

Hall County Appraisal District

2015-2016

Plan For Periodic Reappraisal

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INTRODUCTION

The Hall County Appraisal District has prepared and published this reappraisal plan and appraisal report to provide our Board of Directors, citizens and taxpayers with a better understanding of the district's responsibilities and activities required by law.

The Hall County Appraisal District (CAD) is a political subdivision of the State of Texas created effective January 1, 1980. The provision of the Texas Property Tax Code governs the legal, statutory, and administrative requirements of the appraisal district. A Board of Directors, appointed by the taxing units within the boundaries of Hall County, constitutes the district's governing body. The Chief Appraiser, appointed by the Board of Directors, is the chief executive officer of the appraisal district.

The Hall County Appraisal District is responsible for local property tax appraisal and exemption administration for nine (9) taxing units. The taxing units within the boundaries of the Hall County Appraisal District are:

- Hall County
- City of Memphis
- City of Lakeview
- City of Turkey
- City of Estelline
- Hall County Hospital District
- Mesquite Groundwater Conservation District
- Memphis – Lakeview I.S.D.
- Turkey – Quitaque I.S.D.

Each taxing unit sets its own tax rate to generate revenue to pay for such things as police protection, water and sewer systems, public schools, road and street maintenance, courts, legal services, and other public service. Appraisals established by the appraisal district allocate the year's tax burden based on each taxable property's market value. The district also determines eligibility for various types of property tax exemptions such as those for homeowners, the elderly, disabled persons, disabled veteran, charitable, or religious organizations and agricultural productivity valuation.

All taxable property is appraised at its "market value" as of January 1, except as otherwise provided by the Texas Property Tax Code. Under the tax code, "market value" means 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 buyer and the seller 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 buyer and seller seek to maximize their gains and neither is in a position to take advantage of the other.

The Property Tax Code defines special appraisal provision 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 (Sec 23.18) or restricted use properties (Sec 23.83) and allocation of interstate property (Sec 23.03).

The Texas Property Tax Code, under Sec 25.18, requires each appraisal office to implement a plan to update appraised values for real property and personal property at least once every three years. The appraisal district board of directors as required by section 6.05, Texas Property Tax Code, adopts the written plan. The approved written plan for this tax year is included with this report. The District's current policy is to conduct a general reappraisal of real property every three (3) years. However, appraised values are reviewed annually and are subject to change for purposes of equalization. Business personal property and utility properties are appraised each year.

The appraised value of real estate is calculated using specific information about each property. Using computer-assisted mass appraisal programs, and recognized appraisal methods and techniques, we compare that information with the data for similar properties and with recent cost and market data. The district follows the standards of the International Association of Assessing Officers (IAAO) regarding its appraisal practices and procedures, and subscribes to the standards set by the Appraisal Foundation known as the Uniform Standards of Professional Appraisal Practice (USPAP) to the extent they are applicable. In cases where the appraisal district contracts for professional valuation services, the contract that is entered into by each appraisal firm requires adherence to similar professional standards.

This Reappraisal Plan is being submitted as a tool to organize the appraisal activities of the Hall County Appraisal District. As we progress into the actual reappraisal process, we reserve the right to modify the plan as required in order to meet the requirement of this office as set by the Texas Property Tax Code.

PERSONAL RESOURCES

The Chief Appraiser is the Chief Administrative and Executive Officer of the appraisal district. The office of the Chief Appraiser is primarily responsible for the overall planning, organizing, staffing, coordinating, and controlling of district's operations. The Chief Appraiser is subject to the provisions of the Property Taxation Certification Act and must be duly registered and licensed with the Texas Department of Licensing and Regulation (TDLR).

The Hall County Appraisal District staff consists of three (3) full-time employees:

- Chief Appraiser – RPA, RTA, CCA
- Bookkeeper – customer service, clerical, & other
- Clerk – customer service, clerical & other

After certification, the Registered Professional Appraiser (RPA) must receive additional training with a minimum of 30 hours of continuing education within a two (2) year period. The continuing education must include two (2) hours of professional ethics, state laws and rules update course and seven (7) hours in USPAP. The Registered Texas Assessor / Collector (RTA) must receive additional training with a minimum of 30 hours of continuing education

within a two-year period. The continuing education must include two (2) hours of professional ethics and state laws and rules update course.

The Board of Directors of the Hall County Appraisal District has contracted with Pritchard & Abbott, Inc., an appraisal firm to appraise all Single-Family Residential, Multi-Family Residential, Vacant Lots and Tracts, Agricultural Land Schedules, Market Land Schedules, Farm and Ranch improvements, Commercial, Industrial, (Manufacturing), Business Personal Property, Mobile Home Schedules and Miscellaneous improvement schedules, Utility Companies within the boundaries of the appraisal district, and conduct ratio studies. The Hall County Appraisal District leases computer equipment from Pritchard & Abbott, Inc., for data processing and record management.

DATA

Hall County Appraisal District is responsible for establishing and maintaining 7,100 real and personal accounts within Hall County. The overlapping taxing jurisdiction Memphis – Lakeview ISD, is located in Childress County, Collingsworth County, and Donley County. A small portion of Hall County overlaps into the Childress ISD. The data includes property characteristics, ownership, and exemptions information. Ownership and legal description is maintained by processing recorded deeds. Exemption data is processed with application requirements as stipulated in the Texas Property Tax Code. Letters are sent to both the buyer and seller of property to acquire voluntary sale information to aid in valuation of property.

SHARED APPRAISAL DISTRICT BOUNDARIES

Due to passing of House Bill 1010, the appraisal of property ends at the county line.

Hall CAD has overlapping properties with Childress, Collingsworth, and Donley Counties. By agreement, Hall CAD honors the appraised values from Childress, Collingsworth, and Donley counties for the overlapping properties within their Appraisal Districts, and, also by agreement Hall CAD provides values to Childress County for the overlapping properties within their Appraisal District.

PROPERTY VALUE STUDY

According to Chapter 5.10 of the Texas Property Tax Code and Section 403.302 of the Texas Government Code, the State Comptroller's Property Tax Division (PTAD) conducts a biennial property value study (PVS) of each Texas school district and each appraisal district. As part of this biennial study, the code requires the Comptroller to conduct a study to determine the degree of uniformity and the median level of appraisals by the appraisal district within each major category of property. The preliminary results of this study are released February 1 in the year following the year of appraisal. The results of this study are certified to the Texas Education Agency (TEA) the following July of each year, this outside ratio study provides additional assistance to the CAD in determining area of market activity of changing market conditions. After completion of the study, the findings will be published. These findings will be distributed to the school districts and the appraisal district. There are three (3) independent school districts in Hall County for which appraisal rolls are annually developed.

This study utilizes statistical analysis of sold properties (sales ratio studies) and appraisals of unsold properties (appraisal ratio studies) as a basis for assessment ratio reporting. For appraisal districts, the reported measures include medial level of appraisal, coefficient of dispersion (COD), the percentage of properties within 10% of the median, the percentage of properties within 25% of the median and price-related differentials (PRD) for properties overall and by state category.

At least once every two years, the comptroller shall review the governance of each appraisal district, taxpayer assistance provided and the operating and appraisal standards, procedures and methodology. This review is the Methods and Assistance Program Review (MAP).

The property value study for Hall County Appraisal District will be conducted in odd numbered years. The Methods and Assistance Program Review (MAP) will be conducted in even numbered years.

EXECUTIVE SUMMARY

TAX CODE REQUIREMENT

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 10th day before the date 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, the board shall complete its hearings, make any amendments, and by resolution finally approve the plan. Copies of the approved plan shall be distributed to the presiding officer of the governing body of each taxing unit participating in the district and to the Comptroller within 60 days of the approval date.

PLAN FOR PERIODIC REAPPRAISAL 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;
 - a. Hall County Appraisal District uses the market area of the cities of Memphis, Lakeview, Turkey and Estelline when setting the market for the following Categories: A, B, C, F and M
 - b. Hall County Appraisal District uses countywide market area for appraising Categories D and E.
 - 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 a size, age, and condition;
 - c. Legal and economic attributes; and
 - d. Easements, covenants, leases, reservations, contracts, declarations, special 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;
 6. Applying the conclusions reflected in the model to the characteristics of the properties being appraised; and
 7. Reviewing the appraisal results to determine value.

USPAP

The Tax Code, Section 23.01, appraisal generally, subsection (b) 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. The same or similar appraisal methods and techniques shall be used in appraising the same or similar kinds of property. However, each property shall be appraised based upon the individual characteristics that affect the property's market value.

REVALUATION DECISION (REAPPRAISAL CYCLE)

The Hall CAD, by policy adopted by the Board of Directors and the Chief Appraiser, reappraises all property in a designated area each year on a three- year cycle. The reappraisal year is a complete appraisal of all properties in the designated area. A reappraisal may be comprised of field inspections, CAMA, or a combination of both. The reappraisal year is a complete appraisal of all properties in the district either by field inspection, CAMA, or of both. Tax year 2015 is a reappraisal year and tax year 2016 is a reappraisal year.

2015 -

All of the City of Memphis, City of Lakeview, and Abstracts (Rural Land) North of the Prairie Dog Fork of the Red River falling within Hall County lines that are in the Memphis ISD portion of the Memphis Independent School District. This will include all residential, commercial properties within this area, all business personal property, mineral property, all agriculture values, and all utilities in the Appraisal District will be reappraised. To be completed in 2015.

2016 –

All of the City of Estelline, and Abstracts (Rural land) South of the Prairie Dog Fork of the Red River falling within the (Old Estelline ISD Portion), Childress ISD Portion in Hall County. This will include all residential, commercial properties within this area, all business personal property, mineral property, all agriculture values, and all utilities in the Appraisal District will be reappraised. To be completed in 2016.

Hall CAD has overlapping properties with Childress, Collingsworth, and Donley Counties. By agreement, Hall CAD honors the appraised values from Childress, Collingsworth, and Donley counties for the overlapping properties within their Appraisal Districts, and, also by agreement Hall CAD provides values to Childress County for the overlapping properties within their Appraisal District.

PERFORMANCE ANALYSIS

Performance Analysis – the equalized values from the previous tax year are analyzed with ratio studies of the current market to determine the appraisal accuracy and appraisal uniformity overall, and by market area, within property re-reporting categories. Ratio studies are conducted in compliance with the current Standard on Ratio Studies of the International Association of Assessing Officers. Mean, median, and weighted mean ratios are calculated for properties in reporting categories to measure the level of appraisal accuracy. The mean ratio is calculated in each reappraised category to indicate the level of appraisal accuracy by property reporting category. In 2015, the reappraisal year, this analysis is used to develop the starting point for establishing the level and accuracy of appraisal performance. Likewise, in 2016, the reappraisal year, this analysis is used to develop the starting point for establishing the level and accuracy of appraisal performance. In 2015 and 2016, any reporting category that may have been previously excluded from appraisal, due to lack of data, will be readdressed. If sufficient market data has been discovered and verified, the category will be tested and analyzed to arrive at an indication of uniformity or equity of existing appraisals.

ANALYSIS OF AVAILABLE RESOURCES

Staffing and budget requirements for tax year 2015 are detailed in the 2015 budget, as adopted by the Board of Directors of the Hall County Appraisal District, and attached to the written biennial plan by reference. This reappraisal plan is adjusted to reflect the available staffing in tax year 2015 and anticipated staffing for tax year 2016. Budget restraints can impact the cycle of real property re-inspection and personal property on-site review that can be accomplished in the 2015-2016 time period.

The Board of Directors of the Hall County Appraisal District has contracted with Pritchard & Abbott, Inc. to provide personnel and expertise towards the completion of the fieldwork, data analysis, and taxpayer protest portions of the reappraisal plan.



The Board of Directors of the Hall County Appraisal District has contracted with Pritchard & Abbott, Inc. to provide personnel and expertise towards the completion of the appraisal of Mineral, Industrial, Utilities, and related Personal Property including fieldwork, data analysis, and taxpayer protest portions of the reappraisal plan.

Existing appraisal practices, which are continued from year to year, are identified and methods utilized to keep these practices current. Real property value tables are tested against verified sales data to ensure they represent current market data. Personal property values are evaluated and analyzed based on renditions, prior year documentation, and inspections. The Comptroller's Guide is utilized to appraise new and/or undocumented personal property and for verification purposes.

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.



The projected dates incorporated in the calendar may be adjusted within the overall plan due to unforeseen changes in staffing, budgetary constraints, weather, and/or reevaluation of the priorities of the projects within the plan.

Periodic and concurrent examination of production standards, goals, and progress in the plan may very well require adjustments to the on-going plan or to the plan for the succeeding year(s).

Field inspections are carried out by the Pritchard & Abbott field appraisers as assigned by the Pritchard & Abbott supervisor, with input and direction from the Chief Appraiser. The field appraiser physically inspects area required by the reappraisal cycle, checks all existing data, works building permits, takes photographs of improvements (if possible), draws plans of new improvements for entry into computer, and 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, or supervisor.

The staff of the Hall County Appraisal District performs data entry of fieldwork notes, sketches, and uploads photos into the database.



The P&A staff perform market analysis. Sales data is gathered throughout the year by CAD staff 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 presented to the Chief Appraiser for discussion and application to the universe of properties.

MASS APPRAISAL SYSTEM

Computer Assisted Mass Appraisal (CAMA) system revision are completed by the Information Systems Software Provider. The provider performs system revisions and procedures. Hall County Appraisal District contracted with the firm of Pritchard & Abbott, Inc. for these services. Pritchard & Abbott support the software and they make programming updates as needed. P&A Staff is able to get on our server through the internet, and can assist us with corrections and updates.

The computer system leased from P&A allows us to enter revisions to the appraisal record, take pictures of the property in the field using a digital camera, and then download them for the camera into the parcel record. Hall CAD staff is responsible for entering all name, address, exemption changes, as well as any appraisal schedule changes. We are able to scan deed documents into the parcel record, or other information needed to assist us in our appraisal work. We are able to create and enter information for new accounts. The Hall CAD staff enters all supplemental changes.

REAL PROPERTY VALUATION

Revisions to cost models, income models, and market models are specified, updated, and tested each tax year, as information is available.

Cost schedules are tested with market data (sales) to insure that the appraisal district is in compliance with Texas Property Tax Code, Section 23.011. Value tables, as well as depreciation tables, are tested for accuracy and uniformity using ratio study tools and compared with cost data from recognized industry leaders, such as Marshall & Swift as necessary.

Land schedules are updated using current market data (sales) and then tested with ratio study tools. Value schedules are developed and tested on pilot basis with ratio study tools. Pritchard & Abbott, Inc. prepares the schedules.

BUSINESS PROPERTY VALUATION

Density schedules are tested using data received during the previous tax year from rendition and hearing documentation. Valuation procedures are reviewed, modified, as needed, and tested. The latest edition of the Comptroller's Guide is utilized heavily in the appraisal of personal property in the district.

UTILITIES AND PIPELINES

Pritchard & Abbott, Inc. appraise and maintain the utility and pipeline accounts. Utility companies and pipelines are appraised annually using a unit value developed using all three

approaches to value. For example, a utility company's total value in the State is estimated using cost, market, and income approaches to value and then the entire value is allocated using the components of that utility company that have situs in the various tax units of the Hall County Appraisal District. Components include such things as miles of transmission lines, miles of distribution lines, substations and the like for an electric utility.

NOTICING PROCESS

25.19 appraisal notice forms are provided by the IS Provider. Notices of Appraised Value are reviewed and proofed by the Chief Appraiser and Hall CAD staff prior to mass mail out, 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. Standards of documentation are reviewed and amended as required. The appraisal district hearing documentation is reviewed and updated to reflect the current valuation process and requirements. Compliance with House Bill 201 is insured.

DATA COLLECTION REQUIREMENTS

Data collection of real property involves data characteristics of property on the CAMA. The information contained in CAMA includes site characteristics, such as size and improvement data, such as square footage of living area, year built (if available), quality of construction and condition. Field appraisers are required to use a property classification system that establishes uniform procedures for the correct listing of real property. All properties are coded according to a classification system. The field appraisers use property classification references during their initial training and as a guide in the field inspection of properties. Data collection for personal property involves maintaining information on software designed to record and appraise business personal property such as business inventory, furniture, and fixtures, machinery and equipment, with details such as cost and year acquired.

Field and office procedures are review and revised as required for data collection. Projects for each tax year include new construction, new development, demolition, remodeling, re-inspection of problematic market areas, re-inspection of the universe of properties on a specific cycle, and office (or field) verification of sales data and property characteristics.

NEW CONSTRUCTION / DEMOLITION / REMODELING

New construction and office review procedures are identified and revised as required. The appraisals in the field cards that contain specific information regarding the property being appraised. These cards contain brief legal descriptions, ownership interests, property use

codes, property addresses, land size, and sketches of improvements as well as detailed information of any improvements.

Appraisal field inspections require the appraisers to check all information on the field cards and to update the information when necessary. New construction may be identified from field inspections or by permits obtained from the City of Memphis. The city of Estelline, City of Turkey, City of Lakeview do not issue building permits. The City of Memphis is valuable source of information regarding new construction and demolition in the Memphis area. Additionally, the Hall County Herald and Valley Tribune News articles are kept throughout the year for reference purposes. If physical inspections of the property indicate changes to improvements, the appraiser notes these changes in the field. Examples of types of changes that may be made are condition or age of improvements or additions to the improvement. New improvements are also added at this time.

In addition, mechanics liens filed at the Hall County Clerk's office are obtained and changes to accounts are made as indicated. New Mobile Home inspections, as verified with the Texas Department of Housing & Community Affairs, are also included in the yearly inspections. Individual properties are all reappraised due changes to the condition of the property in instances such as fire, remodeling or an addition or demolition of a portion of the improvement. Appraisers will perform detailed field inspections of properties if requested by the owner.

RE-INSPECTION OF PROBLEMATIC MARKET AREAS

Market areas within the Appraisal District where value are considered consistent or in relative harmony among individual properties, an area where physical, economic, governmental, and social forces and other influences (i.e. 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) have similar influences on property values. The affect on values may be real and quantifiable, or may be perceived. In either case, the market area is the first basis for market analysis.

Real property market area (neighborhoods), by property classification, are tested for consistently low or high sales ratios and/o high coefficients of dispersion in comparison to the general market or other identified Market Areas. Market area that fail any or all of these tests, or are known to be in a state of growth or change, are determined to be problematic. Field inspections are scheduled to verify and/or correct property characteristics. Additional sales data is researched and verified.

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 the property, photographing (if possible), and verifying the accuracy of the existing data. The field appraiser has an appraisal card of each property to be inspected and makes notes of changes, depreciation, remodeling, additions, etc. The annual re-inspection requirements for tax year 2015 and 2016 are identified and scheduled in the written reappraisal plan.

VERIFICATION OF SALES DATA AND PROPERTY CHARACTERISTICS

Sales information must be verified and property characteristic data contemporaneous with the date of sale captured. The sales ratio tools require that the property that sold must equal the property appraised in order that statistical analysis results will be valid and therefore be an accurate example of the universe of properties to which any adjustments will be applied. The conditions of each sales are investigated and confirmed, to the greatest extent possible, to determine its applicability to overall market analysis. Properties exhibiting typically high or low sales ratios (outliners) are especially scrutinized with references to the Texas Property Tax Code definition of Market Value, Sec. 1.04(7), and may be excluded from the general market analysis if the transaction conditions do not correspond to the aforementioned definition of Market Value.

All sales are verified through multiple attempts to acquire a sales price through outside sources, such as appraisers, real estate professionals, buyer, and seller. Deeds are reviewed for total consideration and market data letters are mailed to buyers and sellers on a monthly basis.

Data collection of real property involves maintaining data characteristics of the property on CAMA. The information contained in CAMA includes site characteristics, such as land size and improvement data, such as square footage of living area, year built (if available), quality of construction and condition. Field appraisers are required to use a property classification system that establishes uniform procedures for the correct listing of real property. All properties are coded according to a classification system. The field appraisers use property classification references during their initial training and as a guide in the field inspection of properties. Data collection for personal property involves maintaining information on software designed to record and appraise business personal property. The type of information contained in the business personal property file includes personal property such as business inventory, furniture and fixtures, machinery and equipment, with details such as cost and year acquired.

PILOT STUDY/IN-HOUSE STUDY

New and/or revised mass appraisal models are tested each tax year. Ratio studies, by market category, are conducted on proposed values 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 and calibrations are in compliance with USPAP, STANDARD RULE 6. The appraisal model used to determine property value is listed as follows.

Market Value of Residential Property

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)

Market Value of Commercial Property

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)

Market Value of Manufactured Housing

Market Value of Manufactured Housing =

Replacement Cost New x Total Percent Good + Depreciated Additive Values

Market Value of Commercial Personal Property

Market Value of Commercial Personal Property =

Units x (Price/Unit of Inventory) + Units x (Price/Unit of FFE x Percent Good) + Additive Values

(Verified and adjusted by yearly Personal Property Renditions)

Market Value of Vacant Lots or Acreage

Market Value of Vacant Lots or Acreage =

Units x Price/Unit

(As determined by Market Transactions)

1-d-1 Special Use Valuation (Ag Value)

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)

Market research indicates that common unit of comparison for new residential construction as well as sales of existing housing is the price paid per square foot. The value of extra item is based on their contributory value to the property. This value may be estimated by the price per square foot or a value of the item as a whole. This data is extracted from the market paired sales analysis. Pritchard & Abbott, Inc. prepares these schedules.

The residential schedule is based on quality construction, size of structure, age of structure, condition of structure, contributory value of extra items, and land value. Each of the variables had a direct impact on the cost as well as the value of a property. Following is an example of each of the variables and how they may affect market value.

Quality of Construction: Residential construction may vary greatly in quality of construction. The type of construction affects the quality and cost of the material used the quality of the workmanship, as well as the attention paid to detail. The cost and value of residential property will vary greatly depending on the quality of construction. As stated above, the District's residential schedules currently class houses based on quality of construction from 1 to 6, BR for Brick and FR for Frame. Residential properties are classified according to the following categories; BR1/ FR1- low quality, BR2/FR2- fair quality, BR3/FR3 – average quality, BR4/FR4 – good quality, BR5/FR5 – very good quality, BR6/FR6 excellent quality.

Size of Structure: The size of a building also has direct impact on its cost as well as its value. The larger the building, the less the cost per square foot. The District's schedules are graduated in size increments from 100 to 201 square feet, depending on the markets condition.

Condition of improvements: The District rate condition as excellent, very good, good, average, fair, poor, and very poor. Properties that, in the opinion of the Appraiser, are unlivable are not appraised according to the schedule. Rather, they are appraised at fair market or salvage value.

Extra Items: As stated above, extra items are valued according to their contributory value to the whole. Examples of extra items include additional bath, fireplace, and swimming pool.

Land Value: The District values land based on market transactions. Units of comparison depend on how the property is purchased and marketed. For example, large acreage tracts re usually purchased based on the price paid per acre. Commercial tracts are purchased based on the price per square foot/front foot, and residential properties are purchased based on the price per front foot. Depth factors are used to modify values according to market indicators. Land prices vary throughout the County; therefore, their values are dependent upon homogenous areas. Land schedules for residential, commercial, agriculture, and industrial properties are available upon request from the district.

The sales comparison model is our PC software. This program has the capability of selecting comparable sales according to the property use, quality of construction, location, size, condition, and age. The comparable sales may be selected by the computer or manually selected by the appraisers. Adjustments are made in dollar increments and may be made for tract, size, quality of construction, age of the improvements, condition of the improvements, functional adequacy, size of the improvements, and for additional items. As previously stated, inspections of property are made by exterior perspective; therefore, interior finish as well as interior components are assumed and are not adjusted. All financing for comparable sales is considered typical to the market. The final estimate of value is a correlation of the comparable sales after net adjustments have been deducted from the sales price to equal the subject property. The value by this method is estimated by the appraiser and is not a function of the computer.

VALUATION BY TAX YEAR

Using market analysis of comparable sales and locally tested cost data (if available), valuation models (Value per Square Foot Schedules) are specified and calibrated in compliance with supplemental standards from the International Association of Assessing Officers and the Uniform Standards of Professional Appraisal Practice. The calculated values are tested for accuracy and uniformity using ratio studies. Performance standards are those as established by the IAAO Standard on Ratio Studies. Property values in all market categories are analyzed and updated as necessary each reappraisal year.

In order to evaluate the accuracy of the schedule values, property sales information is collected throughout the year. Each property buyer receives a sales letter along with any other necessary forms as soon as the CAD office updates the ownership in the appraisal records. When the sales letter is returned, the sale amount and any other pertinent information are recorded within that parcel's sales records. Information is gathered also from real estate offices, other appraisers, other appraisal districts, and state reviewers. All credible information is included in the sales records and confirmation is attempted through additional sales letters (to buyers and sellers as necessary) or other personal contact. Given that the State of Texas is a non-disclosure state, and that the information needed by the Appraisal District is often confidential in nature, the market analysis performed is limited by the availability of pertinent and complete data, including sales prices, sales conditions and circumstances, income and expense data, etc. As discussed hereafter, each sale is initially considered (assumed) to be a market transaction unless otherwise proved. The resulting conclusions from the market analysis are therefore limited by those assumptions. The Mass Appraisal conducted yearly by the Hall CAD also can claim the Jurisdiction Exemption (USPAP) due to the limited scope and purpose of the appraisal, and considering the guidelines of the Texas Property Tax Code.

Each sale is analyzed to determine the conditions of the sale. All sales included in the study must be a "market value" transaction, as defined in the Texas Property Tax Code, Section 1.04(7), and quoted earlier in this manual. Any sale determined to not be an "arms length" transaction is then omitted from the final study. Several criteria are also considered when determining if each sales price needs any adjustment including, but not limited to: date of sale (in comparison to date of appraisal), special or unusual financing terms, inclusion of personal property, inclusion of intangible value, and significant variances between the market value and the sale price due to physical changes to the property that cannot be accounted for due to the January 1 target date. If adjustments can be made to the sales price to show a current, "arms length" value (including time and financing adjustments), the adjusted value is used in the ratio study. Any adjustments reported on sales prices must be discussed, debated, and approved by the appraisal supervisor and the Chief Appraiser.

Sales used to determine real estate value should not include value that can be attributed to personal property or intangible value. For example, if a home sells, and the transaction included personal property (vehicles, boats, furniture, free-standing appliances, tools, etc.), the value associated with that personal property should be deducted from the reported sales price. The resulting, adjusted sales price is then used in the ratio study. Likewise, commercial property transactions often include both personal property and intangible value. For example, if a motel sells and the buyer purchased the motel franchise along with the real estate, the value of the franchise (being intangible) should be deducted from the sales price before being used in any market study. Determining the value of any intangibles in any, transactions can be problematic and will require research into the industry and the local and similar markets. Although suspected by the appraisal staff, and often reported by buyers, adjustment for intangibles requires confirmation from outside sources and the seller.

Financing adjustments occur rarely. A typically, prudent buyers will strive to acquire the most reasonable financing available, and then purchase the property of their choice using that same financing. Typical financial arrangements usually accompany transactions that would not be considered "arms length" and would therefore be omitted from the ratio study.

Time adjustments are adjustments to the reported sales price of the property that are made when and if it can be proven that the general market trend in an area is changing over a given time period. While relatively simple to calculate in the abstract, time adjustments are extremely difficult to quantify without substantial data, especially in small, rural markets. If a typical property transfers more than one time in a given time period (ideally no more than 1 year), each time being an arms-length transaction, with typical financing, and without physical changes to the property, the difference in the sales prices can be attributed to the general market. This difference, expressed as a positive or negative percentage per month, can then be applied to other property's sales prices to adjust the price to a standard date, usually January 1 of the appraisal year. For example, a residence may sell for \$50,000 on June 1st and then sell again October 1st (5 months later) for \$55,000. The difference of \$5,000 (or 10% of the original sales price) is allocated as a market increase of 2% per month. A market Decrease is calculated in the same way. If this was an arms-length transaction of a typical property, that same percentage of increase or decrease can be used on other sales to adjust their sales prices to the January 1 target date.

A statistical analysis of each class of property is conducted using the available, credible, and adjusted sales information. Within each class of property, the appraisal district looks for not only an acceptable median value, but also a reasonable COD. Each of these values is considered when determining whether to adjust a class schedule, and by how much. The sample size of each class analysis is also a major consideration. Classes that exhibit little or slow activity are allowed a larger variance due to the fact that minimal data sets (small samples) may tend to give incomplete analysis or biased results for an entire statistical population.

Once a median value indicates that a particular property type or class needs adjustment, and the COD value reflects a consistent result, schedule values are recalculated to produce a revised analysis. The resulting median ratio should indicate that the adjusted appraised values of property more closely matches the current market value, as tested by the sales used in the analysis. The appraised values of all properties, sold and unsold, within that type or class are then recalculated, using the increase or decrease indicated by the ratio study, and submitted for notification.

A similar process is used to determine whether any neighborhood factors are needed by analyzing sales within a specific area (market segments) in comparison to the overall general market. These areas could be neighborhoods, cities, school districts or any other definable area within the appraisal district that displays market trends or values differing from the trends or values derived from the market as a whole. Any significant and quantifiable differences then need to be addressed with economic adjustments to the properties within the pertinent area.

RATIO STUDY PROCEDURES

- I. Collect and Post Sales Data
 - A. Solicit sales information from all new property owners through sales letters and/or personal contact
 - B. Collect sales information from outside appraisers and from fee appraisals presented
 - C. Utilize sales information from Comptroller's office.
 - D. Post sales information to the sales database
 1. Record actual sale price
 2. Note unusual financing
 3. Note non-arm length participants
 4. Adjust sales price for inclusion of personal property or intangible value
 5. Initiate frozen characteristics/partial sale codes if necessary
 - a) Imminent construction/renovation can bias any later analysis by including values not part of the original transaction
 - b) Sale including only a portion of the property described can also produce skewed results
- II. Preliminary Analysis
 - A. Run sales analysis (by type, group, or class) which includes any and all sales collected to date
 - B. Note median result and COD
 - C. Examine each sale included
 1. Compare sale ratio to median result
 2. Ratios substantially higher or lower than the median result (outliers) are singled out for further, in-depth analysis
 - a. Note seller-financial institutions, known real estate opportunists, probates, known persons who finance their own transactions
 - b. Note buyer-financial institutions, known real estate opportunists, and re-location companies
 - c. Examine deed records to confirm "arms length" violations not evident from examination of buyer and seller
 - i. contract for deed
 - ii. assumption of previous note

- iii. a typical financing
 - d. Re-inspect properties to rule out any physical differences from the current property records
 - e. Outlier sales that cannot be excluded or adjusted due to the reasons given above are nonetheless included in the subsequent analysis
 - D. Adjust original data set
 - 1. Omit sales that are not arms length
 - 2. Adjust sales values for time or financing if necessary and possible
 - 3. Adjust appraisal values for physical differences if applicable
- III. Secondary Analysis
- A. Run sales analysis (by type, group, or class) utilizing information from preliminary analysis
 - B. Note median result and COD
 - 1. Median value may or may not change significantly
 - 2. COD value should improve
 - C. Note sample size
 - 1. Compare number of sales within the class to the perceived number of total properties within the class
 - 2. From experience and discussion among the appraisal staff, determine whether any median result different from 1.00 is significant
 - D. Attempt to increase sample size—if necessary
 - 1. Utilize time adjustments if determinable
 - 2. Keep in mind marketing time for local market and any trends
 - 3. Be careful to not include more sales just for sales sake
 - 4. Changing markets and trends cannot be reflected in sales that are too old without accurate time adjustments.
 - E. Apply results of analysis to current records
 - 1. Any class whose median value is NOT SIGNIFICANTLY different from 1.00 does not require adjustment.
 - 2. Any class whose median value indicates that an adjustment is necessary should be analyzed
 - a) Look at typical depreciation (age/condition) for that class as reflected in the sales analysis

- b) Calculate increase necessary to raise the individual ratios to produce a median result of 1.00 (keeping in mind that because of depreciation, the percentage increase required is going to be necessarily larger than the difference in percentage points needed to reach a 1.00 result)
- c) Apply the calculated increase to the database
- 3. Repeat procedure for all classes determined to need adjustment
- F. Run analysis again to test results
- IV. Examine results to identify neighborhoods that need adjustment
 - A. As individual sales are examined, note any areas/neighborhoods/sub-divisions that consistently show ratios significantly different from the median result
 - B. Run analysis excluding the area in question
 - C. Run analysis including only the neighborhood in question
 - D. Check for significant variance between the two results
 - E. Apply neighborhood factor to correct variance

THE MASS APPRAISAL REPORT

Each tax year, the required 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 15th). The Mass Appraisal Report is completed in compliance with STANDARD Rule 6-8 of the Uniform Standards of Professional Appraisal Practice. The signed certification by the Chief Appraiser is compliant with STANDARD RULE 6-9 of USPAP.

VALUE DEFENSE

Evidence to be used by the appraisal district to meet its burden of proof for market value and equity in both informal and formal appraisal review board hearing is specified and tested. Taxpayers have the option to present their concerns informally to the chief appraiser, or by appointment with the Pritchard & Abbott staff. Should an understanding not be reached informally, the taxpayer may present their arguments to the appraisal review board as a formal appeal. The appraisal staff provided by Pritchard & Abbott Inc. defends the position of the chief appraiser before the ARB. The appraisal district has the burden of proof for the values as notified. Evidence for further consideration by the CAD or the ARB should be presented by the taxpayer.

THE WRITTEN REAPPRAISAL PLAN FOR HALL COUNTY APPRAISAL DISTRICT

PLANNING A REAPPRAISAL

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

1. Performance Analysis:
 - ¶ ratio study
 - ¶ equity of 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 revision 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 – 8 of 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.****

HALL COUNTY APPRAISAL DISTRICT

RESIDENTIAL, COMMERCIAL, RURAL, AND PERSONAL PROPERTY

2015/2016 REAPPRAISAL PLAN

Pursuant to Section 25.18 of the Texas Property Tax Code, the Hall County Appraisal District has established the following reappraisal plan.

- To provide for the reappraisal of all property within the district at least once every three (3) years, the plan establishes a two-fold approach:
 1. **Three-Year Cycle (Physical Inspections):** The CAD is divided into three areas. Each year, all real residential and commercial property within one of the areas will be reappraised, regardless of any ratio study/report findings. These areas are identified as follows:
 - a. **Area One: (2015)** All of the City of Memphis, City of Lakeview, and Abstracts (Rural land) North of the Prairie Dog Fork of the Red River falling within Hall County lines that are in the Memphis ISD portion of the Memphis Independent School District. This will include all residential, commercial properties within this area, all business personal property, mineral property, all agriculture values, and all utilities in the Appraisal District will be reappraised. To be completed in 2015.
 - b. **Area Two: (2016)** All of the City of Estelline, and Abstracts (Rural land) South of the Prairie Dog Fork of the Red River falling within the (Old Estelline ISD portion), Childress ISD portion in Hall County. This will include all residential, commercial properties within this area, all business personal property, mineral property, all agriculture values, and all utilities in the Appraisal District will be appraised. To be completed in 2016.
 - c. **Area Two: (2017)** All of the City of Turkey and Abstracts (Rural land) falling within Hall County lines that are in the Valley ISD portion of Valley Independent School District. This will include all residential, commercial properties within this area, all business personal property, mineral property, all agriculture values, and all utilities in the Appraisal District will be reappraised. To be completed in 2017.

- d. As mentioned prior, these yearly plans are designed to be flexible within the overall reappraisal plan. The specific workload within and between plan years may need to be adjusted to provide for complete and accurate reappraisals. Each of the cycle years will include those properties needing an inspection based on other methods of identification, such as new construction, new ownership, changing market area, new development, etc. as discussed in the section concerning data collection requirements.

****Note:** all income producing personal property within the CAD is appraised on an annual basis, regardless of its location.**

DEFINING MARKET AREAS IN THE DISTRICT:

- a. Hall County Appraisal District uses the market area of the cities of Memphis, Lakeview, Turkey and Estelline when setting the market for the following Categories: A, B, C, F and M
 - b. Hall County Appraisal District uses countywide market area for appraising Categories D and E.
2. **Annual Market Analysis:** In addition to the three-year cycle stated above, ratio studies shall be performed annually to determine areas or categories of properties within the CAD, which need to be reappraised within the current year based on sales ratios. Any areas or categories whose ratios are above or below statutory requirements, or are in identified areas of growth or change, shall be reappraised in the current year regardless of the area in which they are located.

This two-fold approach will insure not only that all residential and commercial property within the CAD is reappraised at least once every three years, but also that all other categories within the CAD are reviewed annually so that the appraisal district stays current with respect to market value in those areas where residential and/or commercial property values appear to be changing rapidly.

- Each inspection of property will identify and verify or update the relevant characteristics of the property. These characteristics include but are not limited to Name and address of owner, physical address, legal description, multiple ownerships, and any other means of differentiating the property.
- Market area analysis involves the examination of how physical, economic, governmental, and social forces and other influences affect property values. The effects of these forces are also used to identify, classify, and stratify comparable properties into smaller, manageable subsets of the universe of properties known as market areas. In an area of very stable and homogenous values, the market area may be the entire district. More often, the market areas are School Districts, Cities, or Sub-divisions. If adequate and accurate information is available, further delineation is possible. During the reappraisal, field appraisers are directed to be complete and consistent in the gathering of information on each property's characteristics. Once recorded, these characteristics can be used to sort market data (sales) to determine whether these characteristics have

any effect on the value of properties within the market area. Further, the degree of effect that these characteristics have on the value can be used to define and delineate the market areas, one from another. In homogeneous markets, the market areas will be fairly consistent over time. On the other hand, once the determination has been made to recognize a distinct market area, that area may change both qualitatively and quantitatively from year to year. Therefore, it is imperative that reappraisal data collection be complete.

- Each property inspection should verify the existing data for each property as recorded on the property appraisal card, record, or worksheet. Any changes from the existing records must be noted. These changes in data, or characteristics, of the property would include any and all things that may have an effect on property value. These characteristics include but are not limited to Site Value (location, footage, topography, agricultural usage, etc.), Improvement description (construction method, quality, condition, perceived and actual age, configuration, additives, etc.), and Economic or Legal limitations. These characteristics form the basis of differentiation and value development in our mass appraisal Value Schedules.
- Each property has an appraisal record or "card". This record shows the current characteristics and their contributory value to the property value as a whole. During reappraisal, these characteristics must be verified, modified, and updated so that not only the property be described fully and valued completely, the market data from sale transactions can be analyzed to verify, modify, and update the characteristics Value Schedules.

The previous mentioned Market Analysis is the method used to test the appraisal results. If all pertinent and relevant characteristics are recorded and valued, and the resulting appraisal value is not statistically consistent with a sample of market value indicators (market sales, construction cost analysis, income stream valuation), then the contributory values one or more of the characteristics must be modified or adjusted.

ORGANIZATION

Field inspections are carried out by the Pritchard & Abbott field appraisers as assigned by the Pritchard & Abbott supervisor, with input and direction from the Chief Appraiser. The field appraiser physically inspects areas required by the reappraisal cycle, checks all existing data, works building permits, take photographs of improvements (if possible), draws plans of new improvements for entry into computer, and 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 fieldwork notes and sketches is performed by appraisal district staff. The work card is scanned to the parcel account & filed.

The Prichard & Abbott staff performs market analysis. Sales data is gathered throughout the year by Hall County Appraisal District staff from deed records, sales conformation 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

presented to the chief appraiser for discussion and application to the universe of properties.

CALENDAR OF KEY EVENTS 2015 - 2016

2014

September 2014

1 – 30

Staff will pick up recorded deed from county clerk office and make ownership changes & mail out sales survey letters to both buyer & seller.

September 1

Hall CAD Closed – Holiday

September 5

Request appraisal cards from Childress CAD – Donley CAD – Collingsworth CAD – for parcels that overlap in the Memphis ISD for data entry. Staff will manually enter over-lapping values in the order in which they are received prior to creation of the 2014 tax roll.

September 19

Tax Rates set by entities for 2014 Levy Roll – Deadline

September 26

Mail out 2014 Tax Statements

October 2014

1 – 31

Staff will pick up recorded deed from county clerk office and make ownership changes & mail out sales survey letters to both buyer & seller.

October 13

Hall CAD Closed – Holiday

October 14-21

Meet with Agricultural Advisory Board.

October 22 – Dec 31

Field inspections begins for:

All of the City of Memphis, City of Lakeview, and Abstracts (Rural land) North of the Prairie Dog Fork of the Red River falling within Hall County lines that are in the Memphis ISD portion of the Memphis Independent School District. To be completed in Feb 2015.

November 2014

1 – 30

Staff will pick up recorded deeds from county clerk office and make ownership changes & mail out sales survey letters to both buyer and seller.

Field inspection continues for 2015 Reappraisal - Assist field appraiser with reappraisal functions as needed.

November 11
November 27-28

Hall CAD Closed – Holiday
Hall CAD Closed - Holiday

December 2014

1 – 31

Staff will pick up recorded deeds from county clerk office and make ownership changes & mail out sales survey letters to both buyer & seller.

Field inspection continues for 2015 Reappraisal to be completed by December 31, 2014 (dependent on weather conditions). Assist field appraiser with reappraisal functions as needed.

Begin planning sales ratio studies for all areas within the Hall CAD.

December 24 – 25

Hall CAD Closed - Holiday

2015

January 2015

1 – 31

Staff will pick up recorded deeds from county clerk office and make ownership changes & mail out sales survey letters to both buyer & seller.

January 1

Assessment date

January 1

Hall CAD Closed – Holiday

January 2

Staff will mail and process homestead application, special-use valuation applications, business personal property renditions, exemption applications, and other required forms.

January 14

Begin data entry and maintenance changes for 2015 this will continue until all data entry is complete.

February 2015
1 – 28

Staff will pick up recorded deeds from county clerk office and make ownership changes & mail out sales survey letters to both buyer & seller.

Process homestead exemption forms, 1-D-1 Ag application, and business personal property renditions.

February 1

2014 taxes become delinquent.

March 2015
1 – 31

Staff will pick up recorded deeds from county clerk office and make ownership changes & mail out sales survey letters to both buyer & seller.

Process homestead exemption forms, 1-D-1 Ag application, and business personal property renditions.

April 2015
1 – 30

Staff will pick up recorded deeds from county clerk office and make ownership changes & mail out sales survey letters to both buyer & seller.

Process homestead exemption forms, 1-D-1 Ag application, and business personal property renditions.

April 15

Rendition deadline (unless an extension has been requested and granted)

April 17

Complete data entry of all reappraisal and maintenance changes.

Finalize all field work and data collection activities.

April 22

Assist Pritchard & Abbott

- Run sales ratio reports
- Refine sales analysis & mass appraisal schedules

April 30

Deadline to notify each taxing unit in writing of the form in which the certified roll will be provided.

Deadline to certify estimated values to taxing entities.

May 2015
1 – 31

Staff will pick up recorded deeds from county clerk office and make ownership changes & mail out sales survey letters to both buyer & seller.

May 1

Deadline to file 1-d-1 Ag application Exemption.

May 15

Rendition deadline.

May 20

Prepare for mailing 2015 Notice of Appraised Value.

June 2015

1 – 30

Staff will pick up recorded deeds from county clerk office and make ownership changes & mail out sales survey letters to both buyer & seller.

Prepare for Appraisal Review Board Hearing.
Enter data in computer – make file packets on all Taxpayer Protest & respond to property owner inquires, protest, and questions from 2015 Notice of Appraised Value mailing.

Submit proposed 2016 budget to CAD board and taxing units.

Hold informal hearings if needed.

July 2015

1 – 31

Staff will pick up recorded deeds from county clerk office and Make ownership changes & mail out sales survey letters to both buyer & seller.

Enter data in computer – make file packets on all Taxpayer Protest & respond to property owner inquires, protest, and questions from 2015 Notice of Appraised Value mailing.

Hold ARB Hearing.

Enter into computer all changes as ordered by ARB.

Process and mail ARB orders.

July 17

ARB approval of appraisal records.

July 24

Chief Appraiser certifies appraisal roll to taxing units.

August 2015

1 - 31

Staff will pick up recorded deeds from county clerk office and make ownership changes & mail out sales survey letters to both buyer & seller.

August 5

Print and mail appraisal cards to Childress CAD for parcels in Hall County – Childress ISD overlap.

Effective & Roll back rate calculations.

Taxing unit publications on Tax Rate.

Tax rates set by entities for 2015 Levy Roll.

September 2015

1 – 30

Staff will pick up recorded deed from county clerk office and make ownership changes & mail out sales survey letters to both buyer & seller.

September 5

Request appraisal cards from Childress CAD – Donley CAD – Collingsworth CAD – for parcels that overlap in the Memphis ISD for data entry. Staff will manually enter over-lapping values in the order in which they are received prior to creation of the 2015 tax roll.

September 18

Tax Rates set by entities for 2015 Levy Roll – Deadline

September 26

Mail out 2015 Tax Statements

October 2015

1 – 31

Staff will pick up recorded deed from county clerk office and make ownership changes & mail out sales survey letters to both buyer & seller.

Meet with Agricultural Advisory Board.

October 28 – Dec 31

Field inspections begins for:

All of the City of Estelline, and Abstracts (Rural land) South of the Prairie Dog Fork of the Red River falling within the (Old Estelline ISD portion), Childress ISD portion in Hall County. This will include all parcels listed in this area.

Assist field appraiser with reappraisal functions as needed.

November 2015

1 – 30

Staff will pick up recorded deeds from county clerk office and make ownership changes & mail out sales survey letters to both buyer and seller.

Field inspection continues for 2016 Reappraisal - Assist field appraiser with reappraisal functions as need.

December 2015

1 – 31

Staff will pick up recorded deeds from county clerk office and make ownership changes & mail out sales survey letters to both buyer & seller.

Field inspection continues for 2016 Reappraisal to be completed by December 31, 2015 (dependent on weather conditions). Assist field appraiser with reappraisal functions as needed.

Begin planning sales ratio studies for all areas within the Hall CAD.

2016

January 2016 1 – 31

Staff will pick up recorded deeds from county clerk office and make ownership changes & mail out sales survey letters to both buyer & seller.

January 1

Assessment date

January 1

Hall CAD Closed – Holiday

January 2

Staff will mail and process homestead application, special-use valuation applications, business personal property renditions, exemption applications, and other required forms.

January 13

Begin data entry and maintenance changes for 2016 this will continue until all data entry is complete.

February 2016 1 – 28

Staff will pick up recorded deeds from county clerk office and make ownership changes & mail out sales survey letters to both buyer & seller.

Process homestead exemption forms, 1-D-1 Ag application, and business personal property renditions.

February 1

2015 taxes become delinquent.

March 2016 1 – 31

Staff will pick up recorded deeds from county clerk office and make ownership changes & mail out sales survey letters to both buyer & seller.

Process homestead exemption forms, 1-D-1 Ag application, and business personal property renditions.

April 2016

1 – 30

Staff will pick up recorded deeds from county clerk office and make ownership changes & mail out sales survey letters to both buyer & seller.

Process homestead exemption forms, 1-D-1 Ag application, and business personal property renditions.

April 15

Rendition deadline (unless an extension has been requested and granted)

April 17

Complete data entry of all reappraisal and maintenance changes.

April 22

Finalize all field work and data collection activities.

Assist Pritchard & Abbott

- Run sales ratio reports
- Refine sales analysis & mass appraisal schedules

April 30

Deadline to notify each taxing unit in writing of the form in which the certified roll will be provided.

Deadline to certify estimated values to taxing entities.

May 2016

1 – 31

Staff will pick up recorded deeds from county clerk office and make ownership changes & mail out sales survey letters to both buyer & seller.

May 1

Deadline to file 1-d-1 Ag application Exemption.

May 15

Rendition deadline.

May 20

Prepare for mailing 2016 Notice of Appraised Value.

June 2016

1 – 30

Staff will pick up recorded deeds from county clerk office and make ownership changes & mail out sales survey letters to both buyer & seller.

Prepare for Appraisal Review Board Hearing.

Enter data in computer – make file packets on all Taxpayer Protest & respond to property owner inquires, protest, and questions from 2016 Notice of Appraised Value mailing.

Submit proposed 2017 budget to CAD board and taxing units.

Hold informal hearings if needed.

July 2016

1 – 31

Staff will pick up recorded deeds from county clerk office and make ownership changes & mail out sales survey letters to both buyer & seller.

| | |
|---------------------------------|---|
| | Enter data in computer – make file packets on all Taxpayer Protest & respond to property owner inquires, protest, and questions from 2016 Notice of Appraised Value mailing. |
| | Hold ARB Hearing. |
| | Enter into computer all changes as ordered by ARB. |
| | Process and mail ARB orders. |
| July 18 | ARB approval of appraisal records. |
| July 25 | Chief Appraiser certifies appraisal roll to taxing units. |
| August 2016 1 - 31 | Staff will pick up recorded deeds from county clerk office and make ownership changes & mail out sales survey letters to both buyer & seller. |
| August 4 | Print and mail appraisal cards to Childress CAD for parcels in Hall County – Childress ISD overlap. |
| | Effective & Roll back rate calculations. |
| | Taxing unit publications on Tax Rate. |
| | Tax rates set by entities for 2016 Levy. |
| September 2016 1 – 30 | Staff will pick up recorded deed from county clerk office and make ownership changes & mail out sales survey letters to both buyer & seller. |
| September 8 | Request appraisal cards from Childress CAD – Donley CAD – Collingsworth CAD – for parcels that overlap in the Memphis ISD for data entry. Staff will manually enter over-lapping values in the order in which they are received prior to creation of the 2016 tax roll. |
| September 17 | Tax Rates set by entities for 2016 Levy Roll – Deadline |
| September 26 | Mail out 2016 Tax Statements |
| October 2016 1 – 31 | Staff will pick up recorded deed from county clerk office and make ownership changes & mail out sales survey letters to both buyer & seller. |
| | Meet with Agricultural Advisory Board. |

October 22 – Feb 2016

Field inspections begins for:

All of the City of Turkey and Abstracts (Rural land) falling within Hall County lines that are in the Valley ISD portion of Valley Independent School District. This will include all parcels located in this area.

Assist field appraiser with reappraisal functions as needed.

CERTIFICATION STATEMENT

I, Gina Chavira, Certify that to the best of my knowledge and belief:

- The statement of fact contained in this report are true and correct;
- The report analyses, opinion, and conclusions are limited only by the reported assumptions and limiting conditions, and is my personal, impartial, unbiased professional analyses, opinions, and conclusions.
- I have no present or prospective interest in the properties that are subject of this report, and I have no personal interest or bias with respect to the parties involved;
- My compensation is not contingent upon the reporting of a predetermined value or direction in value that favors the cause of the taxing jurisdiction, the amount of the value estimate, the attainment of a stipulated result, or the occurrence of a subsequent event;
- My analyses, opinion and conclusions were developed, and this report has been prepared, in conformity with the Uniform Standards of Professional Appraisal Practice.
- I have made or cause to be made a personal inspection of the properties that the subject of this report;

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.
3. Validation of sales transactions was attempted through questionnaires to buyer and seller and field review.

CERTIFICATION STATEMENT

"I, Gina Chavira, Chief Appraiser for the Hall 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."



Gina Chavira, Chief Appraiser

RESOLUTION

REGARDING HALL COUNTY APPRAISAL DISTRICT REAPPRAISAL PLAN FOR YEARS 2015 – 2016

WHEREAS, per Section 6.05 (i) of the Texas Property Tax Code as amended states:
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; and

WHEREAS, the Tax Entities within the boundaries of the Hall County Appraisal District were notified of a public hearing to be held on June 26, 2014 at 5:15 p.m.; and

WHEREAS, Hall County Appraisal District, pursuant to section 6.05 (i) of the Texas Property Tax Code; and,

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Hall County Appraisal District, pursuant to Section 6.05 (i) of the Texas Property Tax Code, met in open session and approved the Reappraisal Plan for year 2015 – 2016.

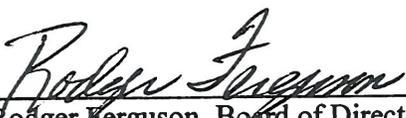
BE IF FURTHER RESOLVED that copies of the approved plan shall be distributed to the presiding officer of the governing body of each taxing unit participating in the district and to the State Comptroller within 60 days of the approval date.

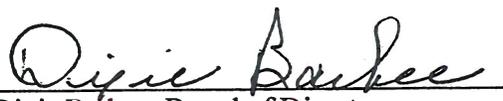
Passed and approved this 26th day of June, 2014.


Curtis Scrivner, Chairman


Ronda Lindsey, Secretary


Milton Beasley, Board of Director


Rodger Ferguson, Board of Director


Dixie Barbee, Board of Director





**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).



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

In 2005, the Texas Legislature, in 79th 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;

3. State appraiser regulatory agencies;
4. Third parties as may be authorized by due process of law; or
5. A duly authorized professional peer review committee except when such disclosure to a committee would violate applicable law or regulation.

It is unethical for a member of a duly authorized professional peer review committee to disclose confidential information presented to the committee.

When all confidential elements of confidential information are removed through redaction or the process of aggregation, client authorization is not required for the disclosure of the remaining information, as modified.

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 notwithstanding 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.

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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 3rd-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 prerequisites.

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 reasonable 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:

- February, after completion of personal property field inspections;
- May, after completion and mailing of Notices of Appraised Value;
- August, after completion of Appraisal Review Board hearings; and

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- November, after Certification of values.

The timetable regarding the sections described above is generally as follows:

- **Data Collection/Validation** occurs beginning in the Fall (October) prior to a tax year and continues into the Spring of that same tax year;
- **Valuation Analysis (Model Calibration)** occurs in the Spring (March - May) of a tax year and continues into the Summer (June - August) of that same tax year;
- **Individual Value Review Procedures** occurs concurrent, more or less, with Valuation Analysis; and
- **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

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:

- February, after completion of personal property field inspections;
- May, after completion and mailing of Notices of Appraised Value;
- August, after completion of Appraisal Review Board hearings; and
- November, after Certification of values.

The timetable regarding the sections described above is generally as follows:

- **Data Collection/Validation** occurs beginning in the Fall (October) prior to a tax year and continues into the Spring of that same tax year;
- **Valuation Analysis (Model Calibration)** occurs in the Spring (March - May) of a tax year and continues into the Summer (June - August) of that same tax year;
- **Individual Value Review Procedures** occurs concurrent, more or less, with Valuation Analysis; and
- **Performance Tests** occurs later in the tax year after certification of values.





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

**THE APPRAISAL OF
MINERAL, INDUSTRIAL, UTILITY, PERSONAL PROPERTY
AND
RESIDENTIAL REAL ESTATE
AS PER
UNIFORM STANDARDS OF
PROFESSIONAL APPRAISAL PRACTICE
(USPAP)**

January 1, 2014

Includes, in part, the Written Mass Appraisal Report and Certification as promulgated by USPAP Standards Rule 6-8 and Rule 6-9. This report was assembled in part with direct reference to the 2014-2015 Edition of USPAP as published by the Appraisal Standards Board of The Appraisal Foundation, authorized by United States Congress as the Source of Appraisal Standards and Appraiser Qualifications.

This report is intended to satisfy the requirements of S.B. 841, enacted by Acts 1997, 75th Leg., ch. 1039, § 22, effective January 1, 1998; amended by Acts 1999, 76th Leg., ch. 1295 (S.B. 1641), § 1, effective January 1, 2000, when performing mass appraisals for ad valorem (property) tax purposes. This is a work product of Pritchard & Abbott, Inc., Valuation Consultants (P&A), developed on behalf of, and for exclusive use by, P&A's valuation clients. Written permission must be obtained before reproduction of these contents or distribution to outside parties.



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POLICY STATEMENT OF PRITCHARD & ABBOTT, INC., ON THE
UNIFORM STANDARDS OF PROFESSIONAL APPRAISAL PRACTICE

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" (a previous USPAP version term) whereas explanations of appraisal methods and results are more concise versus lengthy in order to promote brevity, clarity, and transparency. 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 provided to our clients are not credible within the context of the intended use(s) of the appraisal.

DEFINITIONS

For the purpose of *Uniform Standards of Professional Appraisal Practice*, the following definitions apply:

APPRAISAL: (noun) an estimate of value; the act or process of estimating value; (adjective) of or pertaining to appraising and related functions, e.g. appraisal practice, appraisal services.

Comment: An appraisal must be numerically expressed as a specific amount, as a range of numbers, or as a relationship (e.g., not more than, not less than) to a previous value opinion or numerical benchmark (e.g., assessed value, collateral value).

APPRAISAL CONSULTING: the act or process of developing an analysis, recommendation, or opinion to solve a problem, where an opinion of value is a component of the analysis leading to the assignment results.

Comment: An appraisal consulting assignment involves an opinion of value but does not have an appraisal or an appraisal review as its primary purpose.

APPRAISAL PRACTICE: valuation services performed by an individual acting as an appraiser, including but not limited to appraisal, appraisal review, or appraisal consulting.

Comment: Appraisal practice is provided only by appraisers, while valuation services are provided by a variety of professionals and others. The terms appraisal, appraisal review, and appraisal consulting are intentionally generic and are not mutually exclusive.

APPRAISAL REVIEW: the act or process of developing and communicating an opinion about the quality of another appraiser's work.

Comment: The subject of an appraisal review assignment may be all or part of an appraisal report, workfile, or a combination of these.

APPRAISER: one who is expected to perform valuation services competently and in a manner that is independent, impartial, and objective.

Comment: Such expectation occurs when individuals, either by choice or by requirement placed upon them or upon the service they provide by law, regulation, or agreement with the client or intended users, represent that they comply.

APPRAISER'S PEERS: other appraisers who have expertise and competency in a similar type of assignment.

ASSIGNMENT: 1) an agreement between an appraiser and a client to provide a valuation service; 2) the valuation service that is provided as a consequence of such an agreement.

ASSIGNMENT RESULTS: an appraiser's opinions or conclusions developed specific to an assignment.

Comment: Assignment results include an appraiser's: a) opinions or conclusions developed in an appraisal assignment, not limited to value; b) opinions or conclusions developed in an appraisal review assignment, not limited to an opinion about the quality of another appraiser's work; or c) opinions or conclusions developed when performing a valuation service other than an appraisal or appraisal review assignment.

ASSUMPTION: that which is taken to be true.

BIAS: a preference or inclination used in the development or communication of an appraisal, appraisal review, or appraisal consulting assignment that precludes an appraiser's impartiality.

BUSINESS ENTERPRISE: an entity pursuing an economic activity.

BUSINESS EQUITY: the interests, benefits, and rights inherent in the ownership of a business enterprise or a part thereof in any form (including but not limited to capital stock, partnership interests co-operatives, sole proprietorships, options, and warrants).

CLIENT: the party or parties who engage, by employment or contract, an appraiser in a specific assignment.

Comment: The client may be an individual, group, or entity, and may engage and communicate with the appraiser directly or through an agent.

CONFIDENTIAL INFORMATION: information that is either: (a) identified by the client as confidential when providing it to an appraiser and that is not available from any other source; or (b) classified as confidential or private by applicable law or regulation.*

*Notice: For example, pursuant to the passage of the Gramm-Leach-Bliley Act in November 1999, some public agencies have adopted privacy regulations that affect appraisers. As a result, the Federal Trade Commission issued a rule focused on the protection of "non-public personal information" provided by consumers to those involved in financial activities "found to be closely related to banking or usual in connection with the transaction of banking." These activities have been deemed to include "appraising real or personal property." (Quotations are from the Federal Trade Commission, Privacy of Consumer Financial Information; Final Rule, 16 CFR Part 313.)

COST: the amount required to create, produce, or obtain a property.

Comment: Cost is either a fact or an estimate of fact.

CREDIBLE: worthy of belief.

Comment: Credible assignment results require support, by relevant evidence and logic, to the degree necessary for the intended use.

EXPOSURE TIME: estimated length of time that the property interest being appraised would have been offered on the market prior to the hypothetical consummation of a sale at market value on the effective date of the appraisal.

Comment: Exposure time is a retrospective opinion based on an analysis of past events assuming a competitive and open market.

EXTRAORDINARY ASSUMPTION: an assumption, directly related to a specific assignment, as of the effective date of the assignment results, which, if found to be false, could alter the appraiser's opinions or conclusions.

Comment: Extraordinary assumptions presume as fact otherwise uncertain information about physical, legal, or economic characteristics of the subject property; or about conditions external to the property, such as market conditions or trends; or about the integrity of data used in an analysis.

FEASIBILITY ANALYSIS: a study of the cost-benefit relationship of an economic endeavor.

HYPOTHETICAL CONDITION: a condition, directly related to a specific assignment, which is contrary to what is known by the appraiser to exist on the effective date of the appraisal results, but is used for the purpose of analysis.

Comment: Hypothetical conditions assume conditions contrary to known facts about physical, legal, or economic characteristics of the subject property; or about conditions external to the property, such as market conditions or trends, or about the integrity of data used in an analysis.

INTANGIBLE PROPERTY (INTANGIBLE ASSETS): non-physical assets, including but not limited to franchises, trademarks, patents, copyrights, goodwill, equities, mineral rights, securities, and contracts, as distinguished from physical assets such as facilities and equipment.

INTENDED USE: the use or uses of an appraiser's reported appraisal, consulting, or review assignment opinions and conclusions, as identified by the appraiser.

INTENDED USER: the client and any other party as identified, by name or type, as users of the appraisal, appraisal review, or appraisal consulting report by the appraiser on the basis of communication with the client as the time of the assignment.

JURISDICTIONAL EXCEPTION: an assignment condition established by applicable law or regulation, which precludes an appraiser from complying with a part of USPAP.

MARKET VALUE: a type of value, stated as an opinion, that presumes the transfer of a property (a right of ownership or a bundle of such rights), as of a certain date, under specific conditions set forth in the definition of the term identified by the appraiser as applicable in an appraisal.

Comment: The conditions included in market value definitions establish market perspectives for development of the opinion. These conditions may vary from definition to definition by generally fall into three categories: 1) the relationship, knowledge, and motivation of the parties (i.e., sellers and buyers); 2) the terms of sale (e.g., cash, cash equivalent, or other terms); and 3) the conditions of sale (e.g., exposure in a competitive market for a reasonable time prior to sale).

Appraisers are cautioned to identify the exact definition of market value, and its authority, applicable in each appraisal completed for the purpose of market value.

MASS APPRAISAL: the process of valuing a universe of properties as of a given date utilizing standard methodology, employing common data, and allowing for statistical testing.

MASS APPRAISAL MODEL: a mathematical expression, tool, or formula that describes how supply and demand factors interact in a market.

PERSONAL PROPERTY: identifiable portable and tangible objects, which are considered by the general public as being "personal" - for example, furnishings, artwork, antiques, gems, collectibles, machinery, equipment; all property not classified as real estate.

PRICE: the amount asked, offered, or paid for a property.

Comment: Once stated, price is a fact, whether it is publicly disclosed or retained in private. Because of the financial capabilities, motivations, or special interests of a given buyer or seller, the price paid for a property may or may not have any relation to the value that might be ascribed to that property by others.

REAL ESTATE: an identified parcel or tract of land, including improvements, if any.

REAL PROPERTY: the interests, benefits, and rights inherent in the ownership of real estate.

Comment: In some jurisdictions, the terms real estate and real property have the same legal meaning. The separate definitions recognize the traditional distinction between the two concepts in appraisal theory.

REPORT: any communication, written or oral, of an appraisal, appraisal review, or appraisal consulting assignment that is transmitted upon completion of an assignment.

Comment: Most reports are written and most clients mandate written reports. Oral report requirements (see the record Keeping Rule) are included to cover court testimony and other oral communications of an appraisal, appraisal review, or appraisal consulting service.

SCOPE OF WORK: the type and extent of research and analysis in an appraisal or appraisal review assignment.

SIGNATURE: personalized evidence indicating authentication of the work performed by the appraiser and the acceptance of the responsibility for content, analyses, and the conclusions in the report.

VALUATION SERVICES: services pertaining to aspects of property value.

Comment: Valuation services pertain to all aspects of property value and can be performed by appraisers and by others.

VALUE: the monetary relationship between properties and those who buy, sell, or use those properties.

Comment: Value expresses an economic concept. As such, it is never a fact but always an opinion of the worth of a property at a given time in accordance with a specific definition of value. In appraisal practice, value must always be qualified - for example, market value, liquidation value, or investment value.

WORKFILE: documentation necessary to support an appraiser's analysis, opinions, and conclusions.

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;
3. State appraiser regulatory agencies;
4. Third parties as may be authorized by due process of law; or
5. A duly authorized professional peer review committee except when such disclosure to a committee would violate applicable law or regulation.

It is unethical for a member of a duly authorized professional peer review committee to disclose confidential information presented to the committee.

When all confidential elements of confidential information are removed through redaction or the process of aggregation, client authorization is not required for the disclosure of the remaining information, as modified.

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.

COMPETENCY RULE

An appraiser must: (1) be competent to perform the assignment; (2) acquire the necessary competency to perform the assignment; or (3) decline or withdraw from the assignment. In all cases, the appraiser must perform competently when completing the assignment.

BEING COMPETENT

The appraiser must determine, prior to accepting an assignment, that he or she can perform the assignment competently. Competency requires:

- the ability to properly identify the problem to be addressed;
- the knowledge and experience to complete the assignment competently; and
- the recognition and compliance with all laws and regulations that apply to the appraiser or the assignment.

Competency applies to factors such as, but not limited to, an appraiser's familiarity with a specific type of property, a market, a geographic area, or an analytical method. The background and experience of appraisers varies widely, and a lack of knowledge or experience can lead to inaccurate or inappropriate appraisal practice. The Competency Rule requires an appraiser to have both the knowledge and the experience required to perform a specific appraisal service competently. If an appraiser has been deemed to not have the required competency, the following steps must be taken in acquiring competency in order for that appraiser to perform the assignment under USPAP requirements.

For assignments with retrospective opinions and conclusions (which are allowed under certain prescribed circumstances in property tax work), the appraiser must meet the requirements of this Competency Rule at the time of the assignment, rather than the effective date of the appraisal.

ACQUIRING COMPETENCY

If an appraiser determines he or she is not competent prior to accepting an assignment, the appraiser must:

- disclose the lack of knowledge and/or experience to the client before accepting the assignment;
- take all steps necessary or appropriate to complete the assignment competently; and
- describe, in the report, the lack of knowledge and/or experience and the steps taken to complete the assignment competently.

Competency can be acquired in various ways, including, but not limited to, personal study by the appraiser, association with an appraiser reasonably believed to have the necessary knowledge and/or experience, or retention of others who possess the necessary knowledge and/or experience.

In an assignment where geographic competency is required (certainly useful if not outright necessary in property tax appraisal assignments), an appraiser who is not familiar with the relevant market characteristics must acquire an understanding necessary to produce credible assignment results for the specific property type and market involved. Pritchard & Abbott, Inc., takes great pride in assigning and retaining appraisers who gain and then employ local knowledge and geographic competency in their appraisal assignments.

When an appraiser determines in the course of the assignment that he or she lacks the required knowledge and/or experience to complete the assignment competently, the appraiser must:

- notify the client;
- take all steps necessary or appropriate under the circumstances to complete the assignment competently; and
- describe, in the report, the lack of knowledge and/or experience and the steps taken to complete the assignment competently.

LACK OF COMPETENCY

If the appraiser cannot complete the assignment competently, the appraiser must decline or withdraw from the assignment.

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.

USPAP STANDARD 6: 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 (page 2), 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 notwithstanding 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.

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.

USPAP STANDARDS RULE 6-8: MASS APPRAISAL 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 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 USPAP report 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 USPAP report 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 3rd-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 prerequisites.

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 reasonable 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.

USPAP STANDARDS RULE 6-8: MASS APPRAISAL 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 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 USPAP report 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 USPAP report 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 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.

USPAP STANDARDS RULE 6-8: MASS APPRAISAL OF RESIDENTIAL REAL ESTATE

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 whereas additional documentation and detail may be available per certain Texas Property Tax Code provisions.

INTRODUCTION

Definition of Appraisal Responsibility: The Residential Division of Pritchard & Abbott, Inc. ("P&A" hereinafter), is responsible for developing fair and uniform market values for real estate parcels within certain Appraisal Districts. P&A contractually provides a wide degree of professional services depending upon each contract requirement.

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 USPAP report is not applicable to any real estate property that an appraisal district appraises outside of P&A's appraisal services, in which case the appraisal district's overall USPAP report should be referenced.

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 an extension of 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. 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 the standards of the International Association of Assessing Officers (IAAO) regarding its appraisal practices and procedures. P&A 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 proposals to the Office of the Chief Appraiser and is bound to produce mass appraisal estimates on real estate properties within the cost constraints of said proposals. 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 or at the specific request or direction of the Office of the Chief Appraiser.

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.

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.

Appraisal Resources

Personnel: The Real Estate staff consists of licensed Registered Professional Appraisers through the Texas Department of Licensing and Regulation (TDLR), and are qualified to provide the complete range of professional appraisal services required.

Data: Common data characteristics (within each county) for each property are collected in the field and entered into each respective district's computer data base. This property data drives the computer-assisted mass appraisal (CAMA) approach to valuation.

Information Systems: The mainframe systems are augmented by the 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. The appraiser supervising any given contract fields many of the public's questions or redirects them to the proper division.

VALUATION APPROACH (MODEL SPECIFICATION)

Area Analysis: Data involving economic forces such as demographic, patterns, employment and income patterns, trends in real estate property prices and rents, interest rates, availability of property, economic and climatic factors that may affect production of rural lands, are collected from various sources. Any information particular to a given region or appraisal district helps the appraisal staff determine market conditions or trends that may affect market value.

Neighborhood and Market Analysis: Neighborhood analysis involves the examination of how physical, economic, governmental and social forces and other influences affect property values. The effect of these forces are also used to identify, classify, and organize comparable properties into smaller, manageable subsets of the universe of properties known as neighborhoods. A neighborhood is defined by natural, man-made, or political boundaries and is established by a commonality based on land users, types and age of buildings or population, the desire for homogeneity, or similar factors.

Each neighborhood may be characterized as being in a stage of growth, stability, or decline. The growth period is a time of development and construction. In the period of stability, or equilibrium, the forces of supply and demand are about equal. The period of decline reflects diminishing demand or desirability. During decline general property use may change. Declining neighborhoods may become economically desirable again and experience renewal, reorganization, rebuilding, or restoration, marked by modernization and increasing demand. The appraisal staff must analyze whether a particular neighborhood is in a period of growth, stability, or decline and predict changes that will affect future use and value. In mass appraisal applications the information can be useful for comparing or combining neighborhoods or for developing neighborhood ratings, which are introduced as adjustments in mass appraisal models.

Site descriptions and analysis provide a description of the subject property and an analysis of factors that affect the market value of the site. Site analysis also provides a basis for allocating values to land and improvements, for analyzing comparable

sales to determine the highest and best use of the site, and for estimating locational obsolescence. A description of the subject building and other improvements provides a basis for analysis of comparable sales and rents; for the development of capitalization rates or multipliers; for highest and best use analysis of the site as improved; and for estimation of reproduction or replacement cost new and physical and functional depreciation. The analysis should show how the factors relate to the utility and marketability of the subject property, and, ultimately, its market value. The improvement analysis and the neighborhood analysis focus on similar considerations; for example, whether the improvements represent highest and best use and conform to the neighborhood.

The improvement analysis describes relationships among items and compares them to those in competing properties and to neighborhood standards. Items that will be treated as functional obsolescence in the cost approach need through analysis. The condition of building components is particularly important because it provides the basis for estimates of effective age and remaining economic life.

Currently P&A provides most of its real estate appraisal services in primarily rural areas. The ability to perform detailed neighborhood and market analysis is somewhat limited in these areas where the necessary data is sometimes nonexistent.

Highest and Best Use Analysis: Highest and best use analysis is the culmination of regional, neighborhood, and site analysis. All three are used to help the appraisal staff understand the factors affecting property values in the market being analyzed and the most probable use of the site in long-run economic equilibrium. Highest and best use is the reasonable and probable use that supports the highest present value as of the date of the appraisal. The highest and best use must be physically possible, legal, financially feasible, and productive to the maximum, that is, highest and best use. The analysis should be done as of the date of appraisal. Just as real estate values change, the highest and best use of a property may change over time.

DATA COLLECTION/VALIDATION

Data Collection Manuals: Appraisal manuals are developed and distributed to all appraisers involved in the appraisal and valuation of real estate properties. The appraisal manual is reviewed and revised to meet the changing requirements of field data collection.

Sources of Data: Each District's appraisal manual and schedules are adopted and maintained by the P&A appraisal staff. Data used to perform appraisals are generally collected with a joint effort among appraisers and Appraisal District staff. Physical inspections are performed by the appraisers for various situations whether it be a normal reappraisal, a reinspection requested by the District, working building permits, etc.

Data Collection Procedures: Field data collection is coordinated and organized by the field appraisers to insure uniformity in appraisal technique. The staff conducts field inspections and record information on a particular property field worksheet. This data is entered into the respective computer database and serves as the basis for the valuation.

VALUATION ANALYSIS

Cost Schedules: P&A generally adopts existing cost schedules within each Appraisal District in which we provide appraisal services. These schedules are maintained and adjusted as needed to reflect the current market value conditions that are present in each respective district.

Sales Information: Sales are generally collected by the Appraisal District staff and provided to P&A appraisal personnel for sales ratio analysis.

Statistical Analysis: Appraisers perform statistical analysis annually to evaluate whether values are equitable and consistent with market conditions. Appraisal statistics, central tendency and dispersion generated from sales are available for each class

of property. These summary statistics include mean and median ratios, standard deviation, and coefficient of dispersion. They provide the analysis information to determine both the level and uniformity of the appraised values involved in the study.

Market Adjustment: Depending upon the data provided by the sales ratio analysis, market value tables may be adjusted accordingly to reflect accurate market values within a particular class of property.

INDIVIDUAL VALUE REVIEW PROCEDURES

Field Review: P&A provides field inspections depending upon the contractual arrangement with the appraisal district. In most cases field inspections are done within the outline of the respective Appraisal District's Reappraisal Plan.

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 real estate 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 the Comptroller considers appropriate.

USPAP STANDARDS RULE 6-9: CERTIFICATION

I certify that, to the best of my knowledge and belief:

- The statements of fact contained in this report are true and correct.
- The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are my personal, impartial, and unbiased professional analyses, opinions, and conclusions.
- I have no (or the specified) present or prospective interest in the property that is the subject of this report, and I have no (or the specified) personal interest with respect to the parties involved.
- I have performed no (or the specified) services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment.
- I have no bias with respect to any property that is the subject of this report or the parties involved with this assignment.
- My engagement in this assignment was not contingent upon developing or reporting pre-determined results.
- My compensation for completing this assignment is not contingent upon the reporting of a pre-determined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
- My analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the *Uniform Standards of Professional Appraisal Practice*.
- I have (unless otherwise specified) made a personal inspection of the properties that are the subject of this report. *(If more than one person signs the report, this certification must clearly specify which individual(s) did and which individual(s) did not make a personal inspection of the appraised property.)*
- No one (unless otherwise specified) provided significant mass appraisal assistance to the person signing this certification. *(If there are exceptions, the name of each individual providing significant mass appraisal assistance must be stated.)*

| <i>Appraiser (a)</i> | <i>Date</i> | <i>Inspected Property?</i> | <i>Provided Significant Appraisal Assistance?</i> |
|--|-------------|----------------------------|---|
| | <i>Date</i> | <i>Yes / No</i> | <i>Yes / No</i> |
| <i>Appraiser (b)</i> | <i>Date</i> | <i>Yes / No</i> | <i>Yes / No</i> |
| <i>Supervising Appraiser / Dept. Manager</i> | <i>Date</i> | <i>Yes / No</i> | <i>Yes / No</i> |
| <i>District Manager</i> | <i>Date</i> | <i>Yes / No</i> | <i>Yes / No</i> |

List of other individuals who provided significant mass appraisal assistance in this assignment:

A signed certification is an integral component of the appraisal report.

- **When a signing appraiser has relied on work done by appraisers and others who do not sign the certification, the signing appraiser is responsible for the decision to rely on their work. The signing appraiser is required to have a reasonable basis for believing that those individuals performing the work are competent and that the work of those individuals is credible.**
- **An appraiser who signs any part of the mass appraisal report, including a letter of transmittal, must also sign this certification.**
- **The names of individuals providing significant mass appraisal assistance who do not sign a certification must be stated in the certification. It is not required that the description of this assistance be contained in the certification, but disclosure of their assistance is required in accordance with Standards Rule 6-8(j).**
- **The above certification is not intended to disturb an elected or appointed assessor's work plans or oaths of office.**

