&A is divided into multiple district offices covering different geographic zones. Each office has a district manager and field staff. While overall standards of performance are established and upheld for the various district offices, quality of data is emphasized as the goal and responsibility of each appraiser. Additionally, P&A's Engineering Services Department provides supervision and guidance to all district offices to assist in maintaining uniform and consistent appraisal practices throughout the company.

#### VALUATION ANALYSIS (MODEL CALIBRATION)

The validity of the values by P&A's income and cost approaches to value is tested against actual market transactions, if and when these transactions and verifiable details of the transactions are disclosed to P&A. These transactions are checked for meeting all requisites of fair market value definition. Any conclusions from this analysis are also compared to industry benchmarks before being incorporated in the calibration procedure. Appropriate revisions of cost schedules and appraisal software are annually made and then tested for reasonableness prior to the appraisals being performed.

#### INDIVIDUAL VALUE REVIEW PROCEDURES

Individual property values are reviewed several times in the appraisal process. P&A's industrial, utility, personal property programs and appraisal spreadsheets afford the appraiser the opportunity to review the value being generated. Often the appraiser is prompted to reevaluate some or all of the parameters of data entry so as to arrive at a value more indicative of industry standards. Examples of indicators are original cost, replacement cost, service life, age, net operating income, capitalization rate, etc. In addition to appraiser review, taxpayers are afforded the opportunity to review the appraised values either before or after Notices of Appraised Value are prepared. Taxpayers, agents and representatives routinely meet with P&A's appraisers to review parameters and to provide data not readily available to P&A through public or commercial sources, such as investment costs and capitalization rate studies. And of course, all property values are subject to review through normal protest and Appraisal Review Board procedures, with P&A acting as a representative of the Office of the Chief Appraiser.

#### PERFORMANCE TESTS

An independent test of the appraisal performance of properties appraised by P&A is conducted by the State of Texas Comptroller's Office through the annual Property Value Study for school funding purposes. This study determines the degree of uniformity and the median level of appraisal for utility properties. School jurisdictions are given an opportunity to appeal

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