RESOLUTION
OF THE
GRAYSON CENTRAL APPRAISAL DISTRICT
BOARD OF DIRECTORS
REGARDING AMENDED REAPPRAISAL PLAN 2023-2024

Resolution # 2023-01 May 30th, 2023

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

Whereas, Texas Property Tax Code 6.05 (i) requires adoption by resolution of a written plan for periodic reappraisal of all property within the boundaries of the district;

Whereas, Texas Property Tax Code 25.18 requires implementation of a plan for periodic reappraisal of all property approved by the board of directors under Section 6.05 (i) within the boundaries of the district;

Whereas, the secretary of the board delivered written notice of the date, time and place of the public hearing to the presiding officer of each taxing unit;

Whereas, a public hearing was held on May 30th, 2023 to consider the 2023-2024 Amended Reappraisal Plan;

The 2023-2024 Amended Reappraisal Plan was approved by the Board of Directors of the Grayson Central Appraisal District on May 30th, 2023.

PASSED, APPROVED, AND ADOPTED THIS 30th DAY OF MAY, 2023.

Charlie Williams, Chairman
GCAD Board of Directors

Brett Graham, Secretary
GCAD Board of Directors

Grayson Central Appraisal District
2023-2024 Reappraisal Plan

INTRODUCTION

General Overview of Tax Code Requirement

Passage of Senate Bill 1652 in 2005 amended the Property Tax Code to require each Appraisal District to prepare a biennial reappraisal plan. The following details the Tax Code requirements:

The Written Plan

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

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

Plan for Periodic Reappraisal

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

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

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

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

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

(3) Defining market areas in the district;

(4) Identifying property characteristics that affect property value in each market area, including:

(a) The location and market area of the property;
(b) Physical attributes of the property, such as size, age, and condition;
(c) Legal and economic attributes; and
(d) Easements, covenants, leases, reservations, contracts, declarations, special assessments; ordinances, or legal restrictions;

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

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

(7) Reviewing the appraisal results to determine value.

Scope of Responsibilities

Grayson Central Appraisal District has prepared and published this reappraisal plan to provide the Board of Directors, taxing units, citizens and taxpayers with a better understanding of the District's responsibilities and reappraisal activities. This report has several parts: a general introduction and several sections describing the proposed reappraisal effort by the appraisal departments within Grayson Central Appraisal District (GCAD).

GCAD is a political subdivision of the State of Texas created effective January 1, 1980. The provisions of the Texas Property Tax Code govern the legal, statutory, and administrative requirements of the appraisal district. A six-member Board of Directors, appointed by the taxing units within the boundaries of Grayson County, constitutes the District's governing body. In the event that the elected Tax Assessor-Collector is not appointed, then he is automatically, by statute, a sixth member in an "ex-officio" non-voting status. The Chief Appraiser, appointed by the Board of Directors, is the chief administrator and chief executive officer of the appraisal district.

GCAD is responsible for local property tax appraisal and exemption administration for thirty-four (36) jurisdictions or taxing units in the county. Each taxing unit, such as the county, a city, school district, conservation district, etc., sets its own tax rate to generate revenue to pay for such things as police and fire protection, public schools, road and street maintenance, courts,

water and sewer systems, and other public services. Property appraisals are estimated values by the appraisal district and used by the taxing units to distribute the annual tax burden. They are generally based on each property's worth or market value. GCAD also determines eligibility for various types of property tax exemptions such as those for homeowners, the elderly, disabled persons, disabled veterans, and charitable or religious organizations.

The Property Tax Code states that all taxable property is appraised at its market value as of January 1st, unless special appraisal provisions are otherwise provided. Under the tax code, "market value" means the price at which a property would transfer for cash or its equivalent under prevailing market conditions if:

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

The Tax Code defines special appraisal provisions for the valuation of residential homestead property (Sec. 23.23), productivity (Sec. 23.41), real property inventory (Sec. 23.12), dealer inventory (Sec. 23.121, 23.124, 23.1241 and 23.127), nominal (Sec. 23.18) or restricted use properties (Sec. 23.83) and allocation of interstate property (Sec. 23.03). The owner of real property inventory may elect to have the inventory appraised at its market value as of September 1st of the year preceding the tax year to which the appraisal applies by filing an application with the chief appraiser.

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. GCAD's current policy is to conduct general reappraisal of real and business personal property value continually, meaning that a property's appraised value is established and reviewed for equality and uniformity as dictated by market activity and conditions, which are monitored and interpreted each year. The district conducts an onsite field review of real property and business personal property in a portion of the county annually as part of a reappraisal cycle.

The appraised value of real and business personal property is calculated using specific information and data about each property. Using a computer-assisted mass appraisal (CAMA) program, and generally recognized appraisal methods and techniques, registered and trained appraisers compare the subject property information with the data for similar properties, and with recent market data. The district adheres to the standards of the International Association of

Assessing Officers (IAAO) regarding its appraisal practices and procedures, and subscribes to the standards promulgated by the Appraisal Foundation known as the Uniform Standards of Professional Appraisal Practice (USPAP) to the extent they are applicable. Chapter 23 of the Texas Property Tax code contains statutes dealing with appraisal methods and procedures. Section 23.01 of this chapter was amended in 1997 to specify that appraisal districts are required to comply with the mass appraisal standards of USPAP (Standard Six) when the appraised value of a property is established using mass appraisal techniques. This differs from USPAP Standard One which is applicable to individual property appraisals and is more familiar to the general public; Standard One may supersede Standard Six in the review or appeal processes or in instances where mass appraisal is not practicable. In cases where the appraisal district contracts for professional valuation services, the contract that is entered into by each appraisal firm requires adherence to similar professional standards. Policies and procedures are available at the office of each firm contracting with the District.

Overview of District Operations

Personnel Resources

The Office of the Chief Appraiser is primarily responsible for overall planning, organizing, staffing, coordinating, and controlling all district operations. The district is organized into three (3) primary departments with sub-departments therein: Finance, Administration/Support (Customer) Services and Appraisal. A director heads each department, with assistant director(s) or supervisor(s) overseeing the sub-departments where necessary.

The Finance Department's function is to plan, organize, direct and control the business support functions related to human resources, budget, finance, records management, purchasing, fixed assets, facilities maintenance, information technology, data entry and mail service; in effect, to facilitate all functions that are district-wide in scope.

The Administration/Support (Customer) Services Department's function is customer service, to interact with the public to answer routine questions, distribute information and appropriate forms, records maintenance, exemptions/agricultural administration, ARB support, data entry and facilitation of information transfer to the tax office or member taxing entities. A major sub-department is mapping/GIS (geographic information services) which maintains parcel maps and other GIS components used as a basis for all appraisal and property tax functions throughout the District.

The Appraisal Department consists of two major divisions – real estate and business personal property (BPP), with real estate further delineated between residential and commercial. The Residential Department includes appraisal of residential land and improvements, residential research, agricultural land valuation, mobile homes and residential inventory valuation. Commercial appraisal includes industrial, general commercial, apartments and vacant commercial land. Valuation of minerals and utilities and specific industrial accounts are currently performed by contractor(s).

The 2023 adopted budget provides information for employee positions and classifications broken down as follows:

- 2 - Administrative (including Chief Appraiser)
- 6 - Departmental Directors
- 18 – Administration, Support Services, Information Technology
- 20 – Appraisal Services

Staff Education and Training

All appraisal district employees that perform appraisal work are subject to the provisions of the Property Taxation Professional Certification Act and must be duly registered with The Texas Department of Licensing and Regulation (TDLR). This agency is responsible for ensuring appraisers are professional, knowledgeable, competent and ethical. This is accomplished through a statewide program of registration, education, experience, testing and certification for all property tax professionals for the purpose of promoting an equitable tax system.

Upon registration, appraisers registered with the TDLR have up to five years to take a series of appraisal courses and exams in order to achieve certification as a Registered Professional Appraiser (RPA). During each subsequent two-year period after certification, appraisers must complete an additional 30 hours of continuing education which must include mandatory courses in ethics, USPAP and state laws and rules. Failure to meet these minimum standards will result in the removal of the employee from an appraiser position.

Additionally, all appraisal personnel receive extensive hands-on training in the data gathering and valuation processes. Standardized manuals are provided to ensure uniform and accurate data collection. Senior personnel provide on-the-job data collection training in the office and the reappraisal field area. Supervisors meet regularly with staff to introduce new procedures and regularly monitor appraisal activity to ensure that all personnel are following standardized appraisal methods and techniques.

Data

For 2023-2024, the district is responsible for establishing and maintaining approximately 109,000 accounts covering approximately 979 square miles within Grayson Central Appraisal District's jurisdiction. Each account contains data related to property characteristics, ownership and exemption information. Accurate ownership and legal description data are maintained by processing recorded deeds and plats that are obtained from the Grayson County Clerk's office. Exemption data is processed in conjunction with various application requirements as stipulated in the Property Tax Code.

Existing property characteristics data is updated and maintained through on-site field inspection and/or office review utilizing inspection notes, aerial photography resources, and other available materials. The property data related to new construction and other building permit activity is also collected through an annual field review effort. Each city within GCAD's jurisdiction is encouraged to promote the discovery and appraisal process by providing permit information either electronically or in paper form. Sales are routinely validated during an office review and a separate field effort when applicable; however, numerous sales are validated as part of the building permit process and annual reappraisal effort.

General demographic, economic and financial trends, construction cost, market sales and income data are acquired through various sources. These may include internally generated questionnaires to buyer and seller, public and university research centers, private market data vendors, real estate related publications and telephone contact with buyers, sellers, brokers and fee appraisers, as well as information collected from property owners and agents during the informal appeal and Appraisal Review Board process. The appraisal department staff is trained to harvest market data and other useful economic information as opportunities may present themselves.

The district has a geographic information system (GIS) that contains cadastral maps and includes various layers of data, including parcel lines, FEMA flood data, zoning, jurisdictional boundaries and aerial photography. The district's website makes a broad range of information available for public access, including information on the appraisal process and appraisal district operations, property characteristics data, certified values, protests and appeal procedures, links to other government agencies, property maps and a tax calendar. Downloadable files of related tax information and district forms, including exemption applications, ARB protest notices and business personal property renditions are also available. GCAD, through its software provider, is in the process of implementing an online protest process for property owners that choose to file any protests electronically; other forms of electronic transactions including the appeal process will ultimately be offered in electronic format.

Information Technology Support

The Information Technology (IT) department maintains and manages GCAD's technology Infrastructure. The various IT functions include technical support and systems deployment, computer operations, applications systems support, internet and website support functions, voice and data communications, network and personal computer workstation support, data management, GIS support of Cadastral mapping including multiple layers of GIS related intelligence, coordination of digital orthogonal and oblique aerial photography for utilization by all operating departments of the organization as well as participating taxing entities. The principal operating environment for all GCAD servers is MS SQL Server which supports relational database which are requirements of appraisal and customer service (CAMA system), GIS and website functions, all running on multiple network servers in place to support access through internal and external networks. All GCAD data structures are relational databases created and supported by commercial software vendor products, including Harris Govern (FKA True Automation) CAMA software, ESRI GIS software, Eagle View aerial photography and global positioning software, Cougar Mountain Financial Software and Windows/Office for individual work stations. These systems provide direct support for all operating departments involved in appraisal functions, customer service, exemption administration, human resources department, Appraisal Review Board support activities, as well as all reporting requirements for the taxing units and the State Comptroller's Property Tax Division.

Shared Appraisal District Boundaries (Overlapping Jurisdictions)

Shared boundaries were eliminated per HB 1010 effective January 1, 2008. HB 1010 simplifies the property appraisal system by aligning appraisal district boundaries with county lines to eliminate overlapping jurisdictions.

Independent Performance Test

According to Chapter 5 of the Texas Property Tax Code and Section 403.302 of the Texas Government Code, the State Comptroller's Property Tax Division (PTD) conducts a biennial property value study (PVS) of each Texas school district within each appraisal district. As a part of this biennial study, the Code also requires the Comptroller to: use sales and recognized auditing and sampling techniques; review each appraisal district's appraisal methods, standards and procedures to determine whether the district used recognized standards and practices (Methods Assistance Program review); test the validity of school district taxable values in each appraisal district and presume the appraisal roll values are correct when values are valid; and, determine the level and uniformity of property tax appraisal in each appraisal district. The

methodology used in the property value study includes stratified samples to improve sample representativeness and techniques or procedures of measuring uniformity. This study utilizes statistical analysis of sold properties (sale ratio studies) and appraisals of unsold properties (appraisal ratio studies) as a basis for assessment ratio reporting. For appraisal districts, the reported measures include median level of appraisal, coefficient of dispersion (COD), the percentage of properties within 10% of the median, the percentage of properties within 25% of the median, and price-related differential (PRD) for properties overall and by state category (i.e., categories A, B, C, D and F1 are directly applicable to real property).

There are sixteen independent school districts in Grayson Central Appraisal District for which appraisal rolls are annually developed. The preliminary results of the Comptroller's study are released in January of the year following the year of appraisement. Following review and appeals, if any, the final results of this study are certified to the Education Commissioner of the Texas Education Agency (TEA) in the following July of each year for the year of appraisement.

On alternate biennial years, appraisal districts are audited by the Methods and Assistance Program (MAP). This review is conducted in accordance with Tax Code Section 5.102(a) and related Comptroller Rule 9.301. The Comptroller is required to review appraisal districts' governance, taxpayer assistance, operating procedures and appraisal standards, procedures and methodology.

The outside (third party) ratio study provides additional assistance to Grayson Central Appraisal District in determining areas of market activity or changing market conditions. Results from the upcoming Property Value Study will be reviewed and analyzed by appraisal managers. Geographic areas or property categories with any concerning ratio results will be added to the work plan for the upcoming reappraisal cycles. The MAPs review ensures that appraisal districts are conducting its duties as required by applicable laws, particularly the Texas Property Tax Code. Results from the review demonstrate areas of compliance as well as may demonstrate areas needing attention. Any recommendations are reviewed and considered by management.

Appraisal Activities

Overall Appraisal Responsibilities

Grayson Central Appraisal District appraisal responsibilities are divided into three major categories, residential real estate, commercial/industrial real estate, and business personal property. Although appraisers share some components of the appraisal process, residential is generally divided into major market areas, with commercial being handled on a county-wide basis. Rural and residential land and mobile homes are handled by the residential appraisers; commercial includes retail, office, apartments, industrial, vacant commercial land and other non-residential improvements; business personal property accounts are divided into three main territories except for major industrial accounts, minerals (oil & gas) and utility accounts which are currently appraised by outside contractor(s).

In both the Residential and Commercial department's appraisal staff is responsible for collecting and maintaining property characteristic data for classification, valuation, and information processes. Accurate valuation of real and personal property by any method requires a physical description of personal property, land, and building characteristics. An effective data collection effort involves an inspection of all real and personal property accounts. It is the goal of GCAD appraisal departments to periodically complete a thorough, on-site field review of all residential and commercial properties in accordance with professional and legislative standards which require a three-year cycle. The use of aerial photography and a periodic digital photography project may also be used in meeting this goal. Business personal property data reappraisal is field-verified every two years, alternating approximately one half of the accounts each year. Ultimately, meeting these goals is dependent on budgetary constraints and staffing levels.

Overall Appraisal Resources

- **Personnel** - Grayson Central Appraisal District appraisal activities are accomplished with a staff of appraisers and clerical personnel. Staffing resource numbers are reflected in the budget, adopted by reference. These employees are generally assigned to a specific appraisal department or sub-department.

- **Data** – All appraisal functions utilize existing property characteristic information contained in a CAMA (Computer Assisted Mass Appraisal) system operating within the district's main server storage unit. This consists of the most currently updated information entered into Harris Govern's PACS (Property Appraisal & Collection System), which is in turn linked to the district's GIS parcel database as well as the *Eagle*

View aerial photography and global positioning database. The data is collected and by manual notes that are entered by clerical staff. Other data used includes maps, sales and listing data, fire and damage reports, building permits, mechanic's liens, deeds of trust, septic permits, photos, actual cost information, etc.

Appraisal Frequency and Method Summary

Grayson Central Appraisal District has adopted a <u>continual</u> reappraisal cycle

- Residential Appraisal - Residential property is physically examined in two different phases as part of an annual pattern: ***<u>First</u>*** "re-inspections" are performed in designated areas to verify the physical property data, in order to make sure that this information is refreshed periodically; ***<u>Second</u>*** all properties that reflect changes are specifically inspected in detail – these changes may consist of building permits, or any other documents tracked in the district's data system, as listed above. In both processes, appraisers measure improvements and/or other features when necessary, determine class, year built, effective year of construction (condition) and other property characteristics and features that are used in the cost and sales comparison valuation methods. For improved properties, appraisers consider the cost, sales comparison and income approaches and then reconcile the final value, based on the quality and availability of the most accurate and credible data for each valuation approach. In considering the approaches to value, each appraiser must determine which method or methods are most appropriate. Vacant rural land is valued using comparable sales. Lot values in subdivisions are based on sales comparisons, or computed as an allocated percentage of the total value. Improved residential properties are delineated by neighborhoods and/or by classification. On an annual basis, residential appraisers, with supervisor oversight, perform statistical analysis to evaluate whether values are equitable and consistent with the market. Based on analysis of the sales activity, market adjustment factors are developed and applied to adjust the appraised values in neighborhoods, as designated by geographic areas or improvement character.

- Commercial Appraisal – Like residential property, commercial and industrial real estate are part of the "re-inspection" process as well as the "building permit inspection" process of specifically examining any account that reflects activity through any of the data tracking reports. Commercial and industrial properties are field observed, measured if necessary, and photographed at least once every three years to verify class, condition and other property data. The appraiser(s) determines highest and best use and defines the economic unit characteristics for a grouping of associated accounts. Economic units and neighborhoods are delineated by property type/use, in addition to geographical criteria. On an annual basis, commercial market values are established using generally accepted appraisal methods and techniques. Land values are generally determined

using comparable sales and often valued by mass reappraisal by residential appraisers. For improved properties, appraisers consider the cost, sales comparison and income approaches and then reconcile the final value, based on the quality and availability of the most accurate and credible data for each valuation approach. A commercial cost approach model computes values at the account level and mass adjustment is developed using the commercial sales comparison and income approach models where data is available and considered reflective of subject properties.

- Business Personal Property - Business personal property (BPP) appraisers have a two-year reappraisal cycle with on-site inspections of each business to verify ownership, Standard Industrial Code (SIC) classification, quality and density of inventory, furniture and fixtures and other key information. The Business Personal Property staff reappraises businesses through various discovery methods. SIC code identification and delineation is the cornerstone of the business personal property valuation system, as similar business equipment and inventories tend to share depreciation and density characteristics. The cost approach is the predominant technique used to value personal property, particularly for businesses that render in sufficient detail. Costs are tested against density schedules or comparable ranges. Depreciation tables are developed for each classification using actual historical cost data and market data from generally accepted cost valuation sources. The SIC models are reviewed and tested continually as reliable data becomes available. All business owners are required to annually file rendition reports and list key information about their tangible personal property assets they own or manage as a fiduciary. Appraisers consider information from field observations, density schedules, various cost or market publications and owner's rendition values when determining the market value of the business personal property. The BPP department coordinates communications with the contract appraisers that value minerals, utilities and industrial properties. Minerals and utilities are performed using data from the state Railroad Commission and Public Utility Commission, in addition to information obtained from operators and utility company sources.

Data Collection

Business personal property accounts are physically visited and inspected to observe the character, quantity, and quality of equipment, inventory, furniture/fixtures, and vehicles. At current staffing levels only a fraction of real estate accounts can be physically inspected each year, therefore, real property is inspected in two (2) phases: general re-inspection and specific inspections. General re-inspection is intended to ensure that every property is periodically observed to correct any erroneous information that may be reflected in the district's records due to judgment or clerical errors and to detect any changes in physical characteristics, whether it is additions, demolition, enhancement, or deterioration. Each year the Chief Appraiser and Deputy Chief Appraiser and appraisal department directors, acting in concert with recommendations from the appraisal staff, assign areas to be "re-inspected", meaning that every parcel in the designated area or map(s) be inspected from the street, photographed, and if necessary going on-site to observe more detail and/or to take measurements. In general this process is strictly for data collection rather than an appraisal function. In the past, guidelines for re-inspection were for an approximate six (6) year cycle, however, this has changed to a three (3) year cycle for current and future periods. Achieving this increased level of performance will require innovative methodology, including full integration of aerial photography. The *Eagle View* aerial photography / global positioning system provides the power to scan large rural areas for changes, in addition to viewing inaccessible improvements or other property characteristics from a desktop, and ultimately from a field computer device. The second phase of field work is specific inspections; this includes visiting all properties that have been flagged due to a report of activity from one or more of the monitored data sources, including but not limited to sale, deed of trust, building permit, mechanic's lien, septic permit, fire damage report, etc. Typically, these inspections are more detailed and require measurement because there is new construction. All elements are recorded, classified, and photographed; if improvements are under construction it is appropriate to inspect the interior as well as exterior. In some cases, specific inspection may re-visit a property that has already been observed in the *general* inspection process. The implementation of Eagle View's Change Analysis allows appraisal staff to compare a property side by side and locate new improvements by comparing prior aerial photography with recently flown aerial photography layers. This has proven to be a vital roll in discovery, particularly in rural areas, areas that do not require permits or areas that are otherwise inaccessible to appraisers.

During the general inspection process, appraisers are provided with a map of the assigned area together with computer-generated property information sheets that can be marked-up with new or modified data during an on-site inspection. Handwritten field collected data is returned and entered into the GCAD system by an assigned staff of data entry employees. Electronic field devices are being researched and considered for potential use during this cycle.

Field Review

The date of last inspection, extent of that inspection, and the appraiser responsible are listed on the account record. If a property owner disputes the district's records concerning this data during a hearing, or in an informal setting, the record may be altered based on the evidence provided. When needed, a field inspection is requested to verify this evidence for the current year's valuation or for the next year's valuation. Every year a field review of certain areas or neighborhoods in the jurisdiction is done during the annual reappraisal effort.

Office Review

Office reviews are completed on properties where information has been received from the owner of the property, taxing jurisdictions, or other sources. Aerial photographs and digital photographs are also used to verify property characteristics. When the property data is verified in this manner, field inspections are not required.

Performance Test

Supervisors and appraisers are responsible for conducting ratio studies and comparative analysis to ensure accurate and equitable appraised values.

Residential Valuation Process

INTRODUCTION

Scope of Responsibility

The Residential Appraisal staff appraisers are responsible for developing equal and uniform market values for improved and vacant residential property. Residential appraisal assignments are delineated from commercial assignments on the basis of state use code guidelines, established by the State Comptroller. Generally, the residential staff approximately values the following state property codes:

A1-A4	Single family/Residential	48,423 parcels
B1	1-4 unit multi-family	907 parcels

C1	Vacant Platted Lots (City, Rural)	9,419 parcels
D	Real acreage with Ag (Improved or vacant)	17,212 parcels
E	Real- Non-qualified open space land & Residential Improvements	8,210 parcels
M	Mobile homes (Does not own land)	1,805 parcels
O1	Residential Inventory	3,021 parcels

Appraisal activities are separate albeit closely related to the data collection process. Appraisers spend the majority of the appraisal cycle from August through April in the field performing general and specific inspections for the purpose of collecting and verifying data to ensure that the district's physical database is as accurate as possible. The actual mass appraisal process is founded on the presumption that the physical database is reliable, therefore rendering statistical analysis valid and reliable as well. As analysis of market data and comparison to appraised values (sales ratios) proceeds, the appraisers reach conclusions and make recommendations for applying adjustments to designated areas, typically referred to as *neighborhoods*. Although appraisal analysis is ongoing throughout the year, for obvious reasons it is concentrated toward the end of the cycle to take advantage of access to the maximum amount of market data. Throughout March and April market data is continually being sorted, refined, and interpreted so that appropriate adjustments can be applied prior to issuance of appraisal notices in May. In the event that compelling evidence is discovered after the initial batch of notices is mailed, supplemental notices may be generated up until *Certification* of the appraisal roll. In some cases, according to the Property Tax Code, supplements may be done after Certification under Section 25.

Appraisal Resources

- **Personnel** - The Residential Appraisal staff consists of six appraisers, assisted on a seasonal basis by a four member data entry team.

- **Data -** A common set of data characteristics for each residential dwelling in Grayson CAD is collected in the field and data entered to the computer. This property-specific data drives the GCAD computer-assisted mass appraisal (CAMA) approaches to valuation. Residential appraisal also requires verified sales data, actual construction cost data, and property listings. Appraisers also review various real estate related publications to determine patterns and trends in the market data.

VALUATION APPROACH (Model Specification)

Land Analysis

Residential appraisers are responsible for valuation of residential lots and non-commercial rural acreage within their assigned area. With the assistance, advice, and approval of supervisory personnel, available market data is analyzed to determine what basis exists, if any, for re-valuing lots within a subdivision, or vacant land within a defined area. For lots, the unit of comparison is typically either a simple "per square foot" base or a "per front foot" base. Acreage is appraised on a "per acre" basis, blending in some cases with highway frontage properties that are beginning to trade by the "square foot", and are thus assigned to the commercial valuation function. Base lot values are adjusted for specific influences, where necessary, to account for such factors as view, shape, size, and topography, among others. Abstraction and allocation methods may be used for valuing land in fully developed subdivisions where no vacant sales occur in order to ensure that the land values developed best reflect the contributory market value of the land to the overall property value. Acreage appraisals are based on a schedule developed from analysis of available sales in a defined area; typically these schedules reflect a sliding scale of value related to size, with individual properties receiving adjustments for topography, road type, shape, etc.

Area Analysis

Data on regional economic forces such as demographic patterns, regional location factors, employment and income patterns, general trends in real property prices and rents, interest rate trends, availability of vacant land, and construction trends and costs are collected from private vendors and public sources and provide the field appraiser a current economic outlook on the real estate market. Information is gleaned from real estate publications and other outside sources including continuing education in the form of TDLR courses, seminars and International Association of Assessing Officers courses.

Neighborhood and Market Analysis

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

forces and are interpreted by appraisers into an indication of market value ranges for a given neighborhood. Sales also provide an indication of property component changes considering a given time period relative to the date of appraisal. Although all three approaches to value are considered, residential sales can best be interpreted and applied using two generally accepted appraisal techniques known as the cost and market or comparable sales approach. For low density, multiple family properties, the income approach to value may also be utilized, in the absence of recent sales data.

The first step in neighborhood analysis is the identification of a group of properties that share certain common traits. A "neighborhood" for analysis purposes is defined as the largest geographic grouping of properties where the property's physical, economic, governmental and social forces are generally similar and uniform. Geographic stratification accommodates the local supply and demand factors that vary across a jurisdiction. Once a neighborhood with similar characteristics has been identified, the next step is to define its boundaries. This process is known as "delineation". Some factors used in neighborhood delineation include location, sales price range, lot size, age of dwelling, quality of construction and condition of dwellings, square footage of living area, and story height. Delineation can involve the physical drawing of neighborhood boundary lines on a map, but it can also involve statistical separation or stratification based on attribute analysis. Part of neighborhood analysis is the consideration of discernible patterns of growth that influence a neighborhood's individual market. Few neighborhoods are fixed in character. Each neighborhood may be characterized as being in a stage of growth, stability or decline. The growth period is a time of development and construction. As new neighborhoods in a community are developed, they compete with existing neighborhoods. An added supply of new homes tends to induce population shift from older homes to newer homes. In the period of stability, or equilibrium, the forces of supply and demand are about equal. Generally, in the stage of equilibrium, older neighborhoods can be more desirable due to their stability of residential character and proximity to the workplace and other community facilities. The period of decline may reflect diminishing demand or desirability. Declining neighborhoods may also experience renewal, reorganization, rebuilding, or restoration, which promotes increased demand and economic desirability.

Neighborhood identification and delineation is the cornerstone of the residential valuation system at the district. Most residential analysis work, in association with the residential valuation process, is neighborhood specific. Neighborhoods are visually inspected to verify delineations based on observable aspects of homogeneity. Neighborhood delineation is periodically reviewed to determine if further neighborhood specification is warranted. Whereas neighborhoods involve similar properties in the same location, in some instances it may be appropriate to establish a neighborhood group composed of similar neighborhoods in similar, but different locations to take advantage of a larger pool of market data. In other cases, such as for unusual or unique properties, e.g. log homes, super luxury homes, etc. the concept of neighborhood must be uncoupled from geography to include similar properties found within a

much larger physical area. Generally, however, sales ratio analysis is performed on the neighborhood level.

Highest and Best Use Analysis

The highest and best use of property is the most reasonable and probable use that supports the highest present value as of the date of the appraisal. The highest and best use must be physically possible, legally permissible, financially feasible, and productive to its maximum. The highest and best use of residential property is generally its current use. This is due in part to the fact that residential development, in many areas, through use of deed restrictions and zoning, precludes other land uses. Residential valuation undertakes reassessment of highest and best use in transition areas and areas of mixed residential and commercial use. In transition areas with ongoing gentrification, the appraiser reviews the existing residential property use and makes a determination regarding highest and best use. Once the conclusion is made that the highest and best use remains residential, further highest and best use analysis is done to decide the type of residential use on a neighborhood basis. As an example, it may be determined in a transition area that older, non-remodeled homes are not the most productive or profitable use, and the highest and best use of such property is to demolish the old homes and construct new dwellings. In areas of mixed residential and commercial use, the appraiser reviews properties on a periodic basis to determine if changes in the real estate market require reassignment of the highest and best use of a select category of properties.

VALUATION AND STATISTICAL ANALYSIS (Model Calibration)

Cost Schedules

Cost schedules utilized are reviewed and adjusted periodically in order to consistently reflect market costs or any changing economic trends.

Possible adjustments for factors that may inhibit value are considered as adjustments and are applied where appropriate. Examples may include cracked slab, termite damage, repairs needed, etc.

The District considers all three approaches to value and recognizes the cost approach as an acceptable approach. Generally, for residential property the district considers the market approach a more viable and accurate indicator due to it's being more sensitive to economic, social, and physical characteristics of a given property, i.e. *market forces*. Hence market data is incorporated into the cost approach through the process of applying neighborhood adjustments to cost schedules, producing what is known as a *market-calibrated cost approach*.

Income Models

The income approach to value may be useful to those real properties that are typically viewed as “income producing” when sufficient income data is available and where comparable sales are not present. In the current residential market, the income approach is not generally used except for consideration of *income multipliers* in comparison of duplexes, rent houses, etc. An income multiplier is simply the relationship of monthly rent to value. For example, a property that sells for $80,000 and is rented for $1,000 per month has a Gross Monthly Rent Multiplier (GMRM) of 80 ($80,000 ÷ $1,000).

Sales Information

A sales file for the storage of sales data for vacant and improved properties is a key embedded feature of the CAMA software system. Residential improved and vacant sales are collected from a variety of sources, including: district survey letters sent to buyers and sellers, field discovery, protest hearings, Board of Realtor’s MLS and other sales vendors, Comptroller’s Property Tax Division data, builders, realtors, and brokers. A system of type, source, validity and verification codes has been established to define salient facts related to a property’s purchase or transfer and to help determine relevant market sale price information. The effect of time as an influence on price can be considered by paired sales analysis and applied in the ratio study to the sales as indicated within each neighborhood area. Neighborhood sales reports are generated as an analytical tool for the appraisers in the development and estimation of market price ranges and property component value estimates. Abstraction and allocation of property components based on sales of similar property is an important analytical tool to interpret market sales under the cost and market approaches to value. These analytical tools help determine and estimate the effects of change, with regard to price, as indicated by sale prices for similar property within the current market.

Multiple sales of the same property are considered and analyzed for any indication of price change attributed to a time change or influence and monthly time adjustments are developed. Property characteristics, financing, and conditions of sale may be compared for each property sold in the pairing of property to isolate only the time factor as an influence on price.

Statistical Analysis

The residential appraisers and supervisors perform statistical analysis annually to evaluate whether values are equitable and consistent with the market. Ratio studies are conducted on residential neighborhoods in the district to judge the two primary aspects of mass appraisal accuracy--level and uniformity of value. Appraisal statistics of central tendency and dispersion generated from sales ratios are available for each neighborhood and are summarized by year. These summary statistics including, but not limited to, the weighted mean, median, standard deviation, coefficient of variation, and coefficient of dispersion provide the appraisers a tool by which to determine both the level and uniformity of appraised value on a neighborhood basis. The level of appraised values is determined by the weighted mean for individual properties within a neighborhood, and a comparison of neighborhood weighted means reflect the general level of appraised value between comparable neighborhoods. Review of the standard deviation, coefficient of variation, and coefficient of dispersion discerns appraisal uniformity within and between neighborhoods.

The appraisers and supervisors, through the sales ratio analysis process, review neighborhoods at least annually. The first phase involves neighborhood ratio studies that compare the recent sales prices of neighborhood properties to the appraised values of these sold properties. This set of ratio studies affords the appraiser an excellent means of judging the present level of appraised value and uniformity of the sales. Based on the sales ratio statistics and designated parameters for a valuation update, a preliminary recommendation is made as to whether the value level in a neighborhood needs to be updated for the current reappraisal or in an upcoming reappraisal, or whether the level of appraised value is acceptable. The residential appraisers and supervisors perform statistical analysis at least annually to evaluate whether estimated values are equitable and consistent with the market.

Market Adjustment or Trending Factors

Neighborhood or market adjustment factors are developed from appraisal statistics provided from ratio studies and are used to ensure that estimated values are consistent with the market. The district's primary approach to the valuation of residential properties uses a hybrid cost-sales comparison approach, or *market-calibrated cost approach*. This type of approach accounts for neighborhood market influences not specified in the base building class cost tables.

The following equation denotes the hybrid model used:

$$MV = LV + ((RCNLD) \times MA$$

Whereas the market value (MV) equals land value (LV) plus the replacement cost new (RCN) less depreciation (D) times the market adjustment (MA). As the cost approach separately estimates both land and building values and uses depreciated replacement costs, which reflect

only the supply side of the market, it is expected that adjustments to the cost values are needed to bring the level of appraisal to an acceptable standard. Therefore, market adjustments are applied uniformly by building class or by neighborhood to insure equitable and accurate market values within these market areas.

If a neighborhood is to be updated, the appraiser uses a sale ratio that compares recent sales prices of properties within a delineated neighborhood by building class with the properties actual cost value. The calculated ratio derived from the sum of the sold properties' cost value divided by the sum of the sales prices by building class indicates each neighborhood's level of value based on the unadjusted cost value for the sold properties within that building class range. A common market adjustment for that building class is then calculated to appraise the sold properties within that neighborhood & class at 100% of market value. The calculated factor is then applied to both the sold and unsold properties within that neighborhood to insure equitable and accurate market values. This market adjustment factor is needed to trend the values obtained through the cost approach closer to the actual market evidenced by recent sales prices within a given neighborhood. The sales used to determine the market adjustment will reflect the market influences and conditions for either the entire neighborhood or for only the specified class(es) within a neighborhood, depending on the data, thus producing more representative and supportable values. The market adjustment is applied uniformly to all subject properties within the neighborhood. Once the market adjustment factor(s) is applied for a given neighborhood, the appraiser reviews the final neighborhood's ratio. This value review process may occur in the office or field if needed. GIS, aerial photography, digital photography and other resources are used during the neighborhood value review process.

Property Characteristics that affect Property Values

Physical characteristics such as size, condition, quality of construction, detail and property amenities are determined during inspections. Each of these characteristics can affect property values, so accuracy and consistency are essential. Each property is measured by inspection or by aerial photography to ensure accurate measurements. Generally, physical inspection is required to determine the condition and extent of physical deterioration. Excess deferred maintenance or above average maintenance should be noted. Aside from physical deterioration, any functional or economic obsolescence should also be considered. Determining the quality of construction is important to ensure that proper statistical analysis is completed. Detail and property amenities should be noted and analyzed to see what affect, if any, they have on property values.

Special Appraisal Provisions

Appraisal of Resident Homesteads

Article VIII, Sec. 1 (i) of the Texas constitution allows the legislature to limit the annual percentage increase in the appraised value of residence homestead to 10% under certain conditions. This limitation is commonly referred to as a Homestead "Capped Value". Sec.23.23 of the Tax Code implements the cap on increases in value. The value cap begins in the second year the property qualifies for a residential homestead exemption. The assessed value of a qualified residence homestead will be the LESSER of:

- the market value; or
- the preceding year's appraised value;
  PLUS 10 percent for each year since the property was re-appraised;
  PLUS the value of any improvements added since the last re-appraisal.

Since Grayson Central Appraisal District is on an annual (continual) reappraisal cycle, the appraised value of capped properties must be recomputed annually. The appraised value of a capped homestead increases 10% annually until the appraised value is equal to the market value. If a capped homestead property sells, the cap automatically expires as of January 1st of the year following the sale of the property and the property is appraised at its market value.

Residential Inventory

Sec. 23.12 of the Property Tax Code provides the definition of market value for inventory. Inventory includes residential real property that has never been occupied as a residence and is held for sale in the ordinary course of business, if the property is unoccupied, is not leased or rented, and produces no revenue.

Residential inventory is appraised at market value. The market value of residential inventory is the price at which it would sell as a unit to a purchaser who would continue the business. The residential appraisal staff applies the same generally accepted appraisal techniques to determine the market value of residential real property inventory. Due to the rare incidence of actual market transactions of groups of residential inventory, valuation typically utilizes *Discounted Cash Flow (DCF)* analysis wherein the inventory is treated as a revenue stream with each year's projected cash flow being discounted to present value. The sum of the annual discounted cash flows represents combined value of the inventory components.

Agricultural Appraisal

The Texas Constitution permits certain kinds of agricultural land to be appraised, for tax purposes, at a productivity value rather than market value (not an exemption, per se). This value is based solely on the land's capacity to produce agricultural products. Property qualifying for agricultural appraisal will have a substantial reduction in current taxes, compared to what taxes would otherwise be based on the market value for the property. Procedures for implementing this appraisal are based on the guidelines published in the Manual for the Appraisal of Agricultural Land, printed April 1990.

APPLICATION PROCESS

It is required that an application be made before land is considered for agricultural valuation. The deadline for filing a timely application is before May 1st. Late agricultural valuation applications may be filed up to the time the appraisal roll is certified, however a penalty is imposed for late filing. After an application is filed, the property is inspected to determine its qualification.

Three criteria must be met when determining qualification.

Use - Land must be currently devoted principally to agricultural use.

Degree of Intensity - The agricultural use must be to the degree of intensity generally accepted in the area.

History of Use - The land must have been devoted principally to agricultural use for five (5) of the preceding seven (7) years. Land located within an incorporated city or town must have been devoted principally to agricultural use continuously for the preceding five (5) years.

When the land's use qualifications have been reviewed, one of three actions will be taken.

Application is Approved - Property owner is notified of the decision and the productivity land appraised value.

Application is Denied – Property owner is notified by certified mail and given 30 days to appeal the decision to the Appraisal Review Board.

Disapprove the Application and Request More Information - The application is disapproved and the applicant is allowed thirty (30) days to provide additional information, otherwise the application is denied. When requested information is provided, it is added to data already collected to arrive at a final decision.

INDIVIDUAL VALUE REVIEW PROCEDURES

Field Review

The appraiser identifies individual properties in need of field review through examples such as: sales ratio analysis, ARB hearings, building permits, property owner's requests, Eagle View etc. Sold properties are reviewed on a regular basis to check for accuracy of data characteristics.

As the district's parcel count has increased through new home construction, and existing home remodeling, the appraisers are required to perform the field activity associated with each. Increased sales activity can result in a more substantial field effort on the part of the appraisers to review and resolve sales outliers. Additionally, the appraiser frequently field reviews subjective data items such as quality of construction, condition, and physical, functional and economic obsolescence, factors contributing significantly to the market value of the property.

Office Review

Once field review is completed, the supervisor conducts a routine valuation review of all properties as outlined in the discussion of ratio studies and market analysis. Previous values resulting from a protest hearing, informal negotiation, or litigation are individually reviewed to determine if the value remains appropriate for the current year.

Once the supervisor is satisfied with the level and uniformity of value for each area, the estimates of value are prepared for a notice of proposed value.

PERFORMANCE TESTS

Sales Ratio Studies

The primary analytical tool used by the appraiser and/or appraisal supervisor to measure and improve performance is the ratio study. The district ensures that the appraised values produced meet the standards of accuracy in several ways. Overall sales ratios are generated for each ISD to allow the appraiser to review general market trends within their area of responsibility, and provide an indication of market appreciation over a specified period of time. The neighborhood descriptive statistic is reviewed for each neighborhood being updated for the current tax year.

Management Review Process

Once the proposed value estimates are finalized, the appraiser and/or appraisal supervisor reviews the sales ratios by neighborhood and presents pertinent valuation data, such as weighted sales ratio and pricing trends to the Appraisal Director and the Chief Appraiser for final

review and approval. This review includes comparison of level of value between related neighborhoods within and across jurisdiction lines. The primary objective of this review is to ensure that the proposed values have met preset appraisal guidelines appropriate for the tax year in question.

RESIDENTIAL REAPPRAISAL PLAN OVERVIEW

The Residential Reappraisal Plan consists of two primary tasks – Fixed Tasks and Variable Tasks. Fixed tasks are those tasks required to be done on an annual basis and are associated with working building permits received on a monthly basis from the fourteen cities within the Grayson Central Appraisal District's jurisdictional boundaries that issue and track building permits. Variable tasks are those tasks associated with the annual reappraisal effort.

Fixed Tasks

Building permits are received monthly from several cities and are then updated to the applicable account so a physical inspection and/or an office review can take place for the current appraisal year. All significant value related building permits issued from January 1st through December 31 associated with an account will be inspected and reappraised for the applicable appraisal year. Also, included in these fixed task projections are those accounts that were partially complete in the previous year. Any property that has new construction activity as of January 1 and was not 100% complete will be noted for reappraisal the next appraisal year. This also includes those properties whereby a building permit was issued prior to January 1 but no new construction activity had taken place as of January 1 of the current appraisal year. Property data attribute information is verified and corrected based on on-site inspections as well as office review using digital photographs and aerial photography. The following data attribute information is captured on each appraisal record: land value, State Code, building class, condition, actual year built, effective year built, living area, additional improvements, total living area, garage, exterior walls, porches, decks, and other attached improvements, and site improvements including but not limited to fence, sprinklers, landscaping, pool, etc.

Variable Tasks

Variable tasks are those tasks associated with the annual neighborhood reappraisal effort. Neighborhoods targeted for reappraisal are identified through annual in-house Neighborhood Ratio Studies conducted throughout the year, but concentrated in the spring just prior to making necessary neighborhood adjustments and sending out appraisal notices. Also, included in the annual reappraisal effort are:

- New Subdivision accounts

- Account Review. Account review are those accounts where an inspection and/or office review was undertaken to correct data on an account that wasn't a result of a building permit being issued or wasn't a part of the annual neighborhood reappraisal effort. Account Reviews are typically identified from 3rd party inquiries, the sales qualification process, re-inspections initiated during the Appraisal Review Board process and/or a general review of accounts in non-reappraisal neighborhoods.

Commercial Valuation Process

INTRODUCTION

Scope of Responsibility

The Commercial (real property) staff appraiser(s) and contract appraisal firm(s) are responsible for the valuation of all commercial real property, including land and improvements, located within the boundaries of Grayson Central Appraisal District's jurisdiction. Commercial real property types generally include multi-family (greater than 4 units), office, retail, warehouse/manufacturing and various other categories of business-related facilities. The staff appraiser(s) and contract appraisal firm(s) may or may not value all commercial land parcels. In many cases, land valuations are determined by GCAD's land appraiser. Capitol Appraisal Group, Inc. does not perform land valuations; this is done by the land appraiser. In general, the commercial appraisal staff and contract appraisal firm are responsible for establishing market value on any real property for which the highest and best use is determined to be non-residential or agricultural.

Commercial appraisal assignments are delineated from residential assignments on the basis of state use code guidelines established by the State Comptroller. Generally, the commercial staff values the following state property codes:

B2	Apartments	134 parcels
C1C	Commercial & Industrial land	1,186 parcels
F1-F2	Improved Commercial & Industrial	4,194 parcels

Residential properties located in areas of transition to commercial, or interim-use properties, are

also valued by the commercial staff or with assistance from the residential staff.

Appraisal Resources

Personnel - - The real property Commercial Appraisal function is currently performed by two (2) full-time staff members, assisted as needed and for cross-training purposes by various residential and BPP staff members, also assisted and overseen by the Deputy Chief Appraiser and Chief Appraiser. Litigation and arbitration coordination for both commercial and residential is handled by the Deputy Chief Appraiser and Chief Appraiser. Various aspects of the appraisal review and myriad other activities related to property lawsuits filed against GCAD are assigned to other appropriate staff members.

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

PRELIMINARY ANALYSIS & DATA COLLECTION

Prior to beginning of the valuation activities for an appraisal year, the commercial staff completes a thorough review of the results of the preceding year. Goals and objectives are determined and a plan of action is established. Budget, calendar issues and resource availability are all considered. Appraisal activities must be coordinated to avoid conflicts and ensure availability of personnel. Appraisal resources, including staff and system needs are evaluated; Appraisal Review Board activity and value changes in the informal appeals process are analyzed, as well as any weaknesses revealed in the Property Value Study process. A preliminary internal ratio study is produced to identify any property category or geographic area that may require more research or analysis.

Grayson Central Appraisal District administration and personnel interact and exchange information with other assessment officials through professional trade organizations including the International Association of Assessing Officers, Texas Association of Appraisal Districts and the Texas Association of Assessing Officers.

Area Analysis

Data on regional economic forces such as demographic patterns, regional locational factors, employment and income patterns, general trends in real property prices and rents, interest rate

trends, availability of vacant land, and construction trends and costs are collected from private vendors and public sources. Required continuing education is provided in the form of courses offered by the International Association of Assessing Officers (IAAO), Texas Association of Assessing Officers (TAAO), Texas Association of Appraisal Districts (TAAD) and Texas Department of Licensing and Regulation (TDLR).

Neighborhood Analysis

A commercial neighborhood, submarket, or economic area is generally considered to be comprised of the land area and commercially classed improved properties located within the boundaries of a defined geographic area. However, because of the nature of the GCAD economic area, consisting of two similar adjoining medium-sized towns surrounded by a generally rural county with several much smaller towns, the commercial market and available market data for analysis makes geographic delineation of secondary significance. Instead, commercial property neighborhoods are classified by property *use*, with geographic similarities within the district accorded secondary weight. Hence, comparable sales analysis for any given commercial property type are gathered from throughout the district, and then sorted by location and other characteristics that affect value.

Neighborhood analysis involves the examination of how physical, economic, governmental and social forces and other influences affect property values. The effects of these forces are also used to identify, classify, and organize comparable properties into smaller, manageable subsets of the universe of properties known as market areas or sub-neighborhoods. To the extent possible, properties in a *neighborhood* that has been defined by *use* are appraised in comparison to others that are most similar in locational features as well.

Highest and Best Use Analysis

The highest and best use is the most reasonable and probable use that generates the highest present value of the real estate, as of the date of valuation. The highest and best use of any given property must be physically possible, legally permissible, financially feasible, and maximally productive. It is that use that will generate the highest net return to the property over a period of time. For vacant tracts of land, the highest and best use is considered speculative but market-oriented, and is based on the surrounding land uses in a competing land market area. The appraiser must consider the most probable use that is permitted under local administrative regulations and ordinances. While its current zoning regulation may restrict a property's use, the appraiser may also consider the probability that the zoning could be changed, based on activity in the area and a city's propensity for approving zoning change requests.

For improved properties, highest and best use is evaluated as currently improved and as if the site were still vacant. In many instances, the property's current use is the same as its highest

and best use. However, the appraiser may determine that the existing improvements have a transitional use, interim use, nonconforming use, multiple uses, speculative use, excess land, or a different optimum use, if the site were vacant. Improved properties reflect a wide variety of highest and best uses which include, but are not limited to: office, retail, apartment, warehouse, light industrial, special purpose, or interim uses. Proper highest and best use analysis ensures that the most accurate estimate of market value can be derived.

"Value in use" represents the value of a property to a specific user for a specific purpose. An example of value in use is agricultural or productivity value. The Texas Property Tax Code has specific provisions for appraisal of certain types of property that require a value based on a specific use. This is significantly different than market value, which approximates market price under the following assumptions: (i) no coercion of undue influence over the buyer or seller in an attempt to force the purchase or sale, (ii) well-informed buyers and sellers acting in their own best interests, (iii) a reasonable time for the transaction to take place, and (iv) payment in cash or its equivalent.

Market Analysis

A market analysis relates directly to economic market forces affecting supply and demand that affect a group of similar or "like" properties. This study involves the relationships between social, economic, environmental, governmental, and site conditions. Current market data is gathered and analyzed including sales of commercial properties, new construction and other permit activity, new leases, lease rates, absorption rates, vacancies, typical property expenses (inclusive of replacement reserves, if recognized by the market), expense ratio trends, and capitalization rate indicators. This data is used to determine market ranges in price, operating costs and investment return expectations.

Property Characteristics that affect Property Values

Physical characteristics such as size, condition, quality of construction, detail and property amenities are determined during inspections. Each of these characteristics can affect property values, so accuracy and consistency are essential. Each property is measured by inspection or by aerial photography to ensure accurate measurements. Generally, physical inspection is required to determine the condition and extent of physical deterioration. Excess deferred maintenance or above average maintenance should be noted. Aside from physical deterioration, any functional or economic obsolescence should also be considered. Determining the quality of construction is important to ensure that proper statistical analysis is completed. Detail and property amenities should be noted and analyzed to see what affect, if any, they have on property values.

DATA COLLECTION / VALIDATION

Data Collection Manual

The primary manual for classification of commercial construction and use characteristics is the Marshall and Swift Valuation Service manual, a nationally recognized cost service publication. The Marshall structural classification system is used in conjunction with the district's commercial neighborhood code system which is based on ***use***. This combination takes into account the two major indications of value – physical characteristics and economic influences as evidenced by adaptability to actual use.

Sources of Data

Construction data is primarily gathered from building permits, mechanic's liens, septic permits, etc. With respect to commercial sales data, Grayson CAD is responsible for keeping current ownership records, hence all deed records are reviewed and a computer-generated questionnaire is mailed to both parties in the transaction (Grantor and Grantee). If a questionnaire is answered and returned, the documented responses are scanned and recorded on the account in the CAMA software system. If no information is provided, verification may then be attempted from other sources, including the principals themselves, brokers, appraisers or others active in the real estate market. Deeds of trust may also be helpful in providing some indication of the sales price. Ultimately, much of the market data collected and utilized, particularly income and expense data, is gathered in the appeals process from owners and agents seeking lower valuations. Such information includes closing statements which are the most reliable and preferred method of sales verification.

VALUATION ANALYSIS (Model Calibration)

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

Cost Schedules

The cost approach to value is applied to all improved real property utilizing the comparative unit method. This methodology involves the utilization of national cost data reporting services as well as actual cost information on comparable properties whenever possible. Cost models are

typically developed based on the Marshall Swift Valuation Service, but may alternately be developed directly from local market data. Cost models include the derivation of replacement cost new (RCN) of all improvements. These include comparative base rates, per unit adjustments and lump sum adjustments. This approach also employs the sales comparison approach in the valuation of the underlying land value. Time and location modifiers are necessary to adjust cost data to reflect conditions in a specific market and changes in costs over a period of time. Because a national cost service is used as a basis for the cost models, locational modifiers are necessary to adjust these base costs specifically for Grayson County. These modifiers are provided by the national cost services for the region in general, but must be localized to the greatest extent possible based on available information.

Depreciation schedules are developed based on what is typical for each property type at that specific age. Depreciation schedules have been implemented for what is typical of each major class of commercial property by economic life categories. Schedules have been developed for improvements with 15, 20, 30, 40, 50 and 60 year expected life. These schedules are then tested to ensure they are reflective of current market conditions. The actual and effective ages of improvements are noted in the CAMA database. Effective age estimates are based on the utility of the improvements relative to where the improvement lies on the scale of its total economic life and its competitive position in the marketplace.

Market adjustment factors such as external and/or functional obsolescence can be applied if warranted. A depreciation calculation override can be used if the condition or effective age of a property varies from the norm by appropriately noting the physical condition and functional utility ratings on the property data characteristics. These adjustments are typically applied to a specific property type or location and can be developed via ratio studies or other market analyses. Accuracy in the development of the cost schedules, condition ratings and depreciation schedules will usually minimize the necessity of this type of an adjustment factor.

Sales Comparison Approach Models

Although all three of the approaches to value are based on market data, the Sales Comparison Approach is most frequently referred to as the Market Approach. This approach is utilized for estimating land value and also in comparing sales of similarly improved properties to parcels on the appraisal roll. As previously discussed in the Data Collection / Validation section of this report, pertinent data from actual sales of properties, both vacant and improved, is pursued throughout the year in order to obtain relevant information which can be used in all aspects of valuation. Sales of similarly improved properties can also provide a basis for the depreciation schedules in the Cost Approach, rates and multipliers used in the Income Approach, and as a direct comparison in the Sales Comparison Approach. Improved sales are also used in ratio studies, which afford the appraiser an excellent means of judging the present level and uniformity of the appraised values.

The formula for the sales comparison approach is **Market Value = Sale Price of Comparable Properties plus or minus adjustments** (for differences between the comparables and the subject). In this model, market value is a total amount without a separation for improvement and land values. The sales comparison approach requires an adequate amount of sales data to be accurate. Various comparison units may be used depending on the property type and use. The most common comparison units are sales price per square foot and sales price per unit; however, specialized properties may be compared by other units or a combination of units. The commercial appraiser(s) keeps a manual file of market data by property type and also enters sales prices into the individual accounts in the CAMA software so that it may be retrieved individually or in a sales report by "neighborhood" (property type) code.

Income Approach Model

The income approach to value is applied to those real properties which are typically viewed by market participants as "income producing", and for which the income methodology is considered a leading value indicator. The basic formula for the income approach is **Market Value = Net Operating Income Divided by Overall Cap Rate.** This is also known as "Direct Capitalization", which is a generally accepted appraisal technique used to convert one year's stabilized income into an indication of market value.

The first step in the income approach pertains to the estimation of market rent on a per unit basis. This is derived primarily from actual rent data furnished by property owners and from local market study publications. This per unit rental rate multiplied by the number of units results in the estimate of potential gross rent.

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

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

Allowable expenses and expense ratio estimates are based on a study of the local market, with the assumption of prudent management. An allowance for non-recoverable expenses such as

leasing costs and tenant improvements are included in the expenses. A non-recoverable expense represents costs that the owner pays to lease rental space. Different expense ratios are developed for different types of commercial property based on use. For instance, retail properties are most frequently leased on a triple-net basis, whereby the tenant is responsible for his pro-rata share of taxes, insurance and common area maintenance. In comparison, a general office building is most often leased on a base year expense stop. This lease type stipulates that the owner is responsible for all expenses incurred during the first year of the lease. However, any amount in excess of the total per unit expenditure in the first year is the responsibility of the tenant. Under this scenario, if the total operating expense in year one (1) equates to $8.00 per square foot, any increase in expense over $8.00 per square foot throughout the remainder of the lease term would be the responsibility of the tenant. As a result, expense ratios are implemented based on the type of commercial property.

Another form of allowable expense is the replacement of short-lived items (such as roof or floor coverings, air conditioning or major mechanical equipment or appliances) requiring expenditures of large lump sums. When these capital expenditures are analyzed for consistency and adjusted, they may be applied on an annualized basis as stabilized expenses. When performed according to local market practices by commercial property type, these expenses when annualized are known as replacement reserves. Subtracting the allowable expenses (inclusive of non-recoverable expenses and replacement reserves) from the effective gross income yields an estimate of net operating income.

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

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

Rent loss concessions are made on specific properties with vacancy problems. A rent loss concession accounts for the impact of lost rental income while the building is moving toward stabilized occupancy. The rent loss is calculated by multiplying the rental rate by the percent difference of the property's stabilized occupancy and its actual occupancy. Build out allowances (for first generation space or retrofit/second generation space as appropriate) and leasing expenses are added to the rent loss estimate. The total adjusted loss from these real property operations is discounted using an acceptable risk rate. The discounted value (inclusive of rent loss due to extraordinary vacancy, build out allowances and leasing commissions) becomes the rent loss concession and is deducted from the value indication of the property at stabilized occupancy. A variation of this technique allows that for every year that the property's actual occupancy is less than stabilized occupancy a rent loss deduction may be estimated.

Final Valuation Summary and Reconciliation

Based on the market data analysis and the methodology described in the cost, income and sales approaches, the various models are calibrated and values are developed for each commercial property. The cost approach mass appraisal model is applied to most improved properties. Additional valuation indicators may be developed and applied using the sales comparison and income approaches, depending on the property type and availability of data. The total value, resulting from the execution of each appropriate approach is estimated based on reconciling these indications of value considering the weight of the market information available for evaluation and analysis in these approaches to value.

Statistical and Capitalization Analysis

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

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

Potential gross rent estimates, occupancy levels, secondary income, allowable expenses

(inclusive of non-recoverable and replacement reserves), net operating income and capitalization rate and multipliers are continuously reviewed. Income model estimates and conclusions are compared to actual information obtained on individual commercial and industrial income properties during the appeal and protest hearings process, as well as with information received from published sources and area property managers and owners.

INDIVIDUAL VALUE REVIEW PROCEDURES

Field Review

The date of last inspection, extent of that inspection, and the GCAD appraiser responsible are listed in the CAMA system. If a property owner disputes the District's records concerning this data in a protest hearing, CAMA may be altered based on the credibility of the evidence provided. Normally, a new field inspection is then required to verify this information for the current or for the next year's valuation. In addition, if a building permit is issued for a particular property indicating a change in characteristics, that property is added to a work file for review and field inspection.

The commercial appraiser(s) is somewhat limited in the time available to field review all commercial properties of a specific use type. However, a major effort is made to field review as many properties as possible or economic areas experiencing physical or economic changes, or wide variations in sale prices. As land values are updated, improvements must be evaluated by field review to estimate whether the new land value causes overall value to be overstated, thereby indicating functional or economic obsolescence for the improvements.

Office Review

Office reviews are completed on properties subject to field inspections and are performed in compliance with the guidelines required by the existing classification system. Office reviews are typically limited by the available market data presented for final value analysis. The appraisers may utilize Eagle View as a means to verify building characteristics and location without a field inspection. These reviews summarize the pertinent data of each property as well as comparing the previous value to the proposed value conclusions of the various approaches to value. Previous values resulting from protest hearings are individually reviewed to determine if the value remains appropriate for the current year based on market conditions. Once the appraiser and supervisor are satisfied with the level and uniformity of value the estimates of value are prepared to send a notice of appraised value.

PERFORMANCE TESTS

Sales Ratio Studies

The primary tool to measure appraisal performance is a ratio study. A ratio study compares appraised values to market values. Sales ratio studies are an integral part of estimating equitable and accurate market values, and ultimately property assessments for the taxing jurisdictions. The primary uses of sale ratio studies include the determination of a need for general reappraisal; prioritizing selected groups of property types for reappraisal; identification of potential problems with appraisal procedures; assist in market analyses; and, to calibrate models used to estimate appraised values during valuation or reappraisal cycles. However, these studies cannot be used to judge the accuracy of an individual property's appraised value. Grayson Appraisal Review Board may make individual value adjustments based on unequal appraisal (ratio) protest evidence submitted on a case-by-case basis during the hearing process.

Grayson CAD has adopted the policies of the IAAO STANDARD ON RATIO STUDIES, circa July 1999 regarding its ratio study standards and practices. Ratio studies generally have six basic steps: (1) determination of the purpose and objectives, (2) data collection and preparation, (3) comparing appraisal and market data, (4) stratification, (5) statistical analysis, and (6) evaluation and application of the results. On an annual basis, appraisers and supervisors analyze the results of the previous years Property Value Study that is conducted by the Property Tax Division of the State Comptroller's Office.

COMMERCIAL REAPPRAISAL PLAN OVERVIEW

The Commercial Reappraisal Plan consists of two primary tasks – Fixed Tasks and Variable Tasks. Fixed tasks are those tasks required to be done on an annual basis and are associated with working building permits received on a monthly basis from the cities within the Grayson Central Appraisal District's jurisdictional boundaries that issue and track building permits. Variable tasks are those tasks associated with the annual reappraisal effort.

Fixed Tasks

Building permits are received monthly from several cities and are then updated to the applicable account so a physical inspection and/or an office review can take place for the current appraisal year. All significant value related building permits issued from January 1 through December 31 associated with an account will be inspected and reappraised for the appraisal year. Also, included in these fixed task projections for those accounts that were partially complete as of January 1. Any property that has new construction activity as of January 1 and was not 100% complete will be noted for reappraisal the next appraisal year. This also includes those

properties whereby a building permit was issued prior to January 1 but no new construction activity had taken place as of January 1 of the current appraisal year. Property data attribute information is verified and corrected based on on-site inspections as well as office review using digital photographs and aerial photography. The following data attribute information is captured on each appraisal record: land value, State Code, building class, condition, actual year built, effective year built, gross building area, net leasable area, number of stories, story height, overhead doors, percent finish-out & quality, exterior walls, roof type, average unit size, and special features such as refrigerated area, clean room rating, etc. In addition to the physical characteristics noted above, income related data is collected when possible, including but not limited to rental rates, occupancy, expenses, deferred maintenance costs, etc.

Variable Tasks

Variable tasks are those tasks associated with the annual commercial reappraisal effort. Areas noted for reappraisal are identified by level of activity, and sales ratios for vacant land and/or improved properties segregated by type.

Business Personal Property Valuation Process

INTRODUCTION

Appraisal Responsibility

The Business Personal Property Division (BPP) of Grayson CAD is responsible for developing fair and uniform market values for business personal property located within the district. There are six different account types appraised: (1) standard business personal property, (2) leased asset/special property at multiple locations, (3) vehicles and commercial aircraft, (4) special inventory, (5) State Code G mineral accounts (which are recognized as real property but assigned to the business personal property department staff as the liaison with our mineral accounts appraisal contractor), and (6) State Code J utility accounts. These accounts consist of approximately 23,750 properties divided among State Codes G, J, L, and M.

Appraisal Resources

Personnel – The BPP staff consists of three (3) appraisers, each of the three having an assigned area. The supervisor also has the responsibility of delegating other specialty categories such as aircraft to one of the other appraisers. The BPP staff is assisted on a seasonal basis, particularly during rendition time from February through May, by a three member data entry team which also has the full-time assignment of entering monthly sales reports on special inventory tax (SIT) accounts.

Contractors – Grayson CAD has contracted with Capitol Appraisal Group, Inc. to identify and appraise all taxable oil & gas (mineral) assets, utilities and various large industrial real and BPP accounts.

Data – A common set of data characteristics for each account in the district are collected by appraisers in the field, by phone, and other pertinent sources and are entered into the GCAD CAMA software system by both the appraisal and clerical staff. These assigned property characteristics drive the system to generate a preliminary account value.

VALUATION APPROACH (Model Specification)

SIC Code Analysis

Four digit numeric codes, called Standard Industrial Classification (SIC) codes, are used as the basis for classification and valuation of business personal property accounts. SIC code identification and delineation is the cornerstone of the business personal property valuation system in the district. Analysis work done in association with the valuation process is SIC code specific. SIC codes are delineated based on observable aspects of homogeneity. SIC code delineation is periodically reviewed to determine if further delineation is necessary.

Highest and Best Use Analysis

The highest and best use of property is the most reasonable and probable use that supports the highest present value as of the date of the appraisal. The highest and best use must be physically possible, legally permissible, financially feasible, and maximally productive. The highest and best use of business personal property is normally its current use.

DATA COLLECTION / VALIDATION

Data Collection Procedures

Business personal property data collection procedures are published and distributed to all appraisers involved in the appraisal and valuation of personal property. The appraisal procedures are reviewed and revised to meet the changing requirements of field data collection. Business Personal Property appraisers inspect every business on a two-year cycle to observe equipment and inventory and confirm that the district's record of building area where equipment or inventory is stored is correct. Businesses that cannot be inspected are thus appraised by *density schedules* based on building area.

Sources of Data

Standard Business Personal Property Account

GCAD's property characteristic data was originally received from Grayson County and the various city/school district records between 1981 and 1982, and where absent, collected through a massive field data collection effort coordinated by the district over a period of time. The primary source of asset information is the annual rendition process, wherein most property owners fulfill the legislative mandate for annual reports, or renditions. District appraisers also collect new data via annual field inspections. This process results in the discovery of new businesses not revealed through other sources. Various discovery publications such as the Texas DOT commercially registered vehicle listing, sales tax permits listings, and local occupancy permits are also used for discovery purposes. Tax assessors, city and local newspapers, business publications, business owners, advertisements, and district residents provide discovery information and other useful facts related to discovery and valuation.

Leased Asset/Special Property at Multiple Locations Account

The primary source of discovery for these accounts is owner renditions submitted in either hard copy or electronic format. Field inspections and the renditions of lessees are sometimes used to supplement this information.

Special Inventory

In coordination with the Grayson County Tax Assessor/Collector, a copy of the monthly and annual declaration forms for boat, heavy equipment, manufactured housing, and motor vehicle

dealers (as defined by Section 23 of the Texas Property Tax Code) are maintained at GCAD and used for discovery and valuation of special inventory accounts.

Utility, Pipeline and Mineral Accounts

Grayson CAD contracts for appraisal work on all utilities (state property code J) and Oil/Gas reserves with Capitol Appraisal Group, Inc. USPAP certification and reappraisal plan information on these properties are maintained at GCAD's office; the reappraisal plan is attached as Appendix B.

VALUATION AND STATISTICAL ANALYSIS (Model Calibration)

Cost Schedules

Cost data is analyzed from property owner renditions, Settlement and Waiver of Protest documentation, Appraisal Review Board (ARB) hearing evidence, Texas Comptroller schedules, and published guides. Schedules are reviewed as necessary to reflect changing market conditions and are typically presented on a cost per square foot (density) format.

Statistical Analysis

Summary statistics such as the median, weighted mean, and standard deviation provide appraisers analytical tools by which to determine both the level and uniformity of appraised value by SIC code. Review of standard deviation can distinguish appraisal uniformity within SIC codes.

Depreciation Schedule and Trending Factors:

Although all three approaches to value are considered, Grayson CAD's primary approach to the valuation of business personal property is the cost approach. The replacement cost new (RCN) is either developed from property owner reported historical cost or from a GCAD developed valuation model. The trending factors used by GCAD in the development of the depreciation schedule are based on published valuation guides. The "percent good" or "remaining economic life" depreciation factors published are considered to recognize the trend for changes in cost factors.

Depreciation schedules are reviewed annually and adjusted on an as needed basis. Any revisions are then adopted and their use is reflected in all of the calculations for that category of property. This mass appraisal schedule is used to ensure that market values are uniform and consistent.

Computer Assisted Personal Property Appraisal (CAPPA)

The two main objectives of the CAPPA valuation process are to: (1) analyze and adjust existing SIC models, and (2) develop new models for business classifications not previously integrated into the system. Models are created and refined using both actual original cost data and market data to derive a typical replacement cost new (RCN) per square foot for a specific category of assets. This is typically known as a *Density Schedule*. The RCN per square foot is depreciated by the estimated age using the depreciation table adopted for that category of property for the tax year.

Standard Business Personal Property Account

Density schedules are used in the general business personal property valuation program to estimate the value of new and/or existing accounts for which no property owner's rendition has been filed. The calculated current year value or the prior year's value is compared to the indicated density schedule value for reasonableness.

Vehicles

Value estimates for vehicles are often provided by a property owner's rendition which is compared to published guides (NADA). If the values are similar the appraiser will typically use the property owner's estimate. Otherwise, or if there is no rendered value, the guide value is given primary weight in the assigned value. GCAD also uses a service that identifies business vehicles located in the county for the discovery step.

Special Inventory

Valuation is based upon the annual declaration filed by the property owner indicating the previous year's Texas sales (used as the numerator) and divided by a factor of 12 (the denominator). This establishes a monthly basis consistent with the owner's tax payment requirements. In the absence of an annual declaration, similar businesses that have filed declarations are identified and compared, with appropriate adjustments, to the subject property to establish an estimated market value.

INDIVIDUAL VALUE REVIEW PROCEDURES

Office Review

The current system of hard copy renditions forces the BPP appraisers to manually "work" each account, thereby constituting a desk review. Accounts without a rendition are reviewed and appraised based on density schedule or other means of estimating value. As electronic

rendition filing becomes common, more elaborate and sophisticated programming will be necessary to “flag” accounts for review that meet or fail certain criteria.

PERFORMANCE TESTS

Ratio Studies

Each year the Property Tax Division of the State Comptroller’s Office conducts a Property Value Study (PVS). The PVS is a ratio study used to measure appraisal district performance. Results from the PVS play a part in school funding. Rather than a sales ratio study, the personal property PVS is a ratio study using state cost and depreciation schedules to develop comparative personal property values. These values are then compared to GCAD’s personal property values.

BUSINESS PERSONAL PROPERTY REAPPRAISAL PLAN OVERVIEW

The Business Personal Property Division Reappraisal Plan is made up of both fixed and variable tasks. The fixed tasks include setting up new business accounts, and the annual field reappraisal of Business Personal Property as well as deleting inactive accounts. Variable tasks are associated with vehicles/aircraft, special inventory accounts, leased equipment processing and rendition processing.

Fixed Tasks

Fixed tasks are used to record the BPP reappraisal / field confirmation effort. Due to the dynamic nature of Business Personal Property, constant effort is made to keep appraisal records accurate. GCAD’s geographic area is broken down into sectors that are assigned to the individual appraisers, with the exception of those industrial accounts (State Category L2) deemed to be sufficiently large and complex enough to warrant assignment with CAD’s contract appraisal firm(s). Businesses that are no longer in operation (as of January 1st) are deleted. Special attention and inspection detail is given to new accounts as well as those that have not rendered in the last year or more. Appraisers record information regarding individual pieces of equipment including computers, furniture & fixtures, inventory type, quality, and density, vehicles, leased equipment, consignment goods, size of sales or production area and storage areas, and any other miscellaneous information that might have a bearing on value. Data and photographs are entered into the CAMA system by the BPP appraisers with assistance from the data entry team. Data entry for accounts that are considered likely to render may be held back in order to “work” the account only once with both field data and rendition information. Similarly,

any field data not completed by the time renditions begin arriving may be matched up with the rendition for that account.

Variable Tasks

Variable tasks are those that offer planning flexibility from one year to the next. The most significant variable task is the rendition processing period. The BPP division expects to receive in excess of 5,000 renditions each year. Although rendition forms are mailed out as soon after January 1st as possible, businesses typically do not return them until near the April 15th deadline, and even then there is an automatic 30 day extension if requested, as well as provision for further conditional extension if the property owner demonstrates *good cause.* With appraisal notices due May 15th or as soon thereafter as possible, the time dilemma is obvious, requiring intense coordination between the data entry and appraisal functions. The Appraisal Staff will review the rendered data in conjunction with information collected in the field, incorporating the inventory and depreciated cost information into the appraisals. Larger accounts are given priority and parameters are developed for any account types wherein rendered values will be accepted for that year; e.g. small value, rendered prior year and current year with small change, rendition closely matches input from field work, etc. Minerals, utilities and various large industry accounts are handled by an outside contract appraisal company.

Exempt Property Process

There are a number of properties that qualify for exemption due to the use of the property. These properties can be real property or personal property. The valuation method will be the methodology that will produce the most reliable method of determining value.

X	Exempt Properties	7,129 Parcels

SPECIFIC GOALS FOR APPRAISAL, SUPPORT, AND RESOURCES

2023

Appraisal

Annual Reinspection (1/3 of County each year)

Update Mobile Home Cost Schedules

Review & update Basic Residential Depreciation Schedules

Consider & Incorporate any Findings of PVS

Work Cycle – Follow Market

Enhance field device usage for Residential

Support Services

Continue county wide agricultural-use Eagle View desk inspection project including re-application

Continue re-application process for special/absolute exemptions

Expand data verification monitors

Information Technology

Enhancements to Website;

2024

Appraisal

Annual Reinspection (1/3 of County each year)

Update Marshall/Swift Commercial Schedules

Consider & Implement Recommendations of Methods Assistance Program

Work Cycle – Follow Market

Support Services

Continue county wide agricultural-use Eagle View desk inspection project including re-application

Continue re-application process for special/absolute exemptions

Information Technology

Continue Website Enhancements.

LIMITING CONDITIONS

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

1. The appraisals are prepared exclusively for ad valorem tax purposes.

2. The property characteristic data upon which the appraisals are based is assumed to be correct. Exterior inspections of the property appraised are performed as staff resources and time allowed. Some interior inspections of property appraised are performed at the request of the property owner and required by the district for clarification purposes and to correct property descriptions.

3. Validation of sales transactions is attempted through questionnaires to buyer and seller, telephone survey and field review. In the absence of such confirmation, sales data obtained from vendors is considered reliable.

4. Appendix A has a list of staff providing significant assistance to the person signing this certification.

Certification Statement:

"I, Shawn Coker, Chief Appraiser for Grayson Central Appraisal District, solemnly swear that I have made or caused to be made a reappraisal plan for Grayson Central Appraisal District for the 2023/2024 tax years as required by law."

_ _____

Shawn Coker, RPA, CCA

Chief Appraiser/ Chief Administrator

Appendix A. Key Personnel in Reappraisal Plan Implementation

Department	***Employee***	***Position***
Administration	Shawn Coker	Chief Appraiser/ Chief Administrator
	Ronald Rowe	Deputy Chief Appraiser
Support Administration		
	Vicki Matthews	Director of Mapping / GIS
	Trenna Waw	Director of Administration (Customer Service)
	Debbie Smith	Director of Finance/Human Resources
	Brenda Arzate	Director of Information Technology
Appraisal		
	Joel Hendry	Director of Appraisal
	Jennifer Hightower	Director of Residential Appraisal

Appendix B. Contract Appraisal Firm (Capitol Appraisal Group)

Document 1

Value Defense Procedures for Informal Meetings and Formal Hearings

Industrial Real Property

Informal hearings are conducted by phone, mail, or in person by Capitol Appraisal Group appraisers. Appraisers may present sales data or data specific to the property in defense of our values. Income, expense and capitalization data are reviewed and presented if available. If the taxpayer wishes to pursue a dispute further, the appraiser guides them through the initial phase of the formal protest procedures.

When taxpayers are scheduled for formal hearings they receive an ARB procedures pamphlet and a copy of *Taxpayer's Rights, Remedies, and Responsibilities* published by the State Comptroller's Office. If protest hearing evidence is requested, the appraisal district has 14 days prior to the protest hearing to respond with characteristics and values of comparable properties regarding value disputes. Any income and expense information derived from the market is accumulated and developed into charts containing general data. No confidential income, expense or other information received from taxpayers on specific accounts will be released. Equity evidence is generated by Capitol using programs and tools it has developed to compare other properties to the subject property. Applicable appraisal reports and research data applicable to the property are also included in this packet.

Utilities

Informal hearings are conducted by phone, mail, or in person by Capitol Appraisal Group appraisers. Appraisers may present sales data or data specific to the property in defense of our values. Income, expense and unit appraisal data (when applicable) are reviewed and presented if available. If the taxpayer wishes to pursue a dispute further, the appraiser guides them through the initial phase of the formal protest procedures.

When taxpayers are scheduled for formal hearings they receive an ARB procedures pamphlet and a copy of *Taxpayer's Rights, Remedies, and Responsibilities* published by the State Comptroller's Office. If protest hearing evidence is requested, the appraisal district has 14 days prior to the protest hearing to respond with characteristics and values of comparable properties regarding value disputes. No confidential income, expense or other information received from taxpayers on specific accounts will be released. Equity evidence is generated by Capitol using programs and tools it has developed to compare other properties to the subject property. Applicable appraisal reports and research data applicable to the property are also included in this packet.

Oil and Gas Property

Informal hearings are conducted by phone, mail, or in person by Capitol Appraisal Group appraisers. Mineral operators and third party agents with the proper fiduciary in place may also view the parameters used in the appraisal of their oil and gas properties on Capitol's web site at www.cagi.com. Other taxpayers with an interest in a mineral lease may request a copy of their appraisals at the same web site. Appraisers may present recent production data and sales prices to compare with the actual income received by the taxpayer in defense of our values. Income, expense and capital expense data are reviewed and presented if available. If the taxpayer wishes to pursue a dispute further, the appraiser guides them through the initial phase of the formal protest procedures.

When taxpayers are scheduled for formal hearings they receive an ARB procedures pamphlet and a copy of *Taxpayer's Rights, Remedies, and Responsibilities* published by the State Comptroller's Office. Since oil and gas leases have multiple owners, all owners who pursue a formal protest on the same property will be scheduled at the same time for a hearing. If protest hearing evidence is requested, the appraisal district has 14 days prior to the protest hearing to respond with characteristics and values of comparable properties regarding value disputes. No confidential income, expense or other information received from taxpayers on specific accounts will be released. Capitol uses its MINARB procedure to generate copies of the appraisal reports and product pricing data for the current and prior tax years. These reports are also included in this packet.

Industrial Personal Property

Informal hearings are conducted by phone, mail, or in person by Capitol Appraisal Group appraisers. Appraisers may present general data specific to the property in defense of our values. Renditions other than that of the subject property will not be released. If the taxpayer wishes to pursue a dispute further, the appraiser guides them through the initial phase of the formal protest procedures.

When taxpayers are scheduled for formal hearings they receive an ARB procedures pamphlet and a copy of *Taxpayer's Rights, Remedies, and Responsibilities* published by the State Comptroller's Office. If protest hearing evidence is requested, the appraisal district has 14 days prior to the protest hearing to respond with characteristics and values of comparable properties regarding value disputes. Capitol provides copies of appraisal reports generated by its Industrial Personal Property System for inclusion in the packet. As previously stated, no confidential renditions of competing properties will be provided as evidence.

Client Plan

In the event that the client's value defense plan differs with the plan of Capitol Appraisal Group, the client's plan will be followed and supersedes the provisions of the Capitol Appraisal plan.

Value Defense Procedures for ARB Hearings

Industrial Real Property

If the taxpayer wishes to pursue a dispute beyond informal proceedings, the appraiser guides him through the initial phase of the formal protest procedures.

When taxpayers are scheduled for formal hearings they receive an ARB procedures pamphlet and a copy of *Taxpayer's Rights, Remedies, and Responsibilities* published by the State Comptroller's Office. If protest hearing evidence is requested, the appraisal district has 14 days prior to the protest hearing to respond with characteristics and values of comparable properties regarding value disputes. Any income and expense information derived from the market is accumulated and developed into charts containing general data. No confidential income, expense or other information received from taxpayers on specific accounts will be released. Equity evidence is generated by Capitol using programs and tools it has developed to compare other properties to the subject property. Applicable appraisal reports and research data applicable to the property are also included in this packet.

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Oil and Gas Property

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reports and product pricing data for the current and prior tax years. These reports are also included in this packet.

Industrial Personal Property

If the taxpayer wishes to pursue a dispute beyond informal proceedings, the appraiser guides him through the initial phase of the formal protest procedures.

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Client Plan

In the event that the client's value defense plan differs with the plan of Capitol Appraisal Group, the client's plan will be followed and supersedes the provisions of the Capitol Appraisal plan.

Capitol Appraisal Group, LLC
Formal and Informal Procedures

It is the Capitol Appraisal policy to follow the formal and informal procedures as established by each individual client. Those policies will supercede the below referenced general practices used by this company if there is a conflict.

Informal

Informal meetings with agents or taxpayers/owners on utility properties occur either on the telephone or in the offices of Capitol Appraisal if requested by the agent or owner. This procedure may also take place upon filing of a protest and is useful to finalize issues such as allocations and ownership.

Formal Meetings

Formal meetings with agents or taxpayers/owners take place at the physical location as directed by the appraisal district. Discussions with the agents or taxpayer/owners may take place prior to the scheduled meeting time with the Appraisal Review Board. A deadline for timely action is dictated by the appraisal district. Prior to the deadline and in the absence of the agent or taxpayer/owner being physically present there may be telephone conversations to discuss the protested issues. Failure to resolve the protested issue(s) and no representation by the agent or taxpayer/owner will result in the recommendation to affirm the noticed value and "no show" the agent or taxpayer/owner.

Affidavits used for evidence are presented to the Appraisal Review Board as scheduled by the appraisal district.

Documents 9A-J

Contractor's Appraisal Documentation Delivered to the CAD

Note: Appraisal formats subject to change

Industrial

Unit Pipeline 9A
Investor-owned Electric
9B Investor-owned telephones
9C Electric Coop
9
D
Telephone Coop 9E
Plant Summary 9F

Oil and Gas

Oil lease #1 9G
Oil lease #2 9H
Gas Property #1 91

Gas Property #2 9J

2010

DOCUMENT9A

SAMPLE PIPELINE COMPANY

UNIT APPRAISAL

10/5/2010

Q:\ADMIN\MAPS working & prior years - psi\ History & Building Maps for next year - psl\z 2023-2 2024 MAPS USPAP prep for fall - print as one scan in then zip\2023 - 2 - contractedappraisalservices\1 Samples of appraisal documentation.docQ:.\MAP-\MAP-2:Q44-Goo--feF Glients-P-reI 11 30-2-Q..1-Q.,€1oe

CAGL

INCOME APPROACH

YEAR	AFTER TAX NOi	NET PLANT IN SERVICE		NOi / AVG of prev yr and current yr NPIS
2004	18,111,707	84,791,838		
2005	18,726,411	497,538,026		0.0643
2006	56,177,093	535,687,803		0.1087
2007	66,740,951	851,292,542		0.0962
2008	84,283,848	1,236,732,019		0.0807
2009	146,430,277	1,820,553,365	1.472067786	0.0958

PROJECTIONS OF NOi

MOST RECENT YEAR			146,430,277
FIVE YEAR AVERAGE			74,471,716
FIVE YEAR WEIGHTED AVERAGE			93,372,682
TREND ON 3 YR RETURN ON NPIS		0.0907	165,117,335
LINEAR REGRESSION ON NOi	CORR. COEFF. =	0.96	159,526,062
LIN. REGRESS. ON NOI/NPIS	CORR. COEFF. =	0.98	200,947,084

PROJECTED TYPICAL NET OPERATING INCOME	120,000,000
NET INCOME ATTRIBUTABLE TO CWIP (SEEP. 3)	24,277,319
TOTAL NET INCOME TO CAPITALIZE	144,277,319
CAPITALIZATION RATE	0.1085
VALUE INDICATED BY INCOME APPROACH	1,329,202,314

NET INCOME ATTRIBUTABLE TO
CONSTRUCTION WORK IN PROGRESS
NOT IN THE RATE BASE

TOTAL CONSTRUCTION WORK IN PROGRESS			**364,645,300**
CONSTRUCTION WORK IN PROGRESS IN RATE BASE			0
CONSTRUCTION WORK IN PROGRESS NOT IN RATE BASE			**364,645,300**
DISCOUNTED FOR 3 YEAR(S) AT A RATE OF:		**0.1085**	**267,677,257**
PROJECTED NET INCOME FROM CWIP			**24,277,319**

CAGL

COST APPROACH

UTILITY PLANT	1,904,925,695
CONSTRUCTION WORK IN PROGRESS	364,645,300
TOTAL UTILITY PLANT	2,269,570,995
ACCUMULATED DEPRECIATION AND AMORTIZATION	93,270,899
NET UTILITY PLANT	2,176,300,096
GAS STORED - BASE GAS	0
SYSTEM BALANCING GAS	0
GAS STORED UNDERGROUND - NON-CURRENT	0
GAS STORED - SYSTEM GAS	0
GAS STORED-CURRENT	7,453,749
PLANT MATERIAL AND OPERATING SUPPLIES & STORES EXPENSE UNDISTRIBUTED	1,444,820
NET BOOK VALUE	2,185,198,664
ECONOMIC OBSOLESCENCE (SEE BELOW)	874,079,466
VALUE INDICATED BY COST APPROACH	1,311,119,199

CALCULATION OF ECONOMIC OBSOLESCENCE

HISTORICAL RATE OF RETURN (5 YEAR AVG.)	0.0907
CURRENT DESIRED RATE OF RETURN INDICATED	0.1085
FRACTION NON-OBSOLESCENT	0.8356
MOST RECENT RATE OF RETURN CURRENT	0.0958
DESIRED RATE OF RETURN INDICATED	0.1085
FRACTION NON-OBSOLESCENT	0.8825
PROJECTED RATE OF RETURN CURRENT	0.0659
DESIRED RATE OF RETURN	0.1085
INDICATED FRACTION NON-OBSOLESCENT	0.6073
APPRAISER'S OPINION OF FRACTION NON-OBSOLESCENT	**0.6000**
FRACTION OBSOLETE	**0.4000**
ECONOMIC OBSOLESCENCE	**874,079,466**

CAGL

CORRELATION

INCOME INDICATOR OF VALUE	1,329,202,314
COST INDICATOR OF VALUE	1,311,119,199
CORRELATED UNIT VALUE	**1,315,000,000**
MARKET VALUE /ORIGINAL COST	0.5771
MARKET VALUE/NET BOOK VALUE	0.6018
REPLACEMENT COST NEW OF SOFTWARE	0
MARKET VALUE OF SOFTWARE	0
MARKET VALUE TO ALLOCATE	1,315,000,000
MARKET VALUE /ORIGINAL COST (EXCLUDING SOFTWARE)	0.5771
MARKET VALUE/NET BOOK VALUE (EXCLUDING SOFTWARE)	0.6018

CAGL

ALLOCATION

PLANT IN SERVICE

NET PLANT IN SERVICE	1,811,654,796
NET BOOK VALUE	2,185,198,664
PERCENT TO PLANT IN SERVICE	0.8291
CORRELATED UNIT VALUE	1,315,000,000
PERCENT TO NET UTILITY PLANT	0,8291
UNIT VALUE OF PLANT IN SERVICE	1,090,210,284

TEXAS PLANT IN SERVICE

	TEXAS	TOTAL CO.	¾TO TEXAS
NET PLTIN SRVC	1,811,654,796	1,811,654,796	1.0000
GRS PLTIN SRVC	1,904,925,695	1,904,925,695	1.0000
CONCLUSION			1.0000
UNIT VALUE OF PLANT IN SERVICE			**1,090,210,284**
PERCENT TO TEXAS			1.0000
UNIT VALUE OF TEXAS PLANT **IN** SERVICE			**1,090,210,284**

CAGL

TEXAS GATHERING & TRANSMISSION PIPE

	TEXAS PIPE	TEXAS PLANT IN SERVICE	%TO PIPE
NET INVESTMENT	1,343,744,175	1,811,654,796	0.7417
GROSS INVESTMENT	1,397,895,771	1,904,925,695	0.7338
		CONCLUSION	0.7378

UNIT VALUE OF TEXAS PLANT IN SERVICE	1,090,210,284
%TO PIPE	0.7378
UNIT VALUE OF TEXAS PIPE	804,332,157
REPLACEMENT COST NEW LESS DEPRECIATION OF TEXAS PIPE	970,647,820
CORRELATED MARKET VALUE OF TEXAS PIPE	**800,000,000**
PTD's SCHEDULE 1 VALUE OFTEXAS PIPE	640,872,407
RATIO OF CORRELATED VALUE TO SCHEDULE VALUE (ENS)	1.2483

CAPITOL APPRAISAL GROUP, LLC

2010

DOCUMENT9B

SAMPLE ELECTRIC IOU COMPANY

UNIT APPRAISAL

Appraiser

CAPITOL APPRAISAL GROUP, LLC

INCOME APPROACH

YEAR	NET OPERATING INCOME*	NET PLANT IN SERVICE*		NOI/NPIS OF PRV. YR. & CURRENT YR.
2004	68,027,209	685,658,796		
2005	61,265,796	706,760,852	1.030776	0.0894
2006	56,814,104	685,850,642	0.970414	0.0804
2007	32,745,832	732,197,728	1.067576	0.0477
2008	50,477,347	749,480,314	1.023604	0.0689
2009	46,565,398	824,721,310	1.100391	0.0621

*INCLUDES M&S AND STORED GAS.

PROJECTIONS OF NOi

MOST RECENT YEAR			46,565,398
THREE YEAR AVERGAE			43,262,859
FIVE YEAR AVERAGE			49,573,695
THREE YEAR WEIGHTED AVERGAE			45,566,120
FIVE YEAR WEIGHTED AVERAGE			47,191,192
FIVE YR. AVG. RETURN ON NPIS		0.0697	57,492,045
LINEAR REGRESSION ON NOi	CORR. COEFF. =	(0.71)	38,852,429
LIN. REGRESS. ON NOI/NPIS	CORR. COEFF. =	(0.00)	49,560,383

PROJECTED TYPICAL NET OPERATING INCOME	48,000,000
NET INCOME ATTRIBUTABLE TO CWIP (SEEP. 3)	2,258,138
TOTAL NET INCOME TO CAPITALIZE	50,258,138
CAPITALIZATION RATE	0.0994
VALUE INDICATED BY INCOME APPROACH	505,450,487

CAPITOL APPRAISAL GROUP, LLC

NET INCOME ATTRIBUTABLE TO
CONSTRUCTION WORK IN
PROGRESS
NOT IN THE RATE BASE

TOTAL CONSTRUCTION WORK IN PROGRESS				**82,283,128**
CONSTRUCTION WORK IN PROGRESS - MAINTENANCE				**46,669,321**
CONSTRUCTION WORK IN PROGRESS NOT IN RATE BASE				**35,613,807**
DISCOUNTED FOR	1	YEAR(S) AT A RATE OF:	0.0994	**32,392,904**
PROJECTED NET INCOME FROM CWIP				**2,258,138**

CAPITOL APPRAISAL GROUP, LLC

COST APPROACH

UTILITY PLANT	**1,357,257,700**
CONSTRUCTION WORK IN PROGRESS	**82,283,128**
TOTAL UTILITY PLANT	**1,439,540,828**
NET NUCLEAR FUEL	0
ACCUMULATED DEPRECIATION AND AMORTIZATION	**552,521,228**
NET UTILITY PLANT	**887,019,600**
MERCHANDISE	0
FUEL STOCK	**9,645,377**
PLANT MATERIAL AND OPERATING SUPPLIES	**10,339,461**
LIQUIFIED NATURAL GAS HELD FOR PROCESSING	0
NET BOOK VALUE	**907,004,438**
ECONOMIC OBSOLESCENCE (SEE BELOW)	**380,941,864**
VALUE INDICATED BY COST APPROACH	**526,062,574**

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CAPITOL APPRAISAL GROUP, LLC

CALCULATION OF ECONOMIC OBSOLESCENCE

HISTORICAL RATE OF RETURN (5 YEAR AVG.)	0.0697
CURRENT DESIRED RATE OF RETURN	0.0994
INDICATED FRACTION NON-OBSOLESCENT	0.7011
MOST RECENT RATE OF RETURN CURRENT	0.0621
DESIRED RATE OF RETURN INDICATED	0.0994
FRACTION NON-OBSOLESCENT	0.6248
PROJECTED RATE OF RETURN	0.0582
CURRENT DESIRED RATE OF RETURN	0.0994
INDICATED FRACTION NON-OBSOLESCENT	0.5853
APPRAISER'S OPINION OF FRACTION NON-OBSOLESCENT	0.5800
FRACTION OBSOLETE	**0.4200**
ECONOMIC OBSOLESCENCE	**380,941,864**

CAPITOL APPRAISAL GROUP, LLC

STOCK AND DEBT APPROACH

EQUITY	
NO. SHARES	**403,554,634**
$/SHARE	**30.26**
EQUITY VALUE	**12,211,563,225**
PERCENT TO COMPANY	0.0816
ALLOCATED EQUITY VALUE	**995,860,423**
LONG -TERM DEBT	**368,964,682**
TOTAL STOCK AND DEBT VALUE	**1,364,825,105**

CAPITOL APPRAISAL GROUP, LLC

CORRELATION

INCOME INDICATOR OF VALUE	**505,450,487**
COST INDICATOR OF VALUE	**526,062,574**
STOCK & DEBT INDICATOR OF VALUE	**1,364,825,105**
DISCOUNTED CASH FLOW INDICATOR OF VALUE	**591,713,506**
APPRAISER'S OPINION OF MARKET VALUE	**510,000,000**
MARKET VALUE /ORIGINAL COST	**0.3494**
MARKET VALUE/NET BOOK VALUE	**0.5623**
TOTAL VALUE OF TRANSMISSION AND DISTRIBUTION	**343,397,389**

CAPITOL APPRAISAL GROUP, LLC

ALLOCATION

ORIGINAL COST OF DIST. SYSTEM INCL. INVEST IN GENERAL PLANT	**624,524,151**
ORIGINAL COST OF TRANSMISSION SYSTEM	**411,838,471**
ORIGINAL COST OF PRODUCTION PLANT	**295,065,069**
ORIGINAL COST OF INTANGIBLE PLANT	**22,895,904**
TOTAL ORIGINAL COST	**1,354,323,595**

DISTRIBUTION PLANT

ORIGINAL COST OF DIST. SYSTEM INCL. INVEST IN GENERAL PLANT	**624,524,151**
ORIG. COST OF LAND AND LAND RIGHTS	**1,103,824**
ORIG. COST OF STRUCTURES AND IMPROVEMENTS	**111,337**
ORIG. COST OF STATION EQUIPMENT	**74,929,157**
ORIG. COST OF LAND AND LAND RIGHTS IN GENERAL PLANT	**1,876,687**
ORIG. COST OF STRUCTURES AND IMPROVEMENTS IN GENERAL PLANT	**24,144,259**
ORIGINAL COST OF INTANGIBLES	**387,073**
DIST. PLANT EXCL. SUBSTATIONS AND LAND	**521,971,814**
MARKET VALUE/ ORIGINAL COST	**0.3494**
MARKET VALUE OF DIST. EXCL. SUSTATIONS AND LAND	**182,391,876**
TOTAL METERS	**192,937**
MARKET VALUE PER METER	**945**

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CAPITOL APPRAISAL GROUP, LLC

TRANSMISSION PLANT

ORIGINAL COST OF TRANSMISSION SYSTEM	411,838,471
ORIG. COST OF LAND AND LAND RIGHTS	11,235,765
ORIG. OF STRUCTURES AND IMPROVEMENTS	1,365,537
ORIG. COST OF STATION EQUIPMENT	189,158,884
ORIG. COST OF LAND AND LAND RIGHTS IN GENERAL PLANT	570,685
ORIG. COST OF STRUCTURES AND IMPROVEMENTS IN GENERAL PLANT	7,342,067
ORIGINAL COST OF INTANGIBLES	6,962,453
TRANS. PLANT EXCL. SUBSTATIONS AND LAND	195,203,080
MARKET VALUE/ ORIGINAL COST	0.3494
MARKET VALUE OF TRANS. EXCL. SUBSTATIONS AND LAND	68,209,538

	LINE TYPE	ORIG. COST	M.V./O.C.	MARKET VALUE	NO. MILES	MKT. VAL. PER MILE
	69KV	73,552,521	0.3494	25,701,354	2,619.35	**9,812**
	138 KV	81,868,172	0.3494	28,607,080	1,458.78	**19,610**
	345KV	39,801,908	0.3494	13,907,925	222.53	**62,499**
	115 KV	0	0.3494	0	0.00	0
	161 KV	0	0.3494	0	0.00	0
TOTALS		195,222,601		68,216,359	4,300.66	

CAPITOL APPRAISAL GROUP, LLC

SUBSTATIONS

ORIGINAL COST DIST. SUBSTATIONS	**75,040,494**
ORIGINAL COST TRANS. SUBSTATIONS	**190,524,421**
TOTAL ORIGINAL COST OF SUBSTATIONS	**265,564,915**
MARKET VALUE/ ORIGINAL COST	**0.3494**
MARKET VALUE OF SUBSTATIONS	**92,795,975**
TOTAL SUBSTATION KVA CAPACITY	**9,279,606**
VALUE PER KVA	**10.00**
Total T & **D Value**	**343,397,389**

* ACKNOWLEDGEMENT OF NEW VALUE FOR AD VREM TAXATION *

THE ABOVE LISTED NEW VALUES ARE RECOMMENDED BY TAP PRAISER FOR THE DISTRICT AND ACCEPTED BY THE AGENT/OWNER FOR THEXPAYER AS 2008 VALUES. THE AGENT/OWNER HEREBY WITHDRAWS PROTEST AND WAIVTHE RIGHT TO FURTHER NOTIFICATION OF VALUES.

TO BE VALID THIS SIGN-OFF MUST BE EXECUTED AND RRNED TO CAPITOL BY MIDNIGHT PRIOR TO YOUR ARB HEARING.

DISTRICT CAPITOL TAXPAYER/AGENT BRA

Date Date Date Date

CAPITOL APPRAISAL GROUP, LLC

APPENDIX A

DISCOUNTED CASH FLOW
2010

ASSUMPTIONS:		NOi	46,565,398
		Income Taxes - Federal (409.1)	10,992,511
FIT RATE:	0.35000	EBFIT (NOi + INCOME TAXES)	57,557,909
DISC RATE:	0.09943		
GROWTH RA	0.04355	Interest on Long-Term Debt (427)	19,501,675
		Depreciation Expense (403)	42,404,799
		UTILITY PLANT	1,357,257,700
		Capital Expenditures %	3.00%
		Capital Expenditures	40,717,731

(000'S)

	2009	2010	2011
EBFIT (LESS DEPREC)	57,558	60,064	62,680
INTEREST	19,502	19,502	19,502
EARN. BF. TAX	38,056	40,563	43,179
FED INC TAX	(13,320)	(14,197)	(15,112)
NET INC AFTER FIT	24,737	26,366	28,066
INTEREST	(19,502)	(19,502)	(19,502)
DEPREC	42,405	42,405	42,405
CAP EXP	(40,718)	(40,718)	(40,718)
CASH FLOW	45,925	47,555	49,255
DISC FACT	0.95371	0,86746	0.78900
P.W.	43,799	41,251	38,862

	2012	2013	2014
EBFIT (LESS DEPREC)	65,410	68,258	71,231
INTEREST	19,502	19,502	19,502
EARN. BF. TAX	45,908	48,757	51,729
FED INC TAX	(16,068)	(17,065)	(18,105)
NET INC AFTER FIT	29,840	31,692	33,624
INTEREST	(19,502)	(19,502)	(19,502)
DEPREC	42,405	42,405	42,405
CAP EXP	(40,718)	(40,718)	(40,718)
CASH FLOW	51,029	52,881	54,813
DISC FACT	0.71765	0.65274	0.59371
P.W.	36,621	34,517	32,543

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CAPITOL APPRAISAL GROUP, LLC

	2015	2016	2017
EBFIT (LESS DEPREC)	74,333	77,570	80,948
INTEREST	19,502	19,502	19,502
EARN. BF. TAX	54,831	58,068	61,447
FED INC TAX	(19,191)	(20,324)	(21,506)
NET INC AFTER FIT	35,640	37,745	39,940
INTEREST	(19,502)	(19,502)	(19,502)
DEPREC	42,405	42,405	42,405
CAP EXP	(40,718)	(40,718)	(40,718)
CASH FLOW	56,829	58,933	61,129
DISC FACT	0.54001	0.49117	0.44675
P.W.	30,689	28,947	27,310

	2018
EARN. BF. TAX	84,473
INTEREST	19,502
EARN. BF. TAX	64,972
FED INC TAX	(22,740)
NET INC AFTER FIT	42,232
INTEREST	(19,502)
DEPREC	42,405
CAP EXP	(40,718)
CASH FLOW	63,420
DISC FACT	0.40635
P.W.	25,771

	RVRSN	**TOTAL PW**
EBFIT (LESS DEPREC)		
INTEREST		
EARN. BF. TAX		
FED **INC TAX**		
NET INC AFTER FIT		
INTEREST		
DEPREC		
CAP EXP		
CASH FLOW	**618,690**	
DISC FACT	**0.40635**	
P.W.	**251,404**	$ **591,714**

SAMPLE TELEPHONE COMPANY

DOCUMENT 9C

1/1/10 APPRAISAL

Appraiser

CAPITOL APPRAISAL GROUP, LLC

INCOME APPROACH

	ADJUSTED NOi excludes Pension Gains & Equip Sales		NPIS		NOI/NPIS
2004	**27,609,661**		**213,294,189**		**0.129444**
2005	**31,403,708**	**114%**	**198,144,756**		**0.158489**
2006	**31,663,733**	**101%**	**181,767,566**	**92%**	**0.174199**
2007	**30,279,656**	**96%**	**166,977,937**	**92%**	**0.181339**
2008	**34,468,837**	**114%**	**152,788,425**	**92%**	**0.225598**
2009	**40,010,863**	**116%**	**136,460,682**	**89%**	**0.293204**
		144.92%			

1.	**Prior Year**	**40,010,863**		40,010,863
2.	**Simple 3 Year Average**	**34,919,785**		34,919,785
				31,777,005
3.	**Weighted 3 Year Average**	**219,249,919**		36,541,653
		34,007,885		
4.	**Adjusted Weighted 3 Year Average**	**34,047,670**		34,391,486
		34,053,193		
5.	**Linear Regression on NOi**		0.81	39,571,184
6.	**Linear Regression on NOI/NPIS**		(0.81)	37,606,141
7.	**Typical Return on Plant**			39,582,694
8	Linear regression on NOI vs. Access Lines		(0.85)	38,158,859
PROJECTION	**less allowance for equipment sales:**			35,000,000
INCOME ATTRIBUTED TO CWIP				0
Total Income to be Capitalized				35,000,000

INCOME APPROACH

	SUBSCRIBER ACCESS LINES	
20043	167,000	
2005	162,000	97%
2006	156,489	97%
2007	151,717	97%
2008	147,248	97%
2009	139,353	95%
		83.44%

Market Value Estimate -- Income Approach

	Projection		Cap. Rate		Market Value	
Tangible NOi	**27,465,176**		**0.1146**	=	**239,718,500**	
Less V. S.	**5,706,117**		**0.1146**	=	**49,803,501**	**0.16**
Less DSL	**1,828,707**		**0.1146**	=	**15,961,115**	
System **NOi**	**35,000,000**	/	**0.1146**	=	**305,483,115**	

COST APPROACH

Plant in Service	$566,897,345
Construction WIP	2,998,765
Non-Op Plant	
Subtotal	569,896,110
Miscellaneous Physical Property	0
Materials and Supplies	643,038
Total Operating Property	570,539,148
Less Depreciation Reserve:	
Depreciation & Amortization Reserve	430,436,663
Amortization Reserve Depreciation	0
Reserve	0
Total Depreciation Reserves & Plant Adjustments	430,436,663
NET BOOK	140,102,485
LESS: Software@ Net	0
INDICATED OBSOLESCENCE	150,000,000
COST APPROACH INDICATOR (INCLUDING INTANGIBLES)	290,102,485
Other Intangibles (trade name from D&T Appraisal) Work	9,300,000
Force	5,000,000
Buildings	24,099,934
COST APPROACH (EXCLUDING INTANGIBLES)	251,702,551

FINAL VALUE ESTIMATE

Income Approach Estimate (Excluding Intangibles)	**$239,718,500**
Cost Approach Estimate (Excluding Intangibles)	**251,702,551**
AUS RCNLD STUDY	**$240,679,972**
Income Approach System (Include Intangibles) Cost Approach (Including Intangibles)	**$305,483,115 290,102,485**

After careful consideration of this information, the total system value of SAMPLE COMPANY A excluding intangibles is as follows:

FINAL VALUE ESTIMATE	$240,000,000
FINAL VALUE ESTIMATE SYSTEM (Including Intangibles)	$305,483,115
MARKET VALUE TO COST	**42.07%**
MARKET VALUE TO NB	**171.30%**

* ACKNOWLEDGEMENT OF NEW VALUE FOR AD VALO REM TAXATION

THE ABOVE LISTED NEW VALUES ARE RECOMMENDED BY THE APPRAISER FOR THE

DISTRICT AND ACCEPTED BY THE AGENT/OWNER FOR THEXTA PAYER AS 2010 VALUES.

THE AGENT/OWNER HEREBY WITHDRAWS PROTEST AND WAIVES THE RIGHT TO FURTHER

NOTIFICATION OF VALUES,

TO BE VALID THIS SIGN-OFF MUST BE EXECUTED AND RETU

RNED TO CAPITOL

BY MIDNIGHT PRIOR TO YOUR ARB HEARING,

District	**Capitol**	**Taxpayer/Agent**	**ARB**
Date	**Date**	**Date**	**Date**

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ALLOCATION

(A)	Total System Value		$240,000,000
(B)	Texas Utility Plant in Service	$566,897,345	
(C)	System Gross Utility Plant	$566,897,345	
(D)	Texas Apportionment Factor (B)/(C)		100.00%
(E)	Texas Net Utility Plant	$140,102,485	
(F)	System Net Utility Plant	$140,102,485	
(G)	Texas Apportionment Factor (E)/(F)		100.00%
(H)	Average Apportionment Factor [(D)+(G)]/2		100.00%
(I)	Texas Value (H) * Total Market Value		$240,000,000
(J)			
(K)	Buildings & Land		$24,099,934
(L)	Total Land and Buildings (J)+(K)		$24,099,934
(M)	Original Cost		$570,539,148
(N)	Percentage Attributable to Land and Buildings (L)/(M)		4.22%
	other Intangibles (trade name from D&T Appraisal)		9,300,000
	Work Force		5,000,000
	Value to Allocate [(I)-(l*N)]		$215,562,248
	Total Rendered Value		171,000,000
	ratio of Value to Allocate to Rendered Value		1.2606
	Ratio of Value to Allocate to Original cost		0.3782

NET OPERATING INCOME ATTRIBUTED TO CONSTRUCTION WORK IN PROGRESS

(A) Total Construction work in progress	**$2,998,765**
Less:	
(B) Short term plant in rate base	$0
(C) Modernization - Long term plant replacing plant in rate base	**$2,998,765**
(D) Construction Work in Progress not in rate base	$0
(E) Capitalization Rate	**11.46%**
(F) **Present value of (D) discounted for one period at capitalization rate**	$0
(G) Net operating income attributed to construction work in progress adjusted for 80% market penetration	$0

COST APPROACH OBSOLESCENCE

(A)	Total Net Plant In Service	$136,460,682
(B)	Required Rate of Return	11.46%
(C)	Prior 3 Year's Net Operating Income - Avg.	34,919,785
(D)	Required Net Operating Income (A)*(B)	$15,634,657
(E)	Income Shortfall (D)-(C)	($19,285,128)
(F)	Capitalization Rate	11.46%
(G)	Indicated Obsolescence	($168,322,312)

Method 2

(A)	Projected Net Operating Income	35,000,000
(B)	Total Net Plant In Service	$136,460,682
(C)	Rate of Return (A)/ (B)	25.65%
(D)	Expected Rate of Return (Capitalization Rate)	11.46%
(E)	Percent Good (C)/(D)	223.86%
(F)	Percent Obsolescence Equals (100.00%)- (E)	-123.86%
(G)	Total Economic Obsolescence (B)*(F)	($169,022,433)
	SAY	(150,000,000)

Allocation of Capital Charge

Capital Charge - the annual return required on all corporate assets used in the production of the economic income associated with the subject intangible asset.

Net Plant In Service	Cost of Capital		Required Return
144,624,554	11.46%	=	$16,570,014

Vertical Svces Revenue (VS NOi / co. exp ratio)	Total Operating Revenues	Percent of VS Revenue 8.36%
14,428,016	172,550,486	$1,385,522

Allocated Capital Charge on Supporting Assets

Estimated Vertical Services NOi	7,091,639
Vertical Services NOi Less Capital Charge	$5,706,117

Capitol Appraisal Group, LLC

2010

DOCUMENT9D

SAMPLE ELECTRIC COOP, COMPANY

UNIT APPRAISAL

Unit#OOO

Appraiser

Capitol Appraisal Group, LLC

DATA YEAR: 2010

INCOME APPROACH

YEAR	NET OPERATING INCOME	NOi GROWTH	NET PLANT IN SERVICE	NPIS GROWTH	NOI/NPIS NOi-CURR YR NPIS-PRVYR
2004	4,625,201		81,787,622		
2005	5,661,681	0.2241	85,798,675	0,0490	0,0692
2006	4,748,314	-0.1613	92,154,509	0,0741	0,0553
2007	4,460,508	-0.0606	100,759,381	0,0934	0,0484
2008	4,928,287	0.1049	109,974,664	0,0915	0,0489
2009	4.458.440	-0.0953	115,898,957	0,0539	0,0405

MOST RECENT YEAR			4,458,440
THREE YEAR AVERAGE			4,615,745
FIVE YEAR AVERAGE			4,851.446
THREE YEAR WEIGHTED AVERAGE			4,615,400
FIVE YEAR WEIGHTED AVERAGE			4,703,012
FIVE YR. AVG. RETURN ON NPIS		0.0525	6,082,869
LIN. REGRESS. ON NOi	CORR COEFF. =	(0,39)	4,183,493
LIN. REGRESS. ON NOI/NPIS	CORR COEFF. =	(0,62)	4,261,525

PROJECTED TYPICAL NET OPERATING INCOME NET INCOME ATTRIBUTABLE TO CWIP (SEE BELOW)	3,700,000 0
TOTAL NET INCOME TO CAPITALIZE	3,700,000
CAPITALIZATION RATE	0.1398
VALUE INDICATED BY INCOME APPROACH	26,460,653

INCOME ATTRIBUTABLE TO CONSTRUCTION WORK IN PROGRESS

CONSTRUCTION WORK IN PROGRESS			2009		0
DISCOUNTED AT:	0.1398	FOR		YEAR(S)	0
PROJECTED NET INCOME FROM CWIP					0

Capitol Appraisal Group, LLC

COST APPROACH

TOTAL UTILITY PLANT IN SERVICE (C1)	146,384,363
CONSTRUCTION WORK IN PROGRESS (C2)	0
TOTAL UTILITY PLANT	146,384,363
DEPRECIATION (C4)	30,485,407
NET UTILITY PLANT	115,898,957
MATERIALS & SUPPLIES (C21)	179,002
NET INVESTMENT	115,719,955
ECONOMIC OBSOLESCENCE (SEE BELOW)	89,821,691
COST APPROACH INDICATOR OF VALUE	25,898,263

CALCULATION OF ECONOMIC OBSOLESCENCE

HISTORICAL RATE OF RETURN (5 YEAR AVG.)	0.0525
CURRENT DESIRED RATE OF RETURN	0.1398
INDICATED FRACTION NON-OBSOLESCENT	0.3753
MOST RECENT RATE OF RETURN CURRENT	0.0405
DESIRED RATE OF RETURN INDICATED	0.1398
FRACTION NON-OBSOLESCENT	0.2899
PROJECTED RATE OF RETURN CURRENT	0.0319
DESIRED RATE OF RETURN	0.1398
INDICATED FRACTION NON-OBSOLESCENT	0.2283
APPRAISER'S OPINION OF FRACTION NON-OBSOLESCENT	0.2250
FRACTION OBSOLETE	0.7750
ECONOMIC OBSOLESCENCE	89,821,691

Capitol Appraisal Group, LLC

CORRELATION

INCOME APPROACH INDICATOR OF VALUE	$26,460,653
COST APPROACH INDICATOR OF VALUE	$25,898,263
APPRAISER'S OPINION OF MARKET VALUE	$26,000,000

MARKET VALUE/ ORIGINAL COST	0.1776
MARKET VALUE/ NET BOOK VALUE	**0.2243**

• ACKNOWLEDGEMENT OF NEW VALUE FOR AD VALOREM TAXATION •••

THE ABOVE LISTED NEW VALUES ARE RECOMMENDED BY THE APPRAISER FOR THE DISTRICT AND ACCEPTED BY THE AGENT/OWNER FOR THE TAXPAYER AS 2010 VALUES. THE AGENT/OWNER HEREBY WITHDRAWS PROTEST AND WAIVES THE RIGHT TO FURTHER NOTIFICATION OF VALUES.

TO BE VALID THIS SIGN-OFF MUST BE EXECUTED AND RETURNED TO CAPITOL BY MIDNIGHT PRIOR TO YOUR ARB HEARING.

DISTRICT	CAPITOL	TAXPAYER/AGENT	ARB
DATE	DATE	DATE	DATE

Capitol Appraisal Group, LLC

ALLOCATION

DISTRIBUTION PLANT

ORIGINAL COST OF DISTRIBUTION SYSTEM (E14E)	122,565,286
ORIGINAL COST OF LAND AND LAND RIGHTS (E1E)	123,409
ORIGINAL COST OF STRUCTURES AND IMPROVEMENTS (E2E)	916,416
ORIGINAL COST OF STATION EQUIPMENT (E3E)	11,720,471
DIST. PLANT EXCL. SUBSTATIONS AND LAND	109,804,991
MARKET VALUE/ ORIGINAL COST	0.1776
MARKET VALUE OF DIST. EXCL. SUBSTATIONS AND LAND	19,502,969

TYPE	MARKET VALUE	NO. UNITS		MKTVAUUNIT
METERS	19,502,969	31,056	(R10L)	$628
Ml. OF LINE	19,502,969	4,217	(B6B+B7B)	$4,625

TRANSMISSION PLANT

ORIGINAL COST OF TRANSMISSION SYSTEM (E33E)	11,818,671
ORIGINAL COST OF LAND & LAND RIGHTS (E26E)	16,336
ORIGINAL COST OF STRUCTURES AND IMPROVEMENTS (E27E)	170,820
ORIGINAL COST OF STATION EQUIPMENT (E28E)	4,458,909
TRANS. PLANT EXCL. SUBSTATIONS AND LAND	7,172,606
MARKET VALUE/ ORIGINAL COST	0.1776
MARKET VALUE OF TRANS. EXCL. SUBSTATIONS AND LAND	1,273,960
MILES OF TRANSMISSION LINE (B5B)	104
MARKET VALUE PER MILE OF LINE	$12,281

SUBSTATIONS

ORIGINAL COST OF SUBSTATIONS - DIST.	12,636,887
ORIGINAL COST OF SUBSTATIONS - TRANS.	4,629,729
ORIGINAL COST OF SUBSTATIONS - TOTAL	17,266,616
MARKET VALUE/ ORIGINAL COST	0.1776
MARKET VALUE OF SUBSTATIONS	3,066,803
TOTAL SUBSTATION KVA CAPACITY	269,025
MARKET VALUE PER KVA	$11

Capitol Appraisal Group, LLC

CAP RATE

COST OF EQUITY

MODIFIED DCF • DIVIDEND YIELD	Ke = (Div/P) + G	0.1630
DIVIDEN /PRICE= ((CASH PATRONAGE+ REDEMPTIONS)/ TOTAL PATRONAGE CAPITAL)		0.1571
GROwrH RATE= [1 -(CASH PATRONAGE/ NET INCOME)]* (NET INCOME/ PATRONAGE CAPITAL)		-0.0570
GROwrH RATE - GROwrH OF NPIS		0.0724
GROwrH RATE - GROwrH OF NOi		0.0023
CALCULATED GROwrH RATE		0.0059
CASH PATRONAGE		7,000,090
REDEMPTIONS		0
TOTAL PATRONAGE CAPITAL		44,570,184
NET INCOME		4,458,440
MODIFIED DCF • EARNINGS	Ke= (E/P) +G	0.1059
NET INCOME		4,458,440
TOTAL PATRONAGE CAPITAL		44,570,184
CALCULATED GROWTH RATE		0.0059
BUILD UP METHOD	Ke= Rf+ Rp + SIZE PREMIUM	0.1570
RISK FREE RATE (TREASURY)		0.0400
EQUITY RISK PREMIUM (PRATT /WASATA)		0.0550
SIZE PREMIUM (IBBITSONS)		0.0620
MODIFIED CAPM	Ke = Rf+ (b * ERP)	0.1391
RISK FREE RATE (TREASURY)		0.0400
EQUITY RISK PREMIUM (PRATT /WASATA)		0.0550
BETA (SEE BELOW)		1.8024
BETA		
RETURN ON ASSETS		0.0525
S & P AVERAGE RETURN ON ASSETS		0.0946
CALCULATED BETA		1.8024
AVERAGE COST OF EQUITY		0.1413
OPINION OF COST OF EQUITY		0.1413

COST OF DEBT

ELECTRIC UTILITY BOND	0.0818
COST OF DEBT	0.0818

CAPITAL STRUCTURE

Q:\ADMIN\MAPS working & prior years - psi\ History & Building Maps for next year - psl\z 2023-2024 MAPS USPAP prep

3

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TOTAL DEBT	61,388,492
TOTAL ASSETS	133,029,617
PERCENT DEBT	0.4615
PERCENT EQUITY	0,5385

WEIGHTED COST OF CAPITAL

	CAPITAL STRUCTURE	COST	WEIGHTED COST	FLOTATION COST	ADJ WEIGHTED COST
EQUITY	0,5385	0.1413	0.0761	0.0360	0.0789
DEBT	0.4615	0.0818	0.0377	0.0150	0.0383
					0.1173

CAPITOL APPRAISAL GROUP

2010

DOCUMENT9E

SAMPLE TELEPHONE COOP COMPANY

APPRAISAL

UNIT# 000

Appraiser

CAPITOL APPRAISAL GROUP

DATA YEAR: 2010

INCOME APPROACH

NOi PROJECTION NO. 1		
NET OPERATING REVENUES (878)	2009	$3,585,327
NET OPERATING REVENUES (878)	2008	$3,606,611
NET OPERATING REVENUES (878)	2007	$3,263,862
PROJECTED NET OPERATING REVENUES		$3,485,267
TYPICAL INVESTOR-OWNED TELEPHONE CO, EXPENSE RATIO		0,8100
PROJECTED EXPENSES		$2,823,066
PROJECTED NOi BASED ON TYPICAL INVESTOR-OWNED EXP. RATIO		$662,201
NOi PROJECTION NO. 2		
NET PLANT IN SERVICE 2010		$7,324,320
TYPICAL INVESTOR-OWNED TEL. CO. RETURN RATE ON NPIS		0,1010
PROJECTED NOi BASED ON INVESTOR-OWNED RETURN RATE		$739,756
NOi PROJECTION NO. 3		
NET OPERATING REVENUES (878)	2010	$3,585,327
TOTAL OPERATION & MAINTENANCE EXPENSE (8148)		$2,873,408
TOTAL OPERATING TAXES (8208)		$74,428
NET OPERATING INCOME BEFORE FED. INCOME TAXES	2010	$637,491
NET OPERATING INCOME BEFORE FED. INCOME TAXES	2009	$861,211
NET OPERATING INCOME BEFORE FED. INCOME TAXES	2008	$1,848,531
PROJECTED NOi BEFORE FEDERAL INCOME TAXES		$1,354,871
PROJECTED EFFECTIVE FEDERAL INCOME TAX RATE		0.00
PROJECTED NOi AFTER FEDERAL INCOME TAXES		$1,354,871

INCOME PROJECTIONS	
NOi PROJECTION NO. 1	$739,756
NOi PROJECTION NO. 2	$739,756
NOi PROJECTION NO. 3	$1,354,871
APPRAISER'S OPINION	$900,000
INCOME ATTRIBUTABLE TO CWIP (SEE BELOW)	$0
TOTAL INCOME TO CAPITALIZE	$900,000
CAPITALIZATION RATE	0,1322
INCOME APPROACH INDICATOR OF VALUE	$6,807,893

CAPITOL APPRAISAL GROUP

INCOME ATTRIBUTABLE TO CONSTRUCTION WORK IN PROGRESS

			2010	
CONSTRUCTION WORK IN PROGRESS			YEAR(S)	$0
DISCOUNTED AT:	0.1322	FOR	1	$0
TYPICAL INVESTOR-OWNED ELECTRIC CO. RETURN RATE ON NPIS				0.1010
PROJECTED NET INCOME FROM CWIP				$0

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CAPITOL APPRAISAL GROUP

COST APPROACH

TELECOMMUNICATIONS PLANT-IN-SERVICE (A20)	$12,539,923
PROPERTY HELD FOR FUTURE USE (A21)	$0
CONSTRUCTION WORK IN PROGRESS (A22)	$0
TOTAL UTILITY PLANT	$12,539,923
DEPRECIATION (A24)	$5,215,603
NET UTILITY PLANT	$7,324,320
MATERIALS AND SUPPLIES (A7+A8)	$200,601
NET INVESTMENT	$7,524,921
PERCENT NON-OBSOLETE (SEE BELOW)	0.9000
COST APPROACH INDICATOR OF VALUE	$6,772,429

CALCULATION OF ECONOMIC OBSOLESCENCE

RETURN RATE BASED ON NOi PROJECTION NO. 1	0.1010
CURRENT DESIRED RATE OF RETURN	0.1322
INDICATED FRACTION NON-OBSOLETE	0.7640
RETURN RATE BASED ON NOi PROJECTION NO. 2	0.1010
CURRENT DESIRED RATE OF RETURN	0.1322
INDICATED FRACTION NON-OBSOLETE	0.7640
RETURN RATE BASED ON NOi PROJECTION NO. 3	0.1850
CURRENT DESIRED RATE OF RETURN	0.1322
INDICATED FRACTION NON-OBSOLETE	1.3993
RETURN RATE BASED ON PROJECTED NOi	0.1229
CURRENT DESIRED RATE OF RETURN	0.1322
INDICATED FRACTION NON-OBSOLETE	0.9295
CO-OP'S NET PLANT/ ORIG COST	0.5841
TYPICAL 1.O.U. NET PLANT/ ORIG COST	0.6230
CO-OP'S IOU-ADJUSTED NET PLANT/ ORIG COST	0.9375
TYPICAL 1.O.U. NET PLANT/ MARKET VALUE	0.8250
CO-OP'S 1.O.U.-ADJUSTED FRACTION NON-OBSOLETE	0.7735
TYPICAL INVESTOR-OWNED ELECTRIC PERCENT NON-OBSOLETE	0.8250
COMPTROLLER'S PERCENT NON-OBSOLETE PRIOR YEAR	1.1375
APPRAISER'S OPINION OF FRACTION NON-OBSOLESCENT	0.9000

CAPITOL APPRAISAL GROUP

CORRELATION

INCOME APPROACH INDICATOR OF VALUE	$6,807,893
COST APPROACH INDICATOR OF VALUE	$6,772,429
APPRAISER'S OPINION OF MARKET VALUE	$6,800,000
MARKET VALUE/ ORIGINAL COST	0,5337
MARKET VALUE/ NET BOOK VALUE	0,9037

CAPITOL APPRAISAL GROUP

ALLOCATION

CENTRAL OFFICE EQUIPMENT

ORIGINAL COST OF CENTRAL OFFICE SWITCHING (D2E)	$1,193,274
ORIG. COST OF OPERATOR SYSTEMS (D3E)	$0
ORIG. COST OF CENTRAL OFFICE TRANSMISSION (D4E)	$683,810
ORIGINAL COST OF CENTRAL OFFICE EQUIPMENT	$1,877,084
ALLOCATED CWIP	$0
TOTAL ORIGINAL COST	$1,877,084
MARKET VALUE/ ORIGINAL COST	0,5337
MARKET VALUE OF CENTRAL OFFICE EQUIPMENT	$1,001,856
NO. CENTRAL OFFICE EQUIPMENT ACCESS LINES (GET+GFT)	2,907
VALUE PER COE ACCESS LINE	$345

MAIN STATIONS

ORIGINAL COST OF INFOR ORIG/TERM ASSETS (D5E)	$0
ORIG. COST OF CABLE & WIRE FACILITIES (D6E)	$10,380,881
ORIGINAL COST OF OTHER TANGIBLE ASSETS (D7E)	$0
TOTAL OUTSIDE PLANT ORIGINAL COST	$10,380,881
ALLOCATED CWIP	$0
TOTAL ORIGINAL COST	$10,380,881
MARKET VALUE/ ORIGINAL COST	0,5337
MARKET VALUE OF OUTSIDE PLANT	$5,540,588
TOTAL NO. MAIN STATIONS (C4C)	2,907
MARKET VALUE PER MAIN STATION	$1,906

Document9F

V A L U A T I O N O P I N I O N

2010 PRELIMINARY REPORT

OF

FACILITIES AT

ABC LARGE INDUSTRIY COMPANY

V A L U A T I O N S U M M A R Y

REALTY IMPROVEMENTS	17,389,600
PERSONAL PROPERTY	17,623,800
TOTAL PRESENT WORTH, EXCLUDING LAND	35,013,400

CERTIFICATION: THIS APPRAISAL IS INTENDED TO REFLECT THE FAIR MARKET VALUE OF THE REALTY IMPROVEMENTS AND PERSONAL PROPERTY FOR SUBJECT PROPERTY, EXCLUDING LAND, AS OF JANUARY 1, 2010. THIS OPINION IS TO BE USED BY OUR CLIENT, TEXAS APPRAISAL DISTRICT, ITS CHIEF APPRAISER AND A.R.B., IN THEIR CONSIDERATIONS OF MARKET VALUE FOR PURPOSES OF AD VALOREM TAXATION. OWNERSHIP AND SITUS ARE NOT ASSURED.

APPRAISED BY:

APPRAISER, ENGR.
CAPITOL APPRAISAL GROUP, LLC

PRINTED: 10/08/10 12:04:10

ABC LARGE INDUSTRIY COMPANY
2010 PRELIMINARY REPORT

REALTY IMPROVEMENTS VALUATION SUMMARY

CATEGORY	REPLACEMENT COST	VALUATION FACTOR	PRESENT WORTH
1. PROCESS GROUP	49,590,000	.194	9,598,100
2. UTILITIES	19,340,100	.183	3,539,500
3. RECEIVING, SHIPPING, AND STORAGE	6,942,600	.182	1,261,400
4. SERVICE FACILITIES.	11,681,200	.184	2,144,400
5. GENERAL BUILDINGS	4,408,000	.192	846,200
6. OFF SITE FACILITIES			
7. RESEARCH AND DEVELOPMENT			
SUB-TOTAL	91,961,900		17,389,600
8. CONSTR. IN PROGRESS			
9. OUT OF SERVICE	22,040,000	.000	
10. NEW UNITS			
SUB-TOTAL	22,040,000		
IMPROVEMENTS TOTAL	114,001,900		17,389,600

PAGE 1 PRINTED: 10/08/10 12:04:10

ABC LARGE INDUSTRIY COMPANY
2010 PRELIMINARY REPORT

PERSONAL PROPERTY VALUATION SUMMARY

CATEGORY	REPLACEMENT COST	VALUATION FACTOR	PRESENT WORTH
1. AUTOS & TRUCKS	2,360,000	.430	1,014,800
2. FF&E	250,000	.485	121,300
3. COMPUTERS	150,000	.143	21,500
4. SUPPLIES & PARTS	1,026,000	.750	769,500
5. MOB MACH/TOOLS	327,800	.600	196,700
6. INVENTORY	15,500,000	1.000	15,500,000
PERSONAL PROPERTY	19,613,800		17,623,800

PAGE 2 PRINTED: 10/08/10 12:04:10

ABC LARGE INDUSTRIY COMPANY
2010 PRELIMINARY REPORT

THE OPERABLE FACILITY HAS A SERVICE LIFE OF 27.8 YEARS

AND THE DOLLAR AVERAGE REMAINING LIFE IS 1.1 YEARS THE

ESTIMATED INTEREST RATE FOR AN INVESTMENT IN THIS TYPE OF

PLANT IS 8.6%. NORMALLY, A PLANT IN THIS RANGE OF INVEST-

MENT WOULD BE LOCATED ON A SITE VALUED AT$ 8,110,000.

VALUATION SUMMARY

TYPE VALUE	VALUE	CONSIDERATION
REPLACEMENT	114,001,900	
PHYSICAL	39,900,600	74,101,300
FUNCTIONAL	21,733,500	18,167,100
LOC & EXT OBSO	17,389,600	4,343,900

THE PERSONAL PROPERTY INDEXES FOR THIS PLANT ARE:

	CLASSIFICATION	I	B	F
1.	AUTOS & TRUCKS	2.3600	1,000.0000	.4300
2.	FF&E	.2500	1,000.0000	.4850
3.	COMPUTERS	.1500	1,000.0000	.1430
4.	SUPPLIES & PARTS	1.2000	.7500	.7500
5.	MOB MACH/TOOLS	1.1500	.2500	.6000
6.	INVENTORY	15.5000	1,000.0000	1.0000
	PROCESS UNITS	20.0000	20.0000	.0000
	OVERALL PLANT FACTORS	123-999	1.0000	1.1020
				.8000

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OIL LSE Sample #1-Smaller

MAPlll CAPITOL APPRAISAL GROUP INC,
10/06/10 13, 55 DETAILED MINERAL APPRAISAL PAGE
INCOME APPROACH1 DNCF TECHNIQUE

CLIENT! 777 SAMPLE COUNTY APPR DIST RRC1 99 777011 WELLI PRIMARY PRODUCT: OIL APPRAISAL AS OF: 10/01/01

FIELD (RES) 1 99999 999 COUNTY! 777
IND OPERATOR: 999999 NOMINATOR NOT REQUIRED / SWR 3
LEASE NAME: A E SMITH COMM:ENT: SAMPLE **OIL LSE #1-SML** MODIFICATION USER: CHAR

HISTORICAL PRODUCTION:

DATE OF FIRST PRODUCTION: 41/10/01

----------RAILROAD COMMISSION PRODUCTION----------

DATE	OIL (BBL)	GAS (MCF)	WATER(E)-8/D	%WC-WT	FLOW	LIFT	WELLS
PRIOR	1123821	162					
1999	16133						
2000	14603						
2001	13668						
2002	10161						
2003	9016						
2004	7720						
2005	8922						
2006	9071						
2007	11892						
2008	13024						
JAN	949						
FEB	673						
MAR	1115						
APR	1063						
MAY	1003						
JUN	936						
JUL	841						
AUG	577						
SEP	791						
OCT	924						
NOV	855						
DEC	1400						
2009	11127						
TOTAL	1249158	162					

PROJECTION PARAMETERS:

PROJECTION DATE: 11/01/01 LIMIT DATE1 00/00/00
ANNUAL OIL PRODUCTION: 11127 OIL RESERVE LIMIT:
ANNUAL GAS PRODUCTION: GAS RESERVE LIMIT:
NUMBER OF PRODUCING WELLS: NUMBER OF INJECTION WELLS:

DECLINE PARAMETERS:

	----CALCULATED PARAMETERS-----		-----APPRAISER PARAMETERS----			
	OIL	GAS	p START-RATE	DECL--%	N-FACT	MOS
DATE!	07/07/01	07/07/01	45,0	25,00		12
DAILY-A:	30, 5			15, 00		
DECL-%:	35.53	35.53				
N-FACT:						

SECONDARY PRODUCT RATIO: SECONDARY PRODUCT RATIO1

MAPIll
10/06/10 13, 55

CAPITOL APPRAISAL GROUP, INC,
DETAILED MINERAL APPRAISAL
INCOME APPROACH: DNCF TECHNIQUE

PAGE

CLIENT: 777 SAMPLE COUNTY APPR DIST RRCI 99 777011 WELLI PRIMARY PRODUCT: OIL APPRAISAL AS OF: 10/01/01

FIELD (RES): 99999 999
IND OPERATOR: 999999 NOMINATOR NOT REQUIRED / SWR 3
LEASE NAME: A E SMITH

COUNTY: 777
COW'1ENT1 SAMPLE OIL LSE #1-SML

MODIFICATION DATE:
MODIFICATION TIME:
MODIFICATION USER: CHAR

ECONOMIC PARAMETERS:
OIL PRICE: 94, 09
OIL GRAVITY 1 28, 0
OIL GRAVITY ADJUSTMENT I
GAS PRICE: 10, 04
GAS PRICE PARITY: 1.00

PRODUCING WELLS 1 7
INJECTION WELLS: 1
DEPTH I 2600
OPERATING COST ($/WELL): 6378
*** SECTION 22, 27 RESTRICTION
***
EQUIPMENT COST ($/WELL): 8269

BASE DISCOUNT RATE: 1.1300
AP VALOREM TAX BURDEN: 2, 00
ECONOMIC LIFE! 19
P-TO-I (7/8-1/8): 4. 7 4, 8
PAYOUT (7/8-1/8) I 4. 7 4. 8
R/P RATIO (OIL-GAS): 6.0

CASH FLOW ANALYSIS:

START DATE	-----PRODUCTION----- OIL (BBL)	GAS (MCF)	-------PRODUCT PRICES----- OIL	NET	GAS	NET	-7/8 REVENUE (M$)- OIL	GAS	---OP COST (M$) --- D	CAP EXP	--UNDISC INCOME-- 7/8 (M$)	1/8 (M$)	--DISCOUNTED INCOME-- 7/8 ($)	1/8 ($)
10/01/01	14275		35, 19	33, 57	6, 06	5, 61	419				375	60	349376	55858
11/01/01	11372		40, 69	38. 82	6, 61	6, 11	386				344	55	278830	44746
12/01/01	9669		50, 59	48, 26	7.49	6, 93	408				366	58	257988	41128
13/01/01	8239		65, 98	62, 94	8, 26	7. 64	454				409	65	250900	39744
14/01/01	6984		74, 78	71.34	9, 36	8, 66	436				390	62	207980	33205
15/01/01	5938		83,57	79, 73	10, 46	9, 68	414				367	59	170153	27437
16/01/01	5045		92, 37	88, 12	10, 94	10, 12	389						137204	22403
17/01/01	4301		101. 61	96. 94	11.24	10,40	365						110322	18270
18/01/01	3645		105, 67	100, 81	11.53	10,67	322		52				82274	14002
19/01/01	3097		108,84	103,83	11,81	10,92	281		53				60487	10655
20/01/01	2635		111,56	106,43	12,09	11,18	245		55				43937	8080
21/01/01	2245		113,79	108,56	12,36	11.43	213		56				31436	6106
22/01/01	1902		114, 93	109, 64	12,62	11.67	182		58				21675	4543
23/01/01	1617		116,08	110,74	12.87	11,90	157		60				14676	3392
24/01/01	1374		117,24	111. 85	13,11	12,13	134		62				9598	2532
25/01/01	1173		118,41	112,96	13, 34	12 .34	116		63				6010	1898
26/01/01	993		119,59	114,09	13,56	12,54	99		65				3361	1411
27/01/01	844		120,79	115.23	13,77	12,74	85		67				1537	1053
28/01/01	718		122,00	116,39	13,97	12,92	73		69				282	787
	86066		<====== SUB-TOTAL			======>	5180		1027				2038026	337250
	86066		<====== TOTAL			======>	5180		1027				2038026	337250
							EQUIPMENT ADJUSTMENT:						3793	
							VALUE AT BASE DISCOUNT RATEi						2041819	337250
							VALUE AT MAF ADJUSTMENT:		94/90				1919309	317015
			IN PLACE	DAILY AVG			SECTION 23,175 VALUE:						1764393	288734
	7/8 $/BBL:		23, 43	44810			TOTAL APPRAISED VALUE:						1764393	288734
	7/8 $/MCF:													
	7/8 $/BOE:		23, 43	44810			AVERAGE ANNUAL RORI			20		20		
							DIVISION ORDER TOTAL WORKING INTEREST & VALUE:		, 825000				1648900	

*** SECTION 22, 27 RESTRICTION ***

JURISDICTIONS: SAMPLE COUNTY 1.0000)
SAMPLE ISO 1. 0000 I
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MAPlll CAPITOL APPRAISAL GROUP INC,
10/06/10 13,55 DETAILED MINERAL APPRAISAL PAGE
INCOME APPROACH: DNCF TECHNIQUE

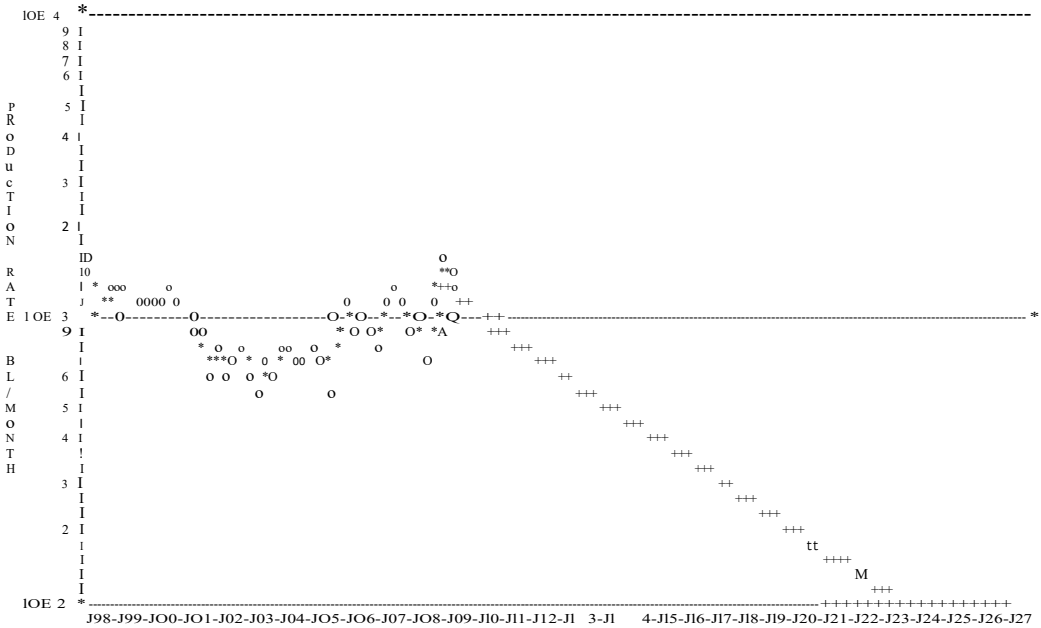
CLIENT! 777 SAMPLE COUNTY APPR DIST RRC1 99 777011 WELL1 PRIMARY PRODUCT: OIL APPRAISAL AS OF: 10/01/01

FIELD (RES) 1 99999 999 COUNTY: 777 MODIFICATION DATE:
IND OPERATOR: 999999 NOMINATOR NOT REQUIRED / SWR 3 MODIFICATION TIME:
LEASE NAME1 A E SMITH COMMENT: SAMPLE OIL LSE #1-SML MODIFICATION USER: CHAR

DATE	OIL (BBL)	GAS (MCF)	WLS	-- 2009 MONTHLY PRODUCTION -- MON	OIL(BBL)	GAS (MCF)	WLS
PRIOR	1123821	162		JAN	949		5
1999	16133			FEB	673		5
2000	14603			MAR	1115		5
2001	13668			APR	1063		5
2002	10161			MAY	1003		5
2003	9016			JUN	936		
2004	7720			JUL	841		
2005	8922			AUG	577		
2006	9071			SEP	791		
2007	11892			OCT	924		
2008	13024			NOV	855		
2009	11127			DEC	1400		
2010	13682						

CALC DECLINE1	OIL	GAS
DATE:	07/07/01	07/07 /01
DAILY-Al	30, 5	
DECL-%:	35.53	35,53
N-FACT:		
----- APPRAISER DECLINE ------		
P START-RATE	DECL-%	N-FACT MOS
0 45,0	25, 00	12
	15, 00	

2010 MONTHLY PRODUCTION -- MON	OIL (BBL)	GAS (MCF)	WLS
JAN	1544		7
FEB	1484		7
MAR	1478		
APR	1296		
MAY	1326		
JUN	1227		
JUL	1267		
AUG	1268		
SEP	1352		
OCT	1440		
NOV			
DEC			

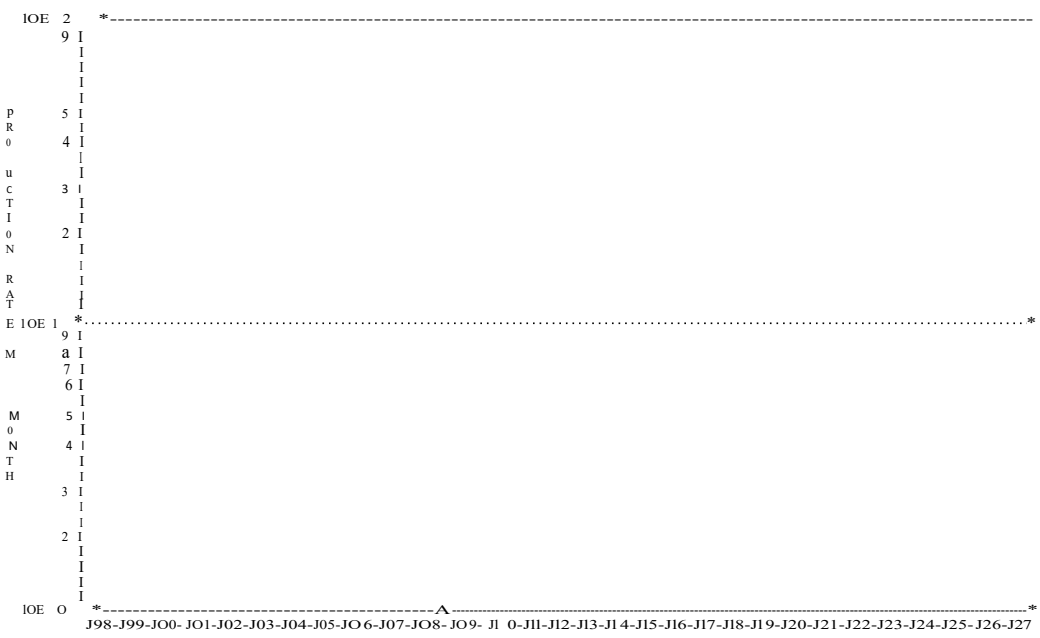


MAPlll CAPITOL APPRAISAL GROUP, INC,
10/06/10 13,55 DETAILED MINERAL APPRAISAL PAGE
INCOME APPROACH1 DNCF TECHNIQUE

CLIENT: 777 SAMPLE COUNTY APPR DIST RRC: 99 777011 WELLI PRIMARY PRODUCT I OIL APPRAISAL AS OF: 10/01/01

FIELD (RES): 99999 999 COUNTY! 777 MODIFICATION DATE:
IND OPERATOR! 999999 NOMINATOR NOT REQUIRED / SWR 3 MODIFICATION TIME:
LEASE NAME I A E SMITH COMMENT! SAMPLE OIL LSE #1-SML MODIFICATION USER1 CHAR

DATE	OIL (BBL)	GAS (MCF)	WLS	-- 2009 MONTHLY PRODUCTION --			CALC DECLINE 1	OIL	GAS	2010 MONTHLY PRODUCTION --			
PRIOR	1123821	162		MON	OIL (BBL)	GAS (MCF)	WLS	DATE1	07/07/01	07/07/01	MON	OIL (BBL)	GAS (MCF) WLS
1999	16133			JAN	949		5	DAILY-A:	30, 5		JAN	1544	7
2000	14603			FEB	673		5	DECL-% 1	35.53	35, 53	FEB	1484	
2001	13668			MAR	1115		5	N-FACTI			MAR	1478	
2002	10161			APR	1063			----- APPRAISER DECLINE ------			APR	1296	
2003	9016			MAY	1003			P START-RATE	DECL-%	N-FACT MOS	MAY	1326	
2004	7720			JUN	936			0 45, 0	25, 00	12	JUN	1227	
2005	8922			JUL	841			B	15, 00		JUL	1267	
2006	9071			AUG	577						AUG	1268	
2007	11892			SEP	791						SEP	1352	
2008	13024			OCT	924						OCT	1440	
2009	11127			NOV	855						NOV		
2010	13682			DEC	1400						DEC		



DOCUMENT9H

OIL LSE Sample #2-Larger

MAPIII CAPITOL APPRAISAL GROUP, INC,
10/06/10 13,55 DETAILED MINERAL APPRAISAL PAGE
INCOME APPROACH: DNCF TECHNIQUE

CLIENT! 777 SAMPLE COUNTY APPR DIST RRC: 99 777002 WELL: PRIMARY PRODUCT: OIL APPRAISAL AS OF: 10/01/01

FIELD (RES): 99999 999 COUNTY! 777 MODIFICATION DATE:
IND OPERATOR: 999999 NOMINATOR NOT REQUIRED / SWR 3 MODIFICATION TIME:
LEASE NAME: HUGH KELKER COMMENT I OIL SAMPLE #2 --LG MODIFICATION USER: CHAR

HISTORICAL PRODUCTION:

DATE OF FIRST PRODUCTION: 48/06/01

----------RAILROAD COMMISSION PRODUCTION----------

DATE	OIL (BBL)	GAS (MCF)	WATER(E)-B/D	%WC-WT	FLOW	LIFT	WELLS
PRIOR	16008540	3803197					
1999	46797	24076	94965	67			
2000	32629	12793	77798	70			
2001	31256	13091	33968	52			
2002	28777	12535	31046	52			
2003	26339	12354	24472	48			
2004	27390	13510	31046	53			
2005	28852	13754	33238	54			
2006	29559	12400	23741	45			
2007	20790	11571	1461	7			
2008	22477	11550	2557	10			
JAN	1694	869					
FEB	1541	861					
MAR	1566	809					
APR	1504	931					5
MAY	2439	1565					5
JUN	1875	1169					5
JUL	1815	972					5
AUG	1932	1214					
SEP	1999	740	69				
OCT	2133	668	13				
NOV	2446	1210					
DEC	3162	1751					
2009	24106	12759	33968	58			
TOTAL	16327512	3953590					

PROJECTION PARAMETERS:

PROJECTION DATE: 11/01/01 LIMIT DATE: 00/00/00
ANNUAL OIL PRODUCTION I 24106 OIL RESERVE LIMIT I
ANNUAL GAS PRODUCTION: 12759 GAS RESERVE LIMIT:
NUMBER OF PRODUCING WELLS: 6 NUMBER OF INJECTION WELLS 1

DECLINE PARAMETERS:

----CALCULATED PARAMETERS-----			-----APPRAISER PARAMETERS ----			
	OIL	GAS	p START-RATE	DECL-%	N-FACT	MOS
DATE:	98/01/01	98/01/01				
DAILY-A:	66,0	34,9	75.0	6.00		
DECL-%:	6,06	6,06				
N-FACTI						

SECONDARY PRODUCT RATIO: 529 SECONDARY PRODUCT RATIO:

MAPlll CAPITOL APPRAISAL GROUP, INC.
10/06/10 13,55 DETAILED MINERAL APPRAISAL PAGE
INCOME APPROACH: DNCF TECHNIQUE

CLIENT! 777 SAMPLE COUNTY APPR DIST RRC: 99 777002 WELL! PRIMARY PRODUCT: OIL APPRAISAL AS OF: 10/01/01

FIELD (RES) 1 99999 999 COUNTY! 777 MODIFICATION DATE:
IND OPERATOR: 999999 NOMINATOR NOT REQUIRED / SWR 3 MODIFICATION TIME:
LEASE NAME: HUGH KELKER COMMENT: OIL SAMPLE #2 --LG MODIFICATION USER: CHAR

ECONOMIC PARAMETERS:
OIL PRICE: 94, 09
OIL GRAVITY 1 43, 0
OIL GRAVITY ADJUSTMENT:
GAS PRICE: 10, 04
GAS PRICE PARITY: 1.00

PRODUCING WELLS:
INJECTION WELLS:
DEPTH: 8545
OPERATING COST ($/WELL): 15076
*** SECTION 22,27 RESTRICTION
***
EQUIPMENT COST ($/WELL): 14095

BASE DISCOUNT RATE: 1. 1300
AD VALOREM TAX BURDEN: 2.00
ECONOMIC LI FE: 42
P-TO-I (7/8-1/8): 8, 0 7, 8
PAYOUT (7/8-1/8): 5, 8 5, 8
R/P RATIO (OIL-GAS): 15, 4 15, 3

CASH FLOW ANALYSIS:

START DATE	PRODUCTION OIL (BBL)	PRODUCTION GAS (MCF)	PRODUCT PRICES OIL	NET	GAS	NET	-7/8 REVENUE (M$) OIL	GAS	OP COST (M$) DIRECT	CAP EXP	UNDISC INCOME 7/8 (M$)	1/8 (M$)	DISCOUNTED INCOME 7/8 ($)	1/8 ($)
10/01/01	26546	12349	35, 19	33, 57	6, 06	5, 61	780	61	90		750	120	699302	111950
11/01/01	24954	11601	40, 69	30, 82	6, 61	6, 11	848	62	86		824	130	667928	105372
12/01/01	23458	1089B	50, 59	4B ,26	7.49	6, 93	991	66	86		971	151	6B4464	106436
13/01/01	22110	10266	65, 9B	62. 94	8 ,26	7, 64	1218	69	90		1196	184	733343	112666
14/01/01	20726	9617	74, 78	71.34	9, 36	B, 66	1294	73	93		1274	195	679092	104091
15/01/01	194B4	9032	B3,57	79,73	10,46	9. 68	1359	77	96		1340	205	621275	95094
16/01/01	1B316	B4B7	92 ,37	B8,12	10,94	10.12	1412	75	99		13B9	212	559896	B5663
17/01/01	17263	7995	101, 61	96, 94	11,24	10. 40	1464	73	102		1435	220	503230	76976
18/01/01	161B1	74B9	105, 67	100,B1	11.53	10, 67	1427	70	105		1393	214	424524	65202
19/01/01	15213	7037	108, 84	103,83	11.B1	10. 92	13B2	67	108		1342	207	355631	54B84
20/01/01	14299	6610	111.56	106,43	12,09	11. 1B	1332	65	111		1285	199	296263	45977
21/01/01	13477	6226	113,79	108,56	12, 36	11. 43	12B0	62	114		122B	192	246164	38439
22/01/01	12634	5831	114, 93	109, 64	12, 62	11. 67	1212	60	118		1154	182	20110B	31661
23/01/01	11B77	5479	116,08	110,74	12,87	11,90	1151	57	121		1087	173	164689	26152
24/01/01	11165	514B	117, 24	111, 85	13,11	12,13	1093	55	125		1022	164	134748	21601
25/01/01	10522	4848	118,41	112, 96	13,34	12,34	1040	52	129		964	156	110439	178B3
26/01/01	9863	4543	119, 59	114, 09	13,56	12,54	985	50	133		902	148	89881	14727
27/01/01	9272	4267	120, 79	115,23	13,77	12,74	935	48	136		846	140	73304	12162
28/01/01	8716	4009	122, 00	116.39	13.97	12,92	888	45	141		792	133	59707	10043
29/01/01	8215	3775	123.22	117,55	14,16	13,10	845	43	145		743	127	48712	8314
	314291	145507	<====== SUB-TOTAL ======>				22934	1228	2226		21937	3452	7353700	1145293
	95511	43638	<====== REMAINING ======>				10773	553	4554		6772	1618	196637	38698
	409802	189145	<====== TOTAL ======>				33707	1782	6780		28709	5070	7550337	1183991
							EQUIPMENT ADJUSTMENT:				85		223	
							VALUE AT BASE DISCOUNT RATE:						7550560	1183991
							VALUE AT MAF ADJUSTMENT:		00/00				7550560	11B3991
		IN PLACE	DAILY AVG				SECTION 23,175 VALUE 1						6026555	940986
7/B	$/BBL:	15, 87	86710				TOTAL APPRAISED VALUE!						6026555	940986
7/8	$/MCF:	2, 03	11011											
7/8	$/BOE:	15, 57	85013				AVERAGE ANNUAL ROR:				20	20		

DIVISION ORDER TOTAL WORKING INTEREST & VALUE: ,825000 5650160
*** SECTION 22, 27 RESTRICTION

JURISDICTIONS: SAMPLE COUNTY 1. 0000!
SAMPLE ISO 1. 0000 I
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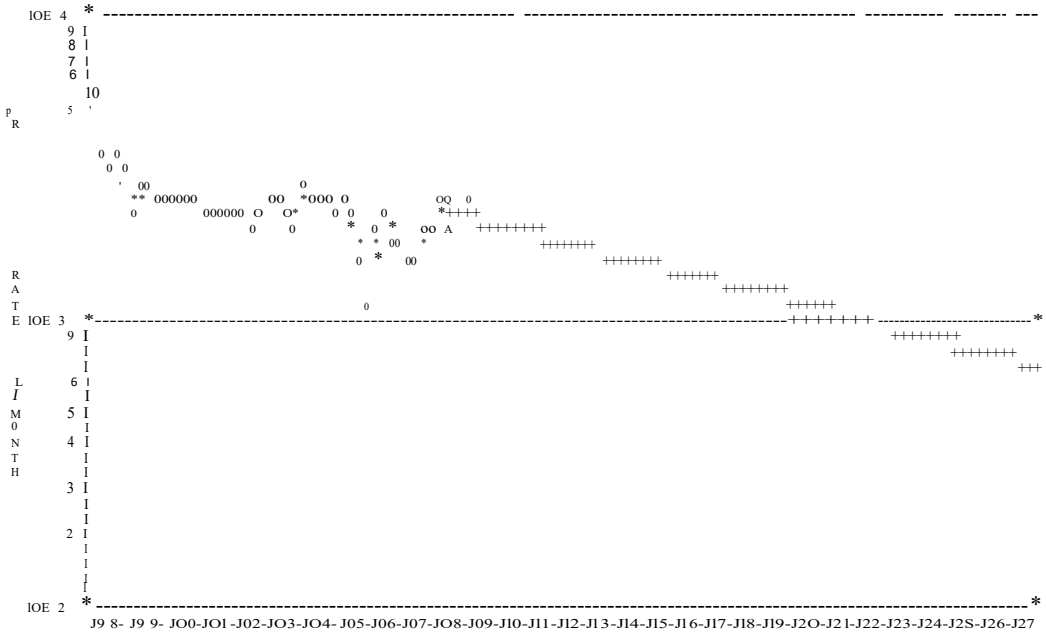
MAPlll CAPITOL APPRAISAL GROUP, INC.
10/06/10 13,55 DETAILED MINERAL APPRAISAL PAGE
INCOME APPROACH: DNCF TECHNIQUE

CLIENT! 777 SAMPLE COUNTY APPR DIST RRC: 99 777002 WELL: PRIMARY PRODUCT: OIL APPRAISAL AS OF: 10/01/01

FIELD (RES): 99999 999 COUNTY: 777 MODIFICATION DATE:
IND OPERATOR! 999999 NOMINATOR NOT REQUIRED / SWR 3 MODIFICATION TIME:
LEASE NAME I HUGH KELKER COMMENT: OIL SAMPLE #2 --LG MODIFICATION USERI CHAR

DATE	OIL (BBL)	GAS (MCF)	WLS	-- 2009 MONTHLY PRODUCTION --			CALC DECLINE:	OIL	GAS	2010 MONTHLY PRODUCTION --			
PRIOR	16008S40	3803197		MON	OIL(BBL)	GAS (MCF)	WLS	DATE:	98/01/01	98/01/01	MON	OIL(BBL)	GAS(MCF) WLS
1999	46797	24076		JAN	1694	869	6	DAILY-A:	66, 0	34, 9	JAN	2829	1655 6
2000	32629	12793		FEB	1541	861		DECL-%:	6, 06	6,06	FEB	2189	1328
2001	312S6	13091		MAR	1566	809		N-FACT:			MAR	2309	787
2002	28777	12535		APR	1504	931		----- APPRAISER DECLINE ------			APR	2623	1438
2003	26339	12354		MAY	2439	1565		P START-RATE DECL-% N-FACT MOS			MAY	2364	1359
2004	27390	13510		JUN	1875	1169		0 75.0 6.00			JUN	2114	1269
2005	28852	13754		JUL	1815	972					JUL	2271	1723
2006	29559	12400		AUG	1932	1214					AUG	2336	1439
2007	20790	11S71		SEP	1999	740					SEP	2120	1495
2008	22477	11S50		OCT	2133	668					OCT	2539	1403
2009	24106	12759		NOV	2446	1210					NOV		
2010	23694	13896		DEC	3162	1751					DEC		

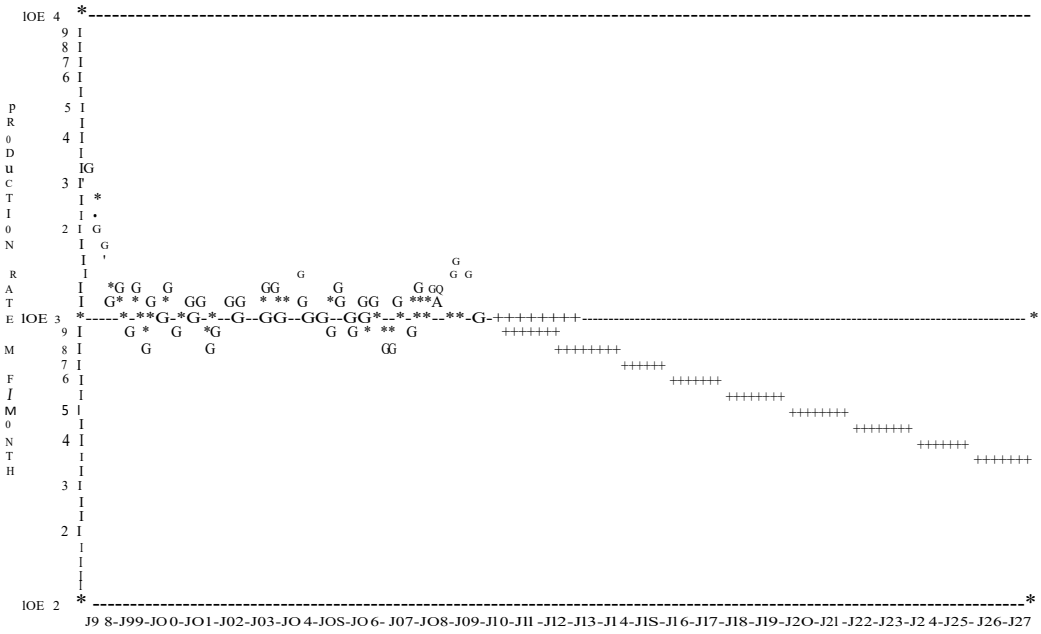


MAPlll CAPITOL APPRAISAL GROUP, INC.
10/06/10 13, 55 DETAILED MINERAL APPRAISAL PAGE
INCOME APPROACH! DNCF TECHNIQUE

CLIENTI 777 SAMPLE COUNTY APPR DIST RRC: 99 777002 WELL: PRIMARY PRODUCT: OIL APPRAISAL AS OFI 10/01/01

FIELD {RES): 99999 999 COUNTY: 777 MODIFICATION DATE:
IND OPERATOR! 999999 NOMINATOR NOT REQUIRED / SWR 3 MODIFICATION TIME
LEASE NAME I HUGH KELKER COMMENT: OIL SAMPLE #2 --LG MODIFICATION USER: CHAR

DATE	OIL {BBL)	GAS (MCF)	WLS	-- 2009 MONTHLY PRODUCTION --			CALC DECLINE:	OIL	GAS	-- 2010 MONTHLY PRODUCTION --			
PRIOR	16008540	3803197		MON	OIL(BBL)	GAS (MCF)	WLS	DATE:	98/01/01	98/01/01	MON	OIL (BBL)	GAS (MCF)	WLS
1999	46797	24076		JAN	1694	869	6	DAILY-Al	66, 0	34, 9	JAN	2829	1655	6
2000	32629	12793		FEB	1541	861	6	DECL-%:	6,06	6,06	FEB	2189	1328	6
2001	31256	13091		MAR	1566	809	6	N-FACT:			MAR	2309	787	6
2002	28777	12535		APR	1504	931	6	------ APPRAISER DECLINE ------			APR	2623	1438	6
2003	26339	12354		MAY	2439	1565	6	P START-RATE DECL-% N-FACT MOS			MAY	2364	1359	6
2004	27390	13510		JUN	1875	1169	6	0 75, 0 6. 00			JUN	2114	1269	6
2005	28852	13754		JUL	1815	972					JUL	2271	1723	
2006	29559	12400		AUG	1932	1214					AUG	2336	1439	
2007	20790	11571		SEP	1999	740					SEP	2120	1495	
2008	22477	11550		OCT	2133	668					OCT	2539	1403	
2009	24106	12759		NOV	2446	1210					NOV			
2010	23694	13896		DEC	3162	1751					DEC			



DOCUMENT91

GAS LSE Sample #!-Smaller

MAPlll CAPITO!, APPRAISAL GROUP, INC,
10/06/10 13.53 DETAILED MINERAL APPRAISAL PAGE
INCOME APPROACH: DNCF TECHNIQUE

CLIENT: 777 SAMPLE COUNTY APPR DIST RRCI 99 777004 WELL: PRIMARY PRODUCT: GAS APPRAISAL AS OF: 10/01/01

FIELD (RES) l 99999 999 COUNTY: 777 MODIFICATION DATE1
IND OPERATOR: 999999 NOMINATOR NOT REQUIRED / SWR 3 MODIFICATION TIME!
LEASE NAME: LAZY LINDA COMMENT: SAMPLE GAS LSE-SML MODIFICATION USER: CHAR

HISTORICAL PRODUCTION:

DATE OF FIRST PRODUCTION1 86/12/01

----------RAILROAD COMMISSION PRODUCTION----------

DATE	OIL (BBL)	GAS (MCF)	WATER (B/D)	FTP	FLOW	LIFT	WELLS
PRIOR	98202	14147992					
1999	1476	378102	12	900			
2000	6717	1139201	30	950			
2001	6618	1218292	30	550			
2002	6678	1138126	40	380			
2003	5675	935663	29	252			
2004	4269	795303	51	240			
2005	2876	601597	40	250			
2006	2231	598200	56	100			
2007	1349	477221		140			
2008	1223	472678	37	80			
JAN	22	29304					
FEB	197	36798					
MAR	156	38188					
APR	292	39689					
MAY	84	40934					
JUN	167	36969					
JUL	162	42031					
AUG	134	29926					
SEP	90	10870					
OCT							
NOV	63	12018	13	60			
DEC	228	47049					
2009	1595	363776	13	60			
TOTAL	138909	22266151					

PROJECTION PARAMETERS:

PROJECTION DATE: 11/01/01 LIMIT DATE: 00/00/00
ANNUAL OIL PRODUCTION: 1595 OIL RESERVE LIMIT:
ANNUAL GAS PRODUCTION: 363776 GAS RESERVE LIMIT! 1750000
NUMBER OF PRODUCING WELLS: 1 NUMBER OF INJECTION WELLS:

DECLINE PARAMETERS:

----CALCULATED PARAMETERS-----			-----APPRAISER PARAMETERS--- -			
	OIL	GAS	p START-RATE	DECL-%	N-FACT	MOS
DATE:	00/01/01	00/01/01	1250,0	15,00		
DAILY-A:	4.8	1086.5				
DECL-%:	14, 07	14, 07				
N-FACT:						

SECONDARY PRODUCT RATIO: SECONDARY PRODUCT RATI01

MAPlll CAPITOL APPRAISAL GROUP I N C ,
10/06/10 13,53 DETAILED MINERAL APPRAISAL PAGE
INCOME APPROACH1 DNCF TECHNIQUE

CLIENT1 777 SAMPLE COUNTY APPR DIST RRC: 99 777004 WELL! PRIMA.RY PRODUCT: GAS APPRAISAL AS OFI 10/01/01

FIELD (RES): 99999 999 COUNTY: 777 MODIFICATION DATE:
IND OPERATOR! 999999 NOMINATOR NOT REQUIRED / SWR 3 MODIFICATION TIME!
LEASE NAME: LAZY LINDA COMMENT1 SAMPLE GAS LSE-SML MODIFICATION USER1 CHAR

ECONOMIC PARAMETERS 1		PRODUCING WELLS:		BASE DISCOUNT RATE:	1, 1300
OIL PRICE:	106, 29	INJECTION WELLS:		AD VALOREM TAX BURDEN:	2, 00
OIL GRAVITY!	51. 0	DEPTH:	11000	ECONOMIC LI FE1	7
OIL GRAVITY ADJUSTMENT I		OPERATING COST ($/WELL) 1	20285	P-TO-I (7/8-1/8):	3 ,5 3, 5
GAS PRICE!	10, 00	*** SECTION 22,27 RESTRICTION***		PAYOUT (7/8-1/8):	3, 8 3, 8
GAS PRICE PARITY:	1.00	EQUIPMENT COST ($/WELL) 1	7882	R/P RATIO (OIL-GAS) 1	4, 7 4, 5

CASH FLOW ANALYSIS:

START	-----PRODUCTION-----		------PRODUCT PRICES-----				-7/8 REVENUE{M$)-		---OP COST(M$)---		--UNDISC INCOME--		--DISCOUNTED INCOME--	
DATE	OIL (BBL)	GAS (MCF)	OIL	NET	GAS	NET	OIL	GAS	DIRECT	CAP EXP	7/8(M$)	1/8(M$)	7/8($)	1/8($)
10/01/01	1625	421127	39, 75	37, 92	6,04	5, 59	54	2060	20		2093	302	1952171	281584
11/01/01	1396	357998	45, 97	43, 86	6.59	6, 10	54	1911	19		1945	281	1577245	227553
12/01/01	1200	304332	57, 16	54 ,53	7.47	6, 91	57	1840	19		1878	271	1324229	191118
13/01/01	1035	259364	74, 55	71.12	8.24	7. 62	64	1729	20		1773	256	1087387	157113
14/01/01	888	219831	84, 49	80, 60	9.34	0. 64	63	1662	21		1704	246	908352	131352
15/01/01	762	186877	94, 43	90,09	10.44	9. 66	60	1580	21		1618	234	750219	108596
16/01/01	656	158864	104, 37	99.57	10. 92	10.10	57	1404	22		1439	209	580130	84150

7562	1908393	<====== SUB-TOTAL ======>	409	12185	143		12451	1799	8179733	1181466
7562	1908393	<====== TOTAL	409	12185	143		12451	1799	8179733	1181466
			EQUIPMENT ADJUSTMENT:				8		2763	
			VALUE AT BASE DISCOUNT RATE:						8182496	1181466
			VALUE AT MAF ADJUSTMENT:			90/90			7364247	1063319
	IN PLACE	DAILY AVG	SECTION 23,175 VALUEI						7424498	1071908
7/8 $/BBL:	34, 69	54658	TOTAL APPRAISED VALUE:						7364247	1063319
7/8 $/MCF:	4 ,27	6523								
7/8 $/BOE:	28, 37	43340	AVERAGE ANNUAL RORI				20	20		

DIVISION ORDER TOTAL WORKING INTEREST & VALUEI ,825000 6938920
*** SECTION 22,27 RESTRICTION***

JURISDICTIONS: SAMPLE COUNTY 1.0000]
SAMPLE ISO 1. 0000 I
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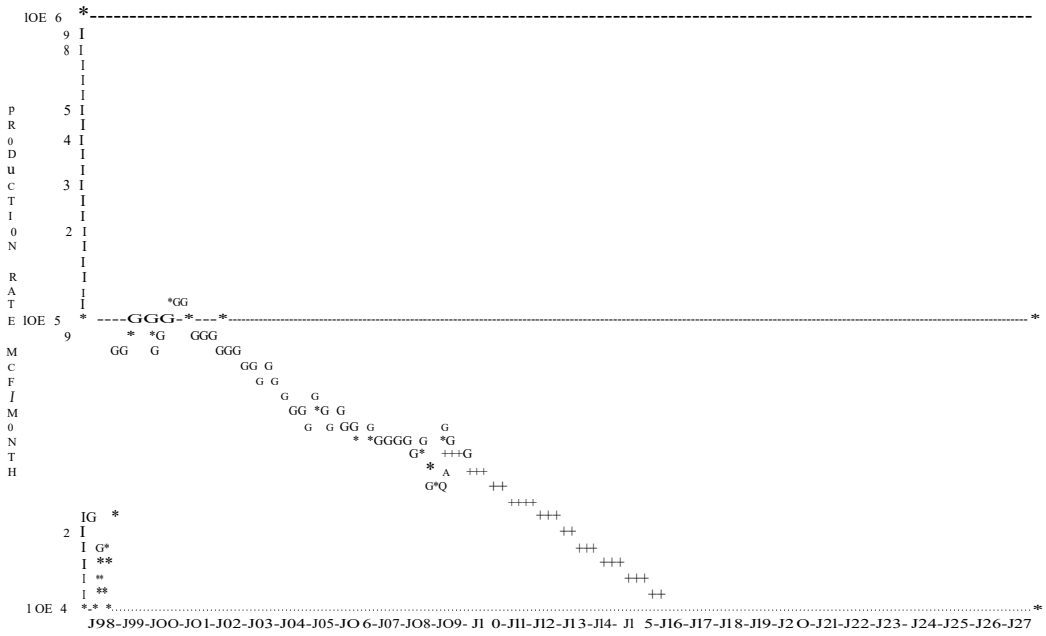
MAPIll CAPITOL APPRAISAL GROUP, INC.
10/06/10 13, 53 DETAILED MINERAL APPRAISAL PAGE
INCOME APPROACH I DNCF TECHNIQUE

CLIENT: 777 SAMPLE COUNTY APPR DIST RRCI 99 777004 WELL1 PRIMARY PRODUCT1 GAS APPRAISAL AS OFI 10/01/01

FIELD (RES) 1 99999 999 COUNTY: 777 MODIFICATION DATE I
IND OPERATOR: 999999 NOMINATOR NOT REQUIRED / SWR 3 MODIFICATION TIME:
LEASE NAME; LAZY LINDA COMM:ENT: SAMPLE GAS LSE-SML MODIFICATION USER; CHAR

DATE	OIL (BBL)	GAS (MCF)	WLS	-- 2009 MONTHLY PRODUCTION --				CALC DECLINE:	OIL	GAS	-- 2010 MONTHLY PRODUCTION --			
PRIOR	98202	14147992		MON	OIL (BBL)	GAS (MCF)	WLS	DATE:	00/01/01	00/01/01	MON	OIL (BBL)	GAS (MCF)	WLS
1999	1476	378102		JAN	22	29304	1	DAILY-A;	4,8	1086, 5	JAN	227	46713	1
2000	6717	1139201		FEB	197	36798	1	DECL-%:	14, 07	14, 07	FEB	145	39738	1
2001	6618	1218292		MAR	156	38188	1	N-FACTI			MAR	32	42709	1
2002	6678	1138126		APR	292	39689	1	----- APPRAISER DECLINE ------			APR	167	40399	1
2003	5675	935663		MAY	84	40934	1	P START-RATE DECL-% N-FACT MOS			MAY	78	37741	1
2004	4269	795303		JUN	167	36969		G 1250, 0 15,00			JUN	159	40099	
2005	2876	601597		JUL	162	42031					JUL	83	37813	
2006	2231	598200		AUG	134	29926					AUG	141	37367	
2007	1349	477221		SEP	90	10870					SEP	98	35619	
2008	1223	472678		OCT							OCT	125	35437	
2009	1595	363776		NOV	63	12018					NOV			
2010	1255	393635		DEC	228	47049			GRL:	1750000	DEC			

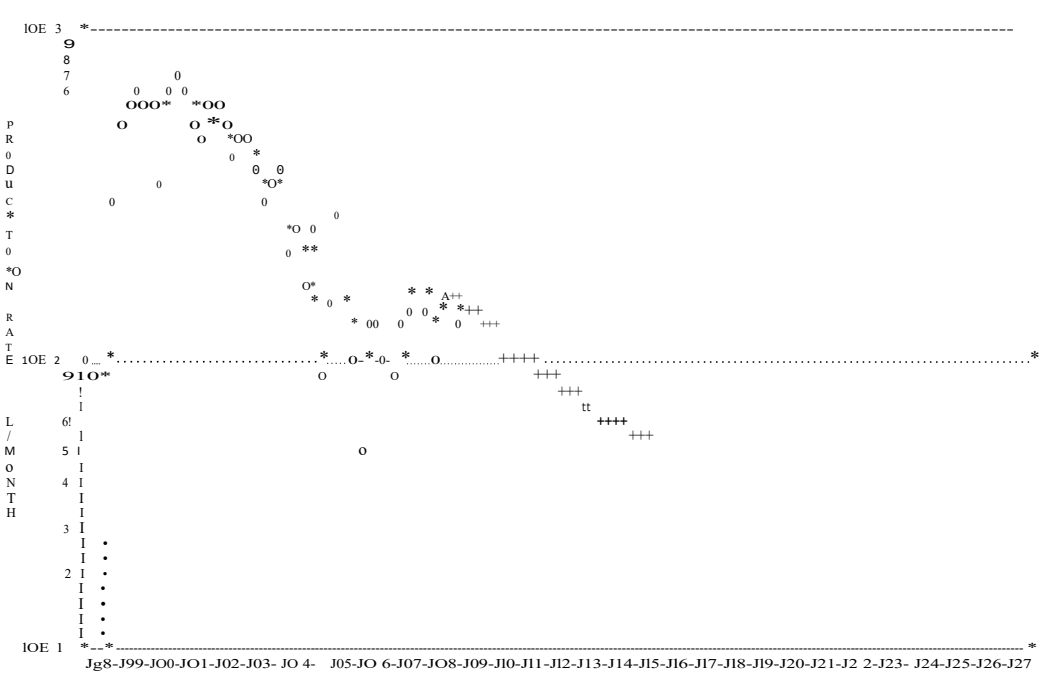


MAP111 CAPITOL APPRAISAL GROUP, INC.
10/06/10 13,53 DETAILED MINERAL APPRA:CSAL PAGE
INCOME APPROACH: DNCF TECHNIQUE

CLIENT: 777 SAMPLE COUNTY APPR DIST RRC: 99 777004 WELL: PRIMARY PRODUCT: GAS APPRAISAL AS OF: 10/01/01

FIELD (RES) I 99999 999 COUNTY! 777 MODIFICATION DATE:
IND OPERATOR: 999999 NOMINATOR NOT REQUIRED / SWR 3 MODIFICATION TIME:
LEASE NAME: LAZY LINDA COMMENT: SAMPLE GAS LSE-SML MODIFICATION USER: CHAR

DATE	OIL (BBL)	GAS (MCF)	WLS	-- 2009 MONTHLY PRODUCTION --			CALC DECLINE:	OIL	GAS	2010 MONTHLY PRODUCTION --			
PRIOR	98202	14147992		MON	OIL (BBL)	GAS (MCF)	WLS	DATEI	00/01/01	00/01/01	MON	OIL(BBL)	GAS (MCF) V S
1999	1476	378102		JAN	22	29304	1	DAILY-A:	4.8	1086, 5	JAN	227	46713 1
2000	6717	1139201		FEB	197	36798	1	DECL-%:	14 ,07	14, 07	FEB	145	39738 1
2001	6618	1218292		MAR	156	38188	1	N-FACT1			MAR	32	42709 1
2002	6678	1138126		APR	292	39689	1	----- APPRAISER DECLINE ------			APR	167	40399 1
2003	5675	935663		MAY	84	40934	1	P START-RATE DECL-% N-FACT MOS			MAY	78	37741 1
2004	4269	795303		JUN	167	36969	1	G 1250, 0 15.00			JUN	159	40099
2005	2876	601597		JUL	162	42031	1				JUL	83	37813
2006	2231	598200		AUG	134	29926	1				AUG	141	37367
2007	1349	477221		SEP	90	10870	1				SEP	98	35619
2008	1223	472678		OCT							OCT	125	35437
2009	1595	363776		NOV	63	12018					NOV		
2010	1255	393635		DEC	228	47049			GRL: 1750000		DEC		



DOCUMENT9J

GAS LSE Sample #2-Larger

MAPlll CAPITOL APPRAISAL GROUP I N C ,
10/06/10 13,55 DETAILED MINERAL APPRAISAL PAGE
INCOME APPROACH 1 DNCF TECHNIQUE

CLIENT! 777 SAMPLE COUNTY APPR DIST RRC: 99 777003 WELL: PRIMARY PRODUCT 1 GAS APPRAISAL AS OF: 10/01/01

FIELD (RES): 99999 999 COUNTY1 777 MODI FI CATION DATE:
!ND OPERATOR: 999999 NOMINATOR NOT REQUIRED / SWR 3 MODIFICATION TIME:
LEASE NAME: FLYING ARROW COMMENT: SAMPLE GAS LSE --LG MODIFICATION USER: CHAR

HISTORICAL PRODUCTIONI

DATE OF FIRST PRODUCTION: 86/06/01

----------RAILROAD COMMISSION PRODUCTION----------

DATE	OIL (BBL)	GAS (MCF)	WATER (B/D)	FTP	FLOW	LIFT	WELLS
PRIOR	253	33236764					
1999		1599264	23	322			
2000		1380913	28	288			
2001		1201564	39	306			
2002		758541	14	263			
2003		823634	14	300			
2004		591383	11	300			
2005		280666	2	300			
2006		192861	2	300			
2007		183998		300			
2008		177500		320			
JAN		14132					
FEB		15285					
MAR		14972					
APR		15605					
MAY		12575		830			
JUN		11876					
JUL		12207					
AUG		12153					
SEP		10424					
OCT		12252					
NOV		11985					
DEC		11254					
2009		154720		830			
TOTAL	259	40581808					

PROJECTION PARAMETERS:

PROJECTION DATE: 11/01/01 LIMIT DATE: 00/00/00
ANNUAL OIL PRODUCTION: OIL RESERVE LIMIT:
ANNUAL GAS PRODUCTION: 154720 GAS RESERVE LIMIT:
NUMBER OF PRODUCING WELLS; 1 NUMBER OF INJECTION WELLS:

DECLINE PARAMETERS:

----CALCULATED PARAMETERS-----			-----APPRAISER PARAMETERS---			
	OIL	GAS	p START-RATE	DECL-%	N-FACT	Mos
DATEI	98/01/01	98/01/01	G 400,0	15,00		
DAILY-A:		423, 6				
DECL-% 1	23,39	23,39				
N-FACT:						

SECONDARY PRODUCT RATIO: SECONDARY PRODUCT RATIO:

MAPlll CAPITOL APPRAISAL GROUP, INC,
10/06/10 13, 55 DETAILED MINERAL APPRAISAL PAGE
INCOME APPROACH: DNCF TECHNIQUE

CLIENT: 777 SAMPLE COUNTY APPR DIST RRC: 99 777003 WELL: PRIMARY PRODUCT: GAS APPRAISAL AS OF: 10/01/01

FIELD (RES) I 99999 999 COUNTY! 777 MODI FI CATION DATE:
IND OPERATOR: 999999 NOMINATOR NOT REQUIRED / SWR 3 MODIFICATION TIMEI
LEASE NAME: FLYING ARROW COMMENT: SAMPLE GAS LSE --LG MODIFICATION USER: CHAR

ECONOMIC PARAMETERS I
OIL PRICE! 96,27
OIL GRAVITY: 40, 0
OIL GRAVITY ADJUSTMENT:
GAS PRICE: 7 .10
GAS PRICE PARITY: 1.00

PRODUCING WELLS 1
INJECTION WELLS:
DEPTH: 15200
OPERATING COST ($/WELL): 13082
*** SECTION 22,27 RESTRICTION
***
EQUIPMBNT COST ($/WELL) I 6547

BASE DISCOUNT RATE: 1. 1300
AD VALOREM TAX BURDEN: 2.00
ECONOMIC LIFE: 24
P-TO-I (7/8-1/8) I 4. 1 4.1
PAYOUT (7/8-1/8): 4 ,5 4, 6
R/P RATIO (OIL-GAS): 6.5

CASH FLOW ANALYSIS:

START DATE	PRODUCTION OIL (BBL)	PRODUCTION GAS (MCF)	PRODUCT PRICES OIL	PRODUCT PRICES NET	PRODUCT PRICES GAS	PRODUCT PRICES NET	7/8 REVENUE(M$) OIL	7/8 REVENUE(M$) GAS	OP COST(M$) DIRECT	OP COST(M$) CAP EXP	UNDISC INCOME 7/8(M$)	UNDISC INCOME 1/8(M$)	DISCOUNTED INCOME 7/8($)	DISCOUNTED INCOME 1/8($)
10/01/01		134761	36,00	34,34	4,29	3, 97		468	13		455	67	424331	62361
11/01/01		114559	41.63	39,72	4,68	4. 33		434	12		422	62	341870	50278
12/01/01		97385	51.76	49,38	5.30	4. 90		418	12		405	60	285646	42058
13/01/01		82996	67,51	64,40	5,85	5. 41		393	13		380	56	232890	34413
14/01/01		70346	76,51	72.99	6,63	6, 13		377	13		364	54	194006	28739
15/01/01		59802	85,51	81.58	7.41	6, 85		358	14		345	51	159761	23740
16/01/01		50836	94, 51	90, 16	7, 75	7, 17		319	14		305	46	122829	18368
17/01/01		43324	103,96	99,18	7,96	7, 36		279	15		264	40	92661	13973
18/01/01		36721	108,12	103,15	8,17	7, 56		243	15		228	35	69436	10578
19/01/01		31217	111.36	106,24	8,37	7, 74		211	16		196	30	51911	8006
20/01/01		26537	114,14	108, 89	8, 57	7, 93		184	16		168	26	38744	6063
21/01/01		22614	116,42	111.06	8.76	8, 10		160	17		144	23	28812	4589
22/01/01		19169	117,58	112,17	8,94	8.27		139	17		122	20	21209	3454
23/01/01		16296	118,76	113,30	9,12	8.44		120	18		103	17	15582	2606
24/01/01		13852	119,95	114,43	9,29	8, 59		104	18		86	15	11341	1960
25/01/01		11805	121.15	115,58	9,45	8, 74		90	19		72	13	8214	1478
26/01/01		10006	122,36	116,73	9,61	8, 89		78	19		59	11	5847	1108
27/01/01		8505	123,58	117,90	9,76	9, 03		67	20		47	10	4113	832
28/01/01		7232	124,82	119,08	9,90	9, 16		58	20		38	0	2836	624
29/01/01		6163	126, 07	120,27	10, 04	9 .29		50	21		29	7	1911	469
		864126	<====== SUB-TOTAL		======>			4552	322		4230	650	2113950	315697
		16657	<====== REMAINING		======>			139	90		49	20	2487	955
		880783	<=""==:=:= TOTAL		====="">			4691	412		4279	670	2116437	316652
							EQUIPMENT ADJUSTMENTI				7		213	
							VALUE AT BASE DISCOUNT RATE:						2116650	316652
							VALUE AT MAF ADJUSTMENT:		90/97				2053151	307152
							SECTION 23,175 VALUE:						1846443	275009
							TOTAL APPRAISED VALUE:						1846443	275009
							AVERAGE ANNUAL ROR:				19	19		
							DIVISION ORDER TOTAL WORKING INTEREST & VALUE:				,825000		1736440	

	IN PLACE	DAILY AVG
7/8 $/BBL:		
7/0 $/MCF:	2, 40	5276
7/8 $/BOE:	20. 13	44315

*** SECTION 22, 27 RESTRICTION ***

JURISDICTIONS: SAMPLE COUNTY 1.00001
SAMPLE ISO 1, 0000I
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MAP111 CAPITOL APPRAISAL GROUP, INC.
10/06/10 13,55 DETAILIW MINERAL APPRAISAL PAGE
INCOME· APPROACH I DNCF TECHNIQUE

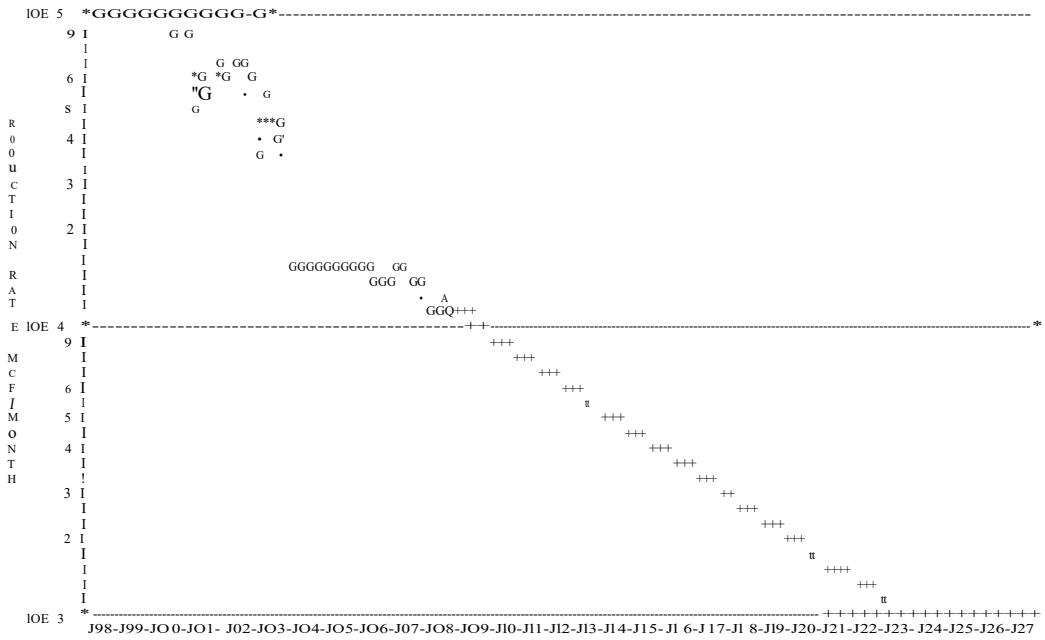
CLIENT: 777 SAMPLE COUNTY APPR DIST RRC: 99 777003 WELL1 PRIMARY PRODUCT: GAS APPRAISAL AS OF! 10/01/01

FIELD (RES): 99999 999 COUNTY: 777 MODIFICATION DATEI
IND OPERATOR! 999999 NOMINATOR NOT REQUIRED / SWR 3 MODIFICATION TIME:
LEASE NAME: FLYING ARROW COMMENT: SAMPLE GAS LSE --LG MODIFICATION USER: CHAR

DATE PRIOR	OIL (BBL} 253	GAS (MCF) WLS 33236764	-- 2009 MONTHLY PRODUCTION -- MON	OIL (BBL)	GAS (MCF)	WLS
1999		1599264	JAN		14132	1
2000		1380913	FEB		15285	1
2001		1201564	MAR		14972	1
2002		758541	APR		15605	1
2003		823634	MAY		12575	1
2004		591383	JUN		11876	
2005		280666	JUL		12207	
2006		192861	AUG		12153	
2007		183998	SEP		10424	
2008		177500	OCT		12252	
2009		154720	NOV		11985	
2010		112017	DEC		11254	

CALC DECLINE 1	OIL	GAS
DATE:	98/01/01	98/01/01
DAILY-AI		423, 6
DECL-% 1	23 ,39	23 ,39
N-FACT 1		
----- APPRAISER DECLINE ------		
P START-RATE DECL-% N-FACT MOS		
G 400, 0 15, 00		

2010 MONTHLY PRODUCTION -- MON	OIL (BBL)	GAS (MCF)	WLS
JAN		11602	1
FEB		10651	
MAR		11644	
APR		10865	
MAY		11379	
JUN		11028	
JUL		11516	
AUG		10856	
SEP		11283	
OCT		11193	
NOV			
DEC			



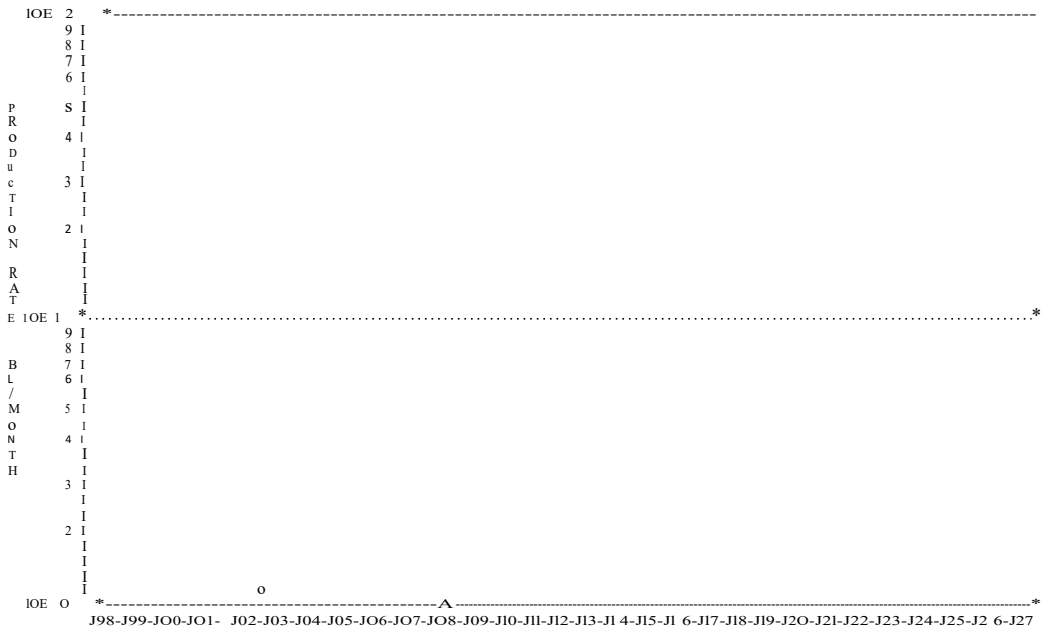
MAP111 CAPITOL APPRAISAL GROUP INC,
10/06/10 13,55 DETAILED MINERAL APPRAISAL PAGE
INCOME APPROACH; DNCF TECHNIQUE

CLIENT: 777 SAMPLE COUNTY APPR DIST RRC: 99 777003 WELLI PRIMARY PRODUCT: GAS APPRAISAL AS OF: 10/01/01

FIELD (RES) 1 99999 999 COUNTY! 777 MODIFICATION DATE1
IND OPERATORI 999999 NOMINATOR NOT REQUIRED / SWR 3 MODIFICATION TIME:
LEASE NAME: FLYING ARROW COMMENT! SAMPLE GAS LSE --LG MODIFICATION USER: CHAR

DATE PRIOR	OIL (BBL) 253	GAS (MCF) WLS 33236764	-- 2009 MONTHLY PRODUCTION -- MON	OIL(BBL)	GAS (MCF)	WLS
1999		1599264	JAN		14132	1
2000		1380913	FEB		15285	1
2001		1201564	MAR		14972	
2002		758541	APR		15605	
2003		B23634	MAY		12575	
2004		5913B3	JUN		11876	
2005		280666	JUL		12207	
2006		192861	AUG		12153	
2007		183998	SEP		10424	
2008		177500	OCT		12252	
2009		154720	NOV		11985	
2010		112017	DEC		11254	

CALC DECLINE I	OIL	GAS	2010 MONTHLY PRODUCTION -- MON	OIL (BBL)	GAS (MCF)	WLS
DATEI	98/01/01	98/01/01	JAN		11602	1
DAILY-A:		423, 6	FEB		10651	
DECL-%1	23,39	23, 39	MAR		11644	
N-FACT:			APR		10B65	
----- APPRAISER DECLINE ------			MAY		11379	
P START-RATE DECL-% N-FACT MOS			JUN		11028	
G 400,0 15, 00			JUL		11516	
			AUG		10856	
			SEP		11283	
			OCT		11193	
			NOV			
			DEC			



3 Copy of Reappraisal Plan Provided by Contractor

See four files in Operating Procedures folder
Reappraisal Plan subfolder

Document 8

Procedure for CAD Verification of Services Provided
by Appraisal Contractor

1. Verify lists of properties provided by the contractor agree with CAD's lists.

2. Verify appropriate methods of appraisal are used for each type of property [market, cost, income].

    a. Inquire if there has been any change in agreed appraisal methodology or application.
    b. Any variations from USPAP guidelines shall be documented and reviewed the following year.

3. Verify that complete and correct data resources, including market data, are used appropriately for each type of property.

    a. Inquire if there are added or deleted sources.
    b. If so, document reason for change and track affected properties.

4. Verify that contractor follows laws and statues applicable for all properties being appraised, including rendition compliance.

    a. Verify that Property Tax Code [P. T. C.] 1.04 (7) is met for all relevant properties such that both the appraisal approach and its conclusions meet the definition of fair market value.
    b. For minerals verify compliance with P. T. C 23.175 for mineral properties:
        - Use of Comptroller's Manual for Discounting Oil and Gas Income
        - Use of average product prices for the year prior to Jan 1

5. Verify agreed scheduling of:

    a. Preliminary appraisal report summarizing progress in completing the year's appraisals.
    b. Mail dates:
        - Notices of Appraisal
        - Last date to file a protest
        - ARB meeting dates
    c. Compilation of Certified Estimate of Value in accordance with P. T. C. 26.01 (e)
    d. copies of all appraisal and supporting data in agreed format

6. Verify timely receipt and correct format of following information:
    a. Value
        - preliminary appraised value
        - preliminary appraisal roll
        - certified roll including all documentation
    b. Reports
        - new property listing
        - list of renditions
        - protests and waives of protest
        - pending protest list
        - value change report

5 Contractor's procedures for appraising oil and gas property

See in Appraisal Standards folder
Property Appraisal Manuals subfolder Procs for
appraisal of Oil&Gas file

6 Contractor's procedures for identifying new property

Industrial Real Property

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.

Industrial Personal Property

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 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.

Utility, Railroad and Pipeline Property

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 confidential, to assist in the identification of these properties.

Oil and Gas Property

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, CAG 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 CAG's in-house map resources.

Procedure for Evaluating Results of Contractor's Property Discovery for all property other than Oil and Gas

1. Review renditions and compare to appraisal roll.
2. Review local news articles.
3. Have chief appraiser or another appraiser ride with contract personnel during inspection process.
4. Meet with contract personnel and go over any discrepancies.
5. Stay aware of what is going on in the area and meet with contractor about new projects.
6. Review contractor's appraisal roll and discuss any discrepancies.

Procedure for Evaluating Results of Contractor's Oil and Gas Property Discovery

1. Obtain a list from the Texas Railroad Commission of all new leases currently producing in the CAD.
2. Choose a sample of leases or if time permits list all new leases producing on January 1st• of current tax year.
3. Check to see if the lease was completed prior to January 1st or producing before January 1st of current tax year.
4. Compare to list of new leases currently producing or completed prior to January 1st of current tax year. If discrepancies exist contact contractor to discover why lease may be left off tax rolls. Some reasons may include but are not limited to: incorrect RRC reporting data, lease being listed under its permit number on current tax roll, or lease being currently listed under a prior RRC lease number.
5. If contractor has accounted for all new production and leases, the CAD has complied with the MAP requirement.

Document 5

CAD Procedure for Identifying New Utility Properties and Producing Wells

Appraisal of industrial properties is limited to those properties indicated in the contract with the appraisal district unless the appraisal district requests the appraisal of other properties. Newly discovered properties will be discussed with the appraisal district to confirm they are to be appraised by Capitol Appraisal.

Utility, Railroad and Pipeline Property

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.

Oil and Gas Property

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, CAG uses the following procedure:

1. Obtain a list from the Texas Railroad Commission of all leases currently producing or permitted in the CAD. Obtain permit plat for leases contained within the county.
2. Obtain a list of leases currently producing or permitted in neighboring counties with common borders and map relative location of leases to county's border. Obtain permit plat to determine if leases may have lease boundaries extending into county.
3. Using plats of leases with partial or all lease boundaries within the county, create a list of potential additional property to be added to the appraisal roll.
4. Compare list of potential leases with all currently producing leases in the CAD on January 1st. of current tax year to determine any lease duplication.
5. Check to see if the lease was completed prior to January 1st or producing before January 1st of current tax year.
6. If lease has not previously been added to the CAD's appraisal roll, do so and obtain ownership.

Document 68

Industrial Personal Property
Mass Appraisal Procedure and Timeline

Although valuation is set for either January 1 of the tax year of September 1 of the previous calendar year prior to the current tax year, the appraisal process begins in September of the previous year and continues through August of the tax year.

September 1 of previous year to March 31 of the current tax year

Discovery and listing. This includes physical inspection of existing properties to appraise and discovery of potential new properties to appraise. New potential properties are reported to the appraisal district to determine if Capitol Appraisal will value the property for the current tax year.

April 1 until complete

Appraisal of properties both market value and taxable value. Deadlines for completion of appraisals and sending out value notices are based upon individual deadlines set by the appropriate appraisal district. Every effort is made to appraise every property timely so that values can be included in certification. Properties not included in certification are reported to the appraisal district and the appraisal process continues until final value is reached. Supplementing the tax roll with those properties is based upon the timeline established by the appraisal district.

July 25

Appraisal roll is certified. Every effort is made to ensure all properties have a final valuation by this date. Exceptions may include properties with late renditions, extensions, or other allowable justifications which preclude final valuation by July 25.

July 26 to August 31

Review current tax year methods and procedures, and begin general property classification research for the next tax year. Special reports for the appraisal districts are created at this time as requested.

Document 6A

Industrial Real Property
Mass Appraisal Procedure and Timeline

Although valuation is set for either January 1 of the tax year of September 1 of the previous calendar year prior to the current tax year, the appraisal process begins in September of the previous year and continues through August of the tax year.

September 1 of previous year to March 31 of the current tax year

Discovery and listing. This includes physical inspection of existing properties to appraise and discovery of potential new properties to appraise. New potential properties are reported to the appraisal district to determine if Capitol Appraisal will value the property for the current tax year.

April 1 until complete

Appraisal of properties both market value and taxable value. Deadlines for completion of appraisals and sending out value notices are based upon individual deadlines set by the appropriate appraisal district. Every effort is made to appraise every property timely so that values can be included in certification. Properties not included in certification are reported to the appraisal district and the appraisal process continues until final value is reached. Supplementing the tax roll with those properties is based upon the timeline established by the appraisal district.

July 25

Appraisal roll is certified. Every effort is made to ensure all properties have a final valuation by this date. Exceptions may include properties with late renditions, extensions, or other allowable justifications which preclude final valuation by July 25.

July 26 to August 31

Review current tax year methods and procedures, and begin general property classification research for the next tax year. Special reports for the appraisal districts are created at this time as requested.

Document 6D

Oil and Gas
Mass Appraisal Procedures and Timeline

Capitol Appraisal Group, LLC (CAGL) contracts with Appraisal Districts and other governmental entities to appraise all oil and gas subsurface, producing, mineral interests within the purview of the law.

October-December:

SEC 10{k) data gathered for use in discount rate study.

A base discount rate is developed using the Securities and Exchange Commission (SEC) 1Ok Standard Measure of Value, before Federal Income Tax (BFIT), for a grouping of Exploration and Production (E&P) companies, and then matching their 1Ok Standard Measure of Value (BFIT), reserves and costs, through a discounted cash flow (DCF) technique. This reserve and cost match is used with 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. This analysis is calibrated with a WACC for the same companies that are used in the stock and debt analysis. Management determines an appropriate base discount rate to be used.

January:

Discount rate study finalized

November-March:

The appraiser commences the annual appraisal cycle with identification of new property and determination of situs.

"Minerals in place" and an estate or interest in the same, are classified by the state of Texas as real property. 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 minerals in place and estates or interests in the same. CAGL obtains monthly oil and gas lease production information from the Railroad Commission of Texas [RRC] and compares it to existing oil and gas properties already identified and appraised. New properties are identified in this process by comparing existing data to new information obtained from the RRC.

The appraiser determines the validity of new properties and then determines the situs of these new properties by obtaining plats, W-2/G-1 records obtained from the RRC, and using in-house mapping resources.

January-March:

Appraisers begin entering detailed new property information.

Along with RRC lease specific information, the appraiser enters the lease's legal description, its situs, and detailed lease information obtained from the RRC. This process of discovery and entry into the appraisal system continues year round to identify assessable properties that are obtained because of delays in the RRC reporting system.

February:

Comptroller's 23.175 pncmg data and market condition factors are obtained and incorporated into the appraisal system.

February-April:

Properties are appraised and values are posted on the CAG web site for clients, operators and agents to review and submit information.

Appraiser(s) access production declines for leases to be appraised. Based on the appraiser's decline rate analysis and review of previous year's appraisal parameters and current Comptroller pricing data, the estimated value for the current appraisal year is determined.

Preliminary appraised values are available from the CAG web site www.cagi.com following appraiser and supervisor review.

April-May:

Preliminary appraisals reviewed.

Appraisers review operating expenses, product prices, new or revised information about production submitted by operators and agents before Notifications of Value are mailed to taxpayers.

May-July:

Notified values formally & informally reviewed.

Appraisers work with taxpayers following Notification of Value and continue to review information submitted by royalty owners, operators and agents. The ARB process is part of this review

Document SC

Utility, Railroad and Pipeline Property Mass Appraisal Procedure and Timeline

Although valuation is set for either January 1 of the tax year of September 1 of the previous calendar year prior to the current tax year, the appraisal process begins in September of the previous year and continues through August of the tax year.

September 1 of previous year to March 31 of the current tax year

Research and capitalization rate development. For properties valued via the income approach data is obtained and analyzed for calculation of a capitalization rate appropriate to a specific property type.

October to December

Submission of appraisals to the Property Tax Assistance Division PTAD) of the Comptroller's office and preparation of value defense for any properties included in their ratio study. Defense documentation and appraisal analysis of the PTAD appraisal is prepared and submitted to the appraisal district or the representative of the taxing jurisdictions whichever is appropriate.

April 1 until complete

Appraisal of properties both market value and taxable value. Deadlines for completion of appraisals and sending out notice of value are based upon individual deadlines set by the appropriate appraisal district. Every effort is made · to appraise every property timely so that values can be included in certification. Properties not included in certification are reported to the appraisal district and the appraisal process continues until final value is reached. Supplementing the tax roll with those properties is based upon the timeline established by the appraisal district.

July 25

Appraisal roll is certified. Every effort is made to ensure all properties have a final valuation by this date. Exceptions may include properties with late renditions, extensions, or other allowable justifications which preclude final valuation by July 25.

July 26 to August 31

Review current tax year methods and procedures, and begin general property classification research for the next tax year. Special reports for the appraisal districts are created at this time as requested.

Document 38

2023-2024

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 a 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.

Document 3D

2023-2024

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 remain'ing 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.

Document 3A

2023-2024

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.

Document 3C

2023-2024

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 am raisal 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.

Calibration Models BUSINESS

PERSONAL PROPERTY

APPRAISED BY CAPITOL APPRAISAL GROUP

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.

Calibration Models

INDUSTRIAL PROPERTY

APPRAISED BY CAPITOL APPRAISAL GROUP

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.

Calibration Models OIL

AND GAS RESERVES

CAPITOL APPRAISAL GROUP

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.

Calibration Models

UTILITY, RAILROAD, AND PIPELINE PROPERTIES

APPRAISED BY CAPITOL APPRAISAL GROUP

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 78

MASS APPRAISAL REPORT

BUSINESS PERSONAL PROPERTY

APPRAISED BY CAPITOL APPRAISAL GROUP

2023-2024

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; Pro12erty 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

RCN
-PD
-FO
-EO
=Cost Indicator of Value

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

Income Approach

PGR
-VCL
-FE
-VE
NOi

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 yearn = 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 su,bject 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 7A MASS

APPRAISAL REPORT

INDUSTRIAL

PROPERTY

APPRAISED BY CAPITOL APPRAISAL GROUP

2023-2024

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

RCN
-PD
-FO
-EO
=Cost Indicator of Value

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

Income Approach

PGR
-VCL
-FE
-VE
NOi

NOI/R = 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:

NOi for year 1 x DF for year 1 = PW of year 1 NOi
NOi for yearn x DF for yearn = 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:
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 7D

MASS APPRAISAL REPORT

OIL AND GAS RESERVES

CAPITOL APPRAISAL GROUP

2023-2024

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 sub-surface 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) 1Ok Standard Measure of Value, Before Federal Income Tax (BFIT), for a grouping of 20 Exploration and Production (E&P) companies, and then matching their 1Ok 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.

Document 7C

MASS APPRAISAL REPORT

UTILITY, RAILROAD, AND PIPELINE PROPERTIES

APPRAISED BY CAPITOL APPRAISAL GROUP

2023-2024

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 ofthe 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

RCN
-PD
-FO
-EO
=RCNLD Indicator of Value

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

Unit Cost Approach

OC

-AD
-EO
=Unit Cost Approach Indicator of Value

Where:
OC = Original Cost
AD = Allowed Depreciation EO
= Economic Obsolescence

Unit Income Approach

PGR
-VCL
-FE
-VE
NOi

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 yearn x DF for year n = PW of yearn NOi Net
Reversion x DF for yearn = 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

MVE
+MVD
=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.

MASS APPRAISAL REPORT

BUSINESS PERSONAL PROPERTY

APPRAISED BY CAPITOL APPRAISAL GROUP

2023-2024

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, Inc. 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, Inc. 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.

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

RCN
-PD
-FO
-EO
=Cost Indicator of Value

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

Income Approach

PGR
-VCL
-FE
-VE

NOi

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

Where:
NOi = Net Operating
Income OF = 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, Inc. 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.

MASS APPRAISAL REPORT

OIL AND GAS RESERVES

APPRAISED BY CAPITOL

APPRAISAL GROUP 2023-2024

Overview

Capitol Appraisal Group, LLC. (CAGI) 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 sub- surface 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

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 a.nd 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, Inc. 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 lnc.'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) 1Ok Standard Measure of Value, Before Federal Income Tax (BFIT), for a grouping of 20 Exploration and Production (E&P) companies, and then matching their 1Ok 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 Va/ueline 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.

MASS APPRAISAL REPORT

UTILITY, RAILROAD, AND PIPELINE PROPERTIES

APPRAISED BY CAPITOL APPRAISAL GROUP, INC.

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, Inc. 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, Inc. 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.
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 piplines 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

RCN
-PD
-FO
-EO
=RCNLD Indicator of Value

Where:

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

Unit Cost Approach

OC
-AD
-EO
=Unit Cost Approach Indicator of Value

Where:
OC = Original Cost
AD = Allowed Depreciation EO
= Economic Obsolescence

Unit Income Approach

PGR
-VCL
-FE
-VE
NOi

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 yearn = 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

MVE
+MVD
=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.

MASS APPRAISAL REPORT

INDUSTRIAL PROPERTY

APPRAISED BY CAPITOL APPRAISAL GROUP

2023-2024

Overview

This type of property consists of processing facilities and related personal property. Capitol Appraisal Group, Inc. 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, Inc. 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 Va!uation 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.
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

RCN
-PD
-FO
-EO
=Cost Indicator of Value

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

Income Approach

PGR
-VCL
-FE
-VE
NOi

NOI/R = 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:

NOi for year 1 x DF for year 1 = PW of year 1 NOi
NOi for year n x DF for yearn = 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:
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.

Appendix C. Contract Appraisal Firm (Eagle Property Tax Appraisal & Consulting)

INTRODUCTION

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

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

PLAN FOR PERIODIC REAPPRAISAL REQUIREMENT:

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

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

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

1. identifying properties to be appraised through physical inspection or by other reliable means of identification, including deeds or other legal documentation, aerial photographs, land-based photographs, surveys, maps, and property sketches;
2. identifying and updating relevant characteristics of each property in the appraisal records;
3. defining market areas in the district
4. identifying property characteristics that affect property value in each market area, including the location and market area of property, physical attributes of property such as size, age, and condition, legal and economic attributes, and the identification of easements, covenants, leases, reservations, contracts, declarations, special assessments, ordinances, or legal restrictions;
5. developing an appraisal model that reflects the relationship among the property characteristics affecting value in each market area and determines the contribution of individual property characteristics;
6. applying the conclusions reflected in the model to the characteristics of the properties being appraised; and
7. reviewing the appraisal results to determine value.

REVALUATION DECISION (REAPPRAISAL CYCLE)

The _____ CAD, by policy adopted by the Board of Directors and the Chief Appraiser, reappraises all property in the district every year. The reappraisal may consist of field

inspections, CAMA, or both. The reappraisal year is a complete appraisal of all properties in the district. Tax year 2023 is a reappraisal year and tax year 2024 is a reappraisal year.

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

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

PLANNING AND ORGANIZATION

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

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

The District shall provide to Eagle Property Tax Appraisal & Consulting, Inc. appraisers the field cards that contain specific information regarding the property being appraised. These cards contain brief legal descriptions, ownership interests, property use codes, property addresses, land size, and sketches of improvements as well as detailed information of any improvements. Appraisal field inspection procedures require the appraisers to check all information on the field cards and to update the information when necessary. All new improvements shall be measured, classed, and assigned the appropriate depreciation amount. Structures that have been demolished or removed shall be marked off the appraisal card. Properties with extensive improvement remodeling shall be identified and the field inspection shall identify and update the property characteristic data. The appraiser shall note the date of the inspection on the card and place his initials on the card. The appraiser shall take pictures, with each picture having a date, and note the picture number on the appraisal card.

Each year, Eagle Property Tax Appraisal & Consulting, Inc. will test real property market areas, by property classification. The market areas shall be tested for low or high ratio sales and/or

high coefficients of dispersion. Market areas that fail any or all of these tests are determined to be problematic. Field inspections are scheduled to verify and/or correct property characteristic data. Additional sales data is researched and verified.

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

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

MASS APPRAISAL SYSTEM
REAL PROPERTY VALUATION

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

Cost schedules are tested with market data (sales) to insure that the appraisal district is in compliance with Texas Property Tax Code, Section 23.011. Replacement cost new tables as well as depreciation tables are tested for accuracy and uniformity using ratio study tools and compared with cost data from recognized industry leaders. Eagle Property Tax Appraisal & Consulting, Inc. utilizes the national publication of cost schedules of Marshall Valuation Services.

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

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

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

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

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

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

Appendix D. Properties to be Appraised-

Residential

SANDRA

2023

MAP	ISD	# ACCTS
015	SWB	474
016	SWB	124
017	SWB	281
032	SWB	93
054	SWB	162
055	SWB	110
056	SWB	57
083	SWB	107
093	SWB	152
127A	SWB	80
166	SWB	34
170	SWB	65
172	SCO	81
173	SCO	79
174	SCO	31
175	SCO	38
210	SCO	71
213	SCO	289
214	SCO	49
214A	SCO	14
217	SCO	116
220	SCO	23
257	SCO	58
255	STI	24
256	STI	40
259	STI	41
259A	STI	23
260	STI	33
261	STI	52
262	STI	212
300	SPP	54
301	SPP	36
302	SPP	84
303	SPP	60
304	SPP	33
305	SPP	99
C001	SCO	109
C002	SCO	96
C003	SCO	292
C004	SCO	146
T001	STI	154
T002	STI	93
T003	STI	72
T004	STI	199
TOTAL:		4540

AARON

2023

MAP	ISD	# ACCTS
058	SSS	67
103	SSH	297
103A	SSH	52
103B	SSH	119
103C	SSH	12
121	SSS	44
121A	SSS	79
142	SSH	62
149	SSH	106
149A	SSH	16
150	SSH	95
150A	SSH	11
157	SSS	138
157A	SSS	101
157B	SSS	94
157C	SSS	18
157D	SSS	66
158	SSS	71
159	SSS	77
160	SSS	70
161	SSS	69
162	SSS	102
163	SSS	27
164	SSS	7
165	SSS	80
179A	SHO	79
180	SSS	128
180A	SSS	63
180B	SSS	32
180C	SSS	42
181	SHO	42
207	SHO	21
208	SHO	38
221	SHO	32
222	SHO	72
223	SHO	57
246	SHO	19
247	SHO	49
H003	SHO	242
H004	SHO	256
R001	SHO	48
Y001	SSS	17
Y002	SSS	47
Y003	SSS	12
Y004	SSS	70
Y005	SSS	43
TOTAL:		3289

BRAD
2023

MAP	ISD	# ACCTS
99	SSH	74
99A	SSH	171
119	SSH	593
119A	SSH	41
119B	SSH	59
119C	SSH	0
154	SSH	10
154A	SSH	83
155	SSH	972
155A	SSH	63
155B	SSH	151
156	SSH	130
156A	SSH	19
156B	SSH	20
S019	SSH	181
S025	SSH	399
S035	SSH	462
S043	SSH	540
S044	SSH	43
S046	SSH	366
S048	SSH	430
S052	SSH	376
S058	SSH	35
S059	SSH	187
TOTAL:		5405

CORBY
2023

MAP	ISD	# ACCTS
042	SDE	76
043	SDE	160
044	SDE	14
045	SDE	11
066	SDE	85
068	SDE	63
069	SDE	81
070	SDE	12
071	SDE	20
072	SDE	159
073	SDE	231
073A	SDE	13
074	SDE	43
147	SBE	144
147A	SBE	17
147B	SBE	46
148	SBE	69
189	STB	102
189A	STB	38
190	STB	129
190A	STB	24
191	STB	69
192	STB	90
192A	STB	27
193	SBE	128
193A	SBE	12
194	STB	121
195	SBE	58
196	SBE	71
200	STB	106
201	STB	38
228	STB	68
231	SWW	131
238	STB	82
239	STB	122
279	STB	126
B001	SBE	90
B002	SBE	153
B003	SBE	124
B004	SBE	84
F001	SDE	31
K001	SWW	21
TOTAL:		3289

JIMMY
2023

MAP	ISD	# ACCTS
D001	SDE	35
D002	SDE	491
D003	SDE	4
D004	SDE	275
D005	SDE	61
D006	SDE	190
D007	SDE	26
D008	SDE	190
D009	SDE	357
D010	SDE	422
D011	SDE	439
D012	SDE	223
D013	SDE	61
D014	SDE	66
D015	SDE	280
D016	SDE	180
D017	SDE	463
024	SDE	21
024A	SDE	34
024B	SDE	112
047	SDE	203
047A	SDE	53
TOTAL:		4186

MERANDA
2023

MAP	ISD	# ACCTS
049	SPB	405
049A	SPB	62
P001	SPB	58
P002	SPB	34
P003	SPB	302
P004	SPB	35
P005	SPB	63
P007	SPB	102
050	SPB	145
051	SPB	170
052	SPB	89
052A	SPB	68
052B	SPB	75
052C	SPB	75
052D	SPB	36
059	SPB	28
059A	SPB	10
060	SPB	69
061	SPB	187
061A	SPB	22
062	SPB	178
063	SPB	174
TOTAL:		2387

JASON
2023

MAP	ISD	# ACCTS
248	SGU	28
249	SGU	9
250	SGU	36
251	SGU	35
252	SGU	25
253	SGU	34
254	SGU	3
266	SGU	53
267	SGU	24
268	SGU	45
269	SGU	178
269A	SGU	88
269B	SGU	48
269C	SGU	30
269D	SGU	34
276	SVA	54
277	SVA	64
284	SVA	118
285	SVA	229
286	SVA	104
292A	SGU	49
292B	SGU	53
314	SVA	699
314A	SVA	77
315	SVA	109
316	SVA	165
TOTAL:		2391

2024 assignments subject to change based on anticipated staffing changes.

SANDRA VARGA

2024

MAP	ISD	# ACCTS
E001	SWB	64
002	SWB	11
007	SWB	13
018	SWB	585
019	SWB	44
057	SWB	81
084	SWB	49
085	SWB	43
087	SWB	86
088	SWB	144
128	SWB	206
129	SWB	108
211	SCO	79
212	SCO	78
213	SCO	289
214	SCO	49
214A	SCO	14
215	STI	47
216	SCO	135
217	SCO	116
258	STI	62
264	STI	8
265	STI	53
299	STI	37
263	STI	31
297	STI	33
298	STI	18
W001	SWB	242
W002	SWB	104
W003	SWB	263
W004	SWB	370
W005	SWB	306
W006	SWB	51
W007	SWB	110
W008	SWB	64
BMR	53	33
CMR	21	41
CBR	31	4
CPR	21	42
GBC	21	200
MQR	8	4
WCR	34	33
TOTAL:		4350

AARON

2024

MAP	ISD	# ACCTS
081	SSS	15
082	SSS	70
089	SSS	53
090	SSS	117
091	SSS	46
092	SSS	16
095	SSS	115
096	SSS	81
097	SSS	45
098	SPB	82
118	SSH	150
118A	SSH	114
120	SSH	93
120A	SSH	24
120B	SSH	2
120C	SSH	7
122	SSS	13
123	SSS	323
123A	SSS	87
124	SSS	42
125	SSS	153
139	SSH	12
140	SSH	33
141	SSH	111
151	SSH	226
151A	SSH	19
185	SSH	31
186	SSH	79
241	SHO	101
242	SHO	180
243	SHO	35
244	SHO	41
245	SHO	15
270	SGU	68
271	SHO	66
271A	SHO	1
273	SHO	54
H001	SHO	107
H002	SHO	240
H005	SHO	9
H006	SHO	71
S004	SSH	137
TOTAL:		3284

JASON WILBURN

2024

MAP	ISD	# ACCTS
272	SVA	102
274	SVA	133
275	SVA	40
287	SVA	155
287A	SVA	21
288	SVA	397
288A	SVA	27
288C	SVA	20
289	SVA	82
289A	SVA	32
291	SGU	33
292	SGU	342
293	SGU	457
313	SVA	291
313A	SVA	25
313B	SVA	40
313C	SVA	178
TOTAL:		2375

2024 assignments subject to change based on anticipated staffing changes

CORBY HOSEA

2024

MAP	ISD	# ACCTS
104	SDE	243
105	SDE	167
105A	SDE	46
111	SBE	35
112	SBE	48
113	SBE	125
114	SBE	64
115	SBE	95
116	SBE	67
117	SDE	162
117A	SSH	2
187A	STB	40
197	SBE	143
198	SBE	36
202	STB	46
203	STB	143
203A	STB	45
203B	STB	24
226A	STB	6
228	STB	68
229	STB	98
230	STB	206
230A	STB	35
232	SWW	57
233	SWW	142
233A	SWW	64
A001	SBE	75
X001	SWW	200
X002	SWW	137
X003	SWW	209
X004	SWW	143
X005	SWW	53
X006	SWW	70
TOTAL:		3094

JIMMY HUBBARD

2024

MAP	ISD	# ACCTS
D018	SDE	119
D019	SDE	279
D020	SDE	70
D021	SDE	98
D022	SDE	457
D023	SDE	247
D024	SDE	473
D032	SDE	210
D033	SDE	199
D034	SDE	58
D035	SDE	57
D036	SDE	78
D037	SDE	402
D038	SDE	139
D045	SDE	139
D046	SDE	203
D048	SDE	154
D049	SDE	147
D056	SDE	59
011	SDE	63
011A	SDE	133
011B	SDE	122
011C	SDE	37
023	SDE	53
023A	SDE	27
023B	SDE	21
025	SDE	22
048	SDE	63
063A	SDE	4
064	SDE	28
075	SDE	24
TOTAL:		4185

MERANDA TAYLOR

2024

MAP	ISD	# ACCTS
003	SPB	2
004	SPB	7
004A	SPB	69
005	SPB	333
005A	SPB	155
005B	SPB	97
005C	SPB	30
005D	SPB	87
009	SPB	2
010	SPB	62
012	SPB	211
012A	SPB	60
012B	SPB	58
012C	SPB	91
012D	SPB	60
022	SPB	201
022A	SPB	242
022B	SPB	62
022C	SPB	257
026	SPB	93
026A	SPB	460
076	SPB	321
077	SPB	97
077A	SPB	28
TOTAL:		3085

2024 assignments subject to change based on anticipated staffing changes

BRAD DURHAM

2024

MAP	ISD	# ACCTS
076C	SSH	56
100	SSH	170
100A	SSH	40
100B	SSH	14
138	SSH	170
182	SSH	141
182A	SSH	134
S005	SSH	2
S007	SSH	144
S008	SSH	7
S009	SSH	40
S010	SSH	27
S018	SSH	12
S020	SSH	58
S021	SSH	227
S022	SSH	111
S023	SSH	89
S030	SSH	486
S031	SSH	370
S032	SSH	474
S033	SSH	241
S034	SSH	40
S037	SSH	60
S038	SSH	129
S039	SSH	30
S040	SSH	152
S041	SSH	318
S050	SSH	22
S052	SSH	376
S053	SSH	120
S055	SSH	36
S056	SSH	78
S057	SSH	91
TOTAL:		4465

2024 assignments subject to change based on anticipated staffing changes

COMMERCIAL REAPPRAISAL PLAN

2023 CYCLE A - 2024 CYCLE B

COMMERCIAL APPRAISER 1	(AT)	CYCLE	CYCLE	
AUBREY	**NEIGH**	A	B	
TRUCK STOP	335	1		
NIGHT CLUB / DINNER THEATER	328	2		
SKATING RINK	382	2		
COLD STORAGE FACILITIES	391	2		
BROADCASTING STUDIOS	366	6		
MOBILE HOME - HOOK UPS / RESORT	606	6		
ATHLETIC / HEALTH / REC CLUB	383	8		
DEALERSHIP MISCELLEANEOUS	381	9		
LUMBER STORAGE	392	11		
NURSING HOME	316	11		
AUTO SERVICE / LUBE	332L	12		
TRUCK TERMINAL	395	14		
BAR / LOUNGE	327	15		
CAR WASH / MANUAL	336	16		
FUNERAL HOME	361	19		
ASSISTED LIVING	317	20		
MOBILE HOME PARK	110	23		
RV PARK	120	25		
BOAT STORAGE	603	53		
SCHOOL	612	72		EX
MANUFACTURING / PROCESSING	401	122		
AUTO SERVICE GARAGE	332	137		
COMMERCIAL- MULTI - PURPOSE	376	148		
WAREHOUSE	398	196		
COMMERCIAL- SPECIAL PURPOSE	377	221		
CONDO (COMMON ELEMENTS)	106		0	
BOARDING / ROOMING HOUSE	318		2	
FOOD STAND	323		10	
CAR WASH / AUTOMATIC	337		11	
CONDO (FEE SIMPLE)	107		13	
SERVICE STATION / FULL	333		20	
SERVICE STATION / SELF	334		20	
DAY CARE CENTERS	369		21	
SOCIAL / FRATERNAL HALLS	367		25	EX
APARTMENTS-TAX CREDIT	212		48	
APARTMENTS - GARDEN	211		61	
RESTAURANT	321		61	
AUTO DEALER / SERVICE	331		68	
FAST FOOD / FRANCHISE	325		106	
CONVENIENCE STORES	348		106	
RELIGIOUS	620		296	EX
OFFICE / WAREHOUSE	397		341	
		1151	1209	
TOTAL			**2360**	
EX			393	

COMMERCIAL APPRAISER 3	(LC)	CYCLE	CYCLE
LESLIE	**NEIGH**	A	B
COMMERCIAL VACANT LAND	300	559	741
MINI WAREHOUSE - CLIMATE CON	396A		12
MINI WAREHOUSE	396		63
OPEN PARKING	339	257	
		816	816
TOTAL			**1632**

COMMERCIAL APPRAISER 2	(CL)	CYCLE	CYCLE	
CHAD	**NEIGH**	A	B	
HANGERS	368	1		
HOSPITALS	640	2		
ENTERTAINMENT CENTERS	364	3		
PHARMACY	630	5		
MEDICAL CLINICS/LABS	645	8		
RES CONV. TO OTHER	104	13		
GARDEN CENTER/NURSERY	715	14		
MARINAS	601	14		
RES CONV. TO RETAIL	103	16		
POST OFFICE	650A	16		
MEDICAL OFFICE -MULTI.	349A	22		
HOTEL/MOTEL	315	24	24	
CHARITABLE / CIVIC FACILITIES	625	36		EX
RES CONV. TO OFFICE	102	41		
RETAIL - MULTI - OCCUPANT	374	52		
MIXED RES & COMM.	105	58		
UNKNOWN OR TEMPORARY	999	79		
GRAYSON AIRPORT	GCA	94		16EX
MEDICAL OFFICE BUILDING	349	102		
MUNICIPAL UTILITIES	716	112		EX
DOCK - O - MINIUMS	604	306		
BED AND BREAKFAST	150		1	
PARKING GARAGE	338		1	
REGIONAL MALL	341		4	
LODGING /RENTAL CABINS	314		4	
LIBRARY	611		4	EX
DEPARTMENT STORES	346		4	
OFFICE BLDG. - OVER 10K S.F.	350B		7	
RADIO / TV TRANSMITTERS	720		7	
OFFICE BLDG. MULTI - OCC HIGH- RISE	352		8	
SUPERMARKET	347		9	
DRY CLEANER/LAUNDRY MAT	378		9	
NEIGH - SHOPPING CENTER	343		15	
VETERINARY CLINIC	362		15	
GOLF COURSES / CLUBS	387		22	
TELEPHONE EQUIPMENT BLDG.	710		23	
RESORT FAC W/ LODGING	605		23	
SALON/BARBER SHOP	345		24	
COLLEGE / UNIVERSITY	613		25	24 EX
POLICE / FIRE STATIONS	660		29	EX
SHOWROOM OFFICE/WAREHOUSE	399		31	
VA ROW BUILDINGS	VA ROW		41	
BANK / SAVINGS INSTITUTION	354		42	
OFFICE BLDG. MULTI - OCC LOW- RISE	351		55	
PUBLIC BUILDINGS	650		61	EX
STRIP SHOPPING CENTER	344		74	
SPORTS ARENAS	610		81	75 EX
CEMETERY	621		82	EX
RETAIL - SINGLE OCCUPANT	373		109	
OFFICE BUILDING	350		122	
ROW BUILDING	371		325	
		1018	1281	
TOTAL			**2299**	
EX			439	

2023 - 2024 Business Personal Property Reappraisal Cycle

2023		2024	
ISD	**BPP ACCOUNTS**	**ISD**	**BPP ACCOUNTS**
Appraiser 1			
Sherman - 03	**576**	**Sherman - 01**	**576**
Total	**576**	**Total**	**576**
Appraiser 2			
Denison - 03	**291**	**Denison - 01**	**291**
Bells	**71**	**Van Alstyne**	**259**
Tom Bean	**52**	**Trenton**	**3**
Howe	**88**		
Whitewright	**73**		
Total	**575**	**Total**	**553**
Appraiser 3			
Pottsboro	**297**	**Whitesboro**	**318**
Collinsville	**88**	**Sadler & Southmayd**	**130**
Gunter	**93**		
Tioga	**54**		
Pilot Point	**7**		
Total	**539**	**Total**	**448**
All Appraisers			
Total	**1690**		**1577**
MH PARKS - 1	303	MH PARKS - 2	315
Total	**303**	**Total**	**315**

TOTAL BPP ACCOUNTS = 4134 - Does not include the following types

TOTAL LEASE ACCOUNTS = 378 - Worked annually per renditions

TOTAL SIT ACCOUNTS = 137 - Entered Monthly

TOTAL MH ACCOUNTS = 881 - Appriaser 1 & 2 Field Work - Appraiser 3 Entry

Sherman ISD, Denison ISD and the Mobile Home Parks are split into a three year reappraisal plan

2023

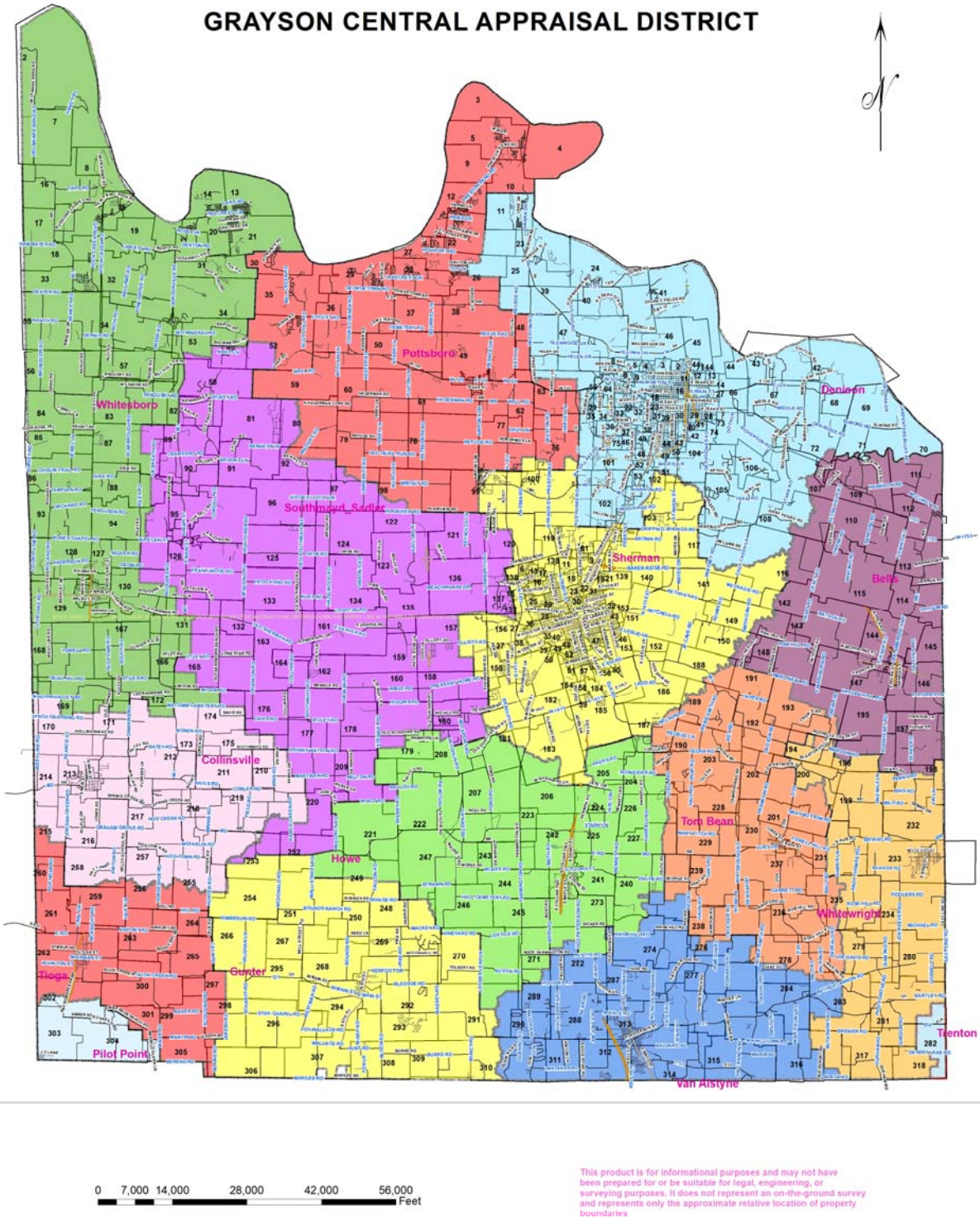
MHP NAME	EST # OF PICS	ANNUAL TOTALS
EL DORADO	78	
PRADERA	225	303

2024

MHP NAME	EST # OF PICS	ANNUAL TOTALS
KNOLLWOOD	190	
SHADOW MOUNTAIN	125	315

Mobile Home Parks are on a three-year schedule for updating pictures, inspection dates and next inspection dates. *All* parks will be driven every year to check for ownership changes, improvements, move-ins and move-outs.

Appendix E. Market Areas Map



Appendix F. Reappraisal Timeline

*2022-2023 REAPPRAISAL TIMELINE**

The Grayson Central Appraisal District reappraises all real and personal property in the district at least once every three years in accordance with Texas Property Tax Code Section 25.18.

The 2022-2023 timeline of activities are as follows:

August

- Begin training and classroom work for compliance with TDLR regulations for appraisers.
- All Residential, Commercial and BPP Appraisers begin routing field inspections and downloading to mobile devices.
- Residential and Commercial Appraisers begin field inspections.
- BPP staff begins review of Certificates of Occupancy and Compliance, sales tax permits and assumed name documents in their areas for appraisal of new businesses in the upcoming year.
- BPP staff to test and update (if necessary) density schedules for specific SIC classifications.
- Sales entry from previous month for sales file.

September

- September 1 or as soon thereafter as possible, BPP Appraisers begin field inspections.
- Land Appraiser runs preliminary ratio studies to determine goals and begin analysis of land values.
- Begin collecting cost, sale and income data via local builders, surveys and MLS listing services.
- Sales entry for sales file.

October - November

- Continue collection and input of sales data that has been collected.
- All appraisers continue regular field inspections.
- Sales entry for sales file.

December

- All appraisers begin field inspections based on next inspection date and permits.
- Sales entry for sales file.
- Surveys to obtain owner lists from mobile home parks send Mid-December.

January

- January 1 is the appraisal date for most categories of taxable property in accordance with Texas Property Tax Code Section 23.01. Complete next inspection list of properties coded for a “Next Inspection Date” as of January 1.
- Preparation for mass mailings.
- Continue with regular field inspections for reappraisal as special inspections are completed.
- Update BPP depreciation schedule and rendition.
- Mail out renditions
- Begin mass mailings for Homestead, Disabled Veteran, Agricultural Valuation, Wildlife, Abatements & Freeport as required by Sec. 11.44 (a).

February

- Prepare Public Notice article for newspapers to include all the items above and also information about Appraisal Notices, Protesting Values and Taxpayer Rights and Remedies as required by Sec. 11.44 (b).
- BPP staff begin to work renditions, Freeport Applications and Abatement Applications.
- Finish any sales entries to prepare the sales file for our analysis.
- All residential and commercial field work completed.

March

- All data entry finalized.
- Auto book match up completed and unmatched vehicles worked.
- Begin Sales Analysis for adjustments to cost schedules of improvements and/or create modifiers.
- Begin Review of Vacant Land Sales for development and/or adjustment to land schedules.
- BPP Staff continue to work filed renditions, extension, etc.
- Notify TAC

April

- Finish sales analysis.
- Run gain/loss reports and other error reports.
- Data entry/ value changes cease for all real properties, to prepare file for the first Notice of Appraised Value mailing.
- April 15 BPP Rendition deadline.
- Review appraisal information from contracted firms.
- Complete all Ag/special valuation.
- Prepare and certify Preliminary totals for all taxing entities, set freezes for new value and transfers.
- Mail Real Property Notices of Appraised Value.

May

- Begin the informal inquiry process with property owners on real property accounts.
- May 15 BPP Extension filing deadline.
- Mail BPP Notices of Appraised Value
- Begin informal inquiry process for BPP accounts.
- Complete BPP extensions and mail second batch of BPP notices
- Finish up with Informal meetings and begin preparation for ARB hearings.
- Submit Appraisal Rolls to ARB as required by Sec 25.22.

June

- ARB hearings scheduled

July

- Continue ARB hearings and schedule contracted firm hearings.
- ARB approved appraisal records as required by Sec 41.12.
- Chief Appraiser Certifies Tax Roll to the Taxing entities as required by Sec. 26.01.
- Create New Year layer and begin new appraisal year.

***The timeline is an anticipated schedule based on typical cycles. It is to be used as a general guide. Depending on variations and ever-changing workload, described duties may vary from year to year, although, every effort should be made to adhere to the schedule. An example of a variation is an above average amount of permits and new construction.**