JIM HOGG COUNTY APPRAISAL DISTRICT REAPPRAISAL PLAN APPRAISAL YEARS

2021 - 2022

As Proposed By:
Jim Hogg County Appraisal District
Board of Directors

September 15th 2020

<u>Table of Contents</u>	Original
EXECUTIVE SUMMARY	1
REVALUATION DECISION	2
PERFORMANCE ANALYSIS	5
Ratio Study Results	
Appraisal Accuracy (level of appraisal)	
Appraisal Uniformity (equity)	
ANALYSIS OF AVAILABLE RESOURCES	5
Staffing for Reappraisal Year	
Proposed Budget for 2021	
Existing Practices	
Information Systems (IS) Support	
Existing data and maps	
PLANNING AND ORGANIZATION	6
Calendar of Key Events – 2021	7
Calendar of Key Events – 2022	8
MASS APPRAISAL SYSTEM	9
Forms and procedures revised	
CAMA System revisions as required	
DATA COLLECTION APPRAISAL YEAR	10
New Construction	
Remodeling	

Re-inspection of problematic market areas	
Re-inspection of universe of properties on a specific Cycle	
Field or office verification of sales data and property Characteristics	
PILOT STUDY BY APPRAISAL YEAR	12
Test new/revised mass appraisal methods	
Ratio Studies by Market Areas	
Test accuracy and reliability in certain market areas	
VALUATION BY APPRAISAL YEAR	13
Market Analysis	
Model specification	
Model calibration	
Calculation of Preliminary values	
Test values for accuracy and uniformity	
THE MASS APPRAISAL REPORT BY TAX YEAR	23
Scope of Work (Written Reappraisal Plan)	
Compliant with STANDARD RULE 6 – 8 of USPAP	
Signed Certification by the Chief Appraiser as required by STANDARD RULE $6-9$ of USPAP	
VALUE DEFENSE	24

EXECUTIVE SUMMARY

INTRODUCTION

The Jim Hogg County Appraisal District has always maintained a written reappraisal plan. The 79th Texas legislature added the following provision to Section 6.05 of the Texas Property Tax Code in 2005. Senate Bill 1652 adds subsection (i) to require appraisal districts to develop a biennial written reappraisal plan and hold a public hearing to consider the plan. No later than September 15 of each even-numbered year, the appraisal district board must finally approve the reappraisal plan and distribute copies to the taxing units and the Comptroller within 60 days of board approval. The law was effective September 1, 2005, and affects appraisal districts and the Comptroller's Property Tax Assistance Division. This document serves as the biennial written reappraisal plan described above.

The Jim Hogg County Appraisal District (JHCAD) is responsible for the appraisal of all classes of taxable property located within its jurisdictional boundaries. The boundaries include all property located in Jim Hogg County. JHCAD is responsible for the appraisal of approximately 4,973 real property parcels; 3,097 mineral accounts; and 390 business and other personal property accounts. The District serves 5 taxing units. Those taxing units consist of one independent school district, 1 county, and 3 special use districts, such as drainage and emergency services. JHCAD employs an outside appraisal firm to appraise minerals, oil and gas, utilities, and various other complex properties. Contract appraisers are also guided by the principles set forth in USPAP and a copy of this firm's valuation methodology is included in the district's appraisal manual.

In mass appraising property for the purpose of ad valorem taxation, JHCAD subscribes to the Standards established by the International Association of Assessing Officers. In addition, JHCAD is guided by the principles set forth in The Appraisal Foundation's "Uniform Standards of Professional Appraisal Practice" (USPAP). USPAP Standards and Statements are included in this Appraisal Plan. In appraising property for ad valorem tax purposes, the District employs generally accepted appraisal methods and techniques. Our analysts conduct mass appraisal utilizing the three approaches to value: the cost, market, and income approaches.

TAX CODE REQUIREMENT

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

The Written Plan

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

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

Plan for Periodic Reappraisal

Texas Property Tax Code Sec. 25.18. Periodic Reappraisals.

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

The Jim Hogg County Appraisal District (JHCAD) receives listings of all deeds filed with the Jim Hogg County Clerk's office. Deeds are read and abstracted by clerical staff in the deed department of JHCAD. Information is recorded in the computer assisted mass appraisal system (CAMA) software including grantor, grantee, date of recording, volume and page. Property identification numbers are assigned to each parcel of property.

Business personal property is located by canvassing the county street by street, using data sources such as yellow pages, sales tax permit holder lists and other business listing publications to ensure that all property owners are located. All businesses are mailed a rendition about January 1 of each year. Owners are required by law to list all their business personal property. Failure to render results in an automatic 10% penalty and a

possible 50% penalty if a false rendition is filed. Lists of commercial vehicles are also purchased annually and these vehicles are tied to appropriate business accounts. Renditions are also required of utility companies, railroads and pipelines.

Oil and gas wells are discovered using Texas Railroad Commission records. Production records are processed by a contracted appraisal firms. Ownership is determined by records known as division orders.

JHCAD utilizes a highly developed geographic information system (GIS) that show ownership lines for all real estate. Aerial photography is interfaced with the GIS for an additional layer of vital information.

(2) Identifying and updating relevant characteristics of each property in the appraisal records;

Jim Hogg CAD operates on 3 year reappraisal cycle. In 2021, all real property in the town of Hebbronville north of Galbrath Street, including Las Lomita's Subdivision north of hwy. 16 will be reappraised. In 2022 all rural properties in the County will be re-appraised, also any new improvements within the town of Hebbronville. In 2023 all properties in the Town of Hebbronville south of Galbrath Street, including South Fork Estate south of Hwy 16 will be reappraised. Business personal property is appraised each year. See Exhibit A of this plan for the proposed 2021 and 2022 work schedules. A category breakdown of properties to be appraised within the Jim Hogg school district is also included.

Appraisers drive the county and gather data about each home, commercial business or vacant tract. The appraisers walk from property to property measuring the structures and noting the condition of the property and noting any changes to the property since the last physical inspection. Pictures are taken to capture the property's current quality and condition. The appraiser notes the date of the physical inspection on the field card and that information along with any property changes is entered in the CAMA system. The pictures are stored in the CAMA system and used to assist the appraiser in making decisions in the office. Other data stored in the CAMA system includes an exterior sketch of the improvement which allows for the calculation of square footage for the building and its components such as, garages, porches, patios, and other structures not attached to the main improvement. Other property characteristics maintained in the CAMA systems are components found within the building such as bathrooms, fireplaces, air conditioning, roof type, wall heights and exterior finish. New property is discovered using septic tank permits, utility hook up permits and driving the county.

Rural acreage is inspected to verify existing agricultural and wildlife management use. New applications for agricultural and wildlife management use are inspected annually.

Business personal property is physically inspected annually. The quality and density of inventories are determined as of January 1 and the age and condition of furniture, fixtures, machinery and other equipment is noted. If the appraiser's observation differs from that of the rendition filed by the business owner, additional information is requested from the business owner and sometimes a value that differs from the rendered value may be assigned.

JHCAD contracts with an appraisal firm that specializes in the appraisal of oil and gas properties, utilities, railroads and pipelines. Specialized software is used to determine well production, decline and economically recoverable reserves. The reserves are appraised discounting for the time it will take to recover them from the earth. Utility companies, railroad and pipelines are appraised using the income approach, where the net income is capitalized and allocating the resulting value to the various taxing entities in the county.

See Exhibit A for proposed work schedules for each appraisal year and the estimated number of parcels to be reappraised by property category. Also included is a calendar of key tax year events.

(3) Defining market areas in the district;

Market sales are used to define market areas and improvement and land schedules are developed accordingly. Because of the scarcity and reliability of market sales in Jim Hogg County, JHCAD has designated Jim Hogg ISD as its primary market area. Ratio studies are performed on property types within Jim Hogg ISD to test appraisal performance and perform appraisal maintenance on cost schedules and tables.

Market areas are also developed for land. Adjustments are determined based on location, size, topography and other characteristics recognized by market sales.

- (4) Identifying property characteristics that affect property value in each market area, including:
 - (A) The location and market area of property;
 - (B) Physical attributes of property, such as size, age, and condition;
 - (C) Legal and economic attributes; and

(D) Easements, covenants, leases, reservations, contracts, declarations, special assessments, ordinances, or legal restrictions:

Each parcel of property has detailed information recorded in the CAMA system. Land attributes consist of legal description, dimensions, zoning, size, utilities, road access and any other special, unique or legal characteristics are noted and used for developing schedules and defining market areas. Each improvement record consists of a current sketch with measurements, a photograph of the improvement and individual property characteristics such as class, construction quality, year of construction, roof covering and style, exterior finish, number of bathrooms, fireplaces, heating and air conditioning, pools, out buildings and other attributes specific to the improvement.

(5) Developing an appraisal model that reflects the relationship among the property characteristics affecting value in each market area and determines the contribution of individual property characteristics;

JHCAD's computer assisted mass appraisal (CAMA) system utilizes an appraisal model that reflects the relationship among the property characteristics affecting value in each market area and determines the contribution of individual property characteristics. The model uses the cost approach to value to estimate the original cost of each building component. Market sales are studied for improvement contributions in each market area and adjustments to cost schedules are applied to each improvement via depreciation and market adjustment factors.

Similar models are used when appraising apartments, commercial and industrial properties, but market sales and income data are key components of the valuation process for these properties.

(6) Applying the conclusions reflected in the model to the characteristics of the properties being appraised; and

JHCAD uses conclusions reflected in appraisal model results to construct and maintain property classification guides identifying minimum property characteristics typical for each property class. By utilizing sales data for each neighborhood and market area, conclusions concerning age, quality, condition, construction components, depreciation and other variables are tested against the model's results.

(7) Reviewing the appraisal results to determine value.

JHCAD tests the results of its appraisal model values (appraisals) against market data (sales) to determine the accuracy and level of appraisal, as well as to monitor the integrity of the appraisal model (CAMA). Ratio study

results are used to maintain and update appraisal schedules to achieve market value appraisals. Sales ratios are performed for each property category with Jim Hogg ISD to determine if values assigned by the model fall within a 95% - 105% confidence interval level.

REVALUATION DECISION (REAPPRAISAL CYCLE)

The Jim Hogg County Appraisal District by policy adopted by the Chief Appraiser and Board of Directors reappraises all property in the district on a 3 year reappraisal cycle as required by Section 25.18, Property Tax Code.

The reappraisal year is a complete appraisal of all properties in the geographic area; therefore both 2021 and 2022 are reappraisal years.

REAPPRAISAL YEAR ACTIVITIES

- 1. Performance Analysis The equalized values from previous appraisal year are analyzed with ratio studies to determine appraisal accuracy and appraisal uniformity overall and by market area within property categories. Ratio studies are conducted in compliance with the current *Standard on Ratio Studies* of the International Association of Assessing Officers.
- 2. Analysis of Available Resources Staffing and budget requirements for appraisal year 2021 are detailed in the 2021 appraisal district budget, as adopted by the Board of Directors. Existing appraisal practices, which are continued from year to year, will be identified and methods utilized to keep these practices current will be specified by district management. Information Systems (IS) support is detailed with year specific functions identified and system upgrades scheduled as necessary. Existing maps and data requirements are specified and updates scheduled as required.
- 3. Planning and Organization A calendar of key events with critical completion dates is prepared for the district. This calendar identifies the key events for the preparation of the appraisal roll. A calendar is prepared and included for appraisal years 2021 and 2022. Production standards for field activities are calculated and incorporated in the planning and scheduling process in order to reach goals set by both district management and the Tax Code.

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

PERFORMANCE ANALYSIS

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

properties in each reporting category to measure the level of appraisal (appraisal accuracy). The median ratio is the primary measure of central tendency analyzed in each market area to indicate the level and accuracy of appraisal performance. The district also calculated the coefficient of dispersion and price related differential in each market area to indicate the uniformity or equity of existing appraisals.

ANALYSIS OF AVAILABLE RESOURCES

Staffing and budget requirements for tax year 2021 are detailed in the 2021 appraisal district budget, as adopted by the Board of Directors. This reappraisal plan is adjusted to reflect the available staffing for appraisal year 2021 and the anticipated staffing in appraisal year 2022. Staffing will impact the cycle of real property re-inspection and personal property on-site review that can be accomplished in this time period.

APPRAISAL RESOURCES

The JHCAD staff consists of the chief appraiser, appraiser/mapper, office manager and clerk. JHCAD currently employs 2 registered professional appraisers. JHCAD contracts with an appraisal firm for the appraisal of oil and gas properties, utilities, railroads, pipelines and other industrial real and personal property. All appraisers performing work for Jim Hogg CAD are active registrants with the Texas Department of Licensing and Regulations (TDLR).

JHCAD appraisers are actively involved in the discovery, listing, and appraisal of all types of property. Properties are grouped by location, type, use, quality, and a variety of other quantitative data elements. A common set of data characteristics on each specific type of property is observed, listed, and collected during field inspection. Each appraiser is trained in the use of the Jim Hogg County Appraisal District's appraisal manual, appraisal techniques, and methodology in the use of this information.

COMPUTER RESOURCES

Data is collected in the field and keypunch entered to the computer. The appraisal records are maintained on data base servers. The primary storage media: power edge data base servers. The District also employs the CD-ROM storage media on some projects. The JHCAD appraisal software is a CAMA system (computer assisted mass appraisal). This system contains cost and depreciation schedules that utilize common data elements to assist in creating base values.

JHCAD contracts with Pritchard & Abbott, Inc. for appraisal administration software. JHCAD employs the use of a server based computer network with

personal computers to form the CAD computer system. This information includes square foot of living area, land size, age, class, construction type, and a variety of other useful information.

MAPPING RESOURCES

JHCAD utilizes a Geographic Information System (GIS) to maintain parcel data and maps for all of Jim Hogg County. All GIS files are stored on a server and ARC/GIS version 9.2 is the current operating software. The Digital mapping has been 100% complete since 2011. The District purchases Aerial Imagery every two years. Appraisers and other staff members can perform virtual property inspections or reviews. The software's capability allows us to locate, identify and better understand taxable properties in our jurisdictions.

INFORMATION SOURCES

JHCAD appraisal staff and administration collect data on local and regional economic forces that may affect value. Locational forces are carefully observed as we find location to be the most significant factor in determining the market value of property in our geographic area. General trends in employment, interest rates, availability of vacant land, and new construction trends are closely monitored. JHCAD obtains information from local realtors, mail surveys, brokers, appraisers, and a variety of other sources, such as Marshall & Swift.

THE DATABASE

The JHCAD database was constructed from property data obtained originally from Jim Hogg County in 1986. Data received was on-site field-inspected and revised to create the foundation for our current database. Since the inception of the JHCAD, this data-base has been continually updated to recognize the current status of the property records. A variety of programs designed to discover changes that may occur to data elements are maintained. Property inspections or drive-outs occur as the result of information gathered during various forms of analysis. Building permits, field review, renditions, reports of value, local news publications, tax offices, and the public are but a few of the sources of information considered by staff analysts during the discovery phase of the appraisal process. Information from building permits is compiled from local taxing units, sorted, and keypunched into our computer-assisted building permit system.

Data collection in the field requires preparation of maps, computer generated appraisal cards, and coordination of staff. Properties are grouped by type, location, and neighborhood prior to the start of the fieldwork. State Property Tax Assistance

Division (PTAD) property types include Residential, Multi-Family, Commercial, Industrial, Farm and Ranch, Vacant Land and Acreage, Oil, Gas, and Mineral, Utilities, Business Personal Property, and other Special Inventory types.

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

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

The Jim Hogg County Appraisal District, as well as all appraisal districts in Texas, is specifically hindered when valuing property due to the lack of mandatory sales disclosure. The lack of mandatory sales disclosure restricts the information that is available to CAD's when using the Sales Comparison Approach, especially on the high end of the value spectrum of residential property and with regard to most non-residential real property. The lack of mandatory sales price disclosure also impacts values developed via the income approach by restricting the type of data necessary to calculate an overall capitalization rate from sold comparable properties. Should mandatory sales price disclosure become law; the district will have an additional tool, with which to value property, which will foster further accuracy and equity in appraisals.

PLANNING AND ORGANIZATION

A calendar of key events with critical completion dates is prepared for the district. This calendar identifies the key events for developing the appraisal roll. A separate calendar is prepared for appraisal years 2021 and 2022. Production standards for field activities are calculated and incorporated in the planning and scheduling process. This plan encompasses the normal processes carried out for each year by the district; therefore catastrophic events or significant legislative action may have a detrimental effect to the district's operation and require changes to this plan.

CALENDAR OF KEY EVENTS

2021 APPRAISAL YEAR

Event	Beginning Date	Ending Date
Process Exemptions and Special Use Applications	9/1/2020	To Certification
Create 2021 Year layer in CAMA System	9/2/2020	2/9/2021
Field Operations/Discovery Process – Appraisal Departments	9/5/2020	2/9/2021
Adopt Biennial Reappraisal Plan Covering 2021 and 2022	9/15/2020	9/15/2021
Adopt 2021 Appraisal District Budget	9/15/2020	9/15/2020
TDLR Education Courses RPA tract as necessary	10/2/2020	3/31/2021
Personal Property Renditions Mailed	12/15/2020	12/15/2020
Statutory Date of Appraisal (Unless Sept 1 granted for Inventory)	1/1/2021	1/1/2021
Preliminary Property Value Study Released	1/31/2021	1/31/2021
Full Valuation Effort-Model Specification/Calibration Included	2/12/2021	3/30/2021
PVS Protest Deadline if necessary	3/11/2021	3/11/2021
Valuation Review/Error Reports Cleanup	3/30/2021	4/13/2021
Send First Batch of 25.19 Appraisal Notices	4/24/2021	4/24/2021
Create Future Year Layer for GIS 2021 Plats and Deeds	4/27/2021	4/27/2021
Certified Estimates of Value Due to School Districts	4/27/2021	4/27/2021
Mail Mineral Notices	5/15/2021	5/15/2021
Turn Over Records to ARB	5/15/2021	5/15/2021
Send Subsequent Batches of Appraisal Notices as Necessary	5/21/2021	7/13/2021
Primary Protest Deadline	5/31/2021	5/31/2021
Formal Hearings Scheduled – Depending on Volume	6/9/2021	9/28/2021
Mineral Import from Vendor	7/16/2021	7/16/2021
Certification of the Appraisal Roll	7/25/2021	7/25/2021

CALENDAR OF KEY EVENTS

2022 APPRAISAL YEAR Beginning Ending Event Date Date To Certification 9/1/2021 Process Exemptions and Special Use Applications 9/4/2021 9/2/2021 Create 2022 Year layer in CAMA System 2/9/2022 9/5/2021 Field Operations/Discovery Process - Appraisal Departments 9/15/2021 9/15/2022 Adopt Biennial Reappraisal Plan Covering 2021 and 2022 9/15/2021 9/15/2021 Adopt 2022 Appraisal District Budget 10/2/2021 3/31/2022 TDLR Education Courses RPA tract as necessary 12/15/2021 12/15/2021 Personal Property Renditions Mailed 1/1/2022 1/1/2022 Statutory Date of Appraisal (Unless Sept 1 granted for Inventory) 1/31/2022 1/31/2022 Preliminary Property Value Study Released 2/12/2022 3/30/2022 Full Valuation Effort-Model Specification/Calibration Included 3/11/2022 3/11/2022 PVS Protest Deadline if necessary 4/13/2022 3/30/2022 Valuation Review/Error Reports Cleanup 4/24/2022 4/24/2022 Send First Batch of 25.19 Appraisal Notices 4/27/2022 4/27/2022 Create Future Year Layer for GIS 2022 Plats and Deeds 4/27/2022 4/27/2022 Certified Estimates of Value Due to School Districts 5/15/2022 5/15/2022 Mail Mineral Notices 5/15/2022 5/15/2022 Turn Over Records to ARB 5/21/2022 7/13/2022 Send Subsequent Batches of Appraisal Notices as Necessary 5/31/2022 5/31/2022 Primary Protest Deadline 6/9/2022 9/28/2022 Formal Hearings Scheduled - Depending on Volume 7/16/2022 7/16/2022 Mineral Import from Vendor 7/25/2022 7/25/2022 Certification of the Appraisal Roll

Jim Hogg CAD 2021-2022 Reappraisal Plan Estimated Parcel Counts by ISD

	Jim
	Hogg
A SINGLE FAMILY RESIDENCE	1974
B MULTIFAMILY RESIDENCE	21
C1 VACANT LOT	493
C2 COLONIA LOTS	42
D1 QUALIFIED OPEN-SPACE LAND	1586
D2 IMPROVEMENTS ON OPEN-SPACE LAND	173
E NON-QUALIFIED LAND & IMPROVEMENTS	346
F COMMERCIAL REAL PROPERTY	214
G OIL AND GAS	1578
H PERSONAL VEHICLES	
J INDUSTRIAL	144
L COMMERCIAL PERSONAL	269
M TANGIBLE OTHER PERSONAL	24
N INTANGIBLE PROPERTY	
O RESIDENTIAL INVENTORY 378	
S SPECIAL INVENTORY TAX	
X TOTALLY EXEMPT PROPERTY	1388
Total	8252

JIM HOGG CAD ANNUAL EVENTS CALENDAR

-	Event	Dept/Staff	Comments:
January	*Source-Property Tax Calendar		*Property Tax Code
•	New Appraisal Year - Dept's begin working on:		
•	Accounts flagged for review, 4th quarter building permits, and		
•	pick-up of	Appraisal	- 30
	new construction continues		
		Appraisal	
	Sales Ratio Analysis begins New businesses, work sales permits, renditions & Mobile	Personal	
•	Home Park tenant lists	Prop	
Y0.07	M 10	Taxpayer	
•	Mail & process Homestead Exemptions for new owners Continue setting up new subdivision plats & ownership	Info	
•	updates & map projects	Mapping	
	*Date that values and qualification for certain exemptions are		*Sections
1	determined		11.42,23.01,
	(except for inventories appraised Sept. 1).		23.12
	(except for inventories appraised sept. 17.		23.12
2	*Date rendition period begins; continues through April 15th		*Section 22.23
	Print & Mail BPP Renditions- businesses, watercraft & aircraft	Personal Property	
	Filit & Ividii BFF Reliditions- businesses, waterclart & directal	Property	
		Admin/Com	
•	Submit Ad to newspapers- Low Income Apartment Cap Rate	m Appr	*Sec.11.1825
	Administer Oath of Office to newly elected Board of Directors	Admin/ARB Dept.	BOD-at scheduled meeting
-	(chosen in	рерг.	ARB-at scheduled
	uneven yrs)& ARB Members (every year-staggered terms).		meeting
	Board of Directors Approve: Taxpayer Liaison Officer,		BOD-at scheduled
•	Investment Policy &	BOD	meeting
	Agricultural Advisory Board		
	Accountant submits District's Investment Policy for approval by CAD's BOD.	Accounting	at scheduled BOD meeting
31 •	*Deadline-Texas Comptroller's preliminary Property Value Study.	Appraisal	*Section 403.302

1.	Event	Dept/Staff	Comments:
	*Last day for chief appraiser to deliver applications for agricultural designation	Appraisal	*Section 11.44 , 23.43
	and exemptions requiring annual applications.		
	*Last day for appraisal district to give public notice of capitalization rate used to appraise property with low and moderate income	Appraisal	*Sec.11.1825
	housing exemption.		
Februar	Y		
1 •	Second Quarter Allocation letters sent to entities	Accounting	
•	Neighborhood Adjustments begin	Appraisal Administrati	
15 • 17 •	Exemption verification letters mailed to entities Submit Ads to newspapers- Taxpayer Rights & Exemptions	on Administrati on	
28	*Last day to request cooperative housing appraisal.		*Section 23.19
March			
	To the could be of Neighborn and Adicator out to with Color Detice	Approint	
1 •	Test results of Neighborhood Adjustments with Sales Ratios.	Appraisal	
14	*Deadline to file written appeal of PVS findings with the State Comptroller.		*Section 403.303
•	Audit Appraisal work-clerical & market data	Appraisal Admininistr	*Section
23 •	Submit Ad to newspapers-Protest & Appeals Procedures Submit Letter to Tax-Assessor Collectors regarding form which rolls are provided	ation Admininistr ation	*Section 26.01(a) *by April 1st
31	*Last day for qualified community housing development corporations to file listing of property acquired or sold during the past year with		*Section 11.182

-	Event	Dept/Staff	Comments:
	Event	Dept/Staff	Comments:
<u>April</u>			
•	NOTICES ARE MAILED. Informal Hearings begin the next day.	All Department	Set up Phone Bank
•	***Appraisal Review Board Members attend training classes ***	ARB	*Section 5.041
1	*Last day (or as soon as practicable thereafter) for chief appraiser to mail	CA/Data Proces/IT	*Sections 25.19, 1.07-1.11
	notices of appraised value for single-family residence homestead properties.		
1	*Last day for the chief appraiser to notify the taxing units of the form in which		*Section 26.01(a)
	the appraisal roll will be provided for them.		
15	*Last day for property owners to file personal property renditions and property information reports unless they request a filing extension in writing.		*Section 22.23
30	*Last day for chief appraiser to certify estimate of school district's preliminary taxable value for school districts, counties & cities and send	Chief Appraiser	*Section 26.01 *mail letters for delivery
	of values to each entities tax-assessor collector.		before April 30th
May			Siro.
1 •	Operations Survey - sent by PTAD to be returned in 60 days	All Department	
1 •	Third Quarter Allocation letters sent to entities	Accounting	
2	*Last day for property owners to file these applications or reports with the CAD:		*Section 11.43
	Some exemption applications Notice property no longer entitled to an exemption not requiring annual applic. Property no longer qualifies for 1-d & 1-d-1 Ag use & other		*Section 11.43
	special uses properties		23.43,23.54,23.75

-	Event	Dept/Staff	Comments:
	•Railroad Rolling Stock reports		*Sec. 24.32
	•Requests for separate listing of separately owned land & Imps.		*Sec. 25.08
	 Requests for proportionate taxing of a planned unit development property 		*Sec. 25.09
	•Request for separate listing of undivided interests		*Sec. 25.11
	Request for joint taxation of separately owned mineral interests		*Sec. 25.12
2	*Last day (or as soon as practible thereafter) for chief appraiser to mail notices of appraised value for properties other than single-family		*Section 25.19
	residence homesteads.		
16	Formal Hearings Begin	ARB/Suppor t Staff	
16	*Last day for property owners to file renditions and property information reports if		*Section 22.23
	they requested an extension in writing. (Can be extended 15 days for good cause)		
•	*Last day (or as soon as practicable thereafter) for chief appraiser to mail notices	CA	*Sec. 11.45,23.44,23.57
	of appraised value, denial of exemptions and denial of special appraisals.		
•	*Date (or as soon as practicable thereafter) for chief appraiser to prepare	CA	*Sec. 25.01, 25.22
	appraisal records & submit to ARB.		
19	*Last day for chief appraiser to count taxing units' resolutions to change CAD's		*Section 6.061
	finance method.		
24	*Last day for chief appraiser to notify taxing units of change in the CAD's finance		*Section 6.061
	method.		
31	*Last day for taxing units to file challenges with ARB(or within 15 days after ARB		*Section 41.04
	receives appraisal records, whichever is later).		

-	Event	Dept/Staff	Comments:
	*Last day for property owners to file protest with ARB (or by 30th day after		*Section 41.44
	notice of appraised value is delivered, whichever is later).		
	Event	Staff/Dept.	Comments
<u>June</u>			
1	*Last day for religious organizations to amend charters and file new applications		*Section 11.20 & 11.421
	for Section 11.20 exemptions.		
	*Last day for chief appraiser to submit recommended budget	Accounting/	
14 •	to CAD board and taxing units(unless taxing units have changed CAD's fiscal	CA	*Section 6.06
	year).		"before June 15th'
16	*Beginning date that CAD board may pass resolution to		*Section 6.061
16	change CAD finance method, subject to taxing units' unanimous approval. Period ends August 15th		Section 0.001
30	*Last day for private schools to amend charters to conform with Section 11.21 & file		*Section 11.422
30	new applications for exemptions(or within 60 days of exemption denial, whichever later).		300001121122
	*Last day for CAD's to report formation of reinvestment zones and tax abatement		*Section 312.005
	agreements to the Texas Comptroller.		
•	Reappraisal Plan submitted to Board of Directors *	Appraisal/C A	
July			100
1	*Last day for ARBs to complete review of railroad rolling stock values for	ARB	*Section 24.35
	submission to Texas Comptroller (or as soon as practicable thereafter).		
20	*Date ARB must approve appraisal records, but may not do so		
•	if more that 5%	ARB	*Section 41.12

-	Event	Dept/Staff	Comments:
	with a population of 1 million or more may postpone the deadline to August 30th.		
25	*Last day for Texas Comptroller to certify apportionment of railroad rolling stock		*Section 24.38
	value to counties, with supplemental records after that date.		
•	*Last day for chief appraiser to certify appraisal roll to each taxing unit .	ĆA	*Section 26.01
	The chief appraiser also shall certify the district appraisal roll to the comptroller	IT	
25 •	Secretary of CAD board of directors sends written notification to all entities of	BOD	*even yrs (2014,2016,,)
	public hearing about Reappraisal Plan.* (10 days prior to BOD mtg)		Section 6.06(b)
August			
•	Appraisers begin field reviews & pick-up of new construction for new year	Appraisal	
1	*Last day for property owners to apply for September 1 inventory appraisal for		*Section 23.12
	the next year.		
1 •	Fourth Quarter Allocation letters sent to entities.	Accounting	
1 •	Electronic Appraisal Report Submission (EARS) to Comptroller (after Supp 1-annually)	Commercial Appr/IT	*Section 5.07
	Comptroller will send back report in Sept-OctCAD mails Report of Prop Val to entities by November 1st.		
9 •	Board of Directors Elections -Odd yrs CA notifies entities of election process.	ĆΑ	nomination forms sent
	(*mail early in month so entities can include on September Agendas)		
15 •	Mail Approved Reappraisal Plan to entities. (every 2 years)	Administrati on	
	*Last day for CAD board to pass resolution to change CAD finance method, subject		*Section 6.061
	to taxing unit's unanimous consent. *Last day for CAD board to pass resolution to change number of directors, method		*Section 6.031
	for appointing or both, and deliver to each taxing unit.		

-	Event	Dept/Staff	Comments:
31 •	Submit Ad-Public Hearing for CAD Budget at Board of Directors Meeting	Administrati on	*Section 6.062 *10 days
			prior to BOD mtg
	Event	Staff/Dept.	Comments
	Secretary of CAD Board of Directors sends entities written		10 days prior to
31 •	notification of Budget	BOD	Public
	Hearing during September's Board of Directors meeting.		Meeting
-	*Last day for property owner to give, in writing, correct address to CAD for tax bill		*Section 33.011
	(penalties & interest waived if the bill is not sent to correct address 21 days before delinquency date).		
	*Last day taxing units may file resolutions with the CAD board to oppose proposed		*Section 6.061
	change in the CAD finance method.		
	*Last day taxing unit entitled to vote for appointment of CAD directors to file a		*Section 6.031
	resolution opposing a change by the CAD board in selection of directors.		
September			
1	*The following years taxable value of inventories may be determined as of this date,		*Section 23.12
	at property owner's written option.		
15	*Last day for CAD board to adopt CAD budget, unless a district has changed its	BOD	*Section 6.06
	fiscal year. BOD approves budget at scheduled meeting. *Last day for CAD board to notify taxing units in writing if a		
	proposal to change a finance method by taxing units' unanimous consent has been		*Section 6.061
	rejected. *Last day for CAD board to notify taxing units in writing if a		
	proposal to change the number or method of selecting CAD directors is rejected by a		*Section 6.031
	voting taxing unit.	Administrati	
16 •	Approved CAD Budget is mailed to entities.	on	
16 •	Submit Ad to newspaper for Appraisal Review Board	Administrati	

	-	Event	Dept/Staff	Comments:
		Applicants for the next year	on	
		Submit Ad to newspaper for Auditor (even yrs) Depository	Accounting/	Auditor-Sect.
20	•	(odd yrs). BOD approves	Admin	6.063
		in October & November meetings.* for Oct. 1st publication		Depository-Sect. 6.09
Oct	<u>ober</u>			
1	•	CAD Board of Director Elections-Before October 15, eligible voting entities may nominate by resolution one candidate for each position on the board.*		*Odd yrs (2015, 2015, etc,)
		Valuation Service Contract approval scheduled at monthly		*Odd yrs
12	•	BOD meeting.*	BOD	(2015, 2015, etc,)
		Board of Directors interview & select new Appraisal Review		*at scheduled
	•	Board members.*	BOD	BOD meeting
15	•	Mail copy of approved Audit report to presiding officers of taxing entities	Administrati on	Section 6.063(b)
27	•	CAD Board of Director Elections -Before October 30, Chief Appraiser prepares	CA	*deadline to return-Dec. 16
		ballot and delivers it to the presiding officer of each entitled voting entity.*		
Nove	<u>ember</u>			
1	•	First Quarter Allocation letters sent to entities Mail Report of Property Values to Entities, TAC's &	Accounting Appraisal/A	mailed 1st wk of
	9	Comptroller (receive in Oct. from Comptr)	dmin	Nov.
Dece	ember			
		Mail Dealer Declaration forms(motor vehicles, vessels,	Taxpayer	Mail before
15	•	manufactured houses,	Info	January 1
		heavy equipment, etc.)		*Odd yrs
	•	Before December 15th, the entities governing bodies shall submit their votes for new CAD Board of Directors. *		(2015, 2015,etc)
		*Source Texas Property Tax Code		



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:

2021 and 2022

Originally Printed: June 29, 2020

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

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



Table of Contents

<u>Item</u>	<u>Page</u>
P&A POLICY STATEMENT	2
PREAMBLE	5
ETHICS RULE	7
RECORD KEEPING RULE	10
SCOPE OF WORK RULE	11
JURISDICTIONAL EXCEPTION RULE	13
STANDARDS 5 & 6: MASS APPRAISAL, DEVELOPMENT AND REPORTING (General	l) 14
STANDARDS 5, 6-1, 6-2: MINERAL INTERESTS	17
STANDARDS 5, 6-1, 6-2: INDUSTRIAL, UTILITY, AND RELATED PERSONAL PROPE	

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

Pritchard & Abbott, Inc., (P&A), a privately held company engaged primarily, but not wholly, in the ad valorem tax valuation industry endorses Uniform Standards of Professional Appraisal Practice (USPAP) as the basis for the production of sound appraisals. Insofar as the statutory requirement to appraise groups (or a "universe") of real and personal property within an established period of time using standardized procedures—and subjecting the resulting appraisals to statistical measures—is the definition of mass appraisal, P&A subscribes to USPAP Standards 5 and 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.

A biennial reappraisal plan is, at its core, a discussion of the CAD's intended implementation of the Scope of Work Rule in USPAP. This plan provides general information about this rather comprehensive USPAP rule, as well as the specific steps P&A takes in the actual appraisal of various property types per our contractual obligations. This Biennial Reappraisal Plan should not be confused or conflated with an "appraisal manual" or other "how-to" guide which may or may not exist within P&A for any particular property type we appraise.

This reappraisal plan discusses a few other USPAP rules that interact with the Scope of Work Rule, such as the Ethics Rule, the Record Keeping Rule, and Jurisdictional Exception Rule. For further information regarding other sections of USPAP, including the Competency Rule, definitions, and appraisal reports, please reference P&A's "USPAP report" which accompanies our appraisals and supporting documentation provided to clients per Property Tax Code, Sec. 25.01(c) at the completion of each tax year. An appraisal season thus begins with an appraisal plan (approved by the CAD's Board of Directors) and ends with appraisal reports. Providing these reports is definitely part of the plan. Likewise, much of the verbiage in the "USPAP report" is a reiteration of the Biennial Reappraisal Plan.

USPAP defines "appraisal" as the act or process of developing an opinion of value or pertaining to appraising and related functions such as appraisal practice or appraisal services. Valuation services is defined as services pertaining to an aspect of property value, regardless of the type of service and whether it is performed by appraisers or by others. 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: USPAP Compliance 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. Advisory opinions do not establish new standards or interpret existing standards, but instead are issued to illustrate the applicability of appraisal standards in specific situations.

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 development mandates (Standard 5: Mass Appraisal, Development), particularly with regards to some, but not all, of the *model calibration* and statistical performance testing confines. However, P&A does strive to employ all or most elements of mass appraisal techniques with regards to the definition and identification of property characteristics and model specification and application.

Per USPAP Advisory Opinion 32: Ad Valorem Property Tax Appraisal and Mass Appraisal Assignments, in the

interests of equity, the scope of work in mass appraisal assignments for ad valorem taxation can include consideration of appraisal level (the overall proximity between appraised values and actual prices) and the uniformity of property values (equity within groups of like properties). The appraiser is responsible for recognizing when the concepts of appraisal level and appraisal uniformity are necessary for credible assignment results in a mass appraisal assignment for ad valorem taxation.

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).

Regarding mass appraisal reports due the client and other intended users per USPAP (Standard 6 (Mass Appraisal, Reporting), a written report of the mass appraisal as described in Standards 6-2 is not provided for each individual property. An individual property record or worksheet may describe the valuation of the specific property after the application of the mass appraisal model. To understand the individual property result developed in a mass appraisal requires the examination of all the information and analysis required by Standards 6-2.

P&A will clearly state or otherwise make known all extraordinary assumptions, hypothetical conditions, limitations imposed by assignment conditions, and/or jurisdictional exceptions in its appraisal reports as they are conveyed to our clients. Intended users of our reports are typically the client(s) for which we are under direct contract. Although taxpayers or their agents who own and/or represent the subject property being appraised often receive these reports either by law or as a courtesy of the client or P&A, this receipt does not mean these parties automatically become Intended Users as defined by USPAP. A party receiving a copy of a report in order to satisfy disclosure requirements does not become an intended user of the appraisal or mass appraisal unless the appraiser specifically identifies such party as an intended user. 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.

USPAP does not currently address communications of assignment results prior to completion of the assignment, thus such communications have no requirements other than to comply with the general requirements in the ETHICS RULE, the COMPETENCY RULE, and the JURISDICTIONAL EXCEPTION RULE. The client and all intended users should be aware that mass appraisals, as opposed to most "fee" appraisals, are somewhat inherently "limited" versus "complete" and that appraisal reports, unless otherwise contracted for by the client, will most often be of a "restricted" nature whereas explanations of appraisal methods and results are more concise versus lengthy in order to promote brevity, clarity, and transparency to the intended user(s).

Per USPAP, the appropriate reporting option and level of information in a report are dependant on the intended use and the intended users. Although the reporting verbiage in USPAP Standard 6 does not specifically offer or promulgate a "Restricted Appraisal Report" such as in Standard 2 (Real Property Appraisal, Reporting) and Standard 8 (Personal Property Appraisal, Reporting), it should be noted that: a) all mass appraisals and mass appraisal reports deal with real and personal property in some form or fashion; and b) P&A is a private consulting firm, a fact which may necessitate the withholding of certain data and/or appraisal models/techniques which are deemed confidential, privileged and/or proprietary in nature. The use of "limited" appraisals in conjunction with "restricted" reports in no way implies non-compliance with USPAP. The substantive content of a report

determines its compliance.

P&A believes that, with its vast experience and expertise in these areas of appraisal, all concluded values and reports thereof are credible, competent, understandable, uniform and consistent; and most importantly for ad valorem tax purposes, accomplished in a cost-efficient and timely manner.

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

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

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

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, Statements (if any), and Advisory Opinions. 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 1 and 2: establish requirements for the development and communication of a real property appraisal.
- Standards 3 and 4: establishes requirements for the development and communication of an appraisal review.
- **Standards 5 and 6:** establishes requirements for the development and communication of a mass appraisal.
- Example 2 Standards 7 and 8: establish requirements for the development and communication of a personal property appraisal.
- Standards 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 5 and 6 are 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 Standards 5 or 6 can apply in ad valorem tax work. 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 or appraisal review 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 not perform an assignment with bias;
- must not advocate the cause or interest of any party or issue;
- must not accept an assignment that includes the reporting of predetermined opinions and conclusions;
- must not misrepresent his or her role when providing valuation services that are outside of appraisal practice;
- must not communicate assignment results with the intent to mislead or to defraud;
- must not use or communicate a report or assignment results known by the appraiser to be misleading or fraudulent;
- must not knowingly permit an employee or other person to communicate a report or assignment results that are misleading or fraudulent report;
- 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;
- · must not engage in criminal conduct;

 must not willfully or knowingly violate the requirements of the RECORD KEEPING RULE; and must not perform an assignment in a grossly negligent manner.

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 is 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 Standardss 2-3, 4-3, 6-3, 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 or appraisal review 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. Parties specifically authorized by the client;
- 3. State appraiser regulatory agencies;
- 4. Third parties as may be authorized by due process of law; or
- 5. A duly authorized professional peer review committee except when such disclosure to a committee would violate applicable law or regulation.

An appraiser must take reasonable steps to safeguard access to confidential information and assignment results by unauthorized individuals, whether such information or results are in physical or electronic form. In addition, an appraiser must ensure that employees, coworkers, subcontractors, or others who may have access to confidential information or assignments results, are aware of the prohibitions on disclosure of such information or results.

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 or appraisal review assignment. A workfile must be in existence prior to the issuance of any report or other communication of assignment results. A written summary of an oral report must be added to the workfile within a reasonable time after the issuance of the oral report.

The workfile must include the name of the client and the identity, by name or type, of any other intended users, and true copies of all written reports, documented on any type of media. (A true copy is a replica of the report transmitted to the client. A photocopy or an electronic copy of the entire report transmitted to the client satisfies the requirement of a true copy.) A workfile must contain summaries of all oral reports or testimony, or a transcript of testimony, including the appraiser's signed and dated certification; and all other data, information, and documentation necessary to support the appraiser's opinions and conclusions and to show compliance with USPAP, or references to the location(s) of such other data, information, and documentation.

A workfile in support of a Restricted Appraisal Report or an oral appraisal report must be sufficient for the appraiser to produce an Appraisal Report. A workfile in support of an oral appraisal review report must be sufficient for the appraiser to produce an Appraisal Review Report.

An appraiser must retain the workfile for a period of at least *five years after preparation* or at least two years after final disposition of any judicial proceeding in which the appraiser provided testimony related to the assignment, whichever period expires last.

An appraiser must have custody of the workfile, or make appropriate workfile retention, access, and retrieval arrangements with the party having custody of the workfile. This includes ensuring that a workfile is stored in a medium that is retrievable by the appraiser throughout the prescribed record retention period. 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.

A workfile must be made available by the appraiser when required by a state appraiser regulatory agency or due process of law.

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 or appraisal review 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 or appraisal review 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 Standard 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;
- · jurisdictional exceptions; and
- other conditions that affect the scope of work.

SCOPE OF WORK ACCEPTABILITY

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

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

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

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

DISCLOSURE OBLIGATIONS

The report must contain sufficient information to allow intended the client and other 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. The information disclosed must be appropriate for the intended use of the assignment results.

Sufficient information includes disclosure of research and analyses performed and might also include disclosure of research and analyses not performed. The appraiser has broad flexibility and significant responsibility in the level of detail and manner of disclosing the scope of work in the appraisal report or appraisal review report. The appraiser may, but is not required to, consolidate the disclosure in a specific section or sections of the report, or use a particular label, heading or subheading. An appraiser may choose to disclose the scope of work as necessary throughout the report.

JURISDICTIONAL EXCEPTION RULE

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

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

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

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

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

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

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

USPAP STANDARDS 5 AND 6: MASS APPRAISAL, DEVELOPMENT AND REPORTING (General Discussion)

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

Standards 5 and 6 apply 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. Standard 5 is directed toward the substantive aspects of developing credible analyses, opinions, and conclusions in the mass appraisal of properties, while Standard 6 addresses the content and level of information required in a report that communicates the results of a mass appraisal. The reporting and jurisdictional exceptions applicable to public 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 (specifying) a model structure that reflects the relationship among the characteristics affecting value in the market area:
- pallbrating 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;
- reviewing the mass appraisal results.

The Jurisdictional Exception Rule may apply to several sections of Standards 5 and 6 because advalorem tax administration is subject to various state, county, and municipal laws.

As previously stated in the P&A Policy Statement (page 2), it may not be possible or practicable for all the mass appraisal attributes listed above to be rigorously applied to the many types of complex and/or unique properties that P&A typically appraises. Often there are contractual limitations on the scope of work needed or required. More prevalently, these types of properties do not normally provide a reliable database of market transactions (or details of transactions) necessary for statistically supportable calibration of appraisal models and review of appraisal results. Generally these two functions are effectively accomplished through annual extended review meetings with taxpayers (and clients) who provide data, sometimes confidentially, that allows for appraisal models to be adjusted where necessary. Nevertheless, and not withstanding whether P&A implicitly or explicitly employs at 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 5 (development of mass appraisal) and Standard 6 (communication of the mass appraisal results) are briefly summarized below:

- Standard 5-1: 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 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 5-2: Defines the introductory framework requirements of developing a mass appraisal, focusing on the identification and/or definition of: client(s), intended users, effective date, appraisal perspective, 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.
- Seen itserd 5-3: 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 and 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 the second consistent with the type and the second consistency with the type and the sec
- Stradard 5-4: Further defines requirements for developing mass appraisal models, focusing on development of standardized data collection forms, procedures, and training materials that are used application in 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 obvious, 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 the quantitative and qualitative property characteristics. Models must be calibrated using recognized replanation. Models may be specified incorporating the income, market, and/or cost approaches to value and mass are rabular, mathematical, linear, nonlinear, or any other structure suitable for representing the assertable property characteristics such as adaptive estimation. Model calibration refers to the process of analyzing sets of property and market data to determine the specific parameters of a model.
- Stratherd 5-5: Defines requirements for collection of sufficient factual data, in both qualitative and translative 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 mediporate 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 attendents and cashflow projections, to weigh historical information and trends, current market factors attending such trends, and reasonably anticipated events, such as competition from developments either plans to or under construction. Terms and conditions of any leases should be analyzed, as well as the need for any extent of any physical inspection of the properties being appraised.

- Standard 5-6: Defines requirements for application of a calibrated model to the property being appraised. This role calls for: the appraiser to recognize methods or techniques based on the cost, market, and income approaches for improved parcels; the appraiser to 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, diviced 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.
- Specifically, appraisers must analyze the results and/or applicability of the various approaches used while ensuring that, on an overall basis, spandards 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. Appraisers have a professional responsibility to ensure that, on an overall basis, models produce was a conclusions that meet attainable standards of accuracy.
- Standard 6-1: Defines general requirements of a mass appraisal written report by addressing the level of promation required that will allow the report to be non-misleading, clearly understood, and sufficiently standard with any assumptions and conditions (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).
- e Spaniard 6-2: Defines specific content required to be included in a mass appraisal written report.
- Standard 6-3: Defines the certification of the mass appraisal written report.

The following sections of this report discuss in more detail the various elements of the development of P&A's mass appraisals and associated written reports as required by USPAP Standards 5 and 6, with regards to P&A appraisal of Mineral Interests, Industrial, Utility, Related Personal Property, and Real Estate.

USPAP STANDARDS 5, 6-1, 6-2: MASS APPRAISAL OF MINERAL INTERESTS

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 contract unity created and specified through deeds and leases, et.al.) 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 parcentage amount.

P&A's typical client is a governmental entity charged with appraisal responsibility for ad valorem tax purposes, authorized to the strictly for various non-advalorem tax purposes so that no conflicts of interest are created with P&A's core as responsible to the strictly for various non-advalorem tax purposes so that no conflicts of interest are created with P&A's core as responsible to the strictly for various non-advalorem tax purposes so that no conflicts of interest are created with P&A's core as responsible to the strictly for various non-advalorem tax purposes.

P&A nemby makes the assumption that, in all appraisal assignments performed for governmental entities in satisfaction of contractual obligations related to ad valorem tax, the client does not wish to or cannot legally request the appraisal report not identify the client.

Intended users of our reports are typically the client(s) for which we are under direct contract. Although taxpayers on the magents who own and/or represent the subject property being appraised often receive these reports either by 12 or 13 as a courtesy of the client or P&A, this receipt does not mean these parties automatically become intended users as defined by USPAP. A party receiving a copy of a report in order to satisfy disclosure requirements does not become an intended user of the appraisal or mass appraisal unless the appraiser specifically identifies such party as an intended user. Potential other users include parties involved in adjuctication 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 gathes who may obtain copies of our appraisals through Open Records Requests made to governmental agencies

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

P&A makes the Extraordinary Assumption that all properties appraised for ad valorem tax purposes are marked to expenses 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 an extraordinary assumption stated above would be revoked.

P&A is typically under contract to determine <u>current</u> 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
- south 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 walking - for example, in Texas the lien date is January 1 per the Texas Property Tax Code. For ad valorem the purposes, the date of the appraisals and reports are typically several months past the effective date, thereby reaving 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
- Anat P&A's peers' actions would be in performing the same or similar appraisal services in compliance

Legal and Statutory Requirements: In Texas, the provisions of the Texas Property Tax Code and other relevant legislation measures involving appraisal administration and procedures control the work of P&A as an extension of the Autoraisa: District. Other states in which P&A is employed will have similar controlling legislation, regulated 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 readcraised annually. The definition of Fair Market Value is provided and promulgated for use in ad valorem tax world? Texas by the Texas Property Tax Code, and therefore as a Jurisdictional Exception supercedes the definition of finance value" as found in USPAP definitions.

IN TEXAS, P&A BELIEVES THE PROPERTY BEING APPRAISED AND PLACED ON THE TAX ROLL IS THE MITEREST 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 IN ONLETIZES. THE INTEREST AND THUS GIVES THE INTEREST ITS VALUE. WHENEVER P&A REFERS TO THAT IS THE SUBJECT OF THE REFERENCE.

Administrative Requirements: P&A endorses the principals of the International Association of Assessing Officers (EAAC) regarding its appraisal practices and procedures. P&A also endorses, and follows when possible, the standards of professional Appraisal Practice (ESPAP). In all cases where EAAC and/or USPAP requirements cannot be satisfied for reasons of practically or irrelevancy, P&A subscribes to "generally accepted appraisal methods and techniques" so that its value appraisals are credible and defencable. 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 and recollectly defined or allowed through IAAC 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.

Appraisa. 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: Fill each mineral property a common set of data characteristics (i.e. historical production, price and expense cata) is an lected 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.

Enformation Systems: The mainframe systems are augmented by the databases that serve the various in-house and 3%-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 cuestions or redirects them to the proper department personnel.

VALUATION APPROACH (MODEL SPECIFICATION)

Concerns 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 reflated the 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 resource (frapplicable), 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 minapsoral in time. The potential value of mineral interests derived from sale of minerals to be extracted from the god and 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.

Approximents to Value for Petroleum Property

Cost a particular The use of cost data in an appraisal for market value is based upon the economic principle of substitute in. The post 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 alifficult 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 cit and gas reserves themselves. Trying to apply the cost approach to evaluation of mineral interests is in like trying to apply the cost approach to land; it is a moot point because both are real properties that are interestly non-repraceable.] 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 A peroach: 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 range 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 userill tess of the market approach for appraising oil and gas properties. First, oil and gas property sales data is sended a severely disclosure states such as Texas); consequently there is usually a severe lack of market cause inflored for meaningful statistical analysis. Second, all conditions of each sale must be known and carefully investigated to be sare one does have a comparative indicator of value per fair market value perquisites.

Many times when these properties do change hands, it is generally through company mergers and acquisitions where the easiers in addition to oil and gas reserves are involved; this further complicates the analysis whereby a rotal and easier the must be allocated to the individual components - a speculative and somewhat arbitrary task at description 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:

- · I great production and estimated declines forecast by the buyer;
- 4 est mated probable and potential reserves:
- general lease and legal information which defines privileges or limitation of the equity sold;
- reveloped potential such as secondary recovery prospects;
- oraximity to other production already operated by the purchaser;
- bantingenoies and other cash equivalents; and
- section factors such as size of property, gravity of oil, etc.

in the event mat 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 most in its applicability. As a general rule, and for the reasons stated above. I licensed & Abbott, Inc., rarely employs a rigorous application of the market approach in the approach of mineral interests.

Insome a process. 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 are income may then be converted (discounted) into an estimate of current value. Many refer to this are a repitalization 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 a limitary ements are of any residual value after the cessation of oil and gas production, that value should also the input set of fitness components are also being appraised).

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

- A Post the and expenses are not a consideration, except insofar as they may be a guide to estimating following meaning.
- That the producing life as well as the reserves (quantity of the minerals) are estimated for the property.
- Figure income is less valuable than current income, and so future net income must be discounted to make trectivement to the present income. This discount factor reflects the premium of present money over the management, increase rate, the aidity, investment management, and risk.

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

DATA CULLECTION/VALIDATION

Sources 1 Data: The main source of P&A's property data is data from the Railroad Commission of Texas as reported 17 operators. As a monthly activity, the data processing department receives data tapes or electronic files which take updated and new well and production data. Other discovery tools are fieldwork by appraisers, financial that 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 is a silelated to property valuation.

Another reaches set of data to obtain is the ownership of these mineral interests. Typically a mineral lease is fractionate 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 is on as operators) who have the responsibility of disbursing the income to the mineral interest owners. Another so are of ownership information is through the taxpayers themselves who file deeds of ownership transplantation of the appraisal district directly.

Data Contention Procedures: Electronic and field data collection requires organization, planning and supervision of the uptralisal staff. Data collection procedures for mineral properties are generally accomplished globally by the computation and price data for the entire state is downloaded at one time into the computer system and raisers are 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 on early liferent geographic areas. Each office has a district manager, appraisal and ownership maintenance staff, and the data staff as appropriate. While overall standards of performance are established and upheld for the various street offices, quality of data is emphasized as the goal and responsibility of each appraiser.

MARLIATION AMALYSIS (MODEL CALIBRATION)

A 1990 who revisions and/or enhancements of schedules or discounted cash flow software are annually made and then tested on or 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: Double for Barrel of Reserves; Dollars of Value Per Daily Average Barrel Produced; Dollars of Expense the Daily Average Barrel Produced; Years Payout of Purchase Price (Fair Market Value). In a more cression of invalue, the validity of values by P&A's income approach to value is tested against actual market of these transactions must be analyzed for meeting all requisites of fair market value definition. How we have a signal of this analysis are then compared to industry benchmarks for reasonableness before being industry and one calibration proceeding.

THE FIRE DAIL MALUE REVIEW PROCEDURES

and the consperty values are reviewed several times in the appraisal process. P&A's discounted cashflow software constructed yearness various benchmark indicators that the appraiser reviews concurrent with the value being sent-taxed. These benchmarks often promotine appraiser to reevaluate some or all of the parameters of data

entry so so to arrive at a value more indicative of industry standards. Examples of indicators are dollars of value per barre, tribilitieserve, years payout, etc. in addition to appraiser review, taxpayers are afforded the opportunity to the life of the appraised values, either before or after Notices of Appraised Value are prepared. Operators rectifine a mest 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 a property values are subject to review through normal protest and Appraisal Review Board procedures, with P&A spring 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 Connector of Texas Connector of Texas Connector of 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 gifted an appearantly 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 consisters appropriate.

USPAP STANDARDS 5, 6-1, 6-2: MASS APPRAISAL OF INDUSTRIAL, UTILITY AND RELATED PERSONAL PROPERTY

INTROLUCTION

<u>Definition of Appraisal Responsibility</u>: 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.

Page a project calculate a governmental entity charged with appraisal responsibility for advalorem tax purposes, although other types of clients (private businesses, individuals, etc.) occasionally contract for appraisal services which are surjetly for various non-advalorem tax purposes so that no conflicts of interest are created with P&A's care an inforem tax work.

Pake hereby makes the assumption that, in all appraisal assignments performed for governmental entities in satisfaction of contractual obligations related to ad valorem tax, the client does not wish to or cannot legally request the appraisal report not identify the client.

Intended users of our reports are typically the client(s) for which we are under direct contract. Although taxpayers controll agents who own and/or represent the subject property being appraised often receive these reports either to a so that as a courtesy of the client or P&A, this receipt does not mean these parties automatically become intended users as defined by USPAP. A party receiving a copy of a report in order to satisfy disclosure requirement to does not become an intended user of the appraisal or mass appraisal unless the appraiser specifically indentifies such party as an intended user. Potential other users include parties involved in adjudicable to of valuation disputes (review board members, lawyers, judges, etc.), governmental agencies which pediodically review our appraisals for various statutory purposes (such as the Texas Comptroller's Office) and proved to relief who may obtain copies of our appraisals through Open Records Requests made to governmental agencies.

Plica believes this section of this report, in conjunction with any attached or separately provided P&A-generated report. The USPAP definition of the provided 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
- A CART P&A's peers' actions would be in performing the same or similar appraisal services in compliance in USPAP.

This product of P&A's USPAP report is not applicable to any Industrial, Utility, or related Personal Property that the product appraises pursify of P&A's appraisal services, in which case the appraisal district's chemical PAP report should be referenced.

Figure that less the Exchaordinary Assumption that all properties appraised for ad valorem tax purposes are manufactured to the temperature of encumbrances and other restrictions that would a featurable manufacture to an extent not obtained to the general marketplace. If and/or when we are made aware colors to these would be taken into account in our appraisal in which case the extraordinary assumption asset above would be revoked.

Least the System of Requirements: The provisions of the Texas Property Tax Code and relevant legislative mess the statistical administration and procedures control the work of P&A as a subcontractor to the

Appraisa. District. P&A is responsible for appraising property on the basis of its market value as of January 1 for ad valuem tax purposes for each taxing unit that imposes ad valorem taxes on property in the contracted appraise. I suffer All industrial, utility and personal properties are reappraised annually. The definition of Fair hands of the is provided and promugated 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 USBAP reflictions.

Association of Assessing Officers (IAAO) regarding its appraisal practices and when appring 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 Foundards in Known as the Uniform Standards of Professional Appraisal Practice (USPAP). P&A submits annual collianates, contract bids to the Office of the Chief Appraiser and is bound to produce appraisal estimates on inclusions, which are personal properties within the cost constraints of said bid. Any appraisal practices and procedures to cover the P&A not explicitly defined through IAAO or USPAP requirements are specified by the Tierras Processor Tax Code and/or at the specific request or direction of the Office of the Chief Appraiser.

Alborn Sell Resources

Anissians of the Engineering Services Department and P&A's appraisal staff consists of appraisers with degrees in engineering, business and accounting. An 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 Flegueria (1777).

Hate with the construction of the program cost, year of acquisition, quantities, capacities, net operating interest of the property is collected from various sources. This data is maintained in either hate copy or computer files. Each property's characteristic data drives the analogous transfer of the property of the

Independ to Systems: P&A's mainframe compater system is composed of in-house custom software augmented to some the smaller system is applications on personal computers (PC). P&A offers a variety of system is to underly owners and public entities with information services.

VALUATION APPROACH (MODEL SPECIFICATION)

that the second second to the variation of incommission untity and personal properties is not an exact science, and exact a following and attached one to many factors. These are considered complex properties and some are considered Special Physose properties. Nevertheless, standards of reasonable performance do exist, and there are reliable means to the uning and applying these standards

The early line are appraise, of industrial prility and personal property relies heavily on the discovery of the content of the property is subject to inflation and detree after the apprication of recognized appraisal techniques. The property is subject to inflation and detree after the appraisal of industrial and personal property involves understanding petroleum, onemical action power. It is appraisal of industrial property usually follows either the specific industry or the general business control. In a consist of mility properties in volves understanding telecommunications, electrical transmission and a final action aum sipelines and the railroad industry. Utility properties are subject to regulation and

enanomic absorbescence. The examination of utility property involves the understanding of the present value of future introduction are environment.

The grant of a lattice of industrial, withly and personal properties is to appraise all taxable property at "fair marker value". The Texas Property Tax Code defines Fair Market value as the price at which a property would transfer the pass on its equivalent under prevailing market conditions if:

- BADASSO for sale in the open marke, with a reasonable time for the seller to find a purchaser;
- which the seller and the purchaser knowledgell the uses and purposes to which the property is adapted and for the change of being used and of the enforceable restrictions on its use; and
- the restriction of the other.

App. to the to wante for ladustrial Culty, and Personal Property

Cast Appropried. 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 in the America as accorded 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 measure above, Pritchard & Amarch, frequency, relies predominantly on the cost approach to value in the nutralist of management utility, and personal property.

Enables to the approach is characterized as one that uses sales data available from actual transactions in the market approach for appraising leaves to the first the property sales data is seldom disclosed; consequently there has a market approach for these properties. First the property sales data is seldom disclosed; consequently there has a market approach of these properties available for meaningful statistical analysis. Second, all conditions of sale in at the known and carefully investigated to be sure one does have a comparative indicator of value. When these properties do change hands, it is generally through company mergers and acquisitions there are assert and intangibles in addition to the industrial, utility and personal property are involved. The camber of witness sales presents unique charlenges and hindrances to the process of allocation of value to the individual and consequents of the transaction.

As the cost of accessive, utility and personal properties, a scarcity of sales requires that all evidence of market data the language and analyzed. Factors relative to the sale of these properties are:

- and on profession and current order of terms of sale, cash or equivalent;
- cumplexity of property:
- Webbilden
- and the months of the modustry sizes of operated by the purchaser; and
- Jac factors such as capital investment in the property.

HIS A BALL OF THE STAR FOR THE PERSONS STATED above, Pritchard & Abbott, Inc., rarely employs a rigorous application of first market approach in the appraisal of industrial, utility, and personal property.

<u>Internal addition</u>. This approach to make a per readily yields itself to all income generating assets, especially utility properties is available from annual reports submitted to regulatory agencies

whereby nature 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 are applied instrumemental, because capitalization is the process of converting an income stream into a capital sum thrus the vital and 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 received income that should be used in the valuation model is the expected future net operating income after contents for Federal Income Taxes may or may not be required).

What would be the interest expense [adjustments for Federal Income Taxes may or may not be required).

What would be the interest expense [adjustments for Federal Income Taxes may or may not be required).

- Past income and expenses are a consideration, insofar as they may be a guide to future income, subject to reaching and competition
 - The economic life of the property can be estimated.
- The mature production, revenues and expenses can be accurately forecasted. Future income is less manded man 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., present safe, its didity, investment management, and risk.

As a general rate and for the reasons sinced above, Pritchard & Abbott, Inc., employs the income approach in the equation of industrial and wallity property only when quantifiable levels of income are able to be realized accommon and/or projected for the subject property. P&A does not employ the income approach in the automism of personnal property

NAME DOLDESTICKMALIDATION

Source to Date: The main source of P&A's property data for industrial and personal property is through the double of the appraisers and commercially/publicly available schedules developed on current costs. Data for performing which appraises is typically provided by the taxpayer or is otherwise available at various regulatory agencies. The as Roll and Commission, Fuotic Utilities Commission, FERC, et. al.). Other discovery tools are the angulative annual reports, information from chief appraisers, renditions, tax assessors, trade publications to a commission and appraisers. Other members of the public ften provide P&A information regarding new inclusions and the ruse like facts related to property valuation.

Flection leads and State of St

VALUEDION ANALYSIS (MODEL CALIBRATION)

The wife mediane values by P&A's income and cost approaches to value is tested against actual market transactions and verifiable details of the transactions are disclosed to P&A. These transactions are predicted for meeting all requisites of fair market value definition. Any conclusions from this transactions are predicted to inclustry perchangels before being incorporated in the calibration procedure. Approximate previsions of post schedules and appraisal software are annually made and then tested for transactions in contract appraisal software are annually made and then tested for transactions in contract appraisal software are annually made and then tested for

MODERAL MALUE REVIEW PROCEDURES

portant to proper an use are reviewed several times in the appraisal process. P&A's industrial, utility, personal portant to appraisal spreadsheets afford the appraiser the opportunity to review the value being generated. Other the appraiser is prompted to reevaluate some or all of the parameters of data entry so as to arrive the control of the parameters of data entry so as to arrive the control of the parameters are original cost, replacement cost, should be age, her operating income, capitalization rate, etc. In addition to appraiser review, taxpayers are afford the parameters and representatives routinely meet with P&A's appraisers to review parameters and the control of the control of the process of through public or commercial sources, such as investment costs and the control of the control of the control of the Chief Appraiser. The levy Board procedures with P&A's acting as a representative of the Office of the Chief Appraiser.

PERSONAL WARDENINGTS

The angle of the angle of the angle of properties appraised by P&A is conducted by the State of The angle of property Value Study for school funding purposes. This study chemicals the negree of uniformity and the median level of appraisal for utility properties. School jurisdictions and the angle of the appearance of the appearance of the compact of the compact of the appearance of the study, including in the report the median level of appraisal, the coefficient of the appearance of the appearance of the study. Including in the report the median level of appraisal, the Comptroller of the appearance of the appearance

Jim Hogg

USPAP STANDARD 63: CERTIFICATION

	locally that, to the best of my knowledge	and belief		
	The statements of fact contained to this The reported analysis, ephalms, and correctly personal, impartial, and unfain I have no (or the specified below) personal into these performed no (or the specified below) personal into I have performed no (or the specified below) personal into I have performed no (or the specified below). I have no this with respect to any profit years no this with respect to any profit years no this with respect to any profit years no this three for completing this at a value that favors the cause of the decentration of a subsequent event directly and only the performance of a subsequent dependent of the support have not, if specified below it is the current provided algorithms many approviding algorithms many approviding algorithms many approvided algorithms.	metadons ero limited only by the col professional analyses, opining the properties havens in the parties from the representative havens in the parties from a superator of three-year period immediately porty that is the subject of this reporty that is the subject of this reporty that is not contingent upon developing and contingent upon developing the professional and on the subject of the report of the value of the report of the subject	ore, and conclusion property that is the invalved. Inval	ne. comblect of this report, and I have acity, regarding the property that acc of this undyminst. to involved with this endyment. determined remits. predetermined value or direction ment of a stipulated result, or the this is combraity with the Uniform are the subject of this report. (Any mention or most before.)
(De cliepn	7-13-20	Inspected Property?	Provided Significant Appoint Anthomat Laurito
4	Fri Cullo	<u>7.9</u> 7.90	W Rank	WCS That is
	can Juhar	7-23-3020	Harris .	Pearl to
	hannes Stay	7-23-20	NO TOTAL	Hane .
List	er statistische beisteren geber einstische Ageistische m	na eppedied entidosco dedito person	d Importion statemer	d of my signature