

# **BURLESON COUNTY APPRAISAL DISTRICT**

## **REAPPRAISAL PLAN**

**2015 – 2016**

**Approved: August 26, 2014**

Board of Directors

Dan Harris, Chairman  
Curtis Doss, Vice-Chairman  
Melvin Schoeneman, Secretary  
Mike Sutherland  
Janet Carrigan  
Jason Urbanosky

Patricia J. Moraw, Interim Chief Appraiser

## Table of Contents

Preface	Page 1
Mission	
Legal Mandates	
Organization	Page 2
Scope of Responsibility	Page 3
Personnel Resources	Page 4
Reappraisal Cycle	Page 5
Appraised Method Summary	Page 6
Residential Properties	
Commercial Properties	
Minerals	
Utilities and Pipelines	
Industrial	
Reappraisal Schedule	Page 7
2015 Reappraisal	
2016 Reappraisal	
Schedule 2015	
Mass Appraisal System	Page.9
Analysis of Available Resources	
Performance Analysis	Page 10
Data Collection Analysis	
Land Analysis	
Area Analysis	
Neighborhood and Market Analysis	
Highest and Best Use Analysis	
Pilot Study by Appraisal Year	Page 13
Valuation by Appraisal Year	Page 14
Re-inspection of Problematic Market Areas	
Re-inspection of the Universe of Properties	
Field or Office Verification of Sales Data and Property Characteristics	
Appraisal Methods	Page 16
Sales Comparison Approach to Value	
Cost Approach to Value	
Income Approach to Value	
Special Valuation Process	
The Mass Appraisal Report	Page 18
Compliance	

## **Preface**

---

This document is intended to provide all interested parties a clear and concise view of the District's responsibilities and the activities planned for 2015 and 2016 appraisal years.

In compliance with Section 6.05(i) of the Property Tax code of the State of Texas, the board of directors of the Burleson Appraisal District conducted a public hearing to consider the adoption of the following reappraisal plan.

## **Mission**

---

The mission of Burleson Appraisal District is to discover, list and appraise property accurately, ethically, and impartially in order to estimate the market value of all property within the boundaries of the county for ad valorem tax purposes. The District must ensure that each taxpayer is given the same consideration, information and assistance as the next. This will be done by administering the laws under the property tax system.

Personnel must be well-educated and informed regarding laws, appraisal practices and the rights of taxpayers and the entities alike. This will be accomplished through attendance of key personnel to workshops conducted online for in-house staff development. Additionally, the staff will promote and adhere to professional standards and ethics as set forth by the Texas Department of Licensing, and the Appraisal standards Board of the Appraisal Foundation (USPAP), and the Texas Association of Appraisal Districts.

## **Legal Mandates**

---

Burleson Appraisal District was formed by the Texas Legislature in 1979 and is charged with the appraisal of all taxable property within the county.

The Texas Property Tax Code governs the legal, statutory, and the administrative requirements of the appraisal District. The appraisal District is responsible for local property tax appraisal, including the qualifications for special use valuation determination (e.g. wildlife and "ag" valuation) as well as exemption administration for the eleven (11) taxing units located in the county. Each taxing unit sets its own tax rate to generate revenue to pay for such things as police and fire protection, public schools, road and street maintenance, courts, water and sewer systems, and other public services. The District also determines eligibility for various types of property tax exemptions such as those for homeowners, the elderly, disabled veterans, and charitable and religious organizations.

Section 23.01(b) requires the appraisal District to determine market value of property according to generally accepted appraisal methods and techniques. Mass appraisal standards must comply with the Uniform Standards of Professional Appraisal Practice (USPAP).

According to Section 6.05(i) of the Property Tax Code, the District is required to hold public hearings and adopt a reappraisal plan by resolution before September 15 of even numbered years. The plan must list, in detail, the District's intentions for reappraisal of property over the following biennial period. Notice must be given at least 10 days before the hearing to the presiding officers of each of the District's participating taxing units. After adoption, the adopted plan must be delivered to each of the presiding officers of each of the District's

## Legal Mandates (continued)

---

participating taxing units as well as to the Texas Comptroller of Public Accounts within 60 days of approval.

The reappraisal plan is made under the guidelines of current law. This plan may be revised if the Legislature materially changes current laws governing appraisal districts, in the unfortunate event of a natural disaster, or other unforeseeable event. Any proposed revision is subject to public notification and ratification by the Board of Directors of the Burleson County Appraisal District.

## Organization

---

Appraisal Districts were created by the Texas Legislature in 1979 to provide uniform and equal appraisals of taxable properties at market value for ad valorem tax purposes. The District is governed by a board of directors elected by the governing bodies of the participating taxing units. The county tax assessor/collector serves on the board as an ex officio member.

The Board of Directors is responsible for:

- Establishing the District's office
- Adopting the District's annual operating budget
- Contracting for necessary services
- Hiring the chief appraiser
- Appointing the Appraisal Review Board (ARB)
- Appointing the Agricultural Advisory Board
- Making general policy of the District's operation

The board's authority over appraisals is limited. The board does not appraise property or review values on individual properties. These tasks are legally assigned to the Chief Appraiser and the Appraisal Review Board (ARB). The board's authority over appraisals comes through its duties to contract and budget for the District's operation.

The ARB is appointed by the Board of Directors to hear and settle formal taxpayer protests. The board's decisions are binding to the District's records, unless ordered to be changed due to lawsuits or arbitrations initiated by the property owner. The District may also file suit in District court to have an ARB decision overturned if the Chief Appraiser and the Board of Directors so choose.

The Agricultural Advisory board is appointed by the Board of Directors, according to the recommendation of the Chief Appraiser in accordance with Section 6.12 of the Property Tax Code. Its purpose is to advise the Chief Appraiser on the valuation and use of land that may be designated for agricultural use or that may be open space agricultural land within the District.

The Chief Appraiser is the chief administrator of the District and is responsible for the District's appraisal operations. The Appraisal District staff is employed and directed by the Chief Appraiser.

**Scope of Responsibility**

---

The Burleson County Appraisal District has prepared and published this reappraisal plan and appraisal report to provide the Board of Directors, taxing entities, and taxpayers with a better understanding of the district's responsibilities and activities.

The Burleson County Appraisal District is a political subdivision of the State of Texas created effective January 1, 1980. The provisions of the Texas Property Tax Code govern the legal, statutory, and administrative requirements of the appraisal district. The Board of Directors, elected by the taxing units within the boundaries of County, constitutes the district's governing body. The chief appraiser, appointed by the Board of Directors, is the chief administrator and chief executive officer of the appraisal district.

The appraisal district is responsible for local property tax appraisal and administration for all taxing entities in the county. The taxing entities are as follows:

<u>Burleson County</u>	<u>Burleson County Hospital District</u>
<u>Caldwell ISD</u>	<u>Burleson County Road</u>
<u>Caldwell, City of</u>	<u>Beaver Creek MUD</u>
<u>Snook ISD</u>	<u>Burleson County MUD #1</u>
<u>Snook, City of</u>	
<u>Somerville ISD</u>	
<u>Somerville, City of</u>	

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

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

### **Scope of Responsibility (continued)**

---

The Texas Property Tax Code defines special appraisal provisions for the valuation of residential homestead property (Sec. 23.23), productivity (Sec. 23.41), real property inventory (Sec. 23.12), dealer inventory (Sec. 23.121, 23.124, 23.1241, nominal (sec. 23.18) or restricted use properties (Sec. 23.83) and allocation of interstate property (Sec. 23.03). The owner of real property inventory may elect to have the inventory appraised at its market value as of September 1<sup>st</sup> of the year preceding the tax year to which the appraisal applies by filing an application with the Chief Appraiser requesting that the inventory be appraised as of September 1<sup>st</sup>.

The Texas Property Tax Code, under Section 25.18, requires each appraisal office to implement a plan to update appraised values for real property at least once every three years. The district's policy is to conduct a general reappraisal of taxable property every year. Appraised values are reviewed annually and are subject to change. All properties are appraised every year. Tax year 2014 and tax year 2015 are reappraisal years.

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, the appraisal district compares that information with the data for similar properties and with recent cost and market data. The district follows the standards of the International Association of Assessing Officers (IAAO) regarding its appraisal practices and procedures, and subscribes to the standards promulgated by the Appraisal Foundation, known as the Uniform Standards of Professional Appraisal Practice (USPAP) to the extent they are applicable.

### **Personnel Resources**

---

The Chief Appraiser is the chief administrative officer of the appraisal District. The Chief Appraiser employs and directs the District's staff, oversees all aspects of the appraisal District operations and performs either directly or through the District staff, a variety of operations.

The office of the Chief Appraiser is primarily responsible for overall planning, organizing, staffing, coordinating, and controlling of the appraisal District operations.

The District's appraisers are subject to the provisions of the Property Taxation Professional Certification Act and must be duly registered with the Texas Department of Licensing and Regulations.

The Appraisal District staff consists of 7 employees with the following classifications:

- Chief Appraiser
- Appraiser
- Appraiser Assistant – 2
- Records Processor
- Deed Processor
- Map Technician

### **Personnel Resources (continued)**

---

All personnel who are performing appraisal work are registered with the Texas Department of Licensing and Regulations (TDLR) and are required to take appraisal courses to achieve the status of Registered Professional Appraiser within five years of employment as an appraiser. After they are awarded their license, they must receive additional training as required to maintain certification. Failure to meet these minimum standards results in termination of employment.

Additionally, the Chief Appraiser ensures that personnel receive on-the-job training to ensure quality and uniformity of appraisals of all types of property and monitors appraisal activity to ensure that standardized appraisal procedures are being followed by all personnel.

Support functions include records maintenance, exemptions processing, information and assistance to property owners, support services for appeal hearings, ownership transfers and mapping.

The Appraisal District contracts for appraisal services for all property types. The Chief Appraiser is responsible for the oversight and compliance with all appraisal contracts.

### **Reappraisal Cycle**

---

The Burleson CAD, by policy adopted by the Board of Directors and the Chief Appraiser, reappraises all property in the District every year. The reappraisal may consist of field inspections, CAMA, or both. The reappraisal year is a complete appraisal of all properties in the District. Tax year 2015 is a reappraisal year and tax year 2016 is a reappraisal year. Each year, Notices of Appraised Value are mailed to all property owners in the District regardless of any changes that may or may not have occurred.

All real properties are physically examined at least once every three years in the universe of property areas. The market areas are defined by the school district where the property is located. Each school district is a separate market area and, are statistically analyzed annually to verify appraisal performance.

Every appraisal year the District inspects and appraises new construction and adds those properties to the appraisal roll. The District inspects and reappraises properties that have been remodeled or demolished, properties with additions, properties with any change or damage, and re-inspection of problematic market areas. Throughout the year, appraisal District staff maintains a folder (or list) of properties for field review (inspected) obtained from, but not limited to, personal observation, word of mouth, or newspaper articles pertaining to changes in property and economic conditions. All District staff remains alert to visual changes in properties, notes are made and information provided to field appraiser for verification and inspection. The field appraiser will conduct detailed field inspections of properties if requested by the owner and reappraise these properties as necessary. Notice of Appraised Value are mailed to property owners each year in compliance with the Property Tax Code.

Eagle Appraisal and consulting compiles all valid sales by school District. Problematic areas are further researched and may indicate the use of market modifiers. The use of these modifiers is the predominant method of adjusting sales for location and time. Values

## **Reappraisal Cycle (continued)**

---

throughout the county may be adjusted by use of market modifiers during the reappraisal year.

## **Appraisal Method Summary**

---

Appraisers in the field have property records that contain specific information regarding the property being appraised. These records contain brief legal descriptions, ownership interest, property use codes, property addresses, land size and characteristics, sketches of improvements as well as any available detailed information of the improvements.

Re-inspections require appraisers to check all information on the property and the property record, and to update the appraisal roll as necessary. The appraiser's primary duty is to ensure the accuracy of property records. Appraisers note their opinion of classification, condition and characteristics of the property. The appraiser will measure and list those dimensions. Appraisers take digital photos of each property field inspected. All work is reviewed by quality control measures.

In addition to reappraisal, all exemptions and special valuations for properties in the reappraisal area are reviewed to verify qualification. For instance, properties with a homestead exemption should not be vacant. Properties receiving "ag" value should show signs of agricultural use. The appraiser notifies the records technician of properties in question.

- **Residential Property** – Residential properties shall be appraised by the same or similar appraisal methods and techniques. However, each property shall be appraised based upon the individual characteristics that effect the property's market value, and all available evidence.
- **Commercial and Business Personal Property** – Commercial real estate is observed by onsite review. Real estate accounts are analyzed against sales of similar properties in the county as well as similar communities in surrounding counties. The income approach to value is utilized to appraise properties where the highest and best use is as income-producing property such as shopping centers, apartment complexes, motels and hotels, and other types of property that typically sell based on net operating income. The cost approach is typically used to value industrial properties due to the lack of reliable income data and comparable sales. This is the recommended approach of the International Association of Assessing Officers (IAAO).

The appraiser concurrently updates Business Personal Property (BPP) records by adding new businesses to the appraisal roll and deleting businesses that no longer exist. A rendition is left for new businesses. The appraisers walk into businesses to make quality and density observations. Similar businesses are analyzed annually to determine appraisal consistency. Businesses are categorized using Standard



## Appraisal Method Summary (continued)

Industry Classification (SIC) codes. Rendition laws provide additional information on which to base values of BPP accounts.

- **Minerals** – Burleson Appraisal District contracts with Pritchard and Abbott of Houston for the valuation of mineral accounts. Producing oil and gas wells are appraised annually. The most recent production data available from the Texas Railroad commission is downloaded into appraisal software that estimates economically recoverable reserve. Those reserve are then valued based upon state mandated pricing using the previous year's average of oil and gas values. A discount is applied over the anticipated life of the well in order to consider the value of money overtime to convert those reserves. Each producing lease is valued as a unit. The unit value is then divided among owners listed in the division order, equal to their percentage of interest in the lease.
- **Utilities and Pipelines** – Utility companies and pipelines are appraised annually by Pritchard and Abbott of Houston. A utility company's total value in the state is estimated using cost, market, and income approaches. Then the entire value is allocated using the components that have situs in the tax units of Burleson Appraisal District. Components include such things as miles of transmission lines, miles of distribution lines, substations and the like for an electric utility.
- **Industrial** – Industrial real estate and personal property is appraised annually by Pritchard and Abbott. The methods used in local commercial appraisal are applied to industrial properties. The appraisers employed by Pritchard and Abbott have the education and experience necessary for accurate estimates of value.

## Reappraisal Schedule

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.

Eagle Appraisal and Consulting will begin the field inspections in September of 2014 and will complete all inspections and schedules by April 1, 2015 for the 2015 tax year.

Eagle Appraisal and Consulting will begin the field inspections in September of 2015 and will complete all inspections and schedules by April 1, 2016 for the 2016 tax year.

### **2015 Reappraisal**

The 2015 Reappraisal will involve the inspection of approximately 7,800 accounts designated in the Caldwell ISD, based on 2014 completed appraised totals. Appraisers will inspect any other accounts flagged/noted for review.

## **2015 Reappraisal Schedule (continued)**

---

Eagle appraisers will be responsible for inspection of commercial property and business personal property. The appraisal District appraiser will be responsible for administering special inventory.

### **2016 Reappraisal**

The 2016 Reappraisal will involve the inspection of approximately 12,370 property accounts in the Snook and Somerville ISDs, based on 2015 totals. Appraisers will inspect any real property accounts in Caldwell ISD flagged/noted for review.

Eagle appraisers will be responsible for inspection of real city property. District appraiser will be responsible for commercial property and business personal property.

### **2015 Reappraisal Schedule**

#### **September, 2014:**

Begin on-site inspections

#### **Mid December, 2014:**

1. Begin planning sales ratio studies for all areas within the CAD.
2. Gather current sales data from sales confirmation letters deed records, and other sources.

#### **January to March, 2015:**

1. Mail homestead applications, special-use valuation applications, personal property renditions, exemption applications, and any other required forms.
2. Complete field inspections as provided by the reappraisal plan area.
3. Begin running sales ratio reports. Compare with CAD values and sales information.
4. Continue working with the Comptroller's Office regarding the ratio study.
5. Identify necessary schedule adjustments.
6. Begin update of the USPAP report (Mass Appraisal Report).
7. Begin working renditions.

#### **March through April, 2015:**

1. Continue running sales ratio reports.
2. Refine sales analysis and mass appraisal schedules.
3. Statistically test schedules.
4. Complete data entry of all reappraisal and maintenance changes.
5. Assist field appraiser with reappraisal functions as needed.
6. Finalize all field work and data collection activities.
7. Execute mass appraisal/maintenance activities as required.
8. Prepare for mailing 2015 Notices of Value.
9. Mail appropriate letters concerning homesteads, special-use appraisals, etc.
10. Continue working renditions.

#### **May through June, 2015:**

1. Mail notices of value.
2. Hold informal hearings.

### **2015 Reappraisal Schedule (continued)**

---

3. Respond to property owners' inquiries, protests, and questions from notice mailings.
4. Mail notices of ARB hearing appointment letter.
5. Mail protest hearing reminder letters.
6. Provide certified estimated values to taxing units.
7. Hold ARB hearings.
8. Mail ARB certified change/no change orders.
9. Mail appropriate ARB pending decision letters.
10. Mail appropriate penalty letters on non-rendered personal property.

#### **July, 2015:**

1. Complete the process of mailing certified ARB orders.
2. Enter into computer all changes as ordered by ARB and notify other CADs if the ordered change falls into an over-lapping area.
3. ARB approval of appraisal records by July 20<sup>th</sup>.
4. Certification of appraisal records and values to taxing units by July 25<sup>th</sup>.

#### **As needed throughout the year 2015:**

1. Handle any outstanding protests by scheduling ARB hearings.

### **Mass Appraisal System**

---

Computer Assisted Mass Appraisal (CAMA) system revisions are completed by the Information Systems Software Provider. System revisions and procedures are performed by the Provider. Burleson County Appraisal District contracted with the firm of Pritchard and Abbott for these services.

Appraisal information for each area of work, maps for each area of work, and appraisal cards showing sketches and pictures of the properties included in the area of work will be provided by the District to the field appraisers.

The District anticipates devoting some programming time to allow for the development of new reports to help manage and edit the information provided by the field appraisers.

After reviewing the 2015-2016 reappraisal plan and based on prior reappraisal efforts, the Burleson County Appraisal District Board of Directors and management believe the information system has the necessary resources to successfully complete the 2015-2016 reappraisal effort while developing the high level of appraisal performances the taxing units of the District expect and the property owners deserve.

### **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 Burleson County Appraisal District, and attached to the written biennial plan by reference. Reappraisal plan reflects the Real property re-inspection and personal property on-site review to be accomplished in the 2015-2016 time period was considered in the adoption of the 2015 budget. Funds were designated for Real and Personal property.

### **Analysis of Available Resources (continued)**

Existing appraisal practices, which are continued from year to year, are identified and methods utilized to keep these practices current. In the reappraisal year, real property appraisal depreciation tables are tested against verified sales data to ensure they represent current market data. Personal property density schedules are tested and analyzed based on renditions and prior year documentation. Due to lack of sales of personal property in the district, the Comptroller's Guide may be utilized to appraise personal property and for testing and analysis purposes.

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

The Texas Legislature amended the appraisal review board appeal process by allowing arbitration in addition to filing suit in District Court with certain limitations. It is anticipated that the number of arbitration requests will increase as the public becomes more informed of this option. Time and effort expended on arbitration cases is a good indicator that additional recourses as well as an increase in staffing may become necessary as the arbitration process evolves.

All appraisal companies may face arbitration or lawsuits in any appraisal year.

Existing appraisal practices, which are continued from year to year, are identified and methods utilized to keep these practices current are specified. Current cost schedules for data. Personal property density schedules are tested and analyzed based on rendition and residential and commercial real properties are derived and updated from Marshall and Swift Valuation Service. Marshall and Swift Valuation Service is a national based cost manual and is generally accepted throughout the nation by the real estate appraisal industry. In a reappraisal year, real property appraisal depreciation tables and cost new tables are tested against verified sales data to ensure they represent current market prior year protest hearing documentation.

Changes in legislation involving appraisal districts may occur in 2015 when the legislature is called into session. These new laws may require adjustments to the budget, staffing, and programming.

### **Performance Analysis**

The equalized values from the previous tax year are analyzed with ratio studies to determine the appraisal accuracy and appraisal uniformity overall and by market area within property reporting categories. Ratio studies are conducted in compliance with the current *Standard on Ratio Studies* of the International Association of Assessing Officers. Mean, median, and weighted 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. 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 excluded from reappraisal due to lack of data to support reappraisal will be tested and analyzed to arrive at an indication of uniformity or equity of existing appraisals.

## **Performance Analysis (continued)**

Sales ratio studies are used to evaluate the District's mass appraisal performance. These studies not only provide a measure of performance, but also are an excellent means of improving mass appraisal performance. The District uses ratio studies not only to aid in the reappraisal of properties, but also to test the State Comptroller's Property Tax Division Annual Property Value Study results.

Eagle Appraisal and Consulting usually begins ratio studies in late January or early February, with all sales reports being compiled by school district. Within the boundaries of the districts, the ratios are analyzed to identify comparable neighborhoods. Outliers and questions that were not identified in the field are reviewed and analyzed. Field cards indicating the results of field inspections of the sold properties are available for each individual sale to further aid in making decisions regarding outliers.

Outliers are characterized as having low or high ratios. They can result from an erroneous or unrepresentative sale price, an error in the appraisal, or a mismatch between the property sold and the property appraised.

Remaining sales are then correlated to indicate comparable neighborhoods within each school district. The sales from each comparable neighborhood are grouped (stratified) according to classification. The median ratio indicated by the sales is then compared to the desired ratio. The coefficient of dispersion is also studied to indicate how tight the ratios are in relation to the measures of central tendency. The median and coefficient of dispersion are good indicators of the types of changes to be made if any are necessary. The use of market modifiers is the predominant method of adjusting sales for location and time to indicate market values. Market modifiers are methods of adjusting property to equal the market without changing the schedules.

### **Data Collection Analysis**

Burleson County Appraisal District cost and value schedules include land, residential improved, commercial improved, and personal property. Data sources currently used by the District include cost information from Marshall and Swift Valuation Service, cost data obtained from local contractors, and renditions provided by the property owners. Marshall and Swift Valuation Service is a national based cost manual and is generally accepted throughout the nation by the real estate appraisal industry. This cost manual is based on cost per unit or square foot and also uses the unit in place method. The unit in place method involves the estimated cost by using actual building components. This national based cost information service provides the base price of buildings by classification with modifications for equipment and additional items. The District's schedule is then modified for time and location.

Field and office procedures are reviewed and revised as required for data collection. Activities for each tax year include new construction, demolition, remodeling, re-inspection of problematic market areas, re-inspection of the universe of properties on a specific cycle, and field or office verification of sales data and property characteristics. On properties that have transferred ownership, the District will verify the sales price and individual property characteristics as of the date of the sale through field inspection and office research.

## **Performance Analysis (continued)**

Renditions are confidential sources and cannot be used for specific information. However, data from renditions may be compared with data obtained from cost manuals and used to test schedules for accuracy.

Data on individual properties is also collected from the field, compiled, and analyzed. Buildings and other improvements are inspected in the field, measured, and classified. The appraiser estimates the age and condition of the improvements. This data is used to compile depreciation tables. Any notes pertaining to the improvements are made during inspection.

### **Land Analysis**

Residential land valuation analysis is conducted prior to neighborhood sales analysis. The value of the land component to the property is estimated based on available market sales for comparable and competing land under similar usage. A comparison and analysis of comparable land sales is conducted based on a comparison of land characteristics found to influence the market price in the neighborhood. Computerized land tables store the information required to consistently value individual parcels within neighborhoods given known land characteristics. Specific land influences are considered, where necessary, and depending on neighborhood and individual lot or tract characteristics, to adjust parcels outside the neighborhood norm for such factors as access, view, shape, size, and topography. The appraisers use abstraction and allocation methods to insure that estimated land values best reflect the contributory market value of the land to the overall property value.

### **Area Analysis**

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

### **Neighborhood and Market Analysis**

Neighborhood analysis involves the examination of how physical, economic, governmental and social forces and other influences affect property values. The effects of these forces are also used to identify, classify, and stratify comparable properties into smaller, manageable subsets of the universe of properties known as neighborhoods. Residential valuation and neighborhood analysis is conducted on various market areas within the district. Analysis of comparable market sales forms the basis of estimating market activity and the level of supply and demand affecting market prices for any given market area.

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

The highest and best use of property 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 its maximum. The highest

### **Performance Analysis (continued)**

and best use of residential property is normally its current use. This is due, in part, to the fact that residential development, in many areas, through use of deed restrictions and zoning, precludes other land uses. Residential valuation undertakes reassessment of highest and best use in transition areas and areas of mixed residential and commercial use. In transition areas with ongoing gentrification, the appraiser reviews the existing residential property use and makes a determination regarding highest and best use. Once the conclusion is made that the highest and best use remains residential, further highest and best use analysis is done to decide the type of residential use on a neighborhood basis. In areas of mixed residential and commercial use, the appraiser reviews properties in these areas on a periodic basis to determine if changes in the real estate market require reassessment of the highest and best use of a select population of properties.

### **Pilot Study by Appraisal Year**

New and/or revised mass appraisal models are tested each tax year. Ratio studies, by market area, 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 calibration are in compliance with USPAP, STANDARD RULE 6.

Residential valuation schedules are cost-based tables modified by actual sales with the cost reflecting the actual replacement cost new of the subject property, market research indicates that the 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 items 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 by paired sales analysis and conversations with local appraisers and brokers. These schedules are formulated from the Marshall and Swift Valuation Service Residential Handbook.

The residential schedule is based on quality of construction, size of structure, condition of structure, contributory value of extra items, and land value. Each of these variables has 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.

1. 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. The District's Appraisal Manual contains an expanded description of classifications used and is attached by reference.
2. Size of structure: The size of a building also has a 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, depending on market conditions. Marshall and Swift Valuation Service also supports this size factor. The District's Appraisal Manual contains an expanded description of size increments and square footage breakdown's and is attached by reference.

### **Pilot Study by Appraisal Year (continued)**

3. Condition of improvements: The District rates conditions as very poor, poor, fair, average, good, very good, and excellent. Upon physical inspection appraisers, using their own judgment of age and condition of the structure, applies a depreciation factor. This factor is based generally on one (1) percent for each two years of age. Properties that, in the opinion of the appraisers, are unlivable are not appraised according to the schedule. Rather, they are appraised at salvage value or are marked as no value at all.
4. Age of Structure: The District's field appraiser assigns an approximate effective age. This method is supported by conversations with local appraisers and builders who estimate the economic life of residential properties to be approximately 50 years. Properties in the age 51 and over bracket are given the maximum amount of depreciation unless remodeling or very good upkeep has allowed the structure to maintain a longer life. The effective age and chronological age may or may not be the same depending on the condition of the structure. This depreciation factor is generally based on one (1) percent for each two years of age.
5. Extra items: Extra items are valued according to their contributory value to the whole. Examples of extra items include covered porches, patios, screened or enclosed porches, storage buildings, swimming pools, etc. The District's Appraisal Manual contains more specific information regarding extra items and is attached by reference.
6. Land Value: The District values land based on market transactions. Units of comparison depend on how the property is purchased and marketed. Large acreage tracts are usually purchased based on the price per acre. Commercial tracts are purchased based on the price per square foot, and residential properties are purchased based on price per front foot. Depth factors are used to modify values according to market indicators. Land prices vary throughout the District, therefore, their values are dependent upon homogenous areas. Land schedules for residential, commercial, agricultural, and industrial properties are available upon request from the District.

Inspections of property are made by exterior perspective, so the 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 Appraisal Year**

Using market analysis of comparable sales and locally tested cost data, market area specific income and expense data, valuation models (Cost 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 areas are updated each reappraisal year. Tax year 2015 is a reappraisal year. Tax year 2016 is a reappraisal year.



## **Valuation by Appraisal Year (continued)**

---

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

Real property market areas, by property classification, are tested for low or high ratio sales and/or high coefficients of dispersion. Market areas that fail any or all of these tests are determined to be problematic. Field inspections are scheduled to verify and/or correct property characteristic data. Additional sales data is 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, 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 changes, remodeling, additions, etc. The annual re-inspection requirements for tax years 2015 and 2016 are identified and scheduled in the written reappraisal plan.

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

Sales information is received from various sources. These sources include conversations with local real estate appraisers, agents, and brokers. Also, from deed transactions, the District mails out sales surveys to sellers and purchasers in an effort to obtain additional sales information that may not be otherwise discovered.

These sales are compared to the existing data on the field cards and changes are made as indicated. These changes include age and condition as well as any improvements made to the property before the sale takes place. When sales information indicates a difference in the improvement's square footage, the buildings are re-measured.

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.

*Note: The district will describe its valuation methods by property types.*

## ***Appraisal Methods***

---

### RESIDENTIAL REAL PROPERTY

- Sales Comparison Approach to Value
- Cost Approach to Value
- Income Approach to Value

### SPECIAL INVENTORY RESIDENTIAL PROPERTY

- Sales Comparison Approach to Value
- Cost Approach to Value
- Income Approach to Value

### MULTIFAMILY RESIDENTIAL PROPERTY

- Sales Comparison Approach to Value
- Cost Approach to Value
- Income Approach to Value

### COMMERCIAL REAL PROPERTY

- Sales Comparison Approach to Value
- Cost Approach to Value
- Income Approach to Value

### VACANT REAL PROPERTY

- Sales Comparison Approach to Value
- Cost Approach to Value
- Income Approach to Value

### INDUSTRIAL REAL PROPERTY

- Sales Comparison Approach to Value
- Cost Approach to Value
- Income Approach to Value

### UTILITIES

- Sales Comparison Approach to Value
- Cost Approach to Value
- Income Approach to Value

### MINERAL INTEREST

- Sales Comparison Approach to Value
- Cost Approach to Value
- Income Approach to Value

### SPECIAL VALUATION PROPERTIES

- Agricultural Use
- Wildlife Management
- Timber Use

### BUSINESS TANGIBLE PERSONAL PROPERTY

- Sales Comparison Approach to Value
- Cost Approach to Value
- Income Approach to Value

### INDUSTRIAL TANGIBLE PERSONAL PROPERTY

- Sales Comparison Approach to Value
- Cost Approach to Value
- Income Approach to Value

## Appraisal Methods (continued)

---

### **Sales Comparison Approach to Value**

The sales comparison approach to value is utilized by grouping or clustering sales within the specified neighborhoods and classification of properties. The sales are then tested against appraised values to indicate a ratio for the neighborhood. A neighborhood is a grouping of complementary land uses affected equally by the four forces that influence property value: social trends, economic circumstances, governmental contracts and regulations, and environmental conditions. These factors have an impact on the value of properties within this grouping and in turn on properties being appraised.

Individual neighborhood boundaries within the District vary according to market indications and the type of property being appraised. The boundaries of these neighborhoods may be physical, geographical, or political in nature. Generally, residential neighborhoods consist of individual subdivisions or clusters of subdivisions that contain similar properties located within the same school district. Commercial neighborhoods may be smaller areas within a city, an entire city, or rural area. Industrial neighborhoods may include the entire District. Defining neighborhood boundaries depends on the subject of the appraisal assignment.

If sufficient sales are not found, then sales from competing neighborhoods are found and appropriate adjustments are made in the form of market modifiers. These modifiers are applied to cost schedules to indicate mass appraisal values for a given neighborhood. Therefore, the sales comparison approach is actually blended with the cost approach to create a hybrid of these two approaches to value.

### **Cost Approach to Value**

The District uses a hybrid cost model developed from Marshall and Swift Valuation Service. The cost model categorizes and values property by class, age, condition, and extra items. Depreciation is derived by age/condition and any additional depreciation that may be necessary. Land value is added to indicate a preliminary market value for like properties within the subject neighborhoods. After cost schedules, depreciation, and land values are applied, then a market modifier may be necessary to adjust the values to actual market conditions. These modifiers apply to improvements only and do not adjust land values. Therefore, the cost approach to value is actually a hybrid of the sales comparison and cost approaches to value.

### **Income Approach to Value**

The income approach to value or rent multipliers are currently not a reliable indicator of value for residential mass appraisal reports unless rents are specified. Databases or data sources for income producing residential properties are not available in the Burleson County area. Therefore, the income approach to value is not used in the residential mass appraisal report but is used for other types of properties.

*Additional information concerning approaches to value for specific types of properties, such as minerals, utilities, industrial, railroads, pipelines, industrial personal property, etc. may be found in the Plan provided by the Appraisal Company that performs those appraisals and is attached to this plan by reference.*

## **Appraisal Methods (continued)**

---

### **Special Valuation Process**

Agricultural Use: Market value for agricultural property is established by acceptable appraisal methodology.

The District also values agricultural property by the income approach as set forth in the Texas Property Tax code. This is a special valuation process as there are parameters set forth in the Code regarding capitalization rates. Income and expenses for each different category of agricultural use is estimated from surveys, actual rental data obtained by property owners as well as conversations with local governmental agencies. The formula used is set out by the Texas Property Tax Code and is as follows:  $\text{net-to-land (all ag related income streams - all ag related expenses) / cap rate = ag value}$

### **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 15<sup>th</sup>). 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*. This written reappraisal plan is attached to the report by reference.

### **Compliance**

---

In accordance with the Texas Property Tax Code Section 6.05(i):

The 2015-2016 PROPOSED Reappraisal Plan was included on the agenda for the regular Board meeting held on September 10, 2014. The Board of Directors sets the date, time and place for the public hearing. Not later than the 10<sup>th</sup> day before the date of the hearing, the secretary of the Board will deliver to the presiding office of the governing body of each taxing unit participating in the district a written notice of the date, time, and place for the hearing.

A public hearing will be held on September 10, 2014 to consider the 2015-2016 Reappraisal Plan.

The 2015-2016 Reappraisal Plan was approved on September 10, 2014.



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

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

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

**For Tax Years:**

**2015 and 2016**

**Originally Printed: July 1, 2014**

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



TABLE OF CONTENTS

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

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

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

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

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

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

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

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

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



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

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

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

## PREAMBLE

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

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

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

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

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

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

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

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

## ETHICS RULE

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

- Conduct;
- Management;
- Confidentiality.

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

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

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

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

### CONDUCT

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

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

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

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

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

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

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

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

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

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

### MANAGEMENT

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

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

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

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

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

### CONFIDENTIALITY

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

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

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

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

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

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

---

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.

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

---

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.

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

---

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

## REAPPRAISAL OF MINERAL INTERESTS

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

### INTRODUCTION

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

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

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

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

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

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

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

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

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

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

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

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

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

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

### Appraisal Resources

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

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

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

### VALUATION APPROACH (MODEL SPECIFICATION)

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

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

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

#### Approaches to Value for Petroleum Property

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

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

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

---

- 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.

July 1, 2014

To: Appraisal Services Clients

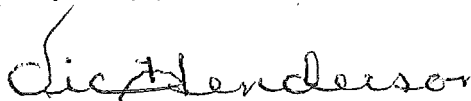
Re: **Reappraisal Plan For Tax Years 2015 and 2016**

Enclosed is a copy of the Reappraisal Plan for Tax Years 2015 and 2016; and, this is required by S.B. 1652 passed in May 2005. This Senate Bill enacted by the Legislature of the State of Texas requires the Board of Directors of an Appraisal District to develop, biennially, a written plan for periodic reappraisal of all property within the District bound areas according to requirements of the Tax Code Section 25.18.

Since our firm provides appraisal services to you for certain property types, we are providing you with a copy of information that addresses all of the complex property services we provide. The enclosed Reappraisal Plan includes these services: mineral interest, industrial, utility and personal property appraisal and appraisal-related materials for your plan. Appraisal services for some of these property types may not be applicable to your Appraisal District.

Should you want to discuss the content of this report, please call Engineering Services at our Fort Worth Office toll-free number which is 1.800.880.7861.

Very truly yours,



Victor W. Henderson, P.E.  
Manager/Engineering Services

VWH/jh

Enclosure