

GLASSCOCK COUNTY APPRAISAL  
DISTRICT

REAPPRAISAL PLAN

For

TAX YEARS 2015-2016

AS ADOPTED BY THE BOARD OF DIRECTORS

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## **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 legal, statutory, and administrative requirements of the appraisal district. The district 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; appointing the Appraisal Review Board (ARB); and making 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 chief administrator and chief executive officer of the appraisal district.

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 in order to estimate the market value of all property within the boundaries of the district for ad valorem tax purposes. Each taxing unit sets its own 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 on the basis of each taxable property's market value. The District also determines eligibility for various types of property tax exemptions such as those for homeowners, the elderly and disabled, disabled veterans, charitable or religious organizations and agricultural productivity valuation.

### **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 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 10<sup>th</sup> day before the date of the hearing, the secretary of the board shall deliver to the presiding officer of the governing body of each taxing unit participating in the district a written notice of the date, time and place of the hearing. Not later than September 15 of each even numbered year, the board shall complete its hearing, make any amendments, and by resolution finally approve the plan. Copies of the approved plan shall be distributed to the presiding officer of the governing body of each taxing unit participating in the district and to the comptroller within 60 days of the approval date.

### **Plan for Periodic Reappraisal**

Section 25.18 of the Property Tax Code to read as follows:

- (a) Each appraisal office shall implement the plan for periodic reappraisal of property approved by the board of directors under Section 6.05(i).
- (b) The plan shall provide for the following reappraisal activities for all real and personal property in the district at least once every three years:
  - (1) Identifying properties to be appraised through physical inspection or by other reliable means of identification, including deeds or other legal documentation, aerial photographs, land-based photographs, surveys, maps, and property sketches;
  - (2) Identifying and updating relevant characteristics of each property in the appraisal records;
  - (3) Defining market areas in the district;
  - (4) Identifying property characteristics that affect property value in each market area, including:
    - (A) the location and market area of the property;
    - (B) physical attributes of property, such as size, age and condition;
    - (C) legal and economic attributes; and
    - (D) easements, covenants, leases, reservations, contracts, declarations, special assessments, ordinances, or legal 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 1<sup>st</sup>.

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 1<sup>st</sup> 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 1<sup>st</sup>.

### **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 with the exception of 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 appraisal accuracy and appraisal uniformity overall, and by market area, within property reporting categories. Ratio studies will be conducted in compliance 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 level 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 tax year 2015 are detailed in the 2015 budget as adopted by the Board of Directors of the Glasscock County Appraisal District and is attached (Attachment A) to this written biennial plan for reference. This reappraisal plan may be adjusted as needed to reflect the available staffing in tax year 2015 and anticipated staffing for tax year 2016. Budget restraints can impact the cycle of real property re-inspection and personal property on-site review that can be accomplished in the 2015-2016 time period.

Existing appraisal practices, which are continued from year to year, are identified and methods utilized to keep these practices current. Real property appraisal value tables are tested against verified sales data to ensure they represent current market data as available. 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 on a yearly basis. 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 area of work. This calendar identifies key events for appraisal, clerical, customer service, and information systems. A calendar is prepared for tax years 2015 and 2016. Production standards for filed activities are calculated and incorporated in 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, and/or reevaluation of the priorities of the projects within the plan.

Periodic and concurrent examination of production standards, goals and progress in the plan may very well require adjustments to the on-going plan or to the plan for the succeeding year(s). The GCAD and Chief Appraiser, together with the field staff provided by Capitol Appraisal Group LLC 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. System revisions and procedures are performed by the provider. Glasscock County Appraisal District contracts with the firm of Capital Appraisal Group LLC for these services.

### **Real Property Valuation**

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

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

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

### **Personal Property Valuation**

Commercial and industrial businesses are valued based on depreciated fixed assets and inventory valuation in accordance with 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 in accordance with section 23.175 of the Property Tax Code. Capitol Appraisal Group LLC is contracted by the Glasscock County Board of Directors.

### **Noticing Process**

25.19 appraisal notice forms are provided by the IS Provider. 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 required. The appraisal district hearing documentation is reviewed and updated to reflect the current valuation process and requirements. Compliance with House Bill 201 is insured. (HB 201 deals with a 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 from 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 from 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/or correct property characteristic data. Additional sales data is researched and verified.



### **Re-inspection of the Universe of Properties**

The International Association of Assessing Officers' *Standard on Mass Appraisal of Real Property*, specifies that the universe of properties should be re-inspected on a cycle of 3-4 years. The re-inspection may include the re-measurement of at least two sides of each improved property valuations. Physical inspection of the property is considered to be the most fundamental step in gathering reliable data. The field appraiser has an appraisal card of each property to be inspected and makes notes of changes, depreciation, remodeling, additions, etc. **Uniform Standards of Professional Appraisal Practices (USPAP) does not require inspection for reappraisal. "Only that the characteristics of a property, relevant to an assignment be identified."** Frequent physical inspections are nevertheless necessary to insure 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 2015 and 2016 are identified and scheduled in the written reappraisal plan.

### **Verification of Sales Data and Property Characteristics**

Sales information must be verified and property characteristic data contemporaneous with the date of sale captured. The sales ratio analysis requires that the sales record must accurately reflect the property appraised in order that statistical analysis results will be valid and therefore be an accurate example of the universe of properties to which any adjustments will be applied. The conditions of each 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 with reference to the Texas Property Tax Code definition of market value and may be excluded from the general market analysis if the transaction conditions do not correspond to the aforementioned definition of market value.

### **Pilot Study by Tax Year**

New and/or revised mass appraisal models will be tested each tax year. Ratio studies, by market category, will be conducted on proposed values each tax year. Proposed values on 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 procedures used for model specification and calibration are in compliance 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 classification of properties. The sales are then tested against appraised values to indicate a ratio for the neighborhood. A neighborhood is a grouping of complementary land uses affected equally by the four forces that influence property value: social trends, economic circumstances, governmental contracts and regulations, and environmental conditions. These factors have an impact on the value of properties within this grouping and in turn on properties being appraised.

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

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

#### **Cost Approach to Value:**

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

#### **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. 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 from market analyses and ratio studies and 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 type of approach accounts for neighborhood market influences not particularly specified in a purely cost model.

**The following equation denotes the hybrid model used:**

$$MV = LV + (RCN - AD)$$

Whereas, in accordance with 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. Whereas, in accordance with the Market Approach, the estimated market value (MV) of the property equals the basic unit of property, under comparison, times the market price range per unit for sales of comparable property. For residential property, the unit of comparison 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 in the annualized accrued depreciation rate. This cost related factor is most appropriately measured by sales of similar property. The market approach, when improvements are abstracted from the sale price, 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. The evaluation of 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 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 indicates 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 a true 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 certain neighborhoods. Based on this market analysis, the appraiser estimates the annual rate of depreciation for given improvement descriptions considering age and observed condition. Once estimated, the appraiser recalculates the improvement value of all property within the sale sample to consider and review the effects on the neighborhood sale ratio. After an acceptable level of appraisal is achieved within the sale sample, the entire neighborhood of property is recalculated utilizing the indicated depreciation rates taken from market sales. This depreciation factor is the basis for trending all improvement values and when combined with any other site improvements and land value, 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 analysis of recent sales located within 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 update 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 is generated that 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 and 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 are currently not a reliable indicator of value for residential mass appraisal reports unless rents are specified. Databases or data sources for income producing residential properties are not available in the 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 types of properties, such as minerals, utilities, industrial, railroads, pipelines, industrial personal property, etc. may be found in the Plan provided by the Appraisal Company that performs those appraisals and is attached to this plan by reference.**

#### **Special Valuation Process:**

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

The District also values agricultural property by the income approach as set forth in the Texas Property Tax code. This is a special valuation process as there are parameters set forth in the Code regarding capitalization rates. Income and expenses for each different category of agricultural use is estimated from surveys, actual rental data obtained by property owners as well as conversations with local governmental agencies. The formula used is set out by the Texas Property Tax Code and is as follows: 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 have the option to present their concerns informally to the chief appraiser, or by appointment with Capitol Appraisal Group 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 Capitol Appraisal Group LLC 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. Evidence for further consideration by the CAD or the ARB should be presented by the taxpayer.

#### **The Mass Appraisal Report**

Each tax year the tax code required Mass Appraisal Report is prepared and certified by the Chief Appraiser at the conclusion of the appraisal phase of the ad valorem tax calendar (on or about

May 15<sup>th</sup>). The Mass Appraisal Report is completed in compliance with Standard Rule 6-8 of the *Uniform Standards of Professional Appraisal Practice*. The signed certification by the Chief Appraiser is compliant with Standard Rule 6-9 of USPAP. This written reappraisal plan is attached to the 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 carefully plan its work before beginning any reappraisal. Although the planning process may vary in specifics, it should involve 5 basic steps:

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

### **STEPS IN A REAPPRAISAL**

The International Association of Assessing Officers (IAAO) textbook, *Property Appraisal and Assessment Administration*, lists steps in a reappraisal. These steps outline those activities performed by Glasscock County Appraisal District for the completion of 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 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**

### **2015-2016 Reappraisal Plan**

Pursuant 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: (2015) All property North of Hwy 158; along with Rural Land, unresolved parcels from previous years, etc...
  - b. Area Two: (2016) All property South of Hwy 158; along with Rural Land, unresolved parcels from previous years, etc...



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

Note: all income producing personal property within the GCAD is appraised on an annual basis, regardless of its 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 the area in which 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 school district and municipal boundaries. The CAD will conduct ratio studies calculation measures of central tendencies for each market area when possible.

**Residential Market Areas:**

Glasscock County's market area is county wide. 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 calculation measures of central tendencies for each market area when possible.

**Rural Land Markets:**

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

This two-fold approach will insure 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 with respect to market value in those areas where residential and/or commercial property values appear to be changing rapidly.

## **Organization**

Field inspections are carried out by the chief appraiser with assistance from contacted services. The field appraiser physically inspects areas required by the reappraisal cycle, checks all existing data, works building permits (if available), takes photographs of improvements (if possible), draws plans of new improvements for entry into computer and rechecks any property on which a

question or problem has arisen. Other duties may be required and will be executed upon direction of the chief appraiser. Data entry of field work notes and sketches are performed by the chief appraiser.

The chief appraiser will perform market analysis. Sales data is gathered throughout the year by the chief appraiser 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, 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 periodic reappraisal of property approved by the board of directors under Section 6.05(i).
- (b) The plan provides for annual reappraisal of all agricultural use property appraised by the CAD. The CAD has a professional services contract with Capitol Appraisal Group, LLC 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.

### **GCAD Plan for Periodic Reappraisal of Industrial Real Property**

The GCAD Board of Directors contract with Capitol Appraisal Group LLC for all Industrial Real Property. (See Attachment B)

### **GCAD Plan for Periodic Reappraisal of Industrial Real Property**

The GCAD Board of Directors contract with Capitol Appraisal Group LLC for all Industrial Personal Property. (See Attachment C)

### **Industrial Personal and Utility Property, Railroad and Pipeline Property**

The GCAD Board of Directors contract with Capitol Appraisal Group LLC for all Utility Property, Railroad and Pipeline Property. (See Attachment D)

### **GCAD Plan for Periodic Reappraisal of Oil and Gas Property**

The GCAD Board of Directors contract with Capitol Appraisal Group LLC for all Oil and Gas Property. (See Attachment E)

**The Mass Appraisal Report**

(See attachment F)

## **2015 Schedule of Events**

September 2014: Board approves final Budget by September 15th.

November 2014 - March 2015: Begin and complete field inspections of all real property & personal property.

October 2014 - January 2015: Commercial and residential schedules and depreciation tables are modified to reflect current market conditions.

December 2014 - February 2015: Conduct and complete residential, rural and commercial land valuation studies.

January 1: Formal date of property values for the year 2015 (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, 2015 - April 15, 2015: Receive and process property owners submitted property renditions (Sec 22.23).

January 1, 2015 - May 1, 2015: Receive and process applications for exemptions and special appraisal through March 31, 2015.

January 1, 2015 - December 31, 2015: Research courthouse records for ownership changes and update taxpayer information as needed.

January 2015: Personal Property schedules are modified for 2015.

January - March 2015: Field inspections of all mobile home parks.

January - March 2015: Complete specifications of all valuation models.

February - March 2015: Work commercial vehicle registration list.

February - June 2015: Work personal property renditions.

March 2015: Chief Appraiser prepares the preliminary Budget. Review and consider conclusions and recommendations of district's Agricultural Advisory Board.

March 31, 2015: Complete work of utility notifications and the inspection of demolished or burned property for the 2015 tax year.

April 2015: Calculate Agricultural values based on local data.

April 2015: Review exemption and special-use appraisal applications.

April 1, 2015 or as soon thereafter; Mail written appraisal notices in compliance with Section 25.19 (g) of the Property Tax Code.

April 29, 2015: Present entities with certified estimates.

May - June 2015: Informal meetings with taxpayers and or agents.

June - August 2015: Formal protest hearings with ARB. Enter changes as ordered by ARB decision.

June 30, 2015: Target date for Chief Appraiser to present the appraisal records to the ARB for approval.

July 25, 2015: Target date for Chief Appraiser to certify the appraisal roll to each of the taxing jurisdictions in Glasscock County.

July 2015: Integrate contractor's valuation for minerals and industrial personal property into the district CAMA computer system.

### **2016 Schedule of Events**

September 2015: Board approves final Budget by September 15th. Personal property field inspections.

November 2015 - March 2016: Begin and complete field inspections of all real property.

October 2015 - January 2016: Commercial and residential schedules and depreciation tables are modified to reflect current market conditions.

December 2015 - February 2016: Conduct and complete residential, rural and commercial land valuation studies.

January 1: Formal date of property values for the year 2016 (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, 2016 - April 15, 2016: Receive and process property owners submitted property renditions (Sec 22.23).

January 1, 2016 - May 1, 2016: Receive and process applications for exemptions and special appraisal through March 31, 2014.

January 1, 2016 - December 31, 2016: Research courthouse records for ownership changes and update taxpayer information as needed.

January 2016: Personal Property schedules are modified for 2016.

January - March 2016: Field inspections of all mobile home parks.

January - March 2016: Complete specifications of all valuation models.

February - March 2016: Work commercial vehicle registration list.

February - June 2016: Work personal property renditions.

March 2016: Chief Appraiser prepares the preliminary Budget. Review and consider conclusions and recommendations of district's Agricultural Advisory Board.

March 31, 2016: Complete work of utility notifications and the inspection of demolished or burned property for the 2014 tax year.

April 2016: Calculate Agricultural values based on local data.

April 2016: Review exemption and special-use appraisal applications.

April 1, 2016 or as soon thereafter; Mail written appraisal notices in compliance with Section 25.19 (g) of the Property Tax Code.

April 29, 2016: Present entities with certified estimates.

May - June 2016: Informal meetings with taxpayers and or agents.

June - August 2016: Formal protest hearings with ARB. Enter changes as ordered by ARB decision.

June 29, 2016: Target date for Chief Appraiser to present the appraisal records to the ARB for approval.

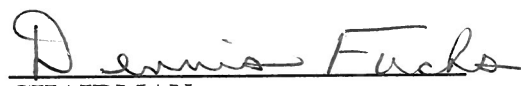
July 25, 2016: Target date for Chief Appraiser to certify the appraisal roll to each of the taxing jurisdictions in Glasscock County.

July 2016: 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 12, 2014**

**APPROVED  
GLASSCOCK COUNTY  
APPRAISAL DISTRICT  
BOARD OF DIRECTORS**

  
**CHAIRMAN**

GLASSCOCK COUNTY  
APPRAISAL DISTRICT

REAPPRAISAL PLAN

(Attachment A)

## 2015 APPROVED BUDGET

GCAD	ACCOUNT NAME	2015	2014	CHANGE	% CHANGE
	SALARIES	\$ 95,450.00	\$ 87,300.00	\$ 8,150.00	9.34%
	PROFESSIONAL SERVICES	\$ 10,800.00	\$ 10,800.00	\$ -	0.00%
	FICA TAXES/MEDICARE TAXES	\$ 10,800.00	\$ 10,800.00	\$ -	0.00%
	RETIREMENT/SUPP DEATH BENF	\$ 15,440.00	\$ 15,440.00	\$ -	0.00%
	HEALTH INSURANCE	\$ 19,740.00	\$ 16,700.00	\$ 3,040.00	18.20%
	WORKERS COMPENSATION	\$ 3,000.00	\$ -	\$ 3,000.00	100.00%
	UNEMPLOYMENT COMPENSATION	\$ 2,000.00	\$ -	\$ 2,000.00	100.00%
	BOARD OF DIRECTORS EXPENSE	\$ -	\$ -	\$ -	0.00%
	OFFICE SUPPLIES	\$ 7,000.00	\$ 7,000.00	\$ -	0.00%
	APPR. & MAP SUPPLIES	\$ 1,000.00	\$ 1,000.00	\$ -	0.00%
	POSTAGE	\$ 7,000.00	\$ 5,000.00	\$ 2,000.00	40.00%
	POSTAGE - ARB	\$ 800.00	\$ 800.00	\$ -	0.00%
	OFFICE EQUIPMENT	\$ 2,000.00	\$ 2,000.00	\$ -	0.00%
	COMPUTER MAINTANCE	\$ 1,500.00	\$ 1,500.00	\$ -	0.00%
	TELEPHONE/FAX/DSL	\$ 3,100.00	\$ 3,100.00	\$ -	0.00%
	ADVERTISING	\$ 2,000.00	\$ 2,000.00	\$ -	0.00%
	BOARD LIABILITY	\$ 1,000.00	\$ 1,000.00	\$ -	0.00%
	DUES & MEMBERSHIPS	\$ 1,200.00	\$ 1,200.00	\$ -	0.00%
	SCHOOLS & SEMINARS	\$ 10,000.00	\$ 7,000.00	\$ 3,000.00	42.86%
	ATTORNEY	\$ 2,800.00	\$ 2,800.00	\$ -	0.00%
	CONTRACTED SERVICES	\$ 210,452.00	\$ 210,452.00	\$ -	0.00%
	AUDIT	\$ 3,000.00	\$ 2,500.00	\$ 500.00	20.00%
	MAPPING AND/OR MAINTENANCE	\$ 5,000.00	\$ 5,000.00	\$ -	0.00%
	MAINTENANCE AGMT/SOFTWARE	\$ 5,000.00	\$ 5,000.00	\$ -	0.00%
	TECHNOLOGY FUND	\$ 3,000.00	\$ 3,000.00	\$ -	0.00%
	RENT	\$ 12,000.00	\$ 9,000.00	\$ 3,000.00	33.33%
	UTILITIES	\$ 2,500.00	\$ 2,500.00	\$ -	0.00%
	OFFICE INSURANCE/ETC.	\$ 3,000.00	\$ 3,000.00	\$ -	0.00%
	ARB	\$ 2,400.00	\$ 2,400.00	\$ -	0.00%
	SCHOOLS & SEMINARS - ARB	\$ 1,000.00	\$ 700.00	\$ 300.00	0.00%
	ATTORNEY - ARB	\$ 1,000.00	\$ 1,000.00	\$ -	0.00%
		\$ 444,982.00	\$ 419,992.00	\$ 24,990.00	5.95%
	OBLIGATED FUND	\$ 24,556.00	\$ 24,556.00	\$ -	0.00%
	OBLIGATED FUND	\$ 6,096.63	\$ 6,096.63	\$ -	0.00%
		\$ 30,652.63	\$ 30,652.63	\$ -	0.00%
	<i>Dennis Fuchs</i>			9-12-14	
	Chairman			Date	



GLASSCOCK COUNTY  
APPRAISAL DISTRICT

REAPPRAISAL PLAN

(Attachment B)

## Document 3A

2015 - 2016

### CAD Plan for Periodic Reappraisal of Industrial Real Property

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

- (a) CAD shall implement the plan for periodic reappraisal of property approved by the board of directors under Section 6.05 (i).
- (b) The plan provides for annual reappraisal of selected industrial property appraised by the CAD. The CAD has a professional services contract with Capitol Appraisal Group, LLC (CAGL) to appraise these properties for the CAD.
  - (1) Identifying properties to be appraised: Appraisal of properties is limited to those indicated in the contract with the appraisal district, unless additionally requested by the appraisal district. Newly discovered properties will be discussed with the appraisal district to confirm they are to be appraised by Capitol Appraisal. Industrial properties are identified as part of the appraiser's physical inspection process each year and through submitted data by the property owner. The appraiser may also refer to legal documents, photography and other descriptive items.
  - (2) Identifying and updating relevant characteristics of each property in the appraisal records: The appraiser identifies and updates relevant characteristics through the inspection process. Confidential rendition, assets lists and other confidential data also provide additional information. Subject property data is verified through previously existing records and through published reports.
  - (3) Defining market areas in the district: Market areas for industrial properties tend to be regional, national and sometimes international. Published information such as prices, financial analysis and investor services reports are used to help define market area.
  - (4) Developing an appraisal approach that reflects the relationship among property characteristics affecting value and determines the contribution of individual property characteristics: Among the three approaches to value (cost, income and market), industrial properties are most commonly appraised using replacement/reproduction cost new less depreciation models because of readily available cost information. If sufficient income or market data are available, those appraisal models may also be used.
  - (5) Comparison and Review: The appraiser considers results that best address the individual characteristics of the subject property and that are based on the most reliable data when multiple models are used. Year-to year property value changes for the subject property are examined using computer-assisted statistical review. Periodic reassignment of properties among appraisers or the review of appraisals by a more experienced appraiser also contributes to the review process.

GLASSCOCK COUNTY  
APPRAISAL DISTRICT

REAPPRAISAL PLAN

(Attachment C)

## Document 3B

2015 - 2016

### CAD Plan for Periodic Reappraisal of Industrial Personal Property

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

- (a) CAD shall implement the plan for periodic reappraisal of property approved by the board of directors under Section 6.05 (i).
- (b) The plan provides for annual reappraisal of all industrial personal property appraised by the CAD. The CAD has a professional services contract with Capitol Appraisal Group, LLC (CAGL) to appraise these properties for the CAD.
  - (1) Identifying properties to be appraised: Appraisal of properties is limited to those indicated in the contract with the appraisal district, unless additionally requested by the appraisal district. Newly discovered properties will be discussed with the appraisal district to confirm they are to be appraised by Capitol Appraisal. Through inspection the appraiser identifies personal property to be appraised. The appraiser begins with properties from the previous tax year and identifies new properties from visual identification and/or publications, newspaper articles, or information obtained through the interview of property owners. The appraiser may also refer to other documents, both public and also confidential, to assist in identification of these properties. Such documents might include but are not limited to the previous year's appraisal roll, vehicle listing services and private directories.
  - (2) Identifying and updating relevant characteristics of each property in the appraisal records: Data identifying and updating relevant characteristics of the subject properties are collected as part of the inspection process through directories and listing services as well as through later submissions by the property owner, sometimes including confidential rendition. These data are verified through previously existing records and through public reports.
  - (3) Defining market areas in the district: Market areas for industrial personal property are generally either regional or national in scope. Published price sources are used to help define market areas.
  - (4) Developing an appraisal approach that reflects the relationship among property characteristics affecting value and determines the contribution of individual property characteristics. Personal property is appraised using replacement/reproduction cost new less depreciation models. Income approach models are used when economic and/or subject property income is available, and a market data model is used when appropriate market sales information is available.
  - (5) Comparison and Review: The appraiser reconciles multiple models by considering the model that best addresses the individual characteristics of the subject property. Year-to year property value changes for the subject property are examined using computer-

assisted statistical review. Periodic reassignment of properties among appraisers or the review of appraisals by a more experienced appraiser also contributes to the review process.

GLASSCOCK COUNTY  
APPRAISAL DISTRICT

REAPPRAISAL PLAN

(Attachment D)

## Document 3C

2015 - 2016

### CAD Plan for Periodic Reappraisal of Utility, Railroad and Pipeline Property

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

- (a) CAD shall implement the plan for periodic reappraisal of property approved by the board of directors under Section 6.05 (i).
- (b) The plan provides for annual reappraisal of all utility, railroad and pipeline property appraised by the CAD. The CAD has a professional services contract with Capitol Appraisal Group, LLC (CAGL) to appraise these properties for the CAD.
  - (1) Identifying properties to be appraised: Appraisal of properties is limited to those indicated in the contract with the appraisal district, unless additionally requested by the appraisal district. Newly discovered properties will be discussed with the appraisal district to confirm they are to be appraised by Capitol Appraisal. Utility, railroad and pipeline properties that are susceptible to inspection are identified by inspection. The appraiser may also refer to other documents, both public and also confidential to assist in identification of these properties. Due to the varied nature of utility, railroad, and pipeline properties there is no standard data collection form or manual. New permitting documents on record with the Railroad Commission of Texas provide a source to identify potential new pipeline projects but does not provide indication if the project was actually started, completed, or a distinct location of the proposed project. Every effort is made to discover new utility, railroad, and pipeline properties through personal observation combined with permitting documents.
  - (2) Identifying and updating relevant characteristics of each property in the appraisal records: The appraiser identifies and updates relevant characteristics through data collected as part of the inspection process and through later submissions by the property owner, sometimes including confidential rendition. Additional data are obtained through public sources, regulatory reports and through analysis of comparable properties.
  - (3) Defining market areas in the district: Market areas for utility, railroad and pipeline property tend to be regional or national in scope. Financial analyst and investor services reports are used to help define market areas.
  - (4) Developing an appraisal approach that reflects the relationship among property characteristics affecting value and determines the contribution of individual property characteristics: For all three types of property, the appraiser must first form an opinion of highest and best use. Among the three approaches to value (cost, income and market),

pipeline value is calculated using a replacement/reproduction cost new less depreciation model [RCNLD]. In addition to the RCNLD indicator, a unit value model may also be used if appropriate data are available. Utility and railroad property are appraised in a manner similar to pipeline except that the RCNLD model is not used.

- (5) Comparison and Review: The appraiser considers results that best address the individual characteristics of the subject property when multiple models are used. Year-to year property value changes for the subject property are examined using computer-assisted statistical review. Periodic reassignment of properties among appraisers or the review of appraisals by a more experienced appraiser also contributes to the review process. These types of property are also subject to review by the Property Tax Division of the Texas Comptroller's Office through their annual Property Value Study.



GLASSCOCK COUNTY  
APPRAISAL DISTRICT

REAPPRAISAL PLAN

(Attachment E)

## Document 3D

2015 - 2016

### CAD Plan for Periodic Reappraisal of Oil and Gas Property

In accordance with Section 25.18 of the Tax Code:

- (a) CAD shall implement the plan for periodic reappraisal of property as approved by the board of directors under Section 6.05 (i).
- (b) The plan provides for annual reappraisal of all oil and gas property appraised by the CAD. The CAD has a professional services contract with Capitol Appraisal Group, LLC (CAGL) to appraise these properties for the CAD.
  - (1) Identification of new property and its situs. As subsurface mineral properties lie within the earth, they cannot be physically identified by inspection like other real property. However, the inability to directly inspect does not appreciably affect the ability to identify and appraise these properties. To identify new properties, CAGL obtains monthly oil and gas lease information from the Railroad Commission of Texas [RRC] to compare against oil and gas properties already identified. The situs of new properties is determined using plats and W-2/G-1 records from the RRC, as well as CAGL's in-house map resources.
  - (2) Identifying and updating relevant characteristics of all oil and gas properties to be appraised. Relevant characteristics necessary to estimate value of remaining oil or gas reserves are production volume and pattern, product prices, expenses borne by the operator of the property, and the rate at which the anticipated future income should be discounted to incorporate future risk. CAGL obtains information to update these characteristics annually from regulatory agencies such as the RRC, the Comptroller of Public Accounts, submissions from property owners and operators, as well as from published investment reports, licensed data services, service for fee organizations and through comparable properties, when available.
  - (3) Defining market areas in the district and identifying property characteristics that affect property value in each market area. Oil and gas markets are regional, national and international. Therefore they respond to market forces beyond defined market boundaries as observed among more typical real properties.
  - (4) Developing an appraisal approach that best reflects the relationship among property characteristics affecting value and best determines the contribution of individual property characteristics. Among the three approaches to value (cost, income and market), the income approach to value is most commonly used in the oil and gas industry. Through use of the discounted cash flow technique in particular, the appraiser is able to bring together relevant characteristics of production volume and pattern, product prices, operating expenses and discount rate to determine an estimate of appraised value of an oil or gas property.

- (5) Comparison and Review. Use of the income approach is the first step in determining an estimate of market value. After that the appraiser reviews the estimated market value compared to its previous certified value and also compares it to industry expected payouts and income indicators. The appraiser examines the model's value with its previous year's actual income, expecting value to typically vary within in a range of 2-5 times actual annual income, provided all appropriate income factors have been correctly identified. Finally, periodic reassignment of properties among appraisers and review of appraisals by a more experienced appraiser further expand the review process.

GLASSCOCK COUNTY  
APPRAISAL DISTRICT

REAPPRAISAL PLAN

(Attachment F)

## Document 7A

### MASS APPRAISAL REPORT

### INDUSTRIAL PROPERTY

APPRAISED BY CAPITOL APPRAISAL GROUP

2015 - 2016

#### Overview

This type of property consists of processing facilities and related personal property. Capitol Appraisal Group, LLC is contracted to reappraise this type of property according to the scope of work in the normal course of business of the client consistent with the Uniform Standards of Professional Appraisal Practice guidelines. The completed appraisals are all retrospective in nature. The purpose of the appraisals is to estimate market value as of January 1 in accordance with the definition of market value established in the Texas Property Tax Code (Sec. 1.04). "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 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
- C. 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.

The effective date of the appraisals is January 1 of the year for which this report is submitted unless the property owner or agent has applied for and been granted September 1 inventory valuation as allowed by Section 23.12(f) of the Texas Property Tax Code. The date of this report is April 20 of the tax year for which it is submitted.

The client for the mass appraisal is the Texas appraisal district named on the last page of this report. The intended users of this report are the client and the property owners of the client appraisal district.

The appraisal results will be used as the tax base upon which a property tax will be levied. The properties are appraised in fee simple in conformance with the Texas Property Tax Code Sec. 25.06. This is a jurisdictional exception to the Standards Rule 6-5 © Comment of the Uniform Standards of Professional Appraisal Practice 2008. A listing of the industrial properties appraised by Capitol Appraisal Group, LLC for the appraisal district is available at the appraisal district office. Industrial properties are normally re-inspected annually.

Documents relevant to an understanding of these appraisals include the confidential rendition, if any, filed with the appraisal district by the owner or agent of the property; other reports described in the Texas Property Tax Code; asset lists and other confidential data supplied by the owner or agent; the General Appraisal Manual adopted by the Texas Comptroller of Public Accounts; Property Assessment Valuation published by the International Association of Assessing Officers and adopted by the Texas Comptroller of Public Accounts; and Engineering Valuation and Depreciation by Marston, Winfrey, and Hempstead; and the Texas Property Tax Code.

Capitol's industrial appraisal staff includes licensed engineers as well as experienced appraisers who are knowledgeable in all three approaches to value. Industrial appraisal staff stays abreast of current trends affecting industrial properties through review of published materials, attendance at conferences, course work, and continuing education. All industrial appraisers are registered with the Texas Board of Tax Professional Examiners.

### **Assumptions and Limiting Conditions**

All appraisals are subject to the following assumptions and limiting conditions:

1. Title to the property is assumed to be good and marketable and the legal description correct.
2. No responsibility for legal matters is assumed. All existing liens, mortgages, or other encumbrances have been disregarded and the property is appraised as though free and clear, under responsible ownership and competent management.
3. The appraisers developing these appraisals are not requested to give testimony or attendance in court by reason of the appraisals, unless directed by, employed by, and provided legal counsel by the Appraisal District.
4. The appraisers do not necessarily inspect every property every year.
5. All sketches on the appraisal documents are intended to be visual aids and should not be construed as surveys or engineering reports unless otherwise specified.
6. All information in the appraisal documents has been obtained by members of Capitol Appraisal Group's staff or by other reliable sources.
7. The appraisals were prepared exclusively for ad valorem tax purposes. As such some valuation formulas may be required by the property tax code as opposed to generally accepted appraisal practices.
8. The appraisers have inspected as far as possible, by observation, the improvements being appraised, however, it is not possible to personally observe conditions beneath the soil or hidden structural components within the improvements. Therefore no representations are made as to these matters unless specifically considered in an individual appraisal.

### **Data Collection and Validation**

Data on the subject properties is collected as part of the inspection process and through later submissions by the property owner. Submitted data may be on a rendition form or in other modes which require confidentiality. Subject property data is verified through previously existing records and through published reports. Additional data are obtained and verified through published sources, regulatory reports, and through analysis of comparable properties, if any. Due to the unique nature of many industrial properties there is no standard data collection form or manual.

### **Valuation Approach and Analysis**

Industrial properties are appraised using replacement/reproduction cost new less depreciation models. Replacement costs are estimated from published sources, other publicly available information, and comparable properties. Reproduction costs are based on actual investment in the subject or comparable properties adjusted for typical changes in cost over time. Depreciation is calculated on the age/life method using typical economic lives and depreciation rates based on published sources, market evidence, and the experience of knowledgeable appraisers. Adjustments for functional and economic obsolescence may be made if utilization and income data for the subject property justify such. Income Approach models (direct capitalization and discounted cash flow) are also used when economic and/or subject property income information is available. Capitalization and discount rates are based on published capital costs for the industry of the subject property. A market data model based on typical selling prices per unit of capacity is also used when appropriate market sales information is available.

Because cost information is the most readily available type of data, the cost approach model is always considered and used. If sufficient data is available either of both of the other two models may also be considered and used. The market data and income approach models may need to be reduced by the value of the land in order to arrive at a value of improvements and personal property.

Model calibration in the cost approach involves the selection of the appropriate service life for each type or class of property. Further calibration can occur through the use of utilization or through-put data provided by the owner or agent. Income approach calibration involves the selection of the cost of capital or discount rate appropriate to the type of property being appraised as well as adjusting the projected income stream to reflect the individual characteristics of the subject property. Model calibration in the market data approach involves adjusting sales prices of comparable properties to reflect the individual characteristics of the subject property.

The mathematical form of each model is described below.

### Cost Approach

$$\begin{aligned} & \text{RCN} \\ & -\text{PD} \\ & -\text{FO} \\ & -\text{EO} \\ & = \text{Cost Indicator of Value} \end{aligned}$$

Where:

RCN = Replacement or Reproduction Cost New  
PD = Physical Depreciation  
FO = Functional Obsolescence  
EO = Economic Obsolescence

### Income Approach

$$\begin{aligned} & \text{PGR} \\ & -\text{VCL} \\ & -\text{FE} \\ & -\text{VE} \\ & \text{NOI} \end{aligned}$$

$$\text{NOI}/R = \text{Income Indicator of Value}$$

Where:

NOI = Net Operating Income  
PGR = Potential Gross Rent  
VCL = Vacancy and Collection Loss  
FE = Fixed Expenses  
VE = Variable Expenses  
R = Discount Rate or Cost of Capital

A variation of the income model is:

$$\begin{aligned} & \text{NOI for year 1} \times \text{DF for year 1} = \text{PW of year 1 NOI} \\ & \text{NOI for year n} \times \text{DF for year n} = \text{PW of year n NOI} \\ & \text{Net Reversion} \times \text{DF for year n} = \text{PW of Reversion} \\ & \text{Sum of PW's for all years 1 - n} = \text{Income Indicator of Value} \end{aligned}$$

Where:

DF = Discount Factor

PW = Present Worth

n = Last year of holding period

## **Market Data Approach**

ASPCP/U = PU

PU x SU = Market Data Indicator of Value

Where:

ASPCP = Adjusted Sales Price of Comparable Property

U = Unit of comparison

PU = Price per Unit of comparison

ASPU = Adjusted Sales Price per Unit of comparison

SU = Subject Property's number of Units of comparison

In reconciling multiple model results for a property the appraiser considers the model results that best address the individual characteristics of the subject property and that are based on the most reliable data while maintaining equalization among like properties. Final results for each property may be found on the appraisal district's appraisal roll.

Land valuation for industrial properties is the responsibility of appraisal district staff as is the highest and best use analysis of the site. Sites are analyzed for highest and best use as though they were vacant. Highest and best use analysis of the improvements is based on the likelihood of the continued use of the improvements in their current and/or intended use. An appraiser's identification of a property's highest and best use is always a statement of opinion, never a statement of fact.

## **Review and Testing**

Field review of appraisals is performed through the regular inspection of subject properties. The periodic reassignment of properties among appraisers or the review of appraisals by an experienced appraiser also contributes to the review process. A computer-assisted statistical review of property value changes is also conducted.

Appraisal-to-sales ratios are the preferred method for measuring performance, however sales are very infrequent. Furthermore, market transactions normally occur for multiple sites and include both real and personal property, tangible and intangible, making analysis difficult and subjective. Performance is also measured through comparison with valid single-property appraisals submitted for staff review. Lastly, Capitol Appraisal Group's industrial appraisal methods and procedures are subject to review by the Property Tax Division of the Texas Comptroller's office. The Comptroller's review as well as comparisons with single-property appraisals indicate the validity of the models and the calibration techniques employed.



**Document 7B**  
**MASS APPRAISAL REPORT**  
**BUSINESS PERSONAL PROPERTY**  
**APPRAISED BY CAPITOL APPRAISAL GROUP**  
**2015 - 2016**

**Overview**

This type of property consists of tangible personal property owned by a business or individual for the purpose of producing an income. The Uniform Standards of Professional Appraisal practice define personal property as "identifiable portable and tangible objects which are considered by the general public as being "personal," e.g. furnishings, artwork, antiques, gems and jewelry, collectibles, machinery and equipment; all property that is not classified as real estate." The Texas Property Tax Code (Sec. 1.04(5)) defines tangible personal property as "...personal property that can be seen, weighed, measured, felt, or otherwise perceived by the senses but does not include a document or other perceptible object that constitutes evidence of a valuable interest, claim, or right and has negligible or no intrinsic value." The Texas Property Tax Code (Sec. 1.04(4)) defines personal property as "...property that is not real property."

Capitol Appraisal Group, LLC is contracted to reappraise this type of property according to the scope of work in the normal course of business of the client consistent with the Uniform Standards of Professional Appraisal Practice guidelines. The completed appraisals are all retrospective in nature. The purpose of the appraisals is to estimate market value as of January 1 in accordance with the definition of market value established in the Texas Property Tax Code (Sec. 1.04). "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 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
- C. 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.

A separate definition of the value of inventory is found in the Texas Property Tax Code (Sec. 23.12(a)), "...the market value of an inventory is the price for which it would sell as a unit to a purchaser who would continue the business." Additionally, some inventories may qualify for appraisal as of September 1 in accordance with the provisions of Texas Property Tax Code Section 23.12(f).

The effective date of the appraisals is January 1 of the year for which this report is submitted unless the property owner or agent has applied for and been granted September 1 inventory valuation as allowed by Section 23.12(f) of the Texas Property Tax Code. The date of this report is April 20 of the tax year for which it is submitted.

The client for the mass appraisal is the Texas appraisal district named on the last page of this report. The intended users of this report are the client and the property owners of the client appraisal district.

The appraisal results will be used as the tax base upon which a property tax will be levied. A listing of the personal property appraised by Capitol Appraisal Group, LLC for the appraisal district is available at the appraisal district office. Personal property is normally re-inspected annually.

Documents relevant to an understanding of these appraisals include the confidential rendition, if any, filed with the appraisal district by the owner or agent of the property; other reports described in the Texas Property tax Code; asset lists and other confidential data supplied by the owner or agent; Property Assessment Valuation published by the International Association of Assessing Officers and adopted by the Texas Comptroller of Public Accounts; and Engineering Valuation and Depreciation by Marston, Winfrey, and Hempstead; and the Texas Property Tax Code.

Capitol's personal property appraisal staff includes licensed engineers as well as experienced appraisers who are knowledgeable in all three approaches to value. Personal property appraisal staff stays abreast of current trends affecting personal property through review of published materials, attendance at conferences, course work, and continuing education. All personal property appraisers are registered with the Texas Board of Tax Professional Examiners.

### **Assumptions and Limiting Conditions**

All appraisals are subject to the following assumptions and limiting conditions:

1. Title to the property is assumed to be good and marketable and the legal description correct.
2. No responsibility for legal matters is assumed. All existing liens, mortgages, or other encumbrances have been disregarded and the property is appraised as though free and clear, under responsible ownership and competent management.
3. The appraisers developing these appraisals are not Requested to give testimony or attendance in court by reason of the appraisals, unless directed by, employed by, and provided legal counsel by the Appraisal District.
4. The appraisers do not necessarily inspect every property every year.
5. All sketches on the appraisal documents are intended to be visual aids and should not be construed as surveys or engineering reports unless otherwise specified.
6. All information in the appraisal documents has been obtained by members of Capitol Appraisal Group's staff or by other reliable sources.
7. The appraisals were prepared exclusively for ad valorem tax purposes. As such some valuation formulas may be required by the property tax code as opposed to generally accepted appraisal practices.

### **Data Collection and Validation**

Data on the subject properties are collected as part of the inspection process and through later submissions by the property owner. Submitted data may be on a rendition form or in other modes which require confidentiality. Subject property data is verified through previously existing records and through published reports. Additional data are obtained and verified through published sources, regulatory reports, and through analysis of comparable properties. Due to the multitude of personal property types there is no standard data collection form or manual.

### **Valuation Approach and Analysis**

Personal property is appraised using replacement/reproduction cost new less depreciation models. Replacement costs are estimated from published sources, other publicly available information, and comparable properties. Reproduction costs are based on actual investment in the subject or comparable properties. Depreciation is calculated on the age/life method using typical economic lives and depreciation rates based on published sources, market evidence, and the experience of knowledgeable appraisers. Adjustments for functional and economic

obsolescence may be made if utilization and income data for the subject property justify such. Income Approach models (direct capitalization and discounted cash flow) are also used when economic and/or subject property income information is available. Capitalization and discount rates are based on published capital costs for the industry of the subject property. A value estimate derived from an income approach model in which the operating income of a business was capitalized must be reduced by the value of any real property in order to arrive at the value of the operating personal property. A market data model based on typical selling prices per item or unit of capacity is also used when appropriate market sales information is available. In the case of some personal property types, such as licensed vehicles, market data from published pricing guides is used to construct a market value model. In other cases, models are based on sales information available through published sources or through private sources.

Because cost information is the most readily available type of data, the cost approach model is always considered and used. If sufficient data is available either of both of the other two models may also be considered and used. The market data and income approach models may need to be reduced by the value of the land in order to arrive at a value of improvements and personal property.

Model calibration in the cost approach involves the selection of the appropriate service life for each type or class of property. Further calibration can occur through the use of utilization or through-put data provided by the owner or agent. Income approach calibration involves the selection of the cost of capital or discount rate appropriate to the type of property being appraised as well as adjusting the projected income stream to reflect the individual characteristics of the subject property. Model calibration in the market data approach involves adjusting sales prices of comparable properties to reflect the individual characteristics of the subject property.

The mathematical form of each model is described below.

### Cost Approach

$$\begin{aligned} & \text{RCN} \\ & -\text{PD} \\ & -\text{FO} \\ & \underline{-\text{EO}} \\ & = \text{Cost Indicator of Value} \end{aligned}$$

Where:

RCN = Replacement or Reproduction Cost New

PD = Physical Depreciation

FO = Functional Obsolescence

EO = Economic Obsolescence

### Income Approach

$$\begin{aligned} & \text{PGR} \\ & -\text{VCL} \\ & -\text{FE} \\ & \underline{-\text{VE}} \\ & \text{NOI} \end{aligned}$$

NOI/R = Income Indicator of Value

Where:

PGR = Potential Gross Rent

VCL = Vacancy and Collection Loss

FE = Fixed Expenses

VE = Variable Expenses  
R = Discount Rate or Cost of Capital

A variation of the income model is:

NOI for year 1 x DF for year 1 = PW of year 1 NOI  
NOI for year n x DF for year n = PW of year n NOI  
Net Reversion x DF for year n = PW of Reversion  
Sum of PW's for all years 1 - n = Income Indicator of Value

Where:  
NOI = Net Operating Income  
DF = Discount Factor  
PW = Present Worth  
n = Last year of holding period

## **Market Data Approach**

ASPCP/U = PU  
PU x SU = Market Data Indicator of Value

Where:  
ASPCP = Adjusted Sales Price of Comparable Property  
U = Unit of comparison  
ASPU = Adjusted Sales Price per Unit of comparison  
SU = Subject Property's number of Units of comparison

In reconciling multiple model results for a property the appraiser considers the model results that best address the individual characteristics of the subject property and that are based on the most reliable data while maintaining equalization among like properties. Final results for each property may be found on the appraisal district's appraisal roll.

Highest and best use analysis of personal property is based on the likelihood of the continued use of the personal property in its current and/or intended use. An appraiser's identification of a property's highest and best use is always a statement of opinion, never a statement of fact.

## **Review and Testing**

Field review of appraisals is performed through the regular inspection of subject properties. The periodic reassignment of properties among appraisers or the review of appraisals by an experienced appraiser also contributes to the review process. A computer-assisted statistical review of property value changes is also conducted.

Appraisal-to-sales ratios are the preferred method for measuring performance and are used when possible. However sales for some types of personal property are very infrequent. Furthermore, many market transactions occur for multiple sites and include both real and personal property, tangible and intangible, making analysis difficult and subjective. Performance is also measured through comparison with valid single-property appraisals submitted for staff review. Lastly, Capitol Appraisal Group's industrial appraisal methods and procedures for real and personal property are subject to review by the Property Tax Division of the Texas Comptroller's office. The Comptroller's review as well as appraisal-to-sale ratios and comparisons with single-property appraisals indicate the validity of the models and the calibration techniques employed. Commercial personal property appraised by Capitol Appraisal Group, LLC is not subject to a methods and procedures review however it is included in the Property Tax Division's annual ratio study with satisfactory results.

**Document 7C**  
**MASS APPRAISAL REPORT**  
**UTILITY, RAILROAD, AND PIPELINE PROPERTIES**  
**APPRAISED BY CAPITOL APPRAISAL GROUP**  
**2015 - 2016**

**Overview**

This type of property consists of operating property, excluding land, owned by utility, railroad, and pipeline companies, and related personal property and improvements. Capitol Appraisal Group, LLC is contracted to reappraise this type of property according to the scope of work in the normal course of business of the client consistent with the Uniform Standards of Professional Appraisal Practice guidelines. The completed appraisals are all retrospective in nature. The purpose of the appraisals is to estimate market value as of January 1 in accordance with the definition of market value established in the Texas Property Tax Code (Sec. 1.04). "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 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
- C. 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.

The effective date of the appraisals is January 1 of the year for which this report is submitted unless the property owner or agent has applied for and been granted September 1 inventory valuation as allowed by Section 23.12(f) of the Texas Property Tax Code. The date of this report is April 20 of the tax year for which it is submitted.

The client for the mass appraisal is the Texas appraisal district named on the last page of this report. The intended users of this report are the client and the property owners of the client appraisal district

The appraisal results will be used as the tax base upon which a property tax will be levied. The properties are appraised in fee simple in conformance with the Texas Property Tax Code Sec. 25.06. This is a jurisdictional exception to Standards Rule 6-5 (c) comment of the Uniform Standards of Professional Appraisal Practice 2008. A listing of the utility, railroad, and pipeline properties appraised by Capitol Appraisal Group, LLC for the appraisal district is available at the appraisal district office. Such utility, railroad, and pipeline properties that are susceptible to inspection (e.g. compressor stations, pump stations, buildings, and power plants) are normally re-inspected at least every three years.

Capitol's utility, railroad, and pipeline appraisal staff includes licensed engineers as well as experienced appraisers who are knowledgeable in all three approaches to value. The appraisal staff stays abreast of current trends affecting utility, railroad, and pipeline properties through review of published materials, attendance at conferences, course work, and continuing education. All appraisers are registered with the Texas Board of Tax Professional Examiners.

### **Assumptions and Limiting Conditions**

All appraisals are subject to the following assumptions and limiting conditions:

1. Title to the property is assumed to be good and marketable and the legal description correct.
2. No responsibility for legal matters is assumed. All existing liens, mortgages, or other encumbrances have been disregarded and the property is appraised as though free and clear, under responsible ownership and competent management.
3. The appraisers developing these appraisals are not Requested to give testimony or attendance in court by reason of the appraisals, unless directed by, employed by, and provided legal counsel by the Appraisal District.
4. The appraisers do not necessarily inspect every property every year.
5. All sketches on the appraisal documents are intended to be visual aids and should not be construed as surveys or engineering reports unless otherwise specified.
6. All information in the appraisal documents has been obtained by members of Capitol Appraisal Group's staff or by other reliable sources.
7. The appraisals were prepared exclusively for ad valorem tax purposes. As such some valuation formulas may be required by the property tax code as opposed to generally accepted appraisal practices.
8. The appraisers have inspected as far as possible, by observation, the improvements being appraised, however, it is not possible to personally observe conditions beneath the soil or hidden structural components within the improvements. Therefore no representations are made as to these matters unless specifically considered in an individual appraisal.

### **Data Collection and Validation**

Data on the subject properties is collected as part of the inspection process and through later submissions by the property owner. Submitted data may be on a rendition form or in other modes which require confidentiality. Subject property data is verified through previously existing records and through published reports. Additional data are obtained and verified through published sources, regulatory reports, and through analysis of comparable properties. Due to the varied nature of utility, railroad, and pipeline properties there is no standard data collection form or manual.

### **Valuation Approach and Analysis**

For all pipelines a value is calculated using a Replacement Cost New Less Depreciation (RCNLD) model. This involves first calculating the cost of building a new pipeline of equal utility using current prices. The Replacement Cost New (RCN) is a function of location, length, diameter, and composition. Depreciation is then subtracted from RCN to produce the final value estimate. Depreciation is defined as the loss of value resulting from any cause. The three common forms of depreciation are physical, functional, and economic. Physical depreciation is accounted for on the basis of the age of the subject pipeline. Functional and economic obsolescence (depreciation) can be estimated through the use of survivor curves or other normative techniques. Specific calculations to estimate abnormal functional and/or economic obsolescence can be made on the basis of the typical utilization of the subject pipeline.

After deductions from RCN have been made for all three forms of depreciation the remainder is the RCNLD or cost approach model indicator of value.

In addition to the RCNLD indicator, a unit value model may also be used for those pipelines for which appropriate income statements and balance sheets are also available. Generally, this model is used for those pipelines that by regulation are considered to be common carriers. The unit value model must be calculated for the entire pipeline system.

The unit value model typically involves an income approach to value and a rate base cost approach. The income approach is based on a projection of expected future typical net operating income (NOI). The projected NOI is discounted to a present worth using a current cost of capital that is both typical of the industry and reflective of the risks inherent in the subject property. The unit value model cost approach is typically an estimation of the current rate base of the subject pipeline (total investment less book depreciation allowed under the current form of regulation). An additional calculation is made to detect and estimate economic obsolescence. Any economic obsolescence is deducted from the rate base cost less book depreciation to achieve a final cost indicator. The unit value model may also include a stock and debt approach in lieu of a market data approach. The stock and debt approach involves finding the total value of the owner's liabilities (equity and debt) and assuming that they are equal to the value of the assets. The two (or three, if the stock and debt approach is included) unit value indicators are then reconciled into a final unit appraisal model indicator of value. The unit value must then be reconciled with the RCNLD model indicator of value for the entire pipeline system being appraised. The final correlated value of the system can then be allocated among the various components of the system to determine the tax roll value for each pipeline segment.

Utility and railroad properties are appraised in a manner similar to pipeline except the RCNLD model is not used. For all three types of property (utility, railroad, and pipeline) the appraiser must first form an opinion of highest and best use. If the highest and best use of the operating property is the current use under current regulation, the unit value model is considered highly appropriate. If the highest and best use is something different, then the RCNLD model may be more appropriate.

Compressor stations, pump stations, improvements, and related facilities are appraised using a replacement cost new less depreciation model.

Model calibration in the RCNLD model involves the selection of the appropriate service life for each type or class of property. Further calibration can occur through the use of utilization or through-put data provided by the owner or agent. Model calibration in the unit value cost approach involves the selection of the appropriate items to include in the rate base calculation and selection of the best measure of obsolescence, if any. Income approach calibration involves the selection of the cost of capital or discount rate appropriate to the type of property being appraised as well as adjusting the projected income stream to reflect the individual characteristics of the subject property. Model calibration in the stock and debt approach involves allocating sales prices of debt and equity to reflect the contribution to value of the operating property of the subject company.

The mathematical form of each model is described below.

### **RCNLD Approach**

$$\begin{aligned} & \text{RCN} \\ & - \text{PD} \\ & - \text{FO} \\ & - \text{EO} \\ & = \text{RCNLD Indicator of Value} \end{aligned}$$

Where:

RCN = Replacement or Reproduction Cost New

PD = Physical Depreciation

FO = Functional Obsolescence

EO = Economic Obsolescence

## Unit Cost Approach

$$\begin{array}{r} \text{OC} \\ -\text{AD} \\ \hline -\text{EO} \\ \hline \end{array} = \text{Unit Cost Approach Indicator of Value}$$

Where:

OC = Original Cost

AD = Allowed Depreciation

EO = Economic Obsolescence

## Unit Income Approach

$$\begin{array}{r} \text{PGR} \\ -\text{VCL} \\ -\text{FE} \\ \hline -\text{VE} \\ \hline \end{array} \text{NOI}$$

$$\text{NOI/R} = \text{Income Indicator of Value}$$

Where:

PGR = Potential Gross Rent

VCL = Vacancy and Collection Loss

FE = Fixed Expenses

VE = Variable Expenses

R = Discount Rate or Cost of Capital

A variation of the income model is:

NOI for year 1 x DF for year 1 = PW of year 1 NOI

NOI for year n x DF for year n = PW of year n NOI

Net Reversion x DF for year n = PW of Reversion

Sum of PW's for all years 1 - n = Income Indicator of Value

Where:

NOI = Net Operating Income

DF = Discount Factor

PW = Present Worth

n = Last year of holding period

## Stock and Debt Approach

$$\begin{array}{r} \text{MVE} \\ +\text{MVD} \\ \hline \end{array} = \text{Market Value of Assets}$$

Where:

MVE = Market value of Equity

MVD = Market value of Debt



In reconciling multiple model results for a property the appraiser considers the model results that best address the individual characteristics of the subject property while maintaining equalization among like properties. Final results for each property may be found on the appraisal district's appraisal roll.

Land valuation for utility and pipeline properties is the responsibility of appraisal district staff as is the highest and best use analysis of the site. Sites are analyzed for highest and best use as though they were vacant. Highest and best use analysis of the improvements is based on the likelihood of the continued use of the improvements in their current and/or intended use. Railroad corridor land is included in the appraisal of the operating property. The highest and best use of railroad corridor land is presumed to be as operating property. An appraiser's identification of a property's highest and best use is always a statement of opinion, never a statement of fact.

The rate-base cost approach, stock and debt approach, and income approach models must be reduced by the value of the land in order to arrive at a value of improvements, personal property, and other operating property.

### **Review and Testing**

Field review of appraisals is performed through the regular inspection of subject properties. The periodic reassignment of properties among appraisers or the review of appraisals by an experienced appraiser also contributes to the review process. A computer-assisted statistical review of property value changes is also conducted.

Appraisal to sales ratios are the preferred method for measuring performance, however sales are very infrequent. Furthermore, market transactions normally occur for multiple sites and include both real and personal property, tangible and intangible, making analysis difficult and subjective. Performance is also measured through comparison with valid single-property appraisals submitted for staff review. Appraisal results are tested annually by the Property Tax Division of the Texas Comptroller's Office. The Comptroller's review as well as comparisons with single-property appraisals indicate the validity of the models as well as the calibration techniques employed.

**Document 7D**  
**MASS APPRAISAL REPORT**  
**OIL AND GAS RESERVES**  
**CAPITOL APPRAISAL GROUP**  
**2015 - 2016**

**Overview**

Capitol Appraisal Group, LLC (CAGL) contracts with Appraisal Districts and other governmental entities to appraise all oil & gas subsurface, producing, mineral interests within the purview of the entity. The contractual purpose is to estimate market value as defined in Section 1.04 of the Texas Property Tax Code as of January 1 of each year and report these values to the entity. The results of our work are used as part of the tax base upon which property taxes are levied. Each mineral interest is listed on the appraisal roll separately from other interests in the minerals-in-place in conformance with the Texas Property Tax Code Sec. 25.12. Subsurface mineral rights are not susceptible to physical inspection. This condition creates the need to invoke the **Departure Provision** as Requested by the 2003 edition of the Uniform Standards of Professional Appraisal Practice Standards Rule 6-7 (f). However, the inability to physically examine the subsurface mineral rights does not appreciably affect the appraisal process or the quality of the results.

**Assumptions and Limiting Factors**

All appraisals are subject to the following:

1. Title to the property is assumed to be good and marketable and the ownership interest and legal description is assumed to be correct.
2. No responsibility for legal matters is assumed. Properties are appraised as if free and clear of any encumbrance and operated under responsible ownership and competent management.
3. Not every property is inspected every year.
4. All information in the appraisal documents has been obtained by Capitol Appraisal Group's employees or through other reliable sources.
5. The appraisals were prepared exclusively for ad valorem tax purposes. As such some valuation formulas may be required by the property tax code as opposed to generally accepted appraisal practices.

**Data Collection**

Data on the properties appraised are collected from regulatory agencies, such as the Texas Railroad Commission and the Texas Comptroller of Public Accounts, from submissions by the property operator or owner(s), or from other sources. **Submitted data from operators, taxpayers and/or their agents on the appraised properties are considered "rendition statements" and, as such, are confidential data, subject to Sec. 22.27 of the Texas Property Tax Code.** Additional data are obtained through published sources, regulatory reports, public investment reports, licensed data services, service for fee organizations and through comparable properties, if any. The state of Texas is a non-disclosure state and thus many forms of information, pertinent to the value of the properties, are not available to the appraiser.

### Valuation and Analysis

The Income Method of Appraisal, as described in Section 23.012 of the Texas Property Tax Code, is the principal appraisal method used. The Market Data Comparison Method of Appraisal (section 23.013) and the Cost Method of Appraisal (section 23.011) are considered. Industry averages of reserve replacement cost and acquisition cost are used for comparative purposes. The non-disclosure nature of the laws of Texas makes market data comparison unreliable. However, if within the scope of Capitol's work assignment market sales disclosures on interests are available, then those data is considered. The nearly exclusive reliance on the income approach, using the discounted cash flow (DCF) technique adjusted for specific property risk and market conditions, is typical of the oil and gas industry. Fee for service organizations are used for survey data with respect to price expectations and discount rates, and licensed data services are used for Industry indicators detailing costs, income, acquisitions costs in dollars per barrel of oil equivalent (\$/BOE), finding and development costs (\$/BOE) and reserve replacement costs (\$/BOE) for over 100 E&P companies.

Due to the demands of Section 23.175 of the Texas Property Tax Code and the Texas Constitution, Capitol Appraisal Group, LLC takes great care to not appraise properties in excess of their fair market value. We analyze a segment of the Petroleum Producing E&P market, determining the impact on their stock and debt value of the pricing requirements of Sec. 23.175 and also the pricing that could be reasonably anticipated from the market. Capitol Appraisal Group LLC's opinion of oil and gas prices is guided by the market's anticipation of those prices through the futures market, oil and gas stock prices and oil and gas industry indexes. A base discount rate is developed using the Securities and Exchange Commission (SEC) 10k Standard Measure of Value, Before Federal Income Tax (BFIT), for a grouping of 20 Exploration and Production (E&P) companies, and then matching their 10k Standard Measure of Value (BFIT), reserves and costs, through a discounted cash flow (DCF) technique. This reserve and cost match is used with Capitol's developed pricing scenario and Section 23.175 pricing directives to determine a discount rate necessary to equal the stock and debt value of the companies, as of January 1 for a given tax year.

The Weighted Average Cost of Capital (WACC) technique is also performed for a subset of these companies grouped according to the Petroleum Producing Industry Exploration and Production companies used in the *The Valueline Investment Survey*. These separate pricing scenarios and the resulting discount rates derived from using the aforementioned stock and debt techniques are applied to the universe of oil and gas properties we appraise. In seeking to avoid appraising any oil and gas property **above** its fair cash market value, Capitol Appraisal employs a market adjustment factor (MAF) to its base discount rate in order to apply property specific risk(s). These factors, which create a wide range of discount rates for the properties that Capitol appraises, are necessary to equitably evaluate disparate leases with respect to remaining reserves, price and costs. By performing two DCF income approach appraisals on each property, Capitol Appraisal provides clients with our opinion of market value, while always endeavoring to guard against appraising a mineral lease at greater than its fair cash market value. [A **jurisdictional exception** to the Discounted Cash Flow technique, as this process is described in the Statement on Appraisal Standards #2, 2003 edition of the Uniform Standards of Professional Appraisal Practice, must be taken. Section 23.175(a) of the Texas Property Tax Code both specifies the directives concerning oil and gas pricing that appraisal districts in Texas must follow and also that each appraisal district must adhere to procedure and methodology contained in manuals developed by the Property Tax Division (PTD) of the Texas Comptroller of Public Accounts. Because adherence to this Property Tax Code directive, without discretion, can result in values greater than fair cash market value, we must express caution.]

The resulting oil and gas lease value is then allocated to each owner on the lease based upon his fractional mineral ownership interest. Royalty and working interests have different impacts on their respective values, since only working interests bear the costs of lease operation. Therefore royalty mineral interest owner's values are allocated from 100% of the appraised royalty value of the lease, according to their fractional royalty interest, while the working interest owner's value(s) are allocated from 100% of the determined working interest value of the lease, according to their fractional working interest.

### **Review and Testing**

Each year we review the estimated market value for each mineral property appraised according to its year-to-year value change and also to industry expected payouts and income indicators. We also examine income projected to be received with the previous year's income and test that income against the lease's appraised value. Market value for income producing properties is a multiple of its monthly or annual income. Our experience through the years indicates that values typically vary within in a range of 2-5 times income, provided all appropriate income factors have been appropriately identified. Periodic reassignment of properties among appraisers and review of appraisals by a more experienced appraiser also contribute to the review process.

Application of appraisal-to-sales ratios is another method for measuring performance. However, single property sales or sales of interest(s) within a property remain difficult to obtain due Texas' disclosure laws. Furthermore many market transactions are normally for multiple properties in multiple areas and include both real and personal property, tangible and intangible. We access licensed databases providing statistical data for company and property sales to compare our efforts. We also measure our performance through comparison of valid single-property market transactions, if any, that are submitted for staff review. Lastly, Capitol Appraisal's mineral appraisal values are subject to review each year in the Property Value Study conducted by the Property Tax Division of the Texas Comptroller of Public Accounts. The Property Tax Division's review as well as comparisons to industry transactions and to single-property market value sales (when available), indicate the validity of the models, techniques and assumptions used.



## GLASSCOCK COUNTY APPRAISAL DISTRICT

PRISCILLA A. GINETTI, RPA - CHIEF APPRAISER

PO Box 155 – 124 N MAIN

GARDEN CITY, TX 79739

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September 15, 2014

Property Tax Assistance Division  
Comptroller of Public Accounts  
PO Box 13528  
Austin, TX 78711

To Whom It May Concern:

Please find enclosed the 2015-2016 Reappraisal Plan for Glasscock County Appraisal District. The 2015-2016 Reappraisal Plan was approved and signed on the 12th day of September, 2014 at the Public Hearing held during the Board of Directors Called Meeting.

If you have any questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in cursive script that reads "Priscilla A. Ginetti".

Priscilla A. Ginetti, RPA  
Chief Appraiser

Enclosures: (1)