GLASSCOCK COUNTY APPRAISAL DISTRICT

REAPPRAISAL PLAN

For

TAX YEARS 2023-2024

AS ADOPTED BY THE BOARD OF DIRECTORS

Table of Contents

EXECUTIVE SUMMARY

The Glasscock County Appraisal District (GCAD) has prepared and published this plan, as required by law, to inform the taxpaying public of the; mission, legal requirements, organization, workload, past performance, and necessary changes to the district's operations to accomplish the plan requirements regarding the valuation and revaluation of taxable property within Glasscock County Appraisal District as summarized in the last section of this document.

The Glasscock County Appraisal District (GCAD) is a political subdivision of the State of Texas created by the Texas Legislature in 1979 to provide uniform and equal appraisals of taxable properties at market value for ad valorem tax purposes. The Texas Property Tax Code governs the appraisal district's legal, statutory, and administrative requirements. The community is governed by a board of five directors appointed by the governing bodies of the participating taxing units, Glasscock County, Glasscock Groundwater Conservation District, and the Glasscock County Independent School District. The board of directors is responsible for establishing the district's office, adopting the district's annual operating budget, contracting for necessary services, hiring the chief appraiser, and making a general policy of the district's operation. The board's authority is limited. The board does not appraise property or review values on individual properties. These tasks are legally assigned to the chief appraiser and the ARB. The chief appraiser, appointed by the Board of Directors, is the appraisal district's top administrator and chief executive officer.

The Appraisal District is responsible for local property tax appraisal and exemption administration for the taxing units in the county. The purpose of the district is to discover, list, and appraise property as accurately, ethically, and impartially as possible to estimate the market value of all property within the district's boundaries for ad valorem tax purposes. Each taxing unit sets its tax rate to generate revenue to pay for police and fire protection, public schools, road and street maintenance, courts, and other public services. Property appraisals by the appraisal district allocate the year's tax burden based on each taxable property's market value. The District also determines eligibility for various property tax exemptions for homeowners, the elderly and disabled, disabled veterans, charitable or religious organizations, and agricultural productivity valuations.

The Written Plan

Section 6.05 of the Property Tax Code

(i) To ensure adherence with generally accepted appraisal practices, the board of directors of an appraisal district shall develop a biennially written plan for the periodic reappraisal of all property within the boundaries of the district, according to the requirements of Section 25.18 and shall hold a public hearing to consider the proposed plan. No later than the 10th day before the hearing date, the board's secretary 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. Before September 15 of each even-numbered year, the board shall complete its hearing, make amendments, and finally approve the plan by resolution. 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
Section 25.18 of the Property Tax Code read as follows:

(a) Each appraisal office shall implement the plan for the periodic reappraisal of property approved by the board of directors under Section 6.05(i).

(b) The plan shall provide for the following reappraisal activities for all real and personal property in the district at least once every three years:

(1) Identifying properties to be appraised through physical inspection or by other reliable means of identification, including deeds or other legal documentation, aerial photographs, land-based photographs, surveys, maps, and property sketches;

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

(3) Defining market areas in the district;
(4) Identifying property characteristics that affect property value in each market area, including:

(A) the location and market area of the property;
(B) physical attributes of the 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 restriction

(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.

Definition of Market Value
Except as otherwise provided by the Property Tax Code, all taxable property is appraised at its "market value" as of January 1st.

Subsection (7), Section 1.04, Tax Code:

(7) "Market value" means the price at which a property would transfer for cash or its equivalent under prevailing market conditions if:

(A) exposed for sale in the open market with a reasonable time for the seller to find a purchaser:

(B) both the seller and the buyer know of all the uses and purposes to which the property is adapted and for which it is capable of being used and of the enforceable restrictions on its use, and;
(C) both the seller and buyer seek to maximize their gains, and neither is in a position to take advantage of the exigencies of the other

The Property Tax Code defines special appraisal provisions for the valuation of residential homestead property (Sec. 23.23), productivity (Sec. 23.41), real property inventory (Sec. 23.12) or restricted use properties (Sec. 23.83), and allocation of interstate property (Sec. 23.03). The owner of real property inventory may elect to have the inventory appraised at its market value as of September 1st of the year proceeding the tax year to which the appraisal applies by filing an application with the chief appraiser requesting that the inventory be appraised as of September 1st.

Revaluation (Reappraisal Cycle)

The Texas Property Tax Code, under Sec. 25.18 requires each appraisal office to implement a plan to update appraised values for real property at least once every three years. The Glasscock County Appraisal District, by policy adopted by the Chief Appraiser and the Board of Directors, reappraises all property in the district every three years except the industrial, mineral, and personal property accounts which are appraised annually. All new construction will be added to the appraisal records; any adjustments in property characteristics that affect value will be applied to all property types of the same class within the district.

Performance Analysis

The equalized values from the previous tax year will be analyzed with ratio studies of the current market to determine the overall appraisal accuracy and uniformity by market area within property reporting categories. Ratio studies will comply with the current *Standard on Ratio Studies* of the International Association of Assessing Officers. Mean, median, and weighted ratios will be calculated for properties in reporting categories to measure the level of appraisal accuracy. The median ratio will be calculated in each reappraised category to indicate the status of appraisal accuracy by property reporting category.

Personnel

The Glasscock County Appraisal District staff consists of 2 full-time employees.

Analysis of Available Resources

Staffing and budget requirements for the tax year 2023 are detailed in the 2023 budget adopted by the Glasscock County Appraisal District Board of Directors. They are attached (Attachment A) to this written biennial plan for reference. This reappraisal plan may be adjusted as needed to reflect the available staffing in the tax year 2023 and anticipated staffing for the tax year 2024. Budget restraints can impact the cycle of real property re-inspection and personal property on-site review that can be accomplished in the 2023-2024 time period.

Existing appraisal practices, which are continued yearly, are identified, and methods are utilized to keep these practices current. Real property appraisal value tables are tested against verified sales data to ensure they represent current market data. Personal property values are evaluated and analyzed based on renditions, prior year documentation, and inspections.

Information Systems support is detailed, and system upgrades are scheduled. Computer-generated forms are reviewed and updated yearly. Unless otherwise specified by legislative changes. Existing maps and data requirements are continually updated and kept current.

Planning and Organization

A calendar of key events with critical completion dates is prepared for each work area. This calendar identifies critical appraisal, clerical, customer service, and information systems events. A calendar is prepared for tax years 2023 and 2024. Production standards for field activities are calculated and incorporated into the planning and scheduling process.

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

Periodic and concurrent examination of production standards, goals, and progress in the plan may require adjustments to the ongoing plan or the plan for the succeeding year(s). The GCAD and Chief Appraiser, together with the field staff provided by Eagle Property Tax Appraisal & Consulting, Inc., Pritchard & Abbot, Inc., and other contracted field staff; will work together closely to identify issues that may affect the successful completion of the on-going plan and to resolve them.

Mass Appraisal System

Computer Assisted Mass Appraisal (CAMA) system revisions are completed by the Information Systems Software Provider. The provider performs system revisions and procedures—Glasscock County Appraisal District contracts with Pritchard & Abbot, Inc. for these services.

Real Property Valuation

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

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

Land schedules are updated using current market data (sales) and then tested with ratio study tools. Value schedules are developed and tested on a pilot basis with ratio study tools.

Personal Property Valuation

Commercial and industrial businesses are valued based on depreciated fixed assets and inventory valuation following Section 23.12 of the Property Tax Code. Depreciation schedules are updated each year. Valuation procedures are reviewed, modified as needed, and tested.

Mineral Property Valuation
Producing oil and gas properties are valued each year following section 23.175 of the Property Tax Code. Pritchard & Abbott, Inc. is contracted by the Glasscock County Appraisal District Board of Directors.

Noticing Process
25.19, the software provider provides appraisal notice forms. The provider reviews and edits for updates and changes required by legislative mandates. The district makes available the latest copy of the Comptroller's pamphlet *Taxpayer's Rights, Remedies, and Responsibilities*.

Hearing Process
Protest hearing scheduling for informal and formal Appraisal Review Board hearings are reviewed and updated as required. Standards of documentation are reviewed and amended as necessary. The appraisal district hearing documentation is reviewed and updated to reflect the current valuation process and requirements. Compliance with House Bill 201 is insured. (HB 201 deals with protesting taxpayers' right to a postponement of an ARB hearing if the appraisal district fails to deliver to the taxpayer certain materials and information at least 14 days before the ARB protest hearing).

Data Collection Requirement

Field and office procedures are reviewed and revised as required for data collection. Projects for each tax year include new construction, demolition, remodeling, re-inspection of the universe of properties on a specific cycle, and office verifications of sales data and property characteristics.

New Construction/Demolition
New construction field and office review procedures are identified and revised as required. Sources for identifying new construction or demolition are public records and site visits.

Remodeling
Properties with extensive improvement remodeling are identified, and field inspections are scheduled to update property characteristic data. Sources for identifying remodeling are public records through Deeds of Trust, Mechanics Lien, etc., and site visits.

Re-inspection of Problematic Market Areas
Real property market areas, by property classification, are tested for consistently low or high sales ratios and/or high coefficients of dispersion. Market areas that fail any or all of these tests, or are located in areas of development or change, are determined to be problematic. Field inspections are scheduled to verify and correct property characteristic data. Additional sales data is researched and verified.

Re-inspection of the Universe of Properties
The International Association of Assessing Officers' *Standard on Mass Appraisal of Real Property* specifies that the universe of properties should be re-inspected on a cycle of 3-4 years. The re-inspection may include the re-measurement of at least two sides of each improved property valuation. Physical property inspection is considered the most fundamental step in gathering

reliable data. The field appraiser has an appraisal card of each property to be inspected and notes changes, depreciation, remodeling, additions, etc. **Uniform Standards of Professional Appraisal Practices (USPAP) do not require inspection for reappraisal. "Only the property characteristics relevant to an assignment be identified." Frequent physical inspections are nevertheless necessary to ensure that each property is appraised according to its conditions as of January 1.** The Glasscock County Appraisal District will be on an annual physical inspection cycle for the properties within the district. The annual re-inspection requirements for tax years 2023 and 2024 are identified and scheduled in the written reappraisal plan.

Verification of Sales Data and Property Characteristics

Sales information must be verified and property characteristic data contemporaneous with the date of sale captured. The sales ratio analysis requires that the sales record accurately reflect the property appraised so that statistical analysis results will be valid and therefore be an accurate example of the universe of properties to which any adjustments will be applied. The conditions of each sale are investigated and confirmed, to the greatest extent possible, to determine its applicability to the overall market analysis. Properties exhibiting a typically high or low sales ratio (outliers) are especially scrutinized regarding the Texas Property Tax Code definition of market value. They may be excluded from the general market analysis if the transaction conditions do not correspond to the definition mentioned above of market value.

Pilot Study by Tax Year

New and revised mass appraisal models will be tested each tax year. Ratio studies by market category will be conducted on proposed values for each tax year. Suggested values for each category will be tested for accuracy and reliability. Actual test results are compared with anticipated results, and those models not performing satisfactorily are refined and retested. The model specification and calibration procedures comply with USPAP, STANDARD RULE 6.

Valuation by Tax Year

Using market analysis of comparable sales and locally tested cost data (if available), 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. Performance standards are those as established by the IAAO Standard on Ratio Studies.

RESIDENTIAL REAL PROPERTY
- **Sales Comparison Approach to Value**
- **Cost Approach to Value**
- **Income Approach to Value**

SPECIAL INVENTORY RESIDENTIAL PROPERTY
- **Sales Comparison Approach to Value**
- **Cost Approach to Value**
- **Income Approach to Value**

MULTIFAMILY RESIDENTIAL PROPERTY
- Sales Comparison Approach to Value
- Cost Approach to Value
- Income Approach to Value

COMMERCIAL REAL PROPERTY
- Sales Comparison Approach to Value
- Cost Approach to Value
- Income Approach to Value

VACANT REAL PROPERTY
- Sales Comparison Approach to Value
- Cost Approach to Value
- Income Approach to Value

INDUSTRIAL REAL PROPERTY
- Sales Comparison Approach to Value
- Cost Approach to Value
- Income Approach to Value

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

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

SPECIAL VALUATION PROPERTIES
- Agricultural Use
- Wildlife Management
- Timber Use

BUSINESS TANGIBLE PERSONAL PROPERTY
- Sales Comparison Approach to Value
- Cost Approach to Value
- Income Approach to Value

INDUSTRIAL TANGIBLE PERSONAL PROPERTY
- Sales Comparison Approach to Value
- Cost Approach to Value
- Income Approach to Value

Sales Comparison Approach to Value

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

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

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

Cost Approach to Value:

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

Market and Cost Reconciliation and Valuation

The replacement cost new of property improvements (RCN) less accrued depreciation (AD) plus land value (LV) equals market value (MV). As the cost approach separately estimates both land and building value. A neighborhood analysis of market sales is used to achieve an acceptable sale ratio or level of appraisal. Market factors are developed from appraisal statistics provided by market analyses and ratio studies. They are used to ensure that estimated values are consistent with the market and to reconcile cost indicators. The district's primary approach to the valuation of properties uses a hybrid cost-sales

comparison approach. This approach accounts for neighborhood market influences not specified in a purely cost model.

The following equation denotes the hybrid model used:

$$\mathbf{MV = LV + (RCN - AD)}$$

Whereas under the cost approach, the estimated market value (MV) of the property equals the land value (LV) plus contributory values and uses depreciated replacement costs, which reflect only the supply side of the market, it is expected that adjustments to the cost values may be needed to bring the level of appraisal to an acceptable standard as indicated by market sales. Thus, demand-side economic factors and influences may be observed and considered. These market, or location adjustments, may be abstracted and applied uniformly within neighborhoods to account for location variances between market areas or across a jurisdiction. Under the Market Approach, the property's estimated market value (MV) equals the basic unit of property, compared to the market price range per unit for comparable property sales. For residential property, the comparison unit is typically the price per square foot of living area or the price indicated for the improvement contribution. This analysis for the hybrid model is based on both the cost and market approaches as a correlation of indications of property valuation. A significant unknown for these two indications of value is determined to be the rate of change for the improvement contribution to total property value. The measure of change for this property component can best be reflected and based on the annualized accrued depreciation rate. Sales of a similar property most appropriately measure this cost-related factor. When improvements are abstracted from the sale price, the market approach indicates the depreciated value of the improvement component, in effect, measuring changes in accrued depreciation, a cost factor. The level of improvement contribution to the property is measured by abstraction of comparable market sales, which is the property sale price less land value. The primary unknown for the cost approach is to accurately measure accrued depreciation affecting the amount of loss attributed to the improvements as age increases and condition changes. This evaluation of cost results in the depreciated value of the improvement component based on age and condition. Evaluating this market and cost information is the basis of reconciliation and indication of property valuation under this hybrid model.

When the appraiser reviews a neighborhood, the appraiser reviews and evaluates a ratio study that compares recent sales prices of properties, appropriately adjusted for the effects of time, within a delineated neighborhood, with the value of the properties based on the estimated depreciated replacement cost of improvements plus the land value. The calculated ratio derived from the sum of the sold properties' estimated value divided by the sum of the time-adjusted sales prices indicates the neighborhood level of appraisal based on sold properties. This ratio is compared to the acceptable appraisal ratio, 95% to

105% to determine the level of appraisal for each neighborhood. If the level of appraisal for the neighborhood is outside the acceptable range of ratios, adjustments to the neighborhood are made.

If reappraisal of the neighborhood is indicated, the appraiser analyzes available market sales, appropriately adjusted for the apparent effects of time by market abstraction of property components. This abstraction of property components allows the appraiser to focus on the rate of change for the improvement contribution to the property by providing a basis for calculating accrued depreciation attributed to the improvement component. This impact on value is usually the most significant factor affecting property value and the most important unknown to determine by market analysis. Abstraction of the improvement component from the adjusted sale price for a property indicates the effect of overall market suggested influences and factors on the price of improvements that were a part of this property recently sold. Comparing this indicated price or value allocation for the improvement with the estimated replacement cost new of the improvement suggests any loss in value due to accrued forms of physical, functional, or economic obsolescence. This is a market-driven measure of accrued depreciation and results in an accurate and relevant measure of improvement marketability, particularly when based on multiple sales that indicate the trending of this rate of change over certain classes of improvements within specific neighborhoods. Based on this market analysis, the appraiser estimates the annual depreciation rate for given improvement descriptions considering age and observed condition. Once assessed, the appraiser recalculates the improvement value of all properties within the sale sample to evaluate and review the effects on the neighborhood sale ratio. After an acceptable level of appraisal is achieved within the sale sample, the entire property neighborhood is recalculated utilizing the indicated depreciation rates taken from market sales. This depreciation factor is the basis for trending all improvement values. When combined with other site improvements and land value, it brings the estimated property value through the cost approach closer to actual market prices, as evidenced by recent sale prices available within a given neighborhood. Therefore, based on an analysis of recent sales in a given neighborhood, estimated property values will reflect the market influences and conditions only for the specified neighborhood, thus producing more representative and supportable values. The estimated property values calculated for each updated neighborhood are based on market-indicated factors applied uniformly to all properties within a neighborhood. Finally, with all the market-trend factors applied, a final ratio study compares recent sale prices with the proposed appraised values for these sold properties. From this set of ratio studies, the appraiser judges the appraisal level and uniformity in both update and non-update neighborhoods verifies appraised values against overall trends as exhibited by the local market, and finally, for the school district as a whole.

Income Approach to Value:

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

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

Special Valuation Process:

Agricultural Use: An acceptable appraisal methodology establishes market value for agricultural property.

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

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. Taxpayers can present their concerns informally to the chief appraiser or by appointment with Pritchard & Abbott, Inc. staff. Should an understanding not be reached informally, the taxpayer may present their arguments to the Appraisal Review Board as a formal appeal. The appraisal staff provided by Pritchard & Abbott, Inc. and/or contracted services defends the position of the chief appraiser before the ARB. The Appraisal District has the burden of proof for the value as notified. The taxpayer should present evidence for further consideration by the CAD or the ARB.

The Mass Appraisal Report

Each tax year, the tax code required Mass Appraisal Report is prepared and certified by the Chief Appraiser after the appraisal phase of the ad valorem tax calendar (on or about May 15th). The Mass Appraisal Report has been completed in compliance with Standard Rule 6-8 of the *Uniform Standards of Professional Appraisal Practice*. The Chief Appraiser's signed certification complies with Standard Rule 6-9 of USPAP. This written reappraisal plan is attached to the Mass Appraisal Report by reference.

THE WRITTEN REAPPRAISAL PLANS FOR GLASSCOCK COUNTY APPRAISAL DISTRICT (GCAD)

PLANNING A REAPPRAISAL

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

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

STEPS IN A REAPPRAISAL

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

1. Performance Analysis:
   - Ratio study
   - Equity of existing values
   - Consistency of values with market activity
2. Revaluation Decision:
   - Statutory – at least once every three years
   - Administrative policy
3. Analysis of Available Resources:
   - Staffing
   - Budget
   - Existing practices
   - Information system support
   - Existing data and maps
4. Planning and Organization
   - Target completion dates
   - Identify performance objectives
   - Specific action plans and schedules
   - Identify critical activities with completion dates
   - Set production standards for field activities
5. Mass Appraisal System:
   - Forms and procedures revised as necessary
   - CAMA (computer-assisted mass appraisal) system revisions as required
6. Conduct Pilot Study
   - Test new/revised appraisal methods as applicable
   - Conduct ratio studies
   - Determine if values are accurate and reliable

7. Data Collection
   Building permits and other sources of new construction
   Check properties that have undergone remodeling
   Re-inspection of problematic properties
   Re-inspection of a universe of properties on a cyclic basis
8. Valuation:
   Market analysis (based on ratio studies)
   Schedules development
   Application of revised schedules
   Calculation of preliminary values
   Tests of values for accuracy and uniformity
9. Value Defense:
   Prepare and deliver notices of value to property owners
   Hold informal hearings
   Schedule and hold formal appeal hearings

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

Glasscock County Appraisal District (GCAD)
Residential, Commercial, Rural, and Personal Property
2023-2024 Reappraisal Plan

According to Section 25.18 of the Texas Property Tax Code, the Glasscock County Appraisal District has established the following reappraisal plan to provide for the reappraisal of all property within the district at least once every other year. The plan established a two-fold approach:

1. **Two-Year Cycle:** Glasscock County Appraisal District is divided into two areas. Each year, all real, residential, and commercial property within one of the areas will be reappraised, regardless of any ratio study/report findings. These areas are identified as follows:

   a. Area One: (2023) All property North of Hwy 158 & South of Hwy 158, along with Rural Land, unresolved parcels from previous years, etc...
   b. Area Two: (2024) All property South of Hwy 158, along with Rural Land, unresolved parcels from previous years, etc.

   As mentioned, these yearly plans are flexible within the overall reappraisal plan. The specific workload within and between plan years may need to be adjusted to provide complete and accurate reappraisals.

   Note: all income-producing personal property within the GCAD is appraised annually, regardless of location.

2. **Annual Market Analysis:** In addition to the two-year cycle stated above, ratio studies shall be performed annually to determine areas or categories of properties within the

GCAD which need to be reappraised within the current year based on sales ratios. Any area or categories whose ratios are above or below statutory requirements shall be reappraised in the current year, regardless of where they are located.

3. **Market Areas Defined:**

Personal Property Market Areas:

Market areas for personal property are generally local or regional in scope. For Glasscock County, the personal property market area is county-wide, having no definite distinction between the school district and municipal boundaries. The CAD will conduct ratio studies and calculation measures of central tendencies for each market area when possible.

Residential Market Areas:

Glasscock County's market area is countywide. Garden City is the county seat but is not incorporated; although it contains the courthouse and county offices, it has little growth and few commercial businesses. There is no distinction between residential sales for different locations within the county. The CAD will conduct ratio studies and calculation measures of central tendencies for each market area when possible.

Rural Land Markets:

The rural market area for Glasscock County is countywide. There is no distinction between land sales for different locations within the county. The CAD will conduct ratio studies and calculation measures of central tendencies for each market area when possible.

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

Organization

The chief appraiser carries out field inspections with assistance from contracted services. The field appraiser physically inspects areas required by the reappraisal cycle, checks all existing data, works the building permits (if available), takes photographs of improvements (if possible), draws plans of new improvements for entry into the computer and rechecks any property on which a question or problem has arisen. Other duties may be required and executed upon the chief appraiser's direction. The chief appraiser performs data entry of fieldwork notes and sketches.

The chief appraiser will perform a market analysis. The chief appraiser gathers sales data throughout the year from deed records, sales confirmation letters from property owners, and other sources, if available. The market data is analyzed, sales data is confirmed, outliers are identified, the existing classification system is reviewed, market schedules are reviewed and updated as necessary, and final market schedules are presented to the chief appraiser for discussion and application to the universe of properties.

GCAD Plan for Periodic Reappraisal of Agricultural Use Properties

Subsections (a) and (b), Section 25.18, Tax Code:

(a) CAD shall implement the plan for the periodic reappraisal of property approved by the board of directors under Section 6.05(i).
(b) The plan provides an annual reappraisal of all agricultural use property appraised by the CAD. The CAD has a professional services contract with Eagle Property Tax Appraisal & Consulting, Inc., to appraise these properties for the CAD.
    (1) Meet with the Glasscock CAD Ag Advisory Board
    (2) Provide an Ag Use Schedule; and,
    (3) Meet with property owners who appear before the ARB to provide Ag Use Support.
    (4) Represent the CAD at informal and/or formal Texas Comptroller of the Public Account Property Tax Assistance Division hearings relative to the Ag Use Schedule values.

(See Attachment B)

GCAD Plan for Periodic Reappraisal of Industrial Real Property

The GCAD Board of Directors contract with Pritchard & Abbott, Inc., for all Industrial Real Property. (See Attachment C)

GCAD Plan for Periodic Reappraisal of Industrial Real Property

The GCAD Board of Directors contract with Pritchard & Abbott, Inc., for all Industrial Personal Property. (See Attachment C)

Industrial Personal and Utility Property, Railroad and Pipeline Property

The GCAD Board of Directors contract with Pritchard & Abbott, Inc., for all Utility Properties, Railroad, and Pipeline properties. (See Attachment C)

GCAD Plan for Periodic Reappraisal of Oil and Gas Property

The GCAD Board of Directors contract with Pritchard & Abbott, Inc., for all Oil and Gas Property. (See Attachment C)

The Mass Appraisal Report

(See Attachment B)
(See Attachment C)
(See Attachment D)

2022-2023 Schedule of Events

September 2022: Board approves final Budget by September 15th.

November 2022 - March 2023: Begin and complete field inspections of all real property & personal property.

October 2022 - January 2023: Commercial and residential schedules and depreciation tables are modified to reflect current market conditions.

December 2022 - February 2023: Conduct and complete residential, rural, and commercial land valuation studies.

January 1: Formal date of property values for the year 2023 (Sec 23.01). New property records added; reappraise due to added improvements or other property value changes; correction of clerical errors on records.

January 1, 2023 - April 15, 2023: Receive and process property owners submitted property renditions (Sec 22.23).

January 1, 2023 - May 1, 2023: Receive and process applications for exemptions and special appraisals through March 31, 2023.

January 1, 2023 - December 31, 2023: Research courthouse records for ownership changes and update taxpayer information as needed.

January 2023: Personal Property schedules are modified for 2023.

January - March 2023: Field inspections of all mobile home parks.

January - March 2023: Complete specifications of all valuation models.

February - March 2023: Work on the commercial vehicle registration list.

February - June 2023: Work personal property renditions.

March 2023: Chief Appraiser prepares the preliminary Budget. Review and consider conclusions and recommendations of the district's Agricultural Advisory Board.

March 31, 2023: Complete work of utility notifications and the inspection of demolished or burned property for the 2023 tax year.

April 2023: Calculate Agricultural values based on local data.

April 2023: Review exemption and special-use appraisal applications.

April 1, 2023, or as soon after, Mail written appraisal notices in compliance with Section 25.19 (g) of the Property Tax Code.

April 29, 2023: Present entities with certified estimates.

May - June 2023: Informal meetings with taxpayers and or agents.

June - August 2023: Formal protest hearings with ARB. Enter changes as ordered by the ARB decision.

June 15, 2023: Target date for Chief Appraiser to present the appraisal records to the ARB for approval.

July 25, 2023: Target date for Chief Appraiser to certify the appraisal roll to each of the taxing jurisdictions in Glasscock County.

July 2023: Integrate contractor's valuation for minerals and industrial personal property into the district CAMA computer system.

2024 Schedule of Events

September 2023: Board approves final Budget by September 15th. Personal property field inspections.

November 2023 - March 2024: Begin and complete field inspections of all real property.

October 2023 - January 2024: Commercial and residential schedules and depreciation tables are modified to reflect current market conditions.

December 2023 - February 2024: Conduct and complete residential, rural, and commercial land valuation studies.

January 1: Formal date of property values for the year 2024 (Sec 23.01). New property records added; reappraise due o added improvements or other property value changes; correction of clerical errors on records.

January 1, 2024 - April 15, 2024: Receive and process property owners submitted property renditions (Sec 22.23).

January 1, 2024 - May 1, 2024: Receive and process applications for exemptions and special appraisals through March 31, 2024.

January 1, 2024 - December 31, 2024: Research courthouse records for ownership changes and update taxpayer information as needed.

January 2024: Personal Property schedules are modified for 2024.

January - March 2024: Field inspections of all mobile home parks.

January - March 2024: Complete specifications of all valuation models.

February - March 2024: Work on the commercial vehicle registration list.

February - June 2024: Work personal property renditions.

March 2024: Chief Appraiser prepares the preliminary Budget. Review and consider conclusions and recommendations of the district's Agricultural Advisory Board.

March 31, 2024: Complete work of utility notifications and the inspection of demolished or burned property for the 2024 tax year.

April 2024: Calculate Agricultural values based on local data.

April 2024: Review exemption and special-use appraisal applications.

April 1, 2024, or as soon after, Mail written appraisal notices in compliance with Section 25.19 (g) of the Property Tax Code.

April 29, 2024: Present entities with certified estimates.

May - June 2024: Informal meetings with taxpayers and or agents.

June - August 2024: Formal protest hearings with ARB. Enter changes as ordered by the ARB decision.

June 15, 2024: Target date for Chief Appraiser to present the appraisal records to the ARB for approval.

July 25, 2024: Target date for Chief Appraiser to certify the appraisal roll to each of the taxing jurisdictions in Glasscock County.

July 2024: Integrate contractor's valuation for minerals and industrial personal property into the district CAMA computer system.
Note: The field appraiser shall physically inspect all property as described in Area Two (2).

PUBLIC MEETING HELD: September 8, 2022 @ 9:00 am
APPROVED by GLASSCOCK COUNTY APPRAISAL DISTRICT BOARD OF DIRECTORS

Nathan Walker
CHAIRMAN

9-8-22
DATE

GLASSCOCK COUNTY APPRAISAL DISTRICT

REAPPRAISAL PLAN

(Attachment A)

GCAD

2023 Adopted Budget

NAME	2022	2023	Dollar Amt	% Change
Payroll Costs				
Appraisal Office	$ 111,740.00	$ 126,588.00	$ 14,848	13.29%
Business Allowances	$ 1,200.00	$ 1,200.00	$ -	0.00%
Car Allowances	$ 6,000.00	$ 6,600.00	$ 600	10.00%
FICA/Medicare	$ 9,650.00	$ 9,650.00	$ -	0.00%
Retirement	$ 15,200.00	$ 15,200.00	$ -	0.00%
Death Benf	$ 600.00	$ 600.00	$ -	0.00%
Health Insurance	$ 14,524.00	$ 15,304.00	$ 780	5.37%
Workman's Compensation	$ 1,000.00	$ 1,000.00	$ -	0.00%
Unemployment Compensation	$ 1,000.00	$ 1,000.00	$ -	0.00%
	$ 160,914.00	**$ 177,142.00**	$ 16,228	10.08%
Purchases & Contract Services				
Appraisal Review Board	$ 3,500.00	$ 3,500.00	$ -	0.00%
Audit Services	$ 3,700.00	$ 3,700.00	$ -	0.00%
CPA Services	$ 2,700.00	$ 2,700.00	$ -	0.00%
Contract Services	$ 2,700.00	$ 2,700.00	$ -	0.00%
Data Processing Services	$ 18,500.00	$ 20,380.00	$ 1,880	10.16%
Electricity Service	$ 2,100.00	$ 2,100.00	$ -	0.00%
Telephone Service	$ 3,000.00	$ 3,000.00	$ -	0.00%
Insurance-Contents & Bldg.	$ 700.00	$ 700.00	$ -	0.00%
Legal Services	$ 2,800.00	$ 2,800.00	$ -	0.00%
Equipment Main/Repair/Misc	$ 4,300.00	$ 4,300.00	$ -	0.00%
Evaluation Services	$ 229,580.00	$ 244,000.00	$ 14,420	6.28%
Mapping	$ 5,500.00	$ 5,500.00	$ -	0.00%
	$ 279,080.00	**$ 295,380.00**	$ 16,300	5.84%
Supplies and Materials				
Book, Mag. & Periodicals	$ 1,000.00	$ 1,000.00	$ -	0.00%
Forms/Printing	$ 4,500.00	$ 4,500.00	$ -	0.00%
Postage	$ 4,000.00	$ 4,000.00	$ -	0.00%
Supplies and Materials	$ 4,750.00	$ 4,750.00	$ -	0.00%
	$ 14,250.00	**$ 14,250.00**	$ -	0.00%
Other Operating Expenses				
Assn Dues/Membership	$ 1,200.00	$ 1,200.00	$ -	0.00%
Legal Notice & Adv.	$ 2,000.00	$ 2,000.00	$ -	0.00%
Education & Travel	$ 10,000.00	$ 1,500.00	$ (8,500)	-85.00%
	$ 13,200.00	**$ 4,700.00**	$ (8,500)	-64.39%
Capital Outlay				
Building Rent	$ 12,000.00	$ 12,000.00	$ -	0.00%
Small Equipment & Materials	$ 2,000.00	$ 2,000.00	$ -	0.00%
	$ 14,000.00	**$ 14,000.00**	$ -	0.00%
Contingency Fund	**$ 61,992.63**	**$ 61,992.63**		0.00%
	$ 543,436.63	**$ 567,464.63**		
Less Contingency Fund	$ 61,992.63	$ 61,992.63	$ -	0.00%
	$ 481,444.00	**$ 505,472.00**	$ 24,028	4.99%

Nathan Halfmann
Chairman

9/8/2022
Date

GLASSCOCK COUNTY APPRAISAL DISTRICT

REAPPRAISAL PLAN

(Attachment B)

EAGLE PROPERTY TAX

APPRAISAL & CONSULTING, Inc.

REAPPRAISAL PLAN

2023 - 2024

INTRODUCTION

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

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

PLAN FOR PERIODIC REAPPRAISAL REQUIREMENT:

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

(a) Each appraisal office shall implement the Plan for Periodic Reappraisal of Property approved by the board of directors under Section 6.05 (i).

(b) The plan shall provide for the following reappraisal activities for all real 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 the location and market area of property, physical attributes of property such as size, age, and condition, legal and economic attributes, and the identification of 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 (REAPPRAISAL CYCLE)

The _____ CAD, by policy adopted by the Board of Directors and the Chief Appraiser, reappraises all property in the district every year. The reappraisal may consist of field inspections, CAMA, or both. The reappraisal year is a complete appraisal of all properties in the district. Tax year 2023 is a reappraisal year and tax year 2024 is a reappraisal year.

Additionally, every tax year, the District inspects and appraises new construction and adds those properties to the appraisal roll. The district also inspects and reappraises properties that have been remodeled or demolished, properties with additions, properties with fire damage, or properties with any change or damage. These changes are found through building permits issued by the city. However, since building permits are not required for properties outside the city limits, District staff maintains a file of newspaper clippings that pertain to changes in property and all District staff remains alert to visual changes in properties. Throughout the year, notes are made on those visual changes and all information is provided to the field appraiser. The field appraiser will also conduct detailed field inspections of properties if requested by the owner and reappraise these properties as necessary. The District is contracted with Eagle Property Tax Appraisal & Consulting, Inc. to perform the appraisals and field inspections.

Eagle Property Tax Appraisal & Consulting, Inc. compiles all sales by school district. Problematic areas are further researched and may indicate the use of market modifiers. The use of these modifiers is the predominant method of adjusting sales for location and time. Values throughout the county may be adjusted by use of market modifiers during the reappraisal year.

PLANNING AND ORGANIZATION

A calendar of key events with critical completion dates is prepared for each area of work. This calendar identifies key events for appraisal, clerical, customer service, and information systems. A calendar is prepared for years 2023 and 2024. Production standards for field activities are calculated and incorporated in the planning and scheduling process. Refer to the District's timeline and schedule in the Written Plan for Periodic Reappraisal.

Eagle Property Tax Appraisal & Consulting, Inc. will begin field inspections of the District's scheduled reappraisal area on or about the first Tuesday following Labor Day in September, 2022 and will complete all inspections and schedules by April 1, 2023 for the 2023 tax year. Eagle Property Tax Appraisal & Consulting, Inc. will begin field inspections of the District's scheduled reappraisal area on or about the first Tuesday following Labor Day in September, 2023 and will complete all inspections and schedules by April 1, 2024 for the 2024 tax year.

The District shall provide to Eagle Property Tax Appraisal & Consulting, Inc. appraisers the field cards that contain specific information regarding the property being appraised. These cards contain brief legal descriptions, ownership interests, property use codes, property addresses, land size, and sketches of improvements as well as detailed information of any improvements. Appraisal field inspection procedures require the appraisers to check all information on the field cards and to update the information when necessary. All new improvements shall be measured, classed, and assigned the appropriate depreciation amount. Structures that have been

demolished or removed shall be marked off the appraisal card. Properties with extensive improvement remodeling shall be identified and the field inspection shall identify and update the property characteristic data. The appraiser shall note the date of the inspection on the card and place his initials on the card. The appraiser shall take pictures, with each picture having a date, and note the picture number on the appraisal card.

Each year, Eagle Property Tax Appraisal & Consulting, Inc. will test real property market areas, by property classification. The market areas shall be tested for low or high ratio sales and/or high coefficients of dispersion. Market areas that fail any or all of these tests are determined to be problematic. Field inspections are scheduled to verify and/or correct property characteristic data. Additional sales data is researched and verified.

The International Association of Assessing Officers' Standard on Mass Appraisal of Real Property specifies that the universe of properties shall be re-inspected on a cyclical basis of at least once every three years. The re-inspection includes, if possible, physically viewing the property, photographing, and verifying the accuracy of the existing data. A re-inspection may also consist of re-inspection by utilizing pictometry, digital and satellite imagery, various other digital options, or a combination of physical and digital information. Eagle Property Tax Appraisal & Consulting, Inc. has set the standard of physical inspection being the first choice and primary focus. When physical inspection is not possible, digital options are then used. Some appraisal districts have chosen digital inspections only. **The annual re-inspection requirements for tax years 2023 and 2024 are identified and scheduled in the District's Written Plan for Periodic Reappraisal.**

In addition to the two-year cycle set out by the District's reappraisal plan, Eagle Property Tax Appraisal & Consulting, Inc. will perform ratio studies annually to determine areas or categories of properties within the CAD which need to be reappraised within the current year based on ratios. Any areas or categories whose ratios are above or below statutory requirements shall be reappraised in the current year regardless of the area in which they are located. This two-fold approach will insure not only that all residential and commercial property within the CAD is reappraised at least once every three years, but also that all other categories within the CAD are reviewed annually so that the District stays current with respect to market value in those areas where residential and/or commercial property values appear to be changing rapidly.

MASS APPRAISAL SYSTEM

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 that 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. Eagle Property Tax Appraisal & Consulting, Inc. utilizes the national publication of cost schedules of Marshall Valuation Services.

Land market value schedules are updated using current market data (sales) and then tested with ratio study tools. Value schedules are developed and tested on a pilot basis with ratio study tools.

Special-use valuations (1-D-1) are recalculated each year, as required by Texas Property Tax Code, Sections 23.51 through 23.60. Each year, Eagle Property Tax Appraisal & Consulting, Inc. will gather information for the district and utilize that district's information to determine ag-use values. Sources of information include, but are not limited to, the Agriculture Advisory Board, Farm Service Agency, and USDA publications. The entire calculation packet will be provided to the district.

PERSONAL PROPERTY VALUATION

Eagle Property Tax Appraisal & Consulting performs personal property valuations only in some Districts.

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

HEARING PROCESS

Eagle Property Tax Appraisal & Consulting, Inc. representatives conduct informal hearings with protesting property owners. If the protest cannot be settled within the guidelines set out by the District's informal hearings procedures, the property owner may elect to proceed to a formal hearing before the Appraisal Review Board.

Eagle Property Tax Appraisal & Consulting, Inc. representatives will be present at formal ARB hearings and will present and defend the appraisals performed. Further, Eagle Property Tax Appraisal & Consulting, Inc. will provide to the District the calculations of schedules and final schedules.

GLASSCOCK COUNTY APPRAISAL DISTRICT

REAPPRAISAL PLAN

(Attachment C)

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:

2023 and 2024**

Originally Printed: July 21, 2022

***This biennial reappraisal plan is largely predicated on the Scope of Work Rule in the most recent version of Uniform Standards of Professional Appraisal Practice (USPAP) promulgated by The Appraisal Foundation's Appraisal Standards Board (ASB). On February 19, 2021, the ASB announced that the 2020-2021 edition of USPAP would be extended for use into 2022. Subsequently, this plan does not have a newer edition of USPAP to draw upon and therefore is substantially similar to the 2021-2022 biennial reappraisal plan.*

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

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

Table of Contents

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

Pritchard & Abbott, Inc., (P&A), a privately held company engaged primarily, but not wholly, in the ad valorem tax valuation industry endorses Uniform Standards of Professional Appraisal Practice (USPAP) as the basis for the production of sound appraisals. Insofar as the statutory requirement to appraise groups (or a "universe") of real and personal property within an established period of time using standardized procedures—and subjecting the resulting appraisals to statistical measures—is the definition of mass appraisal, P&A subscribes to USPAP Standards 5 and 6 (Mass Appraisal, Development and Reporting) whenever applicable in the development and defense of values. When circumstances clearly dictate the use of single property appraisal procedures, P&A adheres to the spirit and intent of the remaining USPAP Standards within all appropriate, practical, and/or contractual limitations or specifications.

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

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

USPAP defines "appraisal" as the act or process of developing an opinion of value or pertaining to appraising and related functions such as appraisal practice or appraisal services. Valuation services is defined as services pertaining to an aspect of property value, regardless of the type of service and whether it is performed by appraisers or by others. The USPAP definition of "appraiser" is one who is expected to perform valuation services competently and in a manner that is ***independent, impartial, and objective.*** USPAP Advisory Opinion 21: *USPAP Compliance* states that this expectation (by clients and intended users of appraisal reports) is the basis that creates an ethical obligation to comply with USPAP, even if not legally required. Advisory opinions do not establish new standards or interpret existing standards, but instead are issued to illustrate the applicability of appraisal standards in specific situations.

The majority of property types that P&A typically appraises for ad valorem tax purposes are categorized as unique, complex, and/or "special purpose" properties (mineral interests, industrial, utility, and related personal property). These categories of properties do not normally provide sufficient market data of reliable quality and/or quantity to support the rigorous use of all USPAP-prescribed mass appraisal development mandates (Standard 5: Mass Appraisal, Development), particularly with regards to some, but not all, of the *model calibration* and *statistical performance testing* confines. However, P&A does strive to employ all or most elements of mass appraisal techniques with regards to the *definition* and *identification of property characteristics* and *model specification* and application.

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

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

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

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

P&A will clearly state or otherwise make known all extraordinary assumptions, hypothetical conditions, limitations imposed by assignment conditions, and/or jurisdictional exceptions in its appraisal reports as they are conveyed to our clients. ***Intended users of our reports are typically the client(s) for which we are under direct contract.*** Although taxpayers or their agents who own and/or represent the subject property being appraised often receive these reports either by law or as a courtesy of the client or P&A, this receipt does not mean these parties automatically become Intended Users as defined by USPAP. ***A party receiving a copy of a report in order to satisfy disclosure requirements does not become an intended user of the appraisal or mass appraisal unless the appraiser specifically identifies such party as an intended user.*** Potential other users include parties involved in adjudication of valuation disputes (review board members, lawyers, judges, etc.), governmental agencies which periodically review our appraisals for various statutory purposes (such as the Texas Comptroller's Office) and private parties who may obtain copies of our appraisals through Open Records Requests made to governmental agencies.

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

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

determines its compliance.

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

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

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

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

PREAMBLE

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

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

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

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

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

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

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

Consequently, USPAP Standards 5 and 6 are assumed to be the applicable standard for ad valorem tax purposes in Texas, if mass appraisal practices are in fact being used to appraise the subject property. USPAP Advisory Opinion 32 suggests several USPAP standards other than Standards 5 or 6 can apply in ad valorem tax work. It appears that an appraiser engaged in ad valorem tax work in Texas is not specifically required by law to follow these USPAP standards if in fact mass appraisal practices have not been used to appraise the subject property. In this case it could be deemed appropriate to invoke the Jurisdictional Exception Rule which is applicable when

there is a contradiction between the requirements of USPAP and the law or regulation of a jurisdiction. Please see the P&A Policy Statement on USPAP as provided elsewhere in this report for a more detailed discussion regarding this matter.

ETHICS RULE

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

- Conduct;
- Management;
- Confidentiality.

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

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

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

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

CONDUCT

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

An appraiser:

- must not perform an assignment with bias;
- must not advocate the cause or interest of any party or issue;
- ***must not accept an assignment that includes the reporting of predetermined opinions and conclusions***;
- must not misrepresent his or her role when providing valuation services that are outside of appraisal practice;
- must not communicate assignment results with the intent to mislead or to defraud;
- must not use or communicate a report or assignment results known by the appraiser to be misleading or fraudulent;
- must not knowingly permit an employee or other person to communicate a report or assignment results that are misleading or fraudulent report;
- must not use or rely on unsupported conclusions relating to characteristics such as race, color, religion, national origin, gender, marital status, familial status, age, receipt of public assistance income, handicap, or an unsupported conclusion that homogeneity of such characteristics is necessary to maximize value;
- must not engage in criminal conduct;

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

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

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

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

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

MANAGEMENT

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

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

Advertising for or ***soliciting assignments in a manner that is false, misleading, or exaggerated*** is unethical. Decisions regarding finder or referral fees, contingent compensation, and advertising may not be the responsibility of an individual appraiser, but for a particular assignment it is the responsibility of the individual appraiser to ascertain that there has been no breach of ethics, that the assignment consulting assignment has been prepared in accordance with USPAP Standards, and that the report can be properly certified when required by USPAP Standards 2-3, 4-3, 6-3, 8-3, or 10-3.

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

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

CONFIDENTIALITY

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

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

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

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

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

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

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

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

RECORD KEEPING RULE

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

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

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

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

An appraiser must have custody of the workfile, or make appropriate workfile retention, access, and retrieval arrangements with the party having custody of the workfile. This includes ensuring that a workfile is stored in a medium that is retrievable by the appraiser throughout the prescribed record retention period. An appraiser having custody of a workfile must allow other appraisers with workfile obligations related to an assignment appropriate access and retrieval for the purpose of:

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

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

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

SCOPE OF WORK RULE

For each appraisal or appraisal review assignment, an appraiser must:

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

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

Scope of work includes, but is not limited to:

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

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

PROBLEM IDENTIFICATION

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

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

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

- assumptions;
- extraordinary assumptions;
- hypothetical conditions;
- 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 the client and other intended users to understand the scope of work performed. Proper disclosure is required because clients and other intended users may rely on the assignment results. Sufficient information includes disclosure of research and analyses performed or not performed. ***The information disclosed must be appropriate for the intended use of the assignment results.***

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

JURISDICTIONAL EXCEPTION RULE

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

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

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

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

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

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

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

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

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

Standards 5 and 6 apply to all mass appraisals of real and personal property regardless of the purpose or use of such appraisals. It is directed toward the substantive aspects of developing and communicating competent analyses, opinions, and conclusions in the mass appraisal of properties, whether real property or personal property. Standard 5 is directed toward the substantive aspects of developing credible analyses, opinions, and conclusions in the mass appraisal of properties, while Standard 6 addresses the content and level of information required in a report that communicates the results of a mass appraisal. The reporting and jurisdictional exceptions applicable to public mass appraisals prepared for 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 (specifying) 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 Standards 5 and 6 because ad valorem tax administration is subject to various state, county, and municipal laws.

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

- **Standard 5-1:** Establishes the appraiser's technical and ethical framework. Specifically, appraisers must recognize and use established principles, methods and techniques of appraisal in a careful manner while not committing substantial errors of fact or negligence that would materially affect the appraisal results and not give a credible estimate of fair market value. To this end appraisers must continuously improve his or her skills to maintain proficiency and keep abreast of any new developments in the real and personal property appraisal profession. This Standards does not imply that competence requires perfection, as perfection is impossible to attain. Instead, it requires appraisers to employ every reasonable effort with regards to due diligence and due care.

- **Standard 5-2:** Defines the introductory framework requirements of developing a mass appraisal, focusing on the identification and/or definition of: client(s), intended users, effective date, appraisal perspective, scope of work, extraordinary assumptions, hypothetical conditions, the type and definition of value being developed (typically "fair market value" for ad valorem tax purposes), characteristics of the property being appraised in relation to the type and definition of value and intended use, the characteristics of the property's market, the property's real or personal attributes, fractional interest applicability, highest and best use analysis along with other land-related considerations, and any other economic considerations relevant to the property.

- **Standard 5-3:** Defines requirements for developing and specifying appropriate mass appraisal data and elements applicable for real and personal property. For real property, the data and elements include: existing 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 5-4:** Further defines requirements for developing mass appraisal models, focusing on development of standardized data collection forms, procedures, and training materials that are used 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 must be calibrated using recognized techniques, including, but not limited to, multiple linear regression, nonlinear regression, and adaptive estimation. 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 such as adaptive estimation. Model calibration refers to the process of analyzing sets of property and market data to determine the specific parameters of a model.

- **Standard 5-5:** 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 statements 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 5-6:** 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 to value sites by recognized methods or techniques such as allocation method, abstraction method, capitalization of ground rent, and land residual; the appraiser to develop value of leased fee or leasehold estates with consideration for terms and conditions of existing leases, and, when applicable by law, as if held in fee simple whereas market rents are substituted for actual contract rents; the appraiser to analyze the effect on value, if any, of the assemblage of the various parcels, 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 5-7:** 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. Appraisers have a professional responsibility to ensure that, on an overall basis, models produce value conclusions that meet attainable standards of accuracy.

- **Standard 6-1:** Defines general requirements of a mass appraisal written report by addressing the level of information required that will allow the report to be non-misleading, clearly understood, and sufficiently qualified with any assumptions and conditions (elements of which are further detailed in the next three sections of this report that discuss P&A appraisal procedures with regards to specific categories of property).

- **Standard 6-2:** Defines specific content required to be included in a mass appraisal written report.

- **Standard 6-3:** Defines the certification of the mass appraisal written report.

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

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

INTRODUCTION

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

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

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

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

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

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

- exposed in the open market with a reasonable time for the seller to find a purchaser;

- both the buyer and seller know of all the uses and purposes to which the property is, or can be, adapted and of the enforceable restrictions on its use; and
- both the buyer and seller seek to maximize their gains and neither is in a position to take advantage of the exigencies of the other. [Exigencies are pressing or urgent conditions that leave one party at a disadvantage to the other.]

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

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

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

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

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

Administrative Requirements: P&A endorses the principals of the International Association of Assessing Officers (IAAO) regarding its appraisal practices and procedures. P&A also endorses, and follows when possible, the standards promulgated by the Appraisal Foundation known as the Uniform Standards of Professional Appraisal Practice (USPAP). In all cases where IAAO and/or USPAP requirements cannot be satisfied for reasons of practicality or irrelevancy, P&A subscribes to "generally accepted appraisal methods and techniques" so that its value conclusions are credible and defendable. 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 reasonable estimates a future income stream to the property. This future income may then be converted (discounted) into an estimate of current value. Many refer to this as a capitalization method, because capitalization is the process of converting an income stream into a capital sum (value). As with any method, the final value is no better than the reliability of the input data. The underlying assumption is that people purchase the property for the future income the property will yield. If the land or improvements are of any residual value after the cessation of oil and gas production, that value should also be included (if those components are also being appraised).

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

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

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

DATA COLLECTION/VALIDATION

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

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

Data Collection Procedures: Electronic and field data collection requires organization, planning and supervision of the appraisal staff. Data collection procedures for mineral properties are generally accomplished globally by the company; i.e., production and price data for the entire state is downloaded at one time into the computer system. Appraisers also individually gather and record specific and particular information to the appraisal file records, which serves as the basis for the valuation of mineral properties. P&A is divided into four district offices covering different geographic areas. Each office has a district manager, appraisal and ownership maintenance staff, and clerical staff as appropriate. While overall standards of performance are established and upheld for the various district offices, quality of data is emphasized as the goal and responsibility of each appraiser.

VALUATION ANALYSIS (MODEL CALIBRATION)

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

INDIVIDUAL VALUE REVIEW PROCEDURES

Individual property values are reviewed several times in the appraisal process. P&A's discounted cashflow software dynamically generates various benchmark indicators that the appraiser reviews concurrent with the value being generated. These benchmarks often prompt the appraiser to reevaluate some or all of the parameters of data

entry so as to arrive at a value more indicative of industry standards. Examples of indicators are dollars of value per barrel of oil reserve, years payout, etc. In addition to appraiser review, taxpayers are afforded the opportunity to review the appraised values, either before or after Notices of Appraised Value are prepared. Operators routinely meet with P&A's appraisers to review parameters and to provide data not readily available to P&A through public or commercial sources, such as individual lease operating expense and reserve figures. And of course, all property values are subject to review through normal protest and Appraisal Review Board procedures, with P&A acting as an extension of the Office of the Chief Appraiser.

PERFORMANCE TESTS

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

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

INTRODUCTION

Definition of Appraisal Responsibility (Scope of Effort): 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.

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

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

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

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

P&A is typically under contract to determine current market value or "fair market value" of said industrial, utility, and related personal property. 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: 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). 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 defendable. 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 ften 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.

GLASSCOCK COUNTY APPRAISAL DISTRICT

REAPPRAISAL PLAN

(Attachment D)

GLASSCOCK COUNTY APPRAISAL DISTRICT
2022 Mass Appraisal Report

INTRODUCTION:

Scope of Responsibility

The Glasscock County Appraisal District has prepared and published this report to give citizens and taxpayers a better understanding of the district's responsibilities and activities. This report has several parts: a general introduction and then several sections describing the appraisal effort by the appraisal district.

The Glasscock County Appraisal District (CAD) is a political subdivision of the State of Texas, created effective January 1, 1980. The provisions of the Texas Property Tax Code govern the legal, statutory, and administrative requirements of the appraisal district. A member board of directors, elected by the voting taxing units of Glasscock County, constitutes the district's governing body. The chief appraiser is the appraisal district's chief administrator and executive officer.

The appraisal district is responsible for local property tax appraisal and exemption administration for all jurisdictions or taxing units in the county. Each taxing unit (Glasscock County, Glasscock ISD, Glasscock Groundwater Conservation District) sets its tax rate to generate tax revenue to pay for such things as police and fire protection, public schools, road and street maintenance, courts, water and sewer systems, and other public services. Appraisals established by the appraisal district allocate the year's tax burden based on each taxable property's January 1 market value. We also determine eligibility for various property tax exemptions for homeowners, elderly, disabled veterans, and charitable and religious organizations.

Except as otherwise provided by the Texas Property Tax Code, all taxable property is appraised at its "market value" as of January 1. Under the tax code, "market value" is defined as the price at which a property would transfer for cash or its equivalency under prevailing market conditions if:

- *****exposed for sale in the open market with a reasonable time for the seller to find a purchaser;
- *****both the seller and the buyer know all the uses and purposes to which the property is adapted and for which it is capable of being used and of any enforceable restrictions on the use; and
- *****both the seller and the buyer seek to maximize their gains, with neither being in the position to take advantage of the other.

The Texas Property Tax Code defines special appraisal provisions for the valuation of residential homestead property (Section 23.23), productivity (Section 23.41), real property inventory (Section 23.12), dealer inventory (Section 23.121, 23.124, 23.1241, and 23.127), and nominal (Section 23.18) or restricted use properties (Section 23.83). The owner of real property inventory may elect to have the inventory appraised at its market value as of September 1st of the year preceding the tax year to which the appraisal applies by filing an application with the chief appraiser requesting that the inventory be appraised as of September 1st. The Texas Property Tax Code, under Section 25.18, requires each appraisal office

to implement a plan to update appraised values for real and personal property at least once every three years. The district's Written Plan for Periodic Reappraisal is attached to this report for reference. Appraised values are reviewed annually and are subject to change for equalization purposes. Personal property, industrial property, complex commercial property, utility property, and mineral property values are checked or reappraised annually. Special-use valuations are also updated annually.

The appraised value of the real estate is calculated using specific information about each property. Using computer-assisted appraisal programs and recognized appraisal methods and techniques, we compare that information with the data for similar properties and recent market data. The district follows the standards of the International Association of Assessing Officers (IAAO) regarding its appraisal practices and procedures and subscribes to the standards promulgated by the Appraisal Foundation, known as the Uniform Standards of Professional Appraisal Practice (USPAP). Any departure from USPAP standards is so noted in departure statements. In cases where the appraisal district contracts for professional valuation services, each appraisal firm's agreement requires adherence to similar professional standards.

Personnel Resources

The office of the Chief Appraiser is primarily responsible for the overall planning, organizing, staffing, coordinating, and controlling of the district operations. The chief appraiser is also responsible for planning, organizing, directing, and managing the business functions related to human resources, budget, finance, records management, purchasing, fixed assets, facilities, and postal services. The chief appraiser is responsible for valuing all real and personal property accounts. Appraising property types include commercial, residential, business, personal, and industrial. Glasscock County Appraisal District currently contracts with Pritchard & Abbott, Inc.'s appraisal firm for appraisals of industrial and mineral properties and industry-related business personal accounts. The appraisal district is contracted with Eagle Appraisal and Consulting for the fieldwork associated with on-site inspections, in-house sales ratio studies for schedule adjustments and appraisals, residential schedule adjustments and appraisals, ag-value and rural land market value schedule adjustments and appraisals, informal hearings with protesting property owners, representation at ARB hearings, and other appraisal related duties. The chief appraiser is responsible for all values assigned. The appraisal district is also responsible for the following support groups: review appraisals, productivity valuation, and special audits. The district's appraisers - whether in-house or contracted - are subject to the provisions of the Property Taxation Professional Certification Act and must be duly registered with The Texas Department of Licensing and Regulation. Support functions, including records maintenance, information and assistance to property owners, and hearings support, are coordinated by the Administrative Assistant.

The appraisal district staff consists of 2 full-time employees. The chief appraiser has certifications: Registered Professional Appraiser and Certified Chief Appraiser.

Data

The district is responsible for establishing and maintaining real and personal property accounts covering Glasscock County. This data includes property characteristics, ownership, and exemption information. Property characteristic data on new construction is updated through an annual field effort; existing property data is maintained through a field review. Sales are routinely validated during a separate field effort; however, numerous sales are validated as part of the new construction and data review field activities. General trends in employment, interest rates, recent construction trends, and cost and market data are acquired through various sources, including internally generated questionnaires to buyers and sometimes the seller and local real estate agents.

The district's geographic information system (GIS) maintains cadastral maps and various data layers, including aerial photography.

Independent Performance Test

According to Chapter 5 of the Texas Property Tax Code and Section 403.302 of the Texas Government Code, the State Comptroller's Property Tax Division (PTD) conducts a property value study (PVS) of each Texas school district and each appraisal district every other year. As a part of this study, the code also requires the Comptroller to use sales and recognized auditing and sampling techniques, review each appraisal district's appraisal methods, standards, and procedures to determine whether the district used recognized standards and practices (MSP Review), test the validity of school district taxable values in each appraisal district and presume the appraisal roll values are correct when values are valid, and determine the level and uniformity of property tax appraisal in each appraisal district. The methodology used in the property value study includes stratified samples to improve sample representativeness and techniques or procedures for measuring uniformity. This study utilizes statistical analysis of sold properties (sale ratio studies) and appraisals of unsold properties (appraisal ratio studies) as a basis for assessment ratio reporting. For appraisal districts, the reported measures include the median level of appraisal, coefficient of dispersion (COD), the percentage of properties within 10% of the median, the percentage of properties within 25% of the median, and price-related differential (PRD) for properties overall and by state category (i.e., categories A, B, C, D, and F1 are directly applicable to real property).

There is one independent school district in Glasscock CAD for the annual development of appraisal rolls. The preliminary results of this study are released in January of the year following the appraisal. The final results of this study are certified to the Education Commissioner of the Texas Education Agency (TEA) in the following July of each year for the year of appraisement. This outside (third party) ratio study assists the CAD in determining areas of market activity or changing market conditions.

Appraisal Activities

INTRODUCTION

Appraisal Responsibilities

The chief appraiser is responsible for collecting and maintaining property characteristic data for classification, valuation, and other purposes. The accurate valuation of real and personal property by any method requires a physical description of personal property, land, and building characteristics. This appraisal activity is responsible for administering, planning, and coordinating all activities involving data collection and maintenance of all commercial, residential and personal property types within the district's boundaries. The data collection effort consists of the field inspection of real and personal property accounts and all data collected into the existing information system. (Appraisal district staff assists the chief appraiser in collecting and entering that data into the information system.) The goal is to inspect all real property in the appraisal district at least once every three years. Meeting this goal is dependent on budgetary constraints. The above responsibilities can be delegated to contracted personnel or in-house staff as deemed appropriate by the chief appraiser. A copy of the Written Plan for Periodic Reappraisal is attached to this report for reference.

* **Personnel** -. The appraisal activities consist of the chief appraiser, one clerk and contracted appraisal companies.

* **Data** - The data used by field appraisers includes the existing property characteristic information contained in CAMA (Computer Assisted Mass Appraisal System) from the district's computer system. The data is printed on a property record card (PRD) or personal property data sheet. Other data include maps, sales data, fire and damage reports, building permits, photos, newspapers, etc.

PRELIMINARY ANALYSIS

Data Collection/Validation

Data collection of real property involves maintaining data characteristics of the property on CAMA (Computer Assisted Mass Appraisal). The information in CAMA includes site characteristics, such as land size and topography, and improvement data, such as square feet of living area, year built quality f construction, and condition. Field appraisers use listing guides that establish uniform procedures for correctly listing the real property. All properties are coded according to these guides, and the approaches to value are structured and calibrated based on this coding system. The field appraisers use these manuals during their initial training and as a guide in the field inspection of properties. Data collection of personal property involves maintaining information on the Personal Property System. The information in the personal property system includes personal

property such as business inventory, furniture and fixtures, machinery and equipment, cost, and location. The field appraisers conducting on-site inspections will use a personal property manual during their initial training and as a guide to correctly list all taxable personal property.

The listing procedure manuals that the field appraisers utilize are located in the district office. The manuals are always available for public inspection. The appraisal district clerical staff handles requests for copies of the manual. The chief appraiser periodically updates the manual with current information.

Sources of Data

The sources of data collection are the new construction field effort, data review/re-list field effort, data mailers, hearings, sales validation field effort, commercial sales verification, newspapers and publications, and property owner correspondence. A principal data source is building permits received for taxing jurisdictions requiring property owners to take out a building permit.

Data review of entire neighborhoods is generally a good source for data collection. The field appraiser will drive whole areas to review the accuracy of our data and identify properties that must be re-listed. Real property sales validation effort pertains to collecting sold properties' data. In residential, the sales validation effort involves on-site inspection by field appraisers to verify the accuracy of our data and to get confirmation of the sales price.

One of the sources that will generate a field check in both real and personal property is a property owner. Property owners have access to part of our data and will notify us - either in an office visit, by phone, or by letter - whenever they find inconsistencies. Notification from property owners will generate a field check.

Data Collection Procedures

Field data collection requires organization, planning, and supervision of the field effort. Data collection procedures have been established for residential, commercial, and personal property. The field appraiser conducts inspections throughout the district and records information on a property record card or personal property data sheet.

Data quality is essential in establishing accurate values of taxable property. While production standards are established and upheld for the various field activities, quality of data is emphasized as the goal and responsibility of each appraisal district employee. New employees are trained in the specifics of data collection rules. Experienced employees are routinely re-trained in listing procedures before major field projects such as new construction, sales validation, or data review. A quality assurance process exists through supervision to review the work performed by the field appraiser and data entry personnel. The chief appraiser is responsible for appraisers and employees following listing procedures, identifying training issues, and providing consistent training throughout the appraisal office staff.

Data Maintenance

The field appraiser ensures that field notes are legible, complete, and in good order for data entry accuracy and quality assurance.

INDIVIDUAL VALUE REVIEW PROCEDURES

Field Review

The date of the last inspection, the extent of that inspection, and the CAD appraiser responsible are listed on the CAMA record. Suppose a property owner or jurisdiction disputes CAD's records concerning this data during a telephone call or correspondence received during a hearing. In that case, CAMA may be altered based on the evidence provided. Typically, a field inspection is requested to verify this evidence for the current year or the following year's valuation. Every year, a field review of certain areas or neighborhoods in the jurisdiction is done during the data review/re-list field effort.

Office Review

Office reviews are completed on properties where information has been received from the property owner. Property owners frequently provide vital data verifying property characteristics or current property conditions. Field inspections are not required unless additional data verification is required when the property data is demonstrated.

PERFORMANCE TEST

The chief appraiser is responsible for conducting ratio studies and comparative analyses. This responsibility may be assigned to contracted appraisal companies. These statistical tests are executed at least once each year.

The chief appraiser or contracted appraisal company may conduct field inspections to ensure that the ratios produced are accurate and that the appraised values utilized are based on precise property data characteristics.

Residential Valuation Process

INTRODUCTION

Scope of Responsibility

The chief appraiser is responsible for developing equal and uniform market values for residential, improved, and vacant properties. There are improved residential parcels and vacant residential properties in Glasscock County.

Appraisal Resources

* Personnel - Residential valuations are performed by the staff of Eagle Appraisal & Consulting. This company is responsible for providing adequate staff. Employees of the appraisal district assist in various and appropriate ways.

* Data - A common set of data characteristics for each residential dwelling in Glasscock County is collected in the field, and data is entered into the computer. The property characteristic drives the computer-assisted mass appraisal (CAMA) approach to valuation.

VALUATION APPROACH (Model Specification)

Area Analysis

Data on regional economic forces such as demographic patterns, regional vocational factors, employment and income patterns, general trends in real property prices and rents, interest rates trends, availability of vacant land, and construction trends and costs are collected from private vendors and public sources. Information gleaned from real estate publications and sources such as continuing education in the form of IAAO, TAAD, TAAO, and Comptroller of Public Accounts classes and seminars.

Neighborhood and Market analysis

Neighborhood analysis examines how physical, economic, governmental, and social forces and other influences affect property values. The effects of these forces are also used to identify, classify, and stratify comparable properties into smaller, more manageable subsets of the universe of properties known as neighborhoods. Residential valuation and neighborhood analysis are conducted on each property within a specified school district.

The first step in neighborhood analysis is identifying a group of properties that share certain traits. A "neighborhood for analysis purposes is defined as the largest geographic grouping of properties where the property's physical, economic, governmental, and social forces are generally similar and uniform. Geographic stratification accommodates the local supply and demand factors that vary across a jurisdiction. Once a neighborhood has been identified, the next step is to define its boundaries. This process is known as "delineation." Some factors used in neighborhood delineation include location, sales price range, lot size, dwelling age, quality of construction and condition of dwellings, square footage of the living area, and story height. Delineation can involve the physical drawing of neighborhood boundary lines on a map, but it can also involve statistical separation or stratification based on attribute analysis. Part of neighborhood analysis is the consideration of discernible patterns of growth that influence a neighborhood market. Few neighborhoods are fixed in character. Each neighborhood may be characterized as being in a stage of growth stability, or the decline stage growth period is a time of development and construction. Generally, in a stage of stability, older neighborhoods can be more desirable due to their stability of residential character and proximity to the workplace and other community facilities. A period of the decline reflects diminishing demand or

desirability. During the decline, general property use may change from residential to a mix of residential and commercial uses. Declining neighborhoods may also experience renewal, reorganization, rebuilding, or restoration, which promotes increased demand and economic desirability.

Highest and Best Use Analysis

The highest and best use of the property is the reasonable and probable use that supports the highest present value as of appraisal dates. The highest and best use must be physically possible, legal, financially feasible, and productive to its maximum. The residential property's highest and best use is usually its current use. This is partly because residential development, through deed restrictions and zoning, in many areas, precludes other land uses—residential valuation undertook a critical reassessment of the highest and best use in mixed residential and commercial use transition areas. In transition areas with ongoing gentrification, the appraiser reviews the existing residential property use and decides the highest and best use. Once the conclusion is made, the highest and best use analysis is done to determine the type of residential use on a neighborhood basis. For example, it may be determined in a transition area that older, non-remodeled homes are economic mix improvements and the highest and best of such property is the construction of new dwellings. In mixed residential and commercial areas, the appraiser reviews properties periodically to determine if changes in the real estate market require a reassessment of the highest and best use of a select population of properties.

DATA COLLECTION AND VALIDATION

Sources of Data

The district's property characteristic data was initially received in 1979 from the Glasscock County Tax Office and the Glasscock County Independent School District Tax Office. Where absent, collected through a massive field data collection effort coordinated by the district over some time. Tax assessors, city and local newspapers, and the public often provide the district information regarding new construction, market patterns, and other valuable facts related to property valuation.

VALUATION AND STATISTICAL ANALYSIS (Model Calibration)

Cost Schedules

All residential parcels in the district are valued from identical cost schedules using a comparative unit method. The district's residential cost schedules, originally adopted from a private mass appraisal firm, have been customized to Glasscock County's local residential building market. The cost schedules are reviewed annually.

The initial cost schedules for the Glasscock County Appraisal District were developed using Marshall & Swift, a nationally recognized cost estimator. The schedules were derived in this manner because the appraisal district did not have enough newly constructed sold properties at various levels of quality of construction to allow for analysis and statistical testing. Marshall & Swift processes included correlation of quality of construction factors. The results of this comparison were analyzed using statistical measures, including

stratification by the quality and age of estimated building costs plus land-to-sales prices. As a result of this analysis, a new regional multiplier was developed and used in the district's cost process. This multiplier adjusted the Marshall & Swift schedules to bring the schedules to costs reflecting the local market.

Sales Information

A sales file for the storage of sales data at the time of sale is maintained, primarily by the deputy chief appraiser. Residential vacant land sales and commercial improved and vacant land sales are maintained. Residential improved and vacant sales are collected from various sources, including district questionnaires sent to buyers, field discovery, protest hearings, vendors, builders, and realtors. A system of type, source, validity, and verification codes was established to define salient facts related to a property's purchase or transfer. School district sales reports are generated as an analysis tool for the chief appraiser to develop value estimates.

Land Analysis

If available, the chief appraiser conducts residential land analysis based on existing and new data. Lot size, costs per front foot, depth factor, and depth percentages are assigned to each parcel. The front footage land table is designed to systematically value the primary and residual land based on a specified rate of one hundred percent (100%) of the current market value. A computerized land-table file stores the land information required to value individual parcels consistently. Where necessary, specific land influences are used to adjust parcels outside the norm for such factors as shape, size, topography, etc. The chief appraiser uses abstraction and allocation methods to ensure that the land values created best reflect the contributory market value of the land to the overall property value. This analysis may be assigned to the contracted appraisal company.

Statistical Analysis

The chief appraiser performs statistical analysis annually to evaluate whether values are equitable and consistent with the market. Ratio studies are conducted on each of the school districts in the district to judge the two primary aspects of mass appraisal accuracy: level of appraisal and uniformity of value. Appraisal statistics of central tendency and dispersion generated from sales ratios are available for each school district by year. These studies include but are not limited to the weighted mean, median, standard deviation, coefficient of variation, and coefficient of dispersion, providing the chief appraiser a tool to determine the level and uniformity of appraisals. The level of appraised values can be determined by the weighted mean for individual properties within a school district. Review of review standard deviation, coefficient of variation, and coefficient of dispersion can discern appraisal uniformity within and between school districts.

The chief appraiser, through the sales ratio analysis process, reviews each classification of residence in each school district annually. The first phase involves ratios studies that compare the recent sales prices of properties to the appraised values of these sold properties. This set of ratio studies affords the chief appraiser an excellent means of judging the present level of appraised value

and uniformity of the sales. Based on the sales ratio statistics and designated parameters for valuation update, the chief appraiser decides whether the value level in a school district needs to be updated or whether the level of market value in a school district is acceptable. This analysis process may be assigned to the contracted appraisal company.

Market Adjustment or Trending Factors

Market adjustments or factors are developed from appraisal statistics from ratio studies and are used to ensure that estimated values are consistent with the market. As the cost approach separately estimates both land and building values and uses depreciated replacement costs, which reflect only the supply side of the market, it is expected that adjustments to the cost values are needed to bring the level of appraisal to an acceptable standard.

Suppose a category of residential improvements is to be updated. In that case, the chief appraiser uses a ratio study that compares recent sales prices of properties sold to the appraised value of those same properties. The calculated ratio derived from the sum of the sold properties value divided by the sum of the sales prices indicates the category's level of value based on the unadjusted value for the sold properties. This appraisal is used to determine the market adjustment factor for the class. This market adjustment factor is needed to trend the values closer to the actual market, evidenced by recent sales prices within a given category in a given school district. The sales used to determine the market adjustment factor will reflect the market influences and conditions only for the specified category in the selected school district, thus producing more representative and supportable values. The market adjustment factor, if any, is applied uniformly to all properties within a school district category. Once the factors are applied and CAMA adjusts values, the second set of ratio studies is generated that compares recent sales prices with the proposed appraised values for those sold properties. From this set of ratio studies, the appraiser judges the school district's overall appraisal level and uniformity.

TREATMENT OF RESIDENCE HOMESTEADS

Beginning in 1998, the State of Texas implemented a constitutional classification scheme concerning the appraisal of residential property that receives a residence homestead exemption. Under the new law, beginning in the second year, a property gets a homestead exemption, and increases of that property are "capped." The value for tax purposes (appraised value) of a qualified residence homestead will be the LESSER of:

- the market value; or
- the preceding year's appraised value plus 10% plus the value of any improvements added since the last reappraisal.

Values of capped properties must be recomputed annually. If a capped property sells, the cap automatically expires on January 1st of the following year. The following year, that home is reappraised at market value to make its appraisal uniform with other properties.

TREATMENT OF ACCOUNTS WITH PRIOR YEAR HEARINGS

If the Appraisal Review Board lowers the appraised value of a property, that value is considered to be the appraised value of the property for that tax year. In

the following tax year, the chief appraiser may not increase the appraised value of the property unless the increase by the chief appraiser is reasonably supported by substantial evidence when all of the reliable and probative evidence in the record is considered as a whole. Suppose the appraised value is finally determined in a protest under Section 41.41(a)(2) or an appeal under Section 42.26. In that case, the chief appraiser may satisfy the requirement to reasonably support by substantial evidence an increase in the appraised value of the property in the following year by presenting evidence showing that the inequality in the appraisal of the property has been corrected about the property that was considered in determining the value of the subject property. The burden of proof is on the chief appraiser to support an increase in the appraised value of the property the under the circumstances described in this section.

INDIVIDUAL VALUE REVIEW PROCEDURES

Field Review

The chief appraiser identifies individual properties in critical need of field review through sales ratio analysis. Sold properties with a high variance in sales ratios are field reviewed annually to check for accuracy of data characteristics.

At each inspection site, the appraiser reviews subjective data items such as quality of construction, condition, and physical, functional, and economic obsolescence factors. These factors contribute significantly to the market value of the property. During the site inspection, the appraiser can physically inspect sold and unsold properties for comparability and consistency of values.

The area to be physically inspected yearly is identified in the appraisal district's written reappraisal plan. A copy of the district's Written Plan for Periodic Reappraisal is attached to this report for reference.

Office Review

Given the resources and time required to conduct a routine field review of all properties, homogeneous properties consisting of similar characteristics with a low variance in sales ratios and other properties having a recent field inspection date can be reviewed in the appraisal office unless it is located in an area specified for that year's field inspection cycle as identified in the appraisal district's written plan for reappraisal.

Once the chief appraiser is satisfied with each school district's level and value uniformity, the value estimates go to noticing.

PERFORMANCE TESTS.

Sales Ratio Studies

The ratio study is the chief appraiser's primary analytical tool to measure and improve performance. The district ensures that its appraised values meet the accuracy standards in several ways. Overall sales ratios are generated for each school district to allow the chief appraiser to review general market trends and indicate market appreciation over a specified period. Sales ratio studies are generated from computer statistical software for each school district and the

appraisal district. The sales ratio statistics for each school district are appraised value and uniformity profile by structure type (classification), the median level of appraisal, weighted mean, and coefficient of dispersion. The computer-based ratio studies are designed to emulate the State Comptroller's annual property value study for category A and E (single-family residential properties).

Management Review Process

Once the proposed value estimates are finalized, the chief appraiser reviews the sales ratios by the school district and confirms pertinent valuation data, such as the sale-to-parcel ratio and level of appraisal. The primary objective of this review is to ensure that the proposed values have met preset appraisal standards.

An independent test of the appraisal performance of the district is conducted by the State of Texas Comptroller's Office through the annual property value study. The study determines the degree of uniformity and the median level of appraisals by the appraisal district within each major category of property. The Comptroller publishes a report of the study findings from each property category, including the median appraisal levels, the coefficient of dispersion, and any other standard statistical measures that the Comptroller considers appropriate.

Commercial Valuation Process

INTRODUCTION

Appraisal Responsibility

This mass appraisal assignment includes all of the commercially classed real property which falls within the responsibility of the Glasscock County Appraisal District and is located within the boundaries of the taxing jurisdictions. The appraisal roll displays and identifies each parcel of real property individually. Commercial appraisers appraise the fee simple interest of properties according to the statute. However, the effect of easements, restrictions, encumbrances, leases, contracts, or special assessments are considered on an individual basis, as is the appraisement of any non-exempt taxable fractional interests in real property (i.e., specific multi-family housing projects). Fractional interests or partial holdings of real property are appraised in fee simple for the whole property and divided programmatically based on their prorated interests.

Appraisal Resources

The improved real property appraisal responsibilities are categorized according to significant property types of office, retail, warehouse, and special use (i.e., hotels, clinics, etc.). The appraisal district is contracted with Eagle Appraisal & Consulting to perform the field inspections and assign improved commercial property types. The contracted appraisal firm is responsible for the land valuations.

DATA – The data used by the commercial appraisers includes verified sales of vacant land and improved properties and the pertinent data obtained from each (sales price levels, capitalization rates, income multipliers, equity dividend rates, marketing period, etc.). Other data used by the appraiser includes actual income and expense data (typically obtained through the hearings process), contract rental data, leasing information (commissions, tenant finish, length of terms, etc.), and construction cost data. In addition to the actual data obtained from specific properties, market data publications are also reviewed to provide additional support for market trends.

PRELIMINARY ANALYSIS

Pilot Study

Pilot studies are utilized to test new or existing procedures or valuation modifications in a limited area (a sample of properties) and are also co. They are whenever substantial changes are made. These studies, including ratio studies, reveal whether a new system is producing accurate and reliable values or whether procedural modifications are required. The appraiser implements this methodology when developing both cost and income models.

Survey of Similar Jurisdictions: Glasscock CAD coordinates its discovery and valuation activities with adjoining appraisal districts. Numerous field trips, interviews, and data exchanges with adjacent appraisal districts have been conducted to ensure compliance with state statutes. In addition, Hardeman CAD administration and personnel interact with other assessment officials through professional trade organizations, including IAAO, TAAD, TAAO, and TRCA.

VALUATION APPROACH (Model Specification)

Area Analysis

Data on regional economic forces such as demographic patterns, regional location factors, employment, and income patterns, general trends in real property prices and rents, interest rate trends, availability of vacant land, and construction trends and costs are collected from private vendors and public sources, such as continuing education in the form of IAAO, TAAD, TAAO, and Comptroller of Public Accounts PTAD courses.

Neighborhood Analysis

The neighborhood comprises the land area and commercially classed properties within the appraisal district's boundaries. This area comprises a wide variety of property types, including residential, commercial, and industrial. Neighborhood analysis examines how physical, economic, governmental, and social forces and other influences affect property values. The effects of these forces are also used to identify, classify, and organize comparable properties into smaller, manageable subsets of the universe of properties known as neighborhoods. In the mass appraisal of commercial properties, these subsets of a universe of properties are generally referred to as market areas or economic areas.

Economic areas are defined by each of the improved property use types (apartment, office, retail, warehouse, and special use) based upon an analysis of similar economic or market forces. These include, but are not limited to, similarities

of rental rates, classification of projects (known as building class by area commercial market experts), construction dates, overall market activity, or other pertinent influences. Economic area identification and delineation by each primary property use type is the benchmark of the commercial valuation system. All income model valuation (income approach to value estimates) is economic area specific. Economic areas are periodically reviewed to determine if re-delineation is required.

Highest and Best Use Analysis

The highest and best use is the most reasonable and probable use that generates the highest present value of the real estate as of the valuation date. Any given property's highest and best use must be physically possible, legally permissible, financially feasible, and maximally productive. For improved properties, the highest and best use are evaluated as improved and as if the site were still vacant. This assists in determining if the existing improvements have a transitional use, interim use, nonconforming use, multiple uses, speculative use, excess land, r a different optimum use if the site were vacant. For vacant tracts of land within this district, the highest and best use is considered speculative based on the surrounding land uses. Improved properties reflect a wide variety of highest and best use but are not limited: to the limited to: office, retail, apartment, warehouse, light industrial, special purposes, or interim uses. In many instances, the property's current use is the same as its highest and best use. This analysis ensures that an accurate estimate of market value (sometimes referred to as value in exchange) is derived.

On the other hand, value in use represents the value of a property to a specific user for a particular purpose. This is significantly different from market value, which approximates market price under the following assumptions: (a) no coercion of undue influence over the buyer or seller in an attempt to force the purchase or sale; (b) well-informed buyers and sellers acting in their own best interests; c) a reasonable time for the transaction to take place; and (d) payments in cash or its equivalent.

Market Analysis

A market analysis relates directly to market forces affecting supply and demand. This study involves the relationships between social, economic, environmental, governmental, and site conditions. Current market activity, including sales of commercial properties, new construction, new leases, lease rates, absorption rates, vacancies, allowable expenses (including replacement reserves), and expense ratio trends, are analyzed.

DATA COLLECTION/VALIDATION

Sources of Data

Concerning the property characteristic data inventory system, every property subject to taxation by a jurisdiction within Glasscock CAD's area of responsibility is incorporated into a computer-assisted mass appraisal (CAMA) system. Appraisers perform maintenance of special purpose properties. Any alterations to the properties involving building permits are then reviewed. Also, suppose discrepancies are discovered during the hearings or at any other time. In that case, the chief appraiser performs a field check before the next tax season. Data is reviewed during periodic field inspections.

Other sale data sources include the hearings process, word of mouth, and local publications.

Data Collection Procedures

Data collection procedures have been established for residential, commercial, industrial, and personal property. Appraisers conduct field inspections and record information on either a property record data (PRD) card or personal property data sheets. This information is entered into the computer system and serves as the basis for the valuation of the property.

The quality of data used is paramount to value using taxable property accurately. While production standards are established and upheld for the various field activities, quality of data quality is emphasized as each appraiser's goal, and responsibilities are trained in the specifics of data collection.

A sale file is produced for those properties involved in a transfer of commercial ownership, which begins the research and verification process. The initial step in sales verification consists of a questionnaire mailed to the purchaser (grantee) in the transaction. Suppose an entirely documented response is recorded in the computerized sales database system. Other sources are sought if a questionnaire is answered and returned information is provided, but the sales data is documented as unconfirmed. Actual closing statements are the most reliable and preferred method of sales verification.

VALUATION ANALYSIS (Model Calibration)

Model calibration involves periodically adjusting the mass appraisal formulas, tables, and schedules, to reflect the current market conditions. Once the models have undergone the specification process, adjustments can be made to reflect new construction procedures, materials, and costs, varying yearly. The basic structure of a mass appraisal model can be valid over an extended period, with trending factors utilized for updating the data to the current market conditions. However, at some point, if the adjustment process becomes too involved, the model calibration technique can mandate new model specifications or a revised model structure.

Cost Schedules

The cost approach to value is applied to all improved real property utilizing the comparative unit method. This methodology uses national cost reporting services and comparable properties' actual cost information whenever possible. Cost models are typically developed based on the Marshall & Swift Valuation Service. Cost models include deriving all improvements' replacement cost new (RCN). These include comparative base rates, per unit adjustments, and lump sum adjustments. This approach also employs the sales comparison approach in the valuation of the underlying land value. Time and location modifiers are necessary to adjust cost data to reflect conditions in a specific market and changes in costs over a period of time. Because a national cost service is used as a basis for the cost models, location modifiers are necessary to adjust these base costs specifically for Glasscock County. The national cost services provide these modifiers.

Depreciation schedules are developed based on what is typical for each property type at that specific age. Depreciation schedules have been implemented for what is typical of each major class of commercial property by economic life categories. Schedules have been developed for improvements with varying years of expected

life. The actual age, if known, and the effective ages of improvements are noted in CAMA. Effective age estimates are based on the utility of the improvements relative to where the improvement lies on the scale of its total economic life and its competitive position in the marketplace.

Market adjustment factors such as external and/or functional obsolescence can be applied if warranted. A depreciation calculation override can be used if a property's condition or effective age varies by appropriately noting the physical condition and functional utility ratings on the property data characteristics. These adjustments are typically applied to a specific property type or location and can be developed via ratio studies or other market analyses.

Income Models

The income approach to value is applied to those fundamental properties typically viewed by market participants and "income producing," for which the income methodology is considered a leading value indicator. The first step in the income approach pertains to estimating market rent per unit. This is derived primarily from rent data furnished by property owners and local market study publications. This per unit rental rate multiplied by the number of units estimates potential gross rent.

A vacancy and collection loss allowance is the next item to consider in the income approach. Property owners and local market publications furnish the projected vacancy and collection loss allowance. This allowance accounts for periodic fluctuations in occupancy, both above and below an estimated stabilized level. The market-derived stabilized vacancy and collection loss allowance are subtracted from the potential gross rent estimate to yield an effective gross rent.

Next, a secondary or service income is calculated as a stabilized effective gross rent percentage. Secondary income represents parking, escalations, reimbursements, and other miscellaneous income generated by real property operations. The secondary income estimate is derived from actual data collected and available market information. The secondary income estimate is then added to effective gross rent to arrive at an effective gross income.

Allowable expenses and expense ratio estimates are based on a local market study, assuming prudent management. An allowance for non-recoverable expenses, such as leasing costs and tenant improvements, is included in the expenses. A non-recoverable expense represents costs that the owner pays to lease rental space. Different expense ratios are developed for different types of commercial property based on use. For instance, retail properties are most frequently leased on a triple-net basis, whereby the tenant is responsible for his pro-rata share of taxes, insurance, and standard area maintenance. A general office building is often leased on a base year expense stop. This lease type stipulates that the owner is responsible for all expenses incurred during the first year of the lease. However, any amount in excess per unit expenditure in the first year is the responsibility of the tenant if the total operating expense in year one equates to $8 per square foot, any increase in expense over $8 per square foot throughout the remainder of the lease term would be the responsibility of the tenant. As a result, expense ratios are implemented based on the type of commercial property.

Another form of allowable expense is the replacement of short-lived items (such as roof or floor coverings, air conditioning, or major mechanical equipment or appliances) requiring expenditures of large sums. When these capital expenditures

are analyzed for consistency and adjusted, they may be applied annually as stabilized expenses. When performed according to local market practices by commercial property type, these expenses, when annualized, are known as replacement reserves.

Subtracting the allowable expenses (including non-recoverable expenses and replacement reserves) from the effective gross income yields an estimated net operating income.

Rates and multipliers are used to convert income into an estimate of market value. These include income multipliers, overall capitalization rates, and discount rates. Each of these is used in specific applications. Rates and multipliers also vary between property types and by location, quality, condition, design, age, and other factors. Therefore, applicants of the various rates and multipliers must be based on a thorough market analysis.

Capitalization analysis is used in the income approach models. This methodology involves the capitalization of net operating income as an indication of market value for a specific property. Both overall (going-in) cap rates for the direct capitalization method and terminal cap rates for discounted cash flow analyses can be derived from the market. Sales of improved properties from which actual income and expense data are obtained provide an excellent indication of what a specific market participant requires from an investment at a particular point. In addition, overall capitalization rates can be derived from the built-up method (band-of-investment). This method relates to satisfying the market return requirements of both the debt a real estate investment. Debt and equity information is obtained from real estate and financial publications.

Rent loss concessions are made on specific properties with vacancy problems. A rent loss concession accounts for the impact of lost rental income while the building is moving toward stabilized occupancy. The rent loss is calculated by multiplying the rental rate by the percent difference between the property's stabilized and actual occupancy. Build-out allowances (for first-generation or retrofit/second-generation space as appropriate) and leasing expenses are added to the rent loss estimate. The total adjusted loss from these real property operations is discounted using an acceptable risk rate. The discounted value (including rent loss due to extraordinary vacancy, build-out allowances, and leasing commissions) becomes the rent loss concession. It is deducted from the value indicative of the property at stabilized occupancy. A variation of this technique allows a rent loss deduction to be estimated for every year the property's actual occupancy is less than stabilized.
Appraisal & Consulting, a valuation firm, has been contracted by the district to perform valuations on income properties in this district, excluding mineral and industrial properties. The firm is responsible for obtaining statistics, and data, performing statistical testing and maintaining data for the valuation of this type of property.

Sales Comparison (Market) Approach

Although all three approaches to value are based on market data, the sales comparison approach is most frequently referred to as the Market Approach. This approach estimates the land value and compares sales of similarly improved properties to each parcel on the appraisal roll. As previously discussed in the Data Collection/Validation section of this report, pertinent data from actual

sales of properties, both vacant and improved, is pursued throughout the year to obtain relevant information, which can be used in all aspects of valuation. Sales of similarly improved properties can provide a basis for the depreciation schedules in the cost approach, rates and multipliers used in the income approach, and as a direct comparison in the sales comparison approach. Improved sales are also used in ratio studies, which afford the appraiser an excellent means of judging the present level and uniformity of the appraised values.

Final Valuation Schedules

The cost and income models are calibrated and finalized based on the market data analysis and review discussed previously in the cost, income, and sales approaches. The calibration results are keyed to the schedules and models on the mainframe CAMA system for utilization on all commercial properties in the district.

Statistical and Capitalization Analysis

Statistical analysis of final values is an essential component of quality control. This methodology compares the absolute value against the standard and provides a concise measurement of the appraisal performance. Statistical comparisons of different criteria are used, including sales of similar properties, the previous year's appraised value, audit trails, value change analysis, and sales ratio analysis.

Appraisal statistics of central tendency and dispersion generated from sales ratios are available for each property type. These summary statistics include but are not limited to the weighted mean, standard deviation, and coefficient of dispersion, thus providing the appraisers an analytical tool to determine the level and uniformity of appraised value of a particular property type. The weighted mean can determine the evaluated level of appraised values for individual properties within a specific style, and comparison or weighted means can reflect the general level of appraised value. A review of the standard deviation and the coefficient of variation can discern appraisal uniformity within a specific property type.

The appraisers review every commercial property annually through the sales ratio analysis process. The first phase involves ratio studies that compare the recent sales prices of properties to the appraised values of sold properties. This set of ratio studies affords the appraiser an excellent means of judging the present level of appraised value and uniformity of the appraised values. Based on the sales ratio statistics and designated parameters for valuation update, the appraiser decides whether the value level of a particular property type needs to be updated in an upcoming reappraisal or whether the market value level is acceptable.

Potential gross rent estimates, occupancy levels, secondary income, allowable expenses (including non-recoverable and replacement reserves), net operating income and capitalization rate, and multipliers are continuously reviewed utilizing frequency distribution methods or other statistical procedures or measures. Income model conclusions are compared to the information obtained on individual commercial properties during the hearings and data from published sources and area vendors.

INDIVIDUAL VALUE REVIEW PROCEDURES

Field Review

The date of the last inspection, the extent of that inspection, and the appraiser responsible are listed in the CAMA system. If a property owner disputes the District's records concerning this data in a protest hearing, CAMA may be altered based on the credibility of the evidence provided. If a building permit is filed for a particular property indicating a change in characteristics, that property is added to a work file. Finally, even though every property cannot be inspected yearly, the chief appraiser typically designates specific area segments to be inspected in field checks.

Commercial appraisers are somewhat limited in the time available to field review all commercial properties of a specific user type. However, a significant effort is made by the appraisal district to field review as many properties as possible or an economic area experiencing large numbers of remodels, renovations, or retrofits, changes in occupancy levels or rental rates, new leasing activity, new construction, or wide variations in sale prices. Additionally, the appraisers frequently field review personal data items such as building class, quality of construction, condition, and physical, functional, and economic obsolescence factors contributing significantly to the property's market value. Field reviews are sometimes warranted when sharp changes in occupancy or rental rate levels occur between building classes or economic areas. With preliminary value estimates, the appraiser's assisted values are against their appraisal judgment in these targeted areas. While in the field, the appraisers physically inspect sold and unsold properties for comparability and consistency of values.

Office Review

Office reviews are completed on properties not subject to field inspections and are performed in compliance with the guidelines set out by USPAP.

Office reviews are typically limited by the data presented in final value reports. These reports summarize the pertinent data of each property. The appraiser may review the methodology for appropriateness to ascertain that it was completed following USPAP or more stringent statutory and district policies. This review process is focused primarily on locating skewed results on an individual basis.

Once the appraiser is satisfied with the level and uniformity of value for each property within their area of responsibility, the value estimates go to noticing. Each parcel is subjected to the value parameters appropriate for its use type. If the value parcel's values are outside proper parameters, it is placed on a rework list. Therefore, although the value estimates are determined in a computerized mass appraisal environment, value edits and rework lists enable an individual parcel review of value anomalies before the estimate of value is released for noticing.

PERFORMANCE TESTS

The primary tool used to measure mass appraisal performance is the ratio study. A ratio study compares appraised values to market values. In a ratio study, market values (value in exchange) are typically represented by sales prices (i.e., a sales ratio study). Independent, expert appraisals may also be used to describe market values in a ratio study (i.e., an appraisal ratio study). If there are not enough sales to provide necessary representativeness, independent appraisals can be used as indicators for market value. In addition, appraisal ratio studies can be used for properties statutorily not appraised at market value but reflect the use-value requirement. An example is agricultural lands to be appraised based on productivity or use value.

Glasscock CAD has adopted the policies of the IAAO STANDARD ON RATIO STUDIES, circa July 1999, regarding its ratio study standards and practices. Ratio studies generally have six basic steps:

(1.) determination of the purpose and objectives
(2.) data collection and preparation
(3.) comparing appraisal and market data
(4.) stratification
(5.) statistical analysis
(6.) evaluation and application of the results

Sales Ratio Studies

Sales ratio studies are integral to establishing fair and accurate market value estimates and assessments for taxing jurisdictions. The primary use of sales ratio studies includes determining a need for general reappraisal, prioritizing selected groups of property types for reappraisal, identifying potential problems with appraisal procedures, assisting in market analyses, and calibrating models used to derive appraised values during valuation or reappraisal cycles. However, these studies cannot be used to judge an individual property's appraised value's accuracy. The Glasscock County Appraisal Review Board may make individual value adjustments based on unequal appraisal (ratio) protest evidence submitted on a case-by-case basis during the hearing process.

Overall sales ratios are generated using type CAMA at least once per year, but frequently more often, especially in specific areas. This allows appraisers to review general market trends in their area of responsibility. In many cases, field checks may be conducted to ensure that the ratios produced are accurate and that the appraised values utilized are based on precise property data characteristics. These ratio studies aid the appraisers by indicating market activity by economic area or changing market conditions.

Comparative Appraisal Analysis

The commercial appraiser performs an average unit comparison to a traditional ratio study. These studies are performed on commercially classed properties by property use type (such as apartment, office, retail, warehouse, or special use). This evaluation aims to determine the appraisal performance of sold and unsold

properties. Appraisers average unit prices of sales and average unit appraised values of the same parcels and compare average value changes of sold and unsold properties. These studies are conducted on substrata such as building class and properties located within various economic areas. This way, overall appraisal performance is evaluated geographically b specific property types to discern whether sold parcels have been selectively appraised. The average unit values are similar when sold, and unsold lots are appraised equally. These horizontal equity studies are performed before annual notice.

INDUSTRIAL VALUATION PROCESS

Appraisal Responsibility

Glasscock CAD contracts with Pritchard & Abbott, Inc., to appraise industrial properties. The firm is responsible for developing fair and uniform market values for improved industrial properties, and the industrial vacant industrial firm is also responsible for the valuation of all tangible general industrial personal property in Glasscock CAD.

Further, the firm is responsible for the collection of data, maintenance of data collection manuals, area analysis, neighborhood analysis, highest and best use analysis, market analysis, development and implementation of data collection procedures, valuation schedules, field review, office review, performance tests, sales ratio studies, and comparative appraisal analysis.

BUSINESS PERSONAL PROPERTY VALUATION PROCESS

Appraisal Responsibility

The district appraises four different personal property types:

(1.) business personal property accounts
(2.) leased assets
(3.) vehicles
(4.) multi-location assets

A standard set of data characteristics for each personal property account in Glasscock CAD is collected in the field, and data is entered into the district's computer system.

Valuation Approach (Model Specification)

SIC Code Analysis

The federal government developed four-digit numeric codes called Standard Industrial Classification (SIC). Glasscock CAD uses these classifications to classify personal property by business type.

Highest and Best Use Analysis

The highest and best use of the property is the reasonable and probable use that supports the highest present value as of the date of the appraisal. The highest and best use must be physically possible, legal, financially feasible, and productive to its maximum. The highest and best use of personal property is typically its current use.

Data Collection/Validation

Sources of Data

Business Personal Property

The district's property characteristic data was initially received from the Glasscock County Tax Office and various school district records in 1980. It has also been collected through a field data collection effort coordinated by the district over some time. When revaluation activities permit, the district collects new data via a field drive-out. This project results in discovering new businesses not revealed through other sources. Tax assessors and the local newspaper also provide the district with information regarding new personal property and other valuable facts related to property valuation.

Leased and Multi-Location Assets

The primary source of leased and multi-location assets is property owner renditions of property. Other sources of data include field inspections.

VALUATION AND STATISTICAL ANALYSIS (MODEL CALIBRATION)

Cost Schedules

Due to a lack of viable information within the district, the appraisal district staff relies mainly upon the Appraisal Manual provided by Eagle Appraisal & Consulting or the Appraisal Guide issued by the Comptroller of Public Accounts. A local modifier is developed and applied to the Guide, where applicable.

Statistical Analysis

Summary statistics, including, but not limited to, the median, weighted mean, and standard deviation, provide the appraisers with an analytical tool to determine both the level and uniformity of appraised value. A review of the standard deviation can discern appraisal uniformity.

Depreciation Schedule and Trending Factors

Glasscock CAD's primary approach to valuing a business's personal property is the cost approach. The replacement cost new (RCN) is either developed from the property owner's reported historical expense, or Glasscock CAD developed valuation

models. The trending factors used by Glasscock CAD to create RCN are based on published valuation guides. The percent good factors used by Glasscock CAD are also based on published valuation guides. The index factors and percent good depreciation factors are used to develop present value factors (PVF) by year of acquisition, as follows:

PVF = Index Factor X percent Good Factor

The cost approach uses the PVF as an "express" calculation. The PVF is applied to reported historical costs as follows:

Market Value Estimate = PVF x Historical Cost

This mass appraisal PVF schedule ensures that estimated values are uniform and consistent within the market.

INDIVIDUAL VALUE REVIEW PROCEDURES

Office Review

Business Personal Property

Property owner renditions, accounts with field or other data changes, accounts with prior hearing information, new accounts, and SIC cost table changes are all reviewed and considered.

Vehicles

A vehicle master file (in hard copy form) is received from an outside vendor. Vehicles in the district's system from the prior year are programmatically matched to current DOT records. These vehicles are compared to existing accounts, creating new reports as needed.

Only those vehicles used in a commercial enterprise are appraised and listed on the appraisal roll. Personal use vehicles are exempt from taxation.

After matching accounts and data entry, notices are generated and reviewed. Once proofed, the statements are mailed according to Section 19 requirements.

PERFORMANCE TESTS

Ratio Studies

Every other year, the Property Tax Division of the state comptroller's office conducts a property value study (PVS). The PVS is a ratio study used to gauge appraisal district performance. Results from the PVS play a part in school funding. Rather than a sales ratio study, the personal property PVS is a ratio study of state cost and depreciation schedules to develop comparative personal property values rather than a sales ratio study. These values are then compared to Glasscock CAD's personal property values, and ratios are determined.

Internal Testing

Glasscock CAD can test new or revised cost and depreciation schedules by running the valuation program in a test mode before the valuation cycle. This can allow the district to make additional refinements to the schedules if necessary.

LIMITING CONDITIONS

The appraised value estimates provided by the district are subject to the following conditions:

1. The appraisals were prepared exclusively for ad valorem tax purposes.
2. The property characteristic data upon which the appraisals are based is assumed to be correct. Exterior inspections of the property appraised were performed as staff resources and time allowed.
3. Validation of sales transactions was attempted through questionnaires to buyers and field reviews. Without such confirmation, residential sales data obtained from vendors were considered reliable.
4. I have attached a list of those providing significant mass appraisal assistance to the person signing this certification.

Certification Statement:

"I, Scott Smetana, RPA, Chief Appraiser for the Glasscock County Appraisal District, solemnly swear that I have made or caused to be made a diligent inquiry to ascertain all property in the district subject to appraisal by me and that I have included in the records all property that I am aware of at an appraised value which, to the best of my knowledge and belief, was determined as required by law."

Scott Smetana, RPA, CCA
Chief Appraiser

PERSONS PROVIDING SIGNIFICANT MASS APPRAISAL ASSISTANCE

NAME	TITLE	TYPE OF ASSISTANCE
Gary Zeitler	Owner of Eagle Appraisal & Consulting	Ratio Studies Schedule Studies & Development Field Inspections Appraisals
Twila Butler	Appraiser/Consultant Eagle Appraisal & Consulting	Field Inspections Research Appraisals
Charlotte Neill	Appraiser/Consultant Eagle Appraisal & Consulting	Field Inspections Research Appraisals
Lance Wood	Appraiser/Consultant Eagle Appraisal & Consulting	Field Inspections Research Appraisals
Phillip Thorton	Appraiser/Consultant Eagle Appraisal & Consulting	Field Inspections Research Appraisals
Shane Schaffner	Appraiser/Consultant Eagle Appraisal & Consulting	Field Inspections Research Appraisals
Clarissa LaRue	Appraiser/Consultant Eagle Appraisal & Consulting	Field Inspections Research Appraisals
David Ballard	Appraiser/Consultant Eagle Appraisal & Consulting	Field Inspections Research Appraisals

Note: Eagle Appraisal and Consulting firm may assign other personnel to appraisals of various properties within the district. Their work falls under the direct scrutiny of Gary Zeitler, owner and President of the Company.