

Matagorda County Appraisal District

2225 Avenue G
Bay City, Texas 77414
979-244-2031

September 10, 2014

Phyllis Winn
Property Tax Division
Texas Comptroller of Public Accounts
P O Box 13528
Austin TX 78711-3528

RE: 2015 2016 Biennial Reappraisal Plan

Dear Ms. Winn:

The Matagorda County Appraisal District Board of Directors met Tuesday, September 9, 2014 in a public hearing and approved a written biennial reappraisal plan for the years 2015 2016. Copies of this plan and the resolution adopting the plan are enclosed to show compliance with Section 6.05 of the Texas Property Code.

Should you have any questions, please feel free to contact me by email at mcad@co.matagorda.tx.us or by phone 979-244-2031.

Sincerely,



Vince Maloney
Chief Appraiser
Matagorda County Appraisal District

Matagorda County Appraisal District
Biennial Reappraisal Plan for
Years 2015 and 2016

Adoption Date: September 9, 2014
Comptroller Submission Date: September 10, 2014

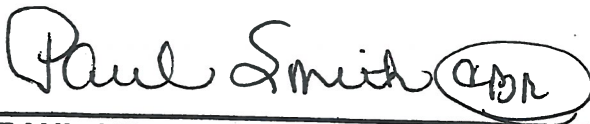
NOTICE OF PUBLIC HEARING

MATAGORDA COUNTY APPRAISAL DISTRICT BIENNIAL REAPPRAISAL PLAN FOR YEARS 2015-2016

NOTICE IS HEREBY GIVEN THAT THE MATAGORDA COUNTY APPRAISAL DISTRICT BOARD OF DIRECTORS WILL HOLD A PUBLIC HEARING ON THE 2015-2016 BIENNIAL REAPPRAISAL PLAN. THE PUBLIC HEARING WILL CONVENE AT 12 NOON ON TUESDAY, SEPTEMBER 9, 2014 IN THE APPRAISAL DISTRICT OFFICE CONFERENCE ROOM LOCATED AT 2225 AVENUE G, BAY CITY IN SAID COUNTY.

THE AGENDA IS AS FOLLOWS:

- A. PUBLIC REVIEW AND DISCUSSION OF THE PROPOSED 2015-2016 BIENNIAL REAPPRAISAL PLAN
- B. ADOPTION AND RESOLUTION OF THE 2015-2016 BIENNIAL REAPPRAISAL PLAN

A handwritten signature in black ink that reads "Paul Smith" followed by a circled set of initials "PSM".

PAUL SMITH, SECRETARY
MATAGORDA COUNTY APPRAISAL DISTRICT
BOARD OF DIRECTORS

2014 AUG 29 PM 12:43
Grace H. H. H.
COUNTY CLERK
MATAGORDA COUNTY TEXAS

FILED

Matagorda County Appraisal District

RESOLUTION

**ADOPTING BIENNIAL REAPPRAISAL PLAN
FOR YEARS 2015 & 2016**

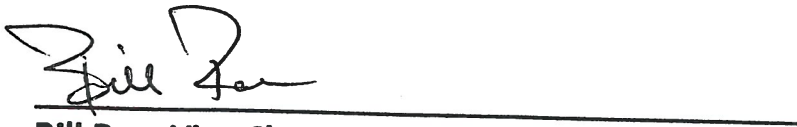
WHEREAS, the Matagorda County Appraisal District is a political subdivision of the State of Texas and;

WHEREAS, Section 6.05(i) Texas Property Tax Code provides that the Board of Directors of an appraisal district shall develop biennially a written reappraisal plan for the periodic reappraisal of all property within the boundaries of the district according to the requirements of Section 25.18 Texas Property Tax Code and shall hold a public hearing to consider the proposed plan.

WHEREAS, the Board of Directors of the Matagorda County Appraisal District met on Tuesday, September 9, 2014 to review and discuss the 2015 & 2016 Biennial Reappraisal Plan.

NOW THEREFORE BE IT RESOLVED, that the Board of Directors of the Matagorda County Appraisal District does hereby approve the adoption of the 2015 & 2016 Biennial Reappraisal Plan.


Stephen Zapalac, Chairman


Bill Roe, Vice Chairman

Passed and Approved this Tuesday, September 9, 2014

Table of Contents

TAX CODE REQUIREMENTS	3
REVALUATION DECISION OR REAPPRAISAL CYCLE	4
REAPPRAISAL AND NON-REAPPRAISAL YEAR ACTIVITIES	4
REVALUATION DECISION.....	5
PERFORMANCE ANALYSIS.....	5
ANALYSIS OF AVAILABLE RESOURCES	6
STAFF EDUCATION & TRAINING	6
PLANNING AND ORGANIZATION	6
2015 CALENDAR OF KEY EVENTS.....	7
2016 CALENDAR OF KEY EVENTS.....	8
MASS APPRAISAL SYSTEM	9
PERIODIC REAPPRAISALS	10
PILOT STUDY Tax Code Section 25.18 (5).....	11
VALUATION BY TAX YEAR Tax Code Section 25.18 (7)	12
THE MASS APPRAISAL REPORT.....	13
VALUE DEFENSE.....	13
ADDENDUM: 2015/2016 BIENNIAL REAPPRAISAL PLAN	14
2015 REAPPRAISAL PLAN	15
WORKFLOW SCHEDULE	15
2016 REAPPRAISAL PLAN	19
WORKFLOW SCHEDULE	19
PRITCHARD & ABBOTT 2015/2016 BIENNIAL REAPPRAISAL PLAN	23

EXECUTIVE SUMMARY

TAX CODE REQUIREMENTS

Passage of S.B. 1652 amended the Tax Code to require a written biennial reappraisal 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 the Section 25.18 and shall hold a public hearing to consider the proposed plan. Not later than the 10th day before the date of the hearing, the secretary of the board shall deliver to the presiding officer of the governing body of each taxing unit participating in the district a written notice of the date, time, and place of the hearing. Not later than September 15 of each even numbered year, the board shall complete its hearing, 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

Subsections (a) and (b), Section 25.18, Tax Code, are amended to read as follows:

- (a) Each appraisal office shall implement the plan for periodic reappraisal of property approved by the board of directors under Section 6.5(i).
- (b) The plan shall provide for the following reappraisal activities for all real and personal property in the district at least once every three years:
 - (1) Identifying properties to be appraised through physical inspection or by other reliable means of identification, including deeds or other legal documentation, aerial photographs, land-based photographs, surveys, maps and property sketches;
 - (2) Identifying and updating relevant characteristics of each property in the appraisal records;
 - (3) Defining market areas in the district;
 - (4) Identifying property characteristics that affect property value in each market area, including:
 - (A) The location and market area of the property;
 - (B) Physical attributes of property, such as size, age, and condition;
 - (C) Legal and economic attributes; and
 - (D) Easements, covenants, leases, reservations, contracts, declarations, special assessments, ordinances, or legal restrictions;

- (5) Developing an appraisal model that reflects the relationship among the property characteristics affecting value in each market area and determines the contribution of individual property characteristics;
- (6) Applying the conclusions reflected in the model to the characteristics of the properties being appraised; and
- (7) Reviewing the appraisal results to determine value.

REVALUATION DECISION OR REAPPRAISAL CYCLE

The Matagorda County Appraisal District by policy adopted by the District's Board of Directors reappraises all property in the district every three years. The reappraisal year is a complete appraisal of all properties in the district. Tax year 2015 is a reappraisal year for Region 3 and tax year 2016 is a reappraisal year for Region 1. (Region Reference pg 6)

REAPPRAISAL AND NON-REAPPRAISAL YEAR ACTIVITIES

1. Performance Analysis – the equalized values from the previous tax year are analyzed with ratio studies to determine the appraisal accuracy and appraisal uniformity overall and by market area within property reporting categories. Ratio studies are conducted in compliance with the current *Standard on Ratio Studies* of the International Association of Assessing Officers.
2. Analysis of Available Resources – staffing and budget requirements for tax year 2015 are detailed in the 2015 budget, as adopted by the board of directors and attached to the written biennial plan by reference. Existing appraisal practices, which are continued from year to year, are identified and methods utilized to keep these practices current are specified. True Automation support is detailed with year specific functions identified and system upgrades scheduled. Existing maps and data requirements are specified and updates scheduled.
3. Planning and Organization – a calendar of key events with critical completion dates is prepared for each major work area. This calendar identifies all key events for appraisal. A calendar is prepared for tax years 2015 and 2016. The production standards for field activities are calculated and incorporated in the planning and scheduling process.
4. Mass Appraisal System – Computer Assisted Mass Appraisal (CAMA) system revisions required are specified and scheduled with True Automation. All computer forms and True Automation 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 tax year include new construction, demolition, remodeling, re-inspection of problematic market areas, re-inspection of the universe of properties on a specific three year cycle, and field or office verification of sales data and property characteristics.
6. Pilot study by tax year – new and/or revised mass appraisal models are tested each tax year. Ratio studies, by market area are conducted on proposed values each tax year. Proposed values on each category are tested for accuracy and reliability in randomly selected market areas.

7. Valuation by tax year – using market analysis of comparable sales and locally tested cost data, valuation models are specified and calibrated in compliance with supplemental standards from the International Association of Assessing Officers and the Uniform Standards of Professional Appraisal Practice. The calculated values are tested for accuracy and uniformity using ratio studies.
8. The Mass Appraisal Report – each tax year the tax code required Mass Appraisal Report is prepared and certified by the Chief Appraiser at the conclusion of the appraisal phase of the ad valorem tax calendar (on or about May 15th). The Mass Appraisal Report is completed in compliance with STANDARD RULE 6-8 of the *Uniform Standards of Professional Appraisal Practice*. The signed certification by the Chief Appraiser is compliant with STANDARD RULE 6-9 of *USPAP*. This written reappraisal plan is attached to the report.
9. Value defense – evidence to be used by the appraisal district to meet its burden of proof for market value and equity in both informal and formal appraisal review board hearings is specified and tested.

REVALUATION DECISION

The Matagorda County Appraisal District by policy adopted by the Board of Directors reappraises all property in the district every three years. The reappraisal year is a complete appraisal of all properties in the region. The non-reappraisal year is used to pick up new construction, adjust for changes in property characteristics that affect value and adjust previous year value equalization.

Tax Year 2015

Tax year 2015 is a reappraisal year for Region 3

Tax Year 2016

Tax year 2016 is a reappraisal year for Region 1

PERFORMANCE ANALYSIS

In each tax year 2015 and 2016, the previous tax year's equalized values are analyzed with ratio studies to determine appraisal accuracy and appraisal uniformity overall and by market area within state property reporting categories. Ratio studies are conducted in compliance with the current *Standard on Ratio Studies* from the International Association of Assessing Officers. Mean, Median, and weighted mean ratios are calculated for properties in each reporting category to measure the level of appraisal (appraisal accuracy). The mean ratio is calculated in each market area to indicate the level of appraisal (appraisal accuracy) by property reporting category. In 2014, the reappraisal year for Region 2, the analysis is used to develop the starting point for establishing the level and accuracy of appraisal performance for 2015. The 2015 final data will become the basis for the 2016 reappraisal of Region 1.

ANALYSIS OF AVAILABLE RESOURCES

Staffing and budget requirements for tax year 2015 are detailed in the 2015 appraisal district budget, as adopted by the board of directors and attached to the written biennial plan by reference. This reappraisal plan is adjusted to reflect the available staffing in tax year 2015 and the anticipated staffing for tax year 2016. Staffing will impact the cycle of real property re-inspection and personal property on-site review that can be accomplished in the 2015-2016 time period.

Existing appraisal practices, which are continued from year to year, are identified and methods utilized to keep these practices current are specified. In the reappraisal year, real property appraisal depreciation tables and cost new tables are tested against verified sales data to ensure they represent current market data. The cap rate study by commercial real property type is updated from current market data and market rents are reviewed and updated from local published data. Personal property density schedules are tested and analyzed based on rendition and prior year hearing documentation.

True Automation support is detailed with year specific functions identified and system upgrades scheduled. Computer generated forms are reviewed for revisions based on year and reappraisal status. Legislative changes are scheduled for completion and testing. Existing maps and data requirements are specified and updates scheduled.

STAFF EDUCATION & TRAINING

All personnel that are performing appraisal work are required to be registered with the Texas Department of Licensing and Regulation. Appraisers are required to achieve the status of Registered Professional Appraiser within five years of employment. Appraisers must receive additional training through continuing education to maintain their certification.

PLANNING AND ORGANIZATION

Matagorda County Appraisal District has established the following reappraisal plan to provide for the reappraisal of all real property within the district at least once every three years.

1. Three Year Cycle – MCAD is divided into three major geographic regions. Each year, all real property within one of the three regions will be reappraised, regardless of any ratio study/report finding. The three major regions are identified as follows:

<u>YEAR</u>	<u>REGION</u>	<u>SCHOOL DISTRICTS</u>	<u>COORDINATOR</u>
2015	3	Bay City/Matagorda	Appraisal Manager
2016	1	Tidehaven/Palacios	Appraisal Manager
2017	2	Van Vleck/Boling	Appraisal Manager

2. Annual Ratio Reports – In addition to the three year cycle stated above, sales ratio reports shall be run on all regions, neighborhoods and subdivisions within the CAD outside of the region undergoing a full reappraisal, in order to identify those areas within the CAD which need to be reappraised during the current year based on sales ratios. Those areas or subdivisions whose ratios are above or below

statutory requirements shall be reappraised in the current year regardless of the region in which they are located.

This approach will insure not only that all residential real property within the MCAD is reappraised at least once every three years, but also that all other areas within MCAD are reviewed annually so that the appraisal district stays current with respect market value to those areas where residential property values appear to be changing rapidly.

A calendar of key events with critical completion dates is prepared for each major work area. This calendar identifies all key events for appraisal and clerical functions. A separate calendar is prepared for tax year 2015 and 2016. The production standards for field activities are calculated and incorporated in the planning and scheduling process.

2015 CALENDAR OF KEY EVENTS

REGION 3 Reappraisal of Bay City ISD & Matagorda ISDs Estimated Parcel Count: 15582

Event	Beginning Date	Ending Date
Start of Region 3 Reappraisal for Matagorda & Bay City ISDs.	07/28/2014	01/30/2015
Run ratio study, analyze for areas of concern, discuss with staff, create 2015 work file.	07/28/2014	07/31/2014
Send EARS & Sales tape to State Comptroller & Last day for property owners to apply for September 1 Inventory appraisal for 2015 (Sec. 23.12)	08/01/2014	08/01/2014
Last day to approve Biennial reappraisal Plan 9/15/2014	8/01/2014	8/29/2014
Region 3 Reappraisal Bay City ISD Measuring	08/11/2014	11/26/2014
Region 3 Reappraisal Bay City & Matagorda ISD non-measuring	12/01/2014	01/30/2015
Personal Property Rendition Printed/ Mailed	12/22/2014	12/31/2014
Statutory Appraisal Date for most categories of taxable properties.	01/02/2015	
Run ratio study, analyze for areas of concern, discuss with staff.	01/02/2015	01/09/2015
Process Exemptions and special use applications	01/02/2015	To Applicable Deadlines
Process Business Personal Property Renditions	01/02/2015	04/30/2015
Sales tape to State Comptroller	01/30/2015	01/30/2015
Region 1 & 2 and Reappraisal Region 3 field checks, rechecks and data entry.	02/02/2015	02/17/2015
Full valuation effort – model specification/calibration included, followed by report to supervisors on efforts. Valuation Review/Test/Error Report Clean up	02/18/2015	03/20/2015
Finalize with supervisory approval of all valuation efforts.	03/25/2015	03/25/2015
Send Appraisal Notices to Residential Homesteads & E-files.	03/27/2015	03/31/2015
Informal Review Process	04/01/2015	05/31/2015
Deadline to file 2015 Business Personal Property		

Renditions and/or General Real Estate Rendition, unless extension is granted.	04/15/2015	
Send Appraisal Notice to Non-Residential Properties	04/30/2015	04/30/2015
Chief Appraiser prepares Mass Appraisal Report	05/15/2015	
Preliminary estimates to taxing units prepared	05/15/2015	
Turn Over 2015 Appraisal Roll to ARB	05/15/2015	
Formal Hearings process	05/15/2015	07/17/2015
Deadline to file protest & send Penalty letters for Business Personal Property.	06/01/2015	6/01/2015
Chief Appraiser certifies 2015 Appraisal Roll	07/20/2015	
Certified totals are provided to taxing entities	07/20/2015	
Finalize and close 2015 work file	07/24/2015	

2016 CALENDAR OF KEY EVENTS

REGION 1 Reappraisal of Tidehavne ISD & Palacios ISDs Estimated Parcel Count: 13,811

Event	Beginning Date	Ending Date
Start of Region 1 Reappraisal for Tidehaven ISD & Palacios ISDs.	07/27/2015	01/29/2016
Run ratio study, analyze for areas of concern, discuss with staff, create 2016 work file.	07/27/2015	08/03/2015
Send EARS & Sales tape to State Comptroller & Last day for property owners to apply for September 1 Inventory appraisal for 2016 (Sec. 23.12)	07/31/2015	07/31/2015
Region 1 Reappraisal Tidehaven ISD & Palacios ISD Measuring	08/10/2015	11/25/2015
Region 1 Reappraisal Tidehaven ISD & Palacios ISD Non-Measuring	12/01/2015	01/29/2016
Personal Property Rendition Printed/ Mailed	12/21/2015	12/31/2015
Statutory Appraisal Date for most categories of taxable properties.	01/04/2016	
Run ratio study, analyze for areas of concern, discuss with staff.	01/04/2016	01/08/2016
Process Exemptions and special use applications	01/04/2016	To Applicable Deadlines
Process Business Personal Property Renditions	01/04/2016	04/29/2016
Sales tape to State Comptroller	02/01/2016	02/01/2016
Region 2 & 3 and Reappraisal Region 1 field checks, rechecks and data entry.	02/01/2016	02/16/2016
Full valuation effort – model specification/calibration included, followed by report to supervisors on efforts. Valuation Review/Test/Error Report Clean up	02/17/2016	03/17/2016
Finalize with supervisory approval of all valuation efforts.	03/21/2016	03/25/2016
Send Appraisal Notices to Residential Homesteads & E-files.	03/31/2016	03/31/2016

Informal Review Process	04/01/2016	05/31/2016
Deadline to file 2016 Business Personal Property Renditions and/or General Real Estate Rendition, unless extension is granted.	04/15/2016	
Send Appraisal Notice to Non-Residential Properties	04/29/2016	04/29/2016
Chief Appraiser prepares Mass Appraisal Report	05/13/2016	
Preliminary estimates to taxing units prepared	05/13/2016	
Turn Over 2016 Appraisal Roll to ARB	05/13/2016	
Formal Hearings process	05/13/2016	07/15/2016
Deadline to file protest	05/31/2016	
Start working on Biennial reappraisal Plan Year 2017-2018	06/01/2016	9/15/2016
Send Penalty letters for Business Personal Property.	06/01/2016	06/01/2016
Chief Appraiser certifies 2016 Appraisal Roll	07/20/2016	
Certified totals are provided to taxing entities	07/20/2016	
Finalize and close 2016 work file	07/22/2016	

MASS APPRAISAL SYSTEM

Computer Assisted Mass Appraisal (CAMA) system revisions are specified and scheduled with True Automation. All computer forms and True Automation procedures are reviewed and revised as required. The following details these procedures as it relates to the 2015 and 2016 tax years:

REAL PROPERTY VALUATION

Revisions to cost models, income models and market models are specified, updated and tested each year.

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

Land tables are updated using current market data (sales) and then tested with ratio study tools. Value modifiers are developed for property categories by market area and tested on a pilot basis with ratio study tools.

Income, expense and occupancy data is updated in the income models for each market area and cap rate studies are completed using current sales data. The resulting models are tested using ratio study tools.

PERSONAL PROPERTY VALUATION

Density schedules are updated using data received during the previous tax year from renditions and hearing documentation. Valuation procedures are reviewed modified as needed and tested against the Comptroller's schedules.

NOTICING PROCESS

25.19-appraisal notice forms are reviewed and edited for updates and changes signed off on by appraisal district management. Updates include the latest copy of Comptroller's Taxpayers Rights, Remedies and Responsibilities.

HEARING PROCESS

Protest hearing scheduling for informal and formal Appraisal Review Board hearings is reviewed and updated as required. Standards of documentation are reviewed and amended as required. The appraisal district hearing documentation is reviewed and updated to reflect the current valuation process. Production of documentation is tested and compliance with HB 201 is insured.

PERIODIC REAPPRAISALS

In accordance with the Texas Property Tax Code Section 25.18(a) Periodic Reappraisals; the following steps will be implemented in the biennial reappraisal plan:

RE-INSPECTION OF THE UNIVERSE OF PROPERTIES Tax Code Section 25.18(b)

The International Association of Assessing Officers, *Standard on Mass Appraisal of Real Property* specifies that the universe of properties should be re-inspected on a cycle of 4-6 years. The re-inspection includes the re-measurement of at least two sides of each improved property. The annual re-inspection requirements for tax years 2015 and 2016 are identified by property type and property classification and scheduled on the key events calendar.

IDENTIFYING/UPDATING RELEVANT PROPERTY CHARACTERISTICS Tax Code Section 25.18 (b) (1) (2)

Field and office procedures are reviewed and revised as required for data collection and verification of value-related and descriptive property characteristics for each property. Activities scheduled for each tax year include new construction, demolition, remodeling, re-inspection of problematic market areas and re-inspection of the universe of properties on a specific 3 year cycle. Sales data verification is an annual process.

Identifying new property is the responsibility of the field appraiser. It is important to add new value to the tax roll as well as remove property that has been torn down or out of business. Tools at the disposal of the field appraisers are: deed transfers, newspaper articles, County and City Building and Demolition permits, aerial photograph, photos taken in past property inspections, surveys, maps, mobile home movement, Comptroller's Sale Tax Report and property sketches. Field appraiser, during the periodic reappraisal, are to verify at least 2 sides of the outside perimeter for all improvements located on the property and verify any new or deleted characteristic data. All the data collected during this process will be entered into the CAMA system. The field appraiser should refer to the appraisal manual and the work file during this process for instructions or updates regarding steps to follow in the field work process, changes made to property classing/characteristics/neighborhood delineation and workflow schedules.

The field appraiser will verify sales data and property characteristic data contemporaneous with the date of the captured sale. Since Texas does not require full disclosure

of the sale price, the field appraiser may obtain sales prices through deeds, voluntarily disclosed closing statements or fee appraisals that are usually submitted as evidence in the prior year protest hearings, buyers/ sellers mailed questionnaires, actual field inspections or third party sources, such as, real estate agents and multiple listing service. It is imperative for the field appraiser to capture accurate information regarding sales data, he/she will use this collected data to test values with ratio studies before the values are finalized through the valuation model.

DEFINING MARKET AREAS IN THE DISTRICT Tax Code Section 25.18 (b) (3), (4) (A)(B),(6)

Market areas are defined by the physical, economic, governmental and social forces that influence property values. The effects of these forces are used to identify, classify, and stratify or delineate similarly situated property into smaller, more comparable and manageable subsets for valuation purposes. Delineation can involve the physical drawing of neighborhood boundary lines on a map or, it can also involve statistical separation or stratification based on attribute analysis. These homogeneous properties have been delineated into valuation neighborhoods for residential property or economic class for commercial property, but because there are discernible patterns of growth that characterize a neighborhood or market segment, appraisers will annually evaluate the neighborhood boundaries or market segments to ensure homogeneity or property characteristics. For the purpose of the CAD's three year re-inspection, market areas are defined by school district; in addition reappraisals are determined by delineated neighborhoods based on concentration of protest and/or sales. Finally re-inspection dates that fall out of the mandated three year cycle are included in the annual plan.

LEGAL ATTRIBUTES AFFECTING VALUE Tax Code Section 25.18 (4) (C) (D)

The district will identify and describe elements of recorded conveyances that will affect the use or value of the property, such as easements, covenants, reservations, and declarations. The district will also monitor the enactment or changes of governmental restrictions affecting property value, such as zoning, health ordinances, special assessments, and other legal restriction. Where leases and other possessory interests are of a nature and duration that affect value, the affect will be considered in the individual valuation of the property to which they apply.

RE-INSPECTION OF PROBLEMATIC MARKET AREAS Tax Code Section 25.18 (6)

The region coordinator will test the market data minimum of (3) times: 1). At the end of the prior year's certification, 2). On Jan 1 and 3). Prior to sending appraisal notices. The region coordinator will be evaluating: low or high protest volumes; low or high sales ratio; or high coefficient of dispersions. Market areas that fail any or all of these tests are determined to be problematic. The field appraiser will then conduct a field review to verify and/or correct property characteristic data. Additional sales data is researched and verified. In the absence of adequate market data, neighborhood delineation may need to be expanded or neighborhoods re-clustered to establish a representation of the overall market area.

REAPPRAISAL YEAR WORK FILE

The region coordinator will be responsible for the current year Reappraisal Work File that is adopted by reference to this reappraisal plan. The Reappraisal Work File is a notebook with current data available to the appraisal staff and used to monitor, update and forecast current market condition regarding property classifications, characteristics and neighborhood code delineation. All field appraisers should refer and contribute to this work file as needed throughout the appraisal year. The appraisal manager will report to the chief appraiser with changes to be made to property classification, characteristics and neighborhood code delineation.

PILOT STUDY Tax Code Section 25.18 (5)

New and/or revised mass appraisal models are tested on randomly selected market areas. These modeling test (sales ratio studies) are conducted each tax year. Actual test results are compared with anticipated results and those models not performing satisfactorily are refined and retested. The procedures used for model specification and model calibration

are in compliance with Uniform Standards of Professional Appraisal Practice, STANDARD RULE 6.

VALUATION BY TAX YEAR Tax Code Section 25.18 (7)

Using market analysis of comparable sales and locally tested cost data, market area specific income and expense data, valuation models are specified and calibrated in compliance with the supplemental standards from the International Association of Assessing Officers and the Uniform Standards of Professional Appraisal Practice. The calculated values are tested for accuracy and uniformity using ratio studies and comparing them to known sale information. Performance standards are established by IAAO Standard on Ratio Studies. Characteristics that typically affect value such as quality, depreciation, location, size, rental rates, occupancies and cap rates are analyzed through available sales data and ratio studies. Properties located in non-reappraisal year market areas are tested and evaluated during regional reappraisals. Tax year 2015 is a reappraisal year for Region 3. Tax year 2016 is a reappraisal year for Region 1.

The appraisal staff will refer to the Reappraisal Work File regarding information that was gathered, updated or maintained for all property classifications, characteristics and neighborhood codes and delineations. It is the responsibility of the region coordinator to see that changes made to property classifications and or schedules, neighborhood codes or delineations have been approved by the appraisal manager and chief appraiser and confirmed that the information was accurately inputted into the CAMA system.

RESIDENTIAL AND COMMERCIAL REAL PROPERTY

Mass Appraisal is the art of appraising a universe of properties while considering their individual characteristics. Valuation is consistent with USPAP STANDARD RULE 6-9.

RATIO STUDIES

The appraiser's primary analytical tool used to measure and improve performance is the ratio study. An appraiser conducts a ratio study to judge the two primary aspects of mass appraisal: level of accuracy and uniformity of value. The appraiser can generate a study by building class, by neighborhood, by city and by school district to allow a review of general market trends and to find any indication of market appreciation over a specified period of time. Typically samples of properties are compared to sales of comparable property and in some instances; independent appraisals are used for comparison to the district's appraised values of like properties. The following formula is utilized to compute an individual property ratio – $\text{Appraised Value} / \text{Market Value} = \text{Ratio}$.

In addition to the ratio studies, the appraiser will consider the three approaches to value listed below:

THREE APPROACHES TO VALUE

Market Data Approach – A method of valuation based on substitution. Similar sold properties are compared to determine the market value of an unsold property.

Cost Approach – A method that involves estimating the value of the site and adding to it the cost to replace the improvements today, less all estimated forms of depreciation. Local and national publications are available with cost trends and prices.

Income Approach – A method based on the premise that value is the present worth of future benefits to be generated and received from the property. Non-income generating properties do not lend themselves very well to the income approach.

THE MASS APPRAISAL REPORT

Each tax year the tax code requires a Mass Appraisal Report prepared by and certified by the Chief Appraiser at the conclusion of the appraisal phase of the ad valorem tax calendar (on or about May 15th). The Mass Appraisal Report is completed in compliance with STANDARD RULE 6-8 of the Uniform Standards of Professional Appraisal Practice. The signed certification by the Chief Appraiser is compliant with STANDARD RULE 6-9 of USPAP. This written reappraisal plan is attached to the Mass Appraisal Report by reference.

VALUE DEFENSE

Evidence to be used by the appraisal district to meet its burden of proof for market value and equity in both informal and formal appraisal review board hearings is specified and tested to insure compliance with HB 201.

ADDENDUM: 2015/2016 BIENNIAL REAPPRAISAL PLAN

Matagorda County Appraisal District

2015/2016 Reappraisal Plan

Workflow

Matagorda County Appraisal District has the following 2015/2016 Reappraisal Plan Workflow. The reappraisal plan is set up to reappraise property within the district at least once every three years by regions. Listed below are the regions, year of reappraisal, areas included in reappraisal and that regions coordinator.

Region	Year	School District	Coordinator
3	2015	Bay City ISD/Matagorda ISD	Appraisal Manager
1	2016	Tidehaven ISD/Palacios ISD	Appraisal Manager
2	2017	Van Vleck ISD/ Boling ISD	Appraisal Manager

Matagorda County Appraisal District

2015 REAPPRAISAL PLAN

WORKFLOW SCHEDULE

This workflow schedule will be used to meet all the reappraisal activities for all real and personal property located in Region 3 – reappraisal of Bay City ISD and Matagorda ISD. In addition to the Region 3 reappraisal, the workflow schedule takes into account the work for both real and personal property outside of the region to insure the district stays current with respect to changing market value. The staff will use this workflow schedule to insure production timelines are met.

The Workflow Schedule start and end dates are: July 28, 2014 and July 24, 2015 respectively.

Tasks that are to be carried out each week and every month by both the appraisal and clerical department are specified below, followed by activity related/events chart by departments:

Each week, a Monday morning Staff Meeting will be held to discuss areas of concern. The staff is encouraged to participate. Production timelines will be verified to insure target dates are met. The minutes of this meeting will be kept in the work file. A monitor is set up to track the areas that the appraiser verified the previous week.

Every month, the appraisal staff is charged with:

- Periodic field check by supervisor.
- Gathering deeds to verify and confirm sales information.
- Mailing sales verification letters to buyers/sellers.
- Input sales data received by outside sources and sales letters.
- Collecting and inputting county/city building and demolition permits.
- Collecting and inputting mechanic liens.
- Collecting and inputting TDHCA and TXDOT mobile home movements.
- Updating the nationally subscribed cost schedule publications.
- Collecting data for new or closing businesses and entering monthly VIT reports.
- Identifying and locating missing GIS parcels.

The region coordinator will update the work file when monthly tasks are completed.

Every month, the clerical staff will:

- Assist taxpayers with filing exemptions or special valuation forms and address changes.
- Answering taxpayer and public inquiries questions.
- Flag/pull and scan verification documents to accounts that will need exemptions pulled/denied due death or change in address/ownership.
- Write up field checks from information received through inquiries.
- Update, process and prepare documentation of supplemental property changes necessary to submit before the Appraisal Review Board.

Activity related/events chart by departments:

Appraisal Department:

REGION 3 Reappraisal of Bay City ISD & Matagorda ISD

Estimated Parcel Count:15,582

Jul 28	<ul style="list-style-type: none">• Run Ratio Study and analyzes the results to identify key areas of concern for the 2014 value review; reviews the prior year ARB protest for high volume areas; Appraisal Manager creates a 2015 work file and discusses results with staff.
Aug 1	<ul style="list-style-type: none">• Appraisal Manager Send EARS TAPE & Sales Tape to State Comptroller office.• Last day for property owners to apply for September 1 Inventory appraisal for 2016 (Sec. 23.12)
Aug 5	<ul style="list-style-type: none">• Print/Prepare Region 3 fieldwork packets
Aug 11	<ul style="list-style-type: none">• Hand Out Region 3 fieldwork packets Measuring Bay City ISD
Nov 26	<ul style="list-style-type: none">• Complete field discovery/verification for measuring Bay City ISD. As well as data entry will be complete
Dec 1	<ul style="list-style-type: none">• Hand Out Region 3 packets fieldwork Non- Measuring Bay City ISD
Dec 22	<ul style="list-style-type: none">• Prepare, print and mail Mobile Home tenant letters, work field checks – county-wide Mobile Home Park discovery.• Prepare & print -2015 Business Personal Property renditions & 2015 VIT Special Inventory packets.
Dec 30	<ul style="list-style-type: none">• Complete Mobile Home Park field checks.• Mail 2015 Business Personal Property rendition and 2015 VIT Special Inventory packets.
Jan 2	<ul style="list-style-type: none">• Run Ratio Study and analyzes study as Jan 1, discusses with staff results.• Begin receiving, processing and reviewing Business Personal Property Renditions• Begin/complete field discovery/verification of Commercial Fishing/Shrimping Vessels.
Jan 30	<ul style="list-style-type: none">• Complete field discovery/verification for Non-measuring Bay City ISD & Matagorda reappraisal. Data entry will be complete.
Jan 31	<ul style="list-style-type: none">• Sales Tape sent to comptroller Offices
Feb 2	<ul style="list-style-type: none">• Begin re-checks/data input Region 1 & 2 area and Reappraisal Region 3 for both real & personal property.• Begin working 2015 Business Personal Property Renditions
Feb 17	<ul style="list-style-type: none">• Complete Region 1 & 2 and Reappraisal Region 3 field checks, re-checks and data entry for both real & personal property.
Feb 18	<ul style="list-style-type: none">• Begin reviewing Land Schedules.• Begin reviewing on Residential/Commercial Model Systems.• Begin reviewing Residential Neighborhood Market Adjustments.• Begin reviewing Business Personal Property Schedules.
Mar 20	<ul style="list-style-type: none">• Report suggested changes to Land Schedules to supervisors.• Report suggested changes to Residential/Commercial Model System adjustments to supervisors.• Report suggested changes to Residential Neighborhood Market Adjustments to supervisors.• Report suggested changes to Business Personal Property Schedules to

	Supervisors. <ul style="list-style-type: none"> • Test/verification of approved model and market adjustments, Land schedules and Business Personal Property Schedules. • Supervisory approval and finalize all changes to 2015 Reappraisal, Residential/Commercial Model System Adjustments, Residential Neighborhood Market Adjustments, Land Schedules and Business Personal Property Schedules. • Run Ratio Study .
Mar 27	<ul style="list-style-type: none"> • Print/Mail 2015 Appraisal Notices for Residential Homestead (Sec 25.19) & E-files for Homestead Accounts
Apr 1	<ul style="list-style-type: none"> • Conduct residential homestead inquiries, informal reviews and prepare cases for protest hearings.
Apr 15	<ul style="list-style-type: none"> • Deadline to file 2015 Business Personal Property Renditions
Apr 21	<ul style="list-style-type: none"> • Print/Mail 2015 Appraisal Notices for all non-residential homestead properties (Sec 25.19), unless an extension has been granted.
May 1	<ul style="list-style-type: none"> • Conduct taxpayer inquires, informal review hearings and prepare cases for protest hearings.
May 15	<ul style="list-style-type: none"> • Print notice for extension granted. • Chief Appraiser prepares Mass Appraisal Report. • Chief Appraiser turns appraisal rolls over to Appraisal Review Board. • Appraisal Review Board starts formal review process and starts building scheduled days for hearings to be held during May, June and July.
Jun 1	<ul style="list-style-type: none"> • Business Personal Property Penalty Letter are mailed out.
Jul 17	<ul style="list-style-type: none"> • Final Appraisal Review Board hearing. • ARB approves 2015 appraisal records.
Jul 17	<ul style="list-style-type: none"> • All 2015 Cases are finalized in CAMA systems for certification process to begin.
Jul 20	<ul style="list-style-type: none"> • Chief Appraiser certifies the 2015 Appraisal Rolls to Taxing Units.
Jul 24	<ul style="list-style-type: none"> • Region 3 Coordinator finalizes and closes 2015 Work file.

Clerical Department:

Jul 28	<ul style="list-style-type: none"> • Close out files and label/store according to records management schedule.
Aug 1	<ul style="list-style-type: none"> • Start receiving and inputting mortgage company codes and address corrections.
Sep 12	<ul style="list-style-type: none"> • Verify with tax offices the dates the statements will be printed so all mortgage company codes and taxpayer addresses can be completed as of the print date. Advise the tax office of any updates after printing and before mailing of tax statement for new mortgage codes or addresses received.
Dec 1	<ul style="list-style-type: none"> • Mail out Homesteads & Ag Applications for updates in Reappraisal area. • Mail out updates for exemptions on exempt accounts that do not have an application on file.
Jan 2	<ul style="list-style-type: none"> • Begin receiving/processing real/industrial property renditions for 2015. • Begin receiving/processing/reviewing of exemption applications. • Begin removing exemptions & special valuation use from properties that were flagged due to ownership transfers or deaths. • Mail out exemptions/special valuation use forms to any and all new owners. • Mail out change in use for special valuation forms to any and all applicable owners from appraisal field work checks.

Mar 24	<ul style="list-style-type: none"> • Complete the data entry of all residential homestead exemptions prior to mailing out 2015 Residential Homestead Appraisal Notices. (Sec 25.19)
Apr 15	<ul style="list-style-type: none"> • Last day to receive renditions. • Begin receiving and processing rendition extensions • Last day to mail out change in use forms from appraiser field work to any and all applicable owners.
Apr 30	<ul style="list-style-type: none"> • Deadline for filing special valuation form(ag) without penalty • Complete the data entry of all address changes, exemptions applications and special valuation (ag) forms prior to mailing out 2015 Non-Residential Appraisal Notices. (Sec 25.19).
May 1	<ul style="list-style-type: none"> • Contact Pritchard and Abbott about notice mailing and scheduling for informal and formal hearings with Appraisal Review Board on mineral and industrial accounts. • Review and process all special valuation (ag) forms now with a 10% late file penalty added on.
May 15	<ul style="list-style-type: none"> • Complete and process all extension granted renditions. • Prepare and present all prior year appraisal roll changes to be reviewed by the Appraisal Review Board. • Provide assistance to taxpayers, appraisers and Appraisal Review Board during the informal and formal taxpayer hearings.
Jul 17	<ul style="list-style-type: none"> • Final day to process late special valuation (ag) with 10% late file penalty. • Finalize all changes to the 2015 appraisal roll before Appraisal Review Board approves the rolls. • Present all prior years changes to the Appraisal Review Board for review and approval.
Jul 17	<ul style="list-style-type: none"> • Process supplements and prepare for close out of 2015 appraisal year.
Jul 20	<ul style="list-style-type: none"> • Chief Appraiser certifies the 2015 Appraisal Rolls to Taxing Units.
Jul 24	<ul style="list-style-type: none"> • Last day of 2015 Appraisal year.

Matagorda County Appraisal District

2016 REAPPRAISAL PLAN

WORKFLOW SCHEDULE

This workflow schedule will be used to meet all the reappraisal activities for all real and personal property located in Region 1 – reappraisal of Tidehaven ISD and Palacios ISD. In addition to the Region 1 reappraisal, the workflow schedule takes into account the work for both real and personal property outside of the region to insure the district stays current with respect to changing market value. The staff will use this workflow schedule to insure production timelines are met.

The Workflow Schedule start and end dates are: July 27, 2015 and July 25, 2016 respectively.

Tasks that are to be carried out each week and every month by both the appraisal and clerical department are specified below, followed by activity related/events chart by departments:

Each week, a Monday morning Staff Meeting will be held to discuss areas of concern. The staff is encouraged to participate. Production timelines will be verified to insure target dates are met. The minutes of this meeting will be kept in the work file. A monitor is set up to track the areas that the appraiser verified the previous week.

Every month, the appraisal staff is charged with:

- Periodic field check by supervisor.
- Gathering deeds to verify and confirm sales information.
- Mailing sales verification letters to buyers/sellers.
- Input sales data received by outside sources and sales letters.
- Collecting and inputting county/city building and demolition permits.
- Collecting and inputting mechanic liens.
- Collecting and inputting TDHCA and TXDOT mobile home movements.
- Updating the nationally subscribed cost schedule publications.
- Collecting data for new or closing businesses and entering monthly VIT reports.
- Identifying and locating missing GIS parcels.

The region coordinator will update the work file when monthly tasks are completed.

Every month, the clerical staff will:

- Assist taxpayers with filing exemptions or special valuation forms and address changes.
- Answering taxpayer and public inquiries questions.
- Flag/pull and scan verification documents to accounts that will need exemptions pulled/denied due death or change in address/ownership.
- Write up field checks from information received through inquiries.
- Update, process and prepare documentation of supplemental property changes necessary to submit before the Appraisal Review Board.

Activity related/events chart by departments:

Appraisal Department:

REGION 1 Reappraisal of Tidehaven ISD & Palacios ISD

Estimated Parcel Count:13,810

Jul 27	<ul style="list-style-type: none">• Run Ratio Study and analyzes result to identify key areas of concern for the 2015 value review; reviews the prior year ARB protest for high volume areas; Appraisal Manager creates a 2015 work file and discusses results with staff.
Jul 31	<ul style="list-style-type: none">• Appraisal Manager Send EARS TAPE & Sales Tape to State Comptroller office.• Last day for property owners to apply for September 1 Inventory appraisal for 2016 (Sec. 23.12)
Aug 4	<ul style="list-style-type: none">• Print/Prepare Region 1 fieldwork packets
Aug 10	<ul style="list-style-type: none">• Hand Out Region 1 fieldwork packets Measuring Tidehaven and Palacios ISD.
Nov 25	<ul style="list-style-type: none">• Complete field discovery/verification for Region 1 Measuring Tidehaven and Palacios ISD. As well as data entry will be complete.
Nov 30	<ul style="list-style-type: none">• Hand Out Region 1 packets field work Non Measuring Tidehaven and Palacios ISD.
Dec 21	<ul style="list-style-type: none">• Prepare, print and mail Mobile Home tenant letters, work field checks – county-wide Mobile Home Park discovery.• Prepare & print -2016 Business Personal Property renditions & 2016 VIT Special Inventory packets.
Dec 31	<ul style="list-style-type: none">• Complete Mobile Home Park field checks.• Mail 2016 Business Personal Property rendition and 2016 VIT Special Inventory packets.
Jan 4	<ul style="list-style-type: none">• Run Ratio Study and analyzes study as Jan 1, discusses with staff results.• Begin receiving, processing and reviewing Business Personal Property Renditions• Begin/complete field discovery/verification of Commercial Fishing/Shrimping Vessels.
Jan 29	<ul style="list-style-type: none">• Complete field discovery/verification for Non measuring Tidehaven ISD & Palacios ISD reappraisal. Data entry will be complete.
Feb 1	<ul style="list-style-type: none">• Sales tape sent to State Comptroller Office
Feb 1	<ul style="list-style-type: none">• Begin re-checks/data input Region 2 & 3 area and Reappraisal Region 1 for both real & personal property.• Begin working 2015 Business Personal Property Renditions
Feb 16	<ul style="list-style-type: none">• Complete Region 2 & 3 and Reappraisal Region 1 field checks, re-checks and data entry for both real & personal property.
Feb 17	<ul style="list-style-type: none">• Begin reviewing Land Schedules.• Begin reviewing on Residential/Commercial Model Systems.• Begin reviewing Residential Neighborhood Market Adjustments.• Begin reviewing Business Personal Property Schedules.
Mar 17	<ul style="list-style-type: none">• Report suggested changes to Land Schedules to supervisors.• Report suggested changes to Residential/Commercial Model System adjustments to supervisors.• Report suggested changes to Residential Neighborhood Market Adjustments to supervisors.• Report suggested changes to Business Personal Property Schedules to Supervisors.• Test/verification of approved model and market adjustments, Land schedules

	<ul style="list-style-type: none"> and Business Personal Property Schedules. Supervisory approval and finalize all changes to 2016 Reappraisal, Residential/Commercial Model System Adjustments, Residential Neighborhood Market Adjustments, Land Schedules and Business Personal Property Schedules. Run Ratio Study.
Mar 25	<ul style="list-style-type: none"> Print/Mail 2016 Appraisal Notices for Residential Homestead (Sec 25.19) & E-files for Homestead Accounts
Apr 1	<ul style="list-style-type: none"> Conduct residential homestead inquiries, informal reviews and prepare cases for protest hearings.
Apr 15	<ul style="list-style-type: none"> Deadline to file 2016 Business Personal Property Renditions
Apr 22	<ul style="list-style-type: none"> Print/Mail 2016 Appraisal Notices for all non-residential homestead properties (Sec 25.19), unless an extension has been granted.
May 2	<ul style="list-style-type: none"> Conduct taxpayer inquiries, informal review hearings and prepare cases for protest hearings.
May 13	<ul style="list-style-type: none"> Chief Appraiser prepares Mass Appraisal Report. Chief Appraiser turns appraisal rolls over to Appraisal Review Board. Appraisal Review Board starts formal review process and starts building scheduled days for hearings to be held during May, June and July.
Jun 1	<ul style="list-style-type: none"> Business Personal Property Penalty Letter are mailed out.
Jul 15	<ul style="list-style-type: none"> Final Appraisal Review Board hearing. ARB approves 2016 appraisal records.
Jul 15	<ul style="list-style-type: none"> All 2016 Cases are finalized in CAMA systems for certification process to begin.
Jul 20	<ul style="list-style-type: none"> Chief Appraiser certifies the 2016 Appraisal Rolls to Taxing Units.
Jul 22	<ul style="list-style-type: none"> Region 1 Coordinator finalizes and closes 2016 Work file.

Clerical Department:

Jul 27	<ul style="list-style-type: none"> Close out files and label/store according to records management schedule.
Aug 3	<ul style="list-style-type: none"> Start receiving and inputting mortgage company codes and address corrections.
Sep 11	<ul style="list-style-type: none"> Verify with tax offices the dates the statements will be printed so all mortgage company codes and taxpayer addresses can be completed as of the print date. Advise the tax office of any updates after printing and before mailing of tax statement for new mortgage codes or addresses received.
Dec 1	<ul style="list-style-type: none"> Mail out Homestead & Ag Applications for updates in Reappraisal Area. Mail out updates for exemptions on exempt accounts that do not have an application on file.
Jan 4	<ul style="list-style-type: none"> Begin receiving/processing real/industrial property renditions for 2015. Begin receiving/processing/reviewing of exemption applications. Begin removing exemptions & special valuation use from properties that were flagged due to ownership transfers or deaths. Mail out exemptions/special valuation use forms to any and all new owners. Mail out change in use for special valuation forms to any and all applicable owners from appraisal field work checks.
Mar 25	<ul style="list-style-type: none"> Complete the data entry of all residential homestead exemptions prior to mailing out 2016 Residential Homestead Appraisal Notices. (Sec 25.19)
Apr 15	<ul style="list-style-type: none"> Last day to receive renditions.

	<ul style="list-style-type: none"> • Begin receiving and processing rendition extensions • Last day to mail out change in use forms from appraiser field work to any and all applicable owners.
Apr 30	<ul style="list-style-type: none"> • Deadline for filing special valuation form(ag) without penalty • Complete the data entry of all address changes, exemptions applications and special valuation (ag) forms prior to mailing out 2016 Non-Residential Appraisal Notices. (Sec 25.19).
May 2	<ul style="list-style-type: none"> • Contact Pritchard and Abbott about notice mailing and scheduling for informal and formal hearings with Appraisal Review Board on mineral and industrial accounts. • Review and process all special valuation (ag) forms now with a 10% late file penalty added on.
May 16	<ul style="list-style-type: none"> • Complete and process all extension granted renditions. • Prepare and present all prior year appraisal roll changes to be reviewed by the Appraisal Review Board. • Provide assistance to taxpayers, appraisers and Appraisal Review Board during the informal and formal taxpayer hearings.
Jul 15	<ul style="list-style-type: none"> • Final day to process late special valuation (ag) with 10% late file penalty. • Finalize all changes to the 2016 appraisal roll before Appraisal Review Board approves the rolls. • Present all prior years changes to the Appraisal Review Board for review and approval.
Jul 15	<ul style="list-style-type: none"> • Process supplements and prepare for close out of 2016 appraisal year.
Jul 20	<ul style="list-style-type: none"> • Chief Appraiser certifies the 2016 Appraisal Rolls to Taxing Units.
Jul 22	<ul style="list-style-type: none"> • Last day of 2016 Appraisal year.

PRITCHARD & ABBOTT 2015/2016 BIENNIAL REAPPRAISAL PLAN

Mineral, Industrial, Utility & Related Personal Property



PRITCHARD & ABBOTT, INC.
VALUATION CONSULTANTS

S.B. 1652* BIENNIAL REAPPRAISAL PLAN

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

For Tax Years:

2015 and 2016

Originally Printed: July 1, 2014

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



TABLE OF CONTENTS

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

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

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

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

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

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

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

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

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

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

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

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

PREAMBLE

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

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

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

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

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

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

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

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

ETHICS RULE

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

- Conduct;
- Management;
- Confidentiality.

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

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

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

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

CONDUCT

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

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

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

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

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

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

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

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

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

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

MANAGEMENT

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

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

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

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

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

CONFIDENTIALITY

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

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

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

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

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

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

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

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

RECORD KEEPING RULE

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

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

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

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

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

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

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

SCOPE OF WORK RULE

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

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

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

Scope of work includes, but is not limited to:

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

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

PROBLEM IDENTIFICATION

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

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

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

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

SCOPE OF WORK ACCEPTABILITY

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

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

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

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

DISCLOSURE OBLIGATIONS

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

JURISDICTIONAL EXCEPTION RULE

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

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

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

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

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

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

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

MASS APPRAISAL, DEVELOPMENT AND REPORTING (General Discussion)

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

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

A mass appraisal includes:

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

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

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

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

The various sections of Standard 6 are briefly summarized below:

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

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

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

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

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

REAPPRAISAL OF MINERAL INTERESTS

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

INTRODUCTION

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Appraisal Resources

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

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

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

VALUATION APPROACH (MODEL SPECIFICATION)

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

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

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

Approaches to Value for Petroleum Property

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

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

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

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

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

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

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

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

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

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

DATA COLLECTION/VALIDATION

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

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

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

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

VALUATION ANALYSIS (MODEL CALIBRATION)

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

INDIVIDUAL VALUE REVIEW PROCEDURES

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

PERFORMANCE TESTS

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

CALENDAR OF EVENTS/DELIVERABLES TO CLIENT

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

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

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

- November, after Certification of values.

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

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

REAPPRAISAL OF INDUSTRIAL, UTILITY, AND RELATED PERSONAL PROPERTY

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

INTRODUCTION

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

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

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

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

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

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

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

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

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

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

Appraisal Resources

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

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

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

VALUATION APPROACH (MODEL SPECIFICATION)

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

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

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

- exposed for sale in the open market with a reasonable time for the seller to find a purchaser;
- both the seller and the purchaser know of all the uses and purposes to which the property is adapted and for which it is capable of being used and of the enforceable restrictions on its use; and

- both the seller and purchaser seek to maximize their gains and neither is in a position to take advantage of the exigencies of the other.

Approaches to Value for Industrial, Utility, and Personal Property

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

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

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

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

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

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

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

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

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

DATA COLLECTION/VALIDATION

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

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

VALUATION ANALYSIS (MODEL CALIBRATION)

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

INDIVIDUAL VALUE REVIEW PROCEDURES

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

PERFORMANCE TESTS

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

any preliminary findings. After the appeal process is resolved, the Comptroller publishes a report of the findings of the study, including in the report the median level of appraisal, the coefficient of dispersion around the median level of appraisal and any other standard statistical measures that the Comptroller considers appropriate.

CALENDAR OF EVENTS/DELIVERABLES TO CLIENT

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

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

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

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