Grayson Central Appraisal District
2021-2022 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 then, 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 (34) 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 2021 adopted budget provides information for employee positions and classifications broken down as follows:

- 2 - Administrative (including Chief Appraiser)
- 7 - Departmental Directors
- 14 – Administration, Support Services, Information Technology
- 14 – 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 2021-2022, the district is responsible for establishing and maintaining approximately 107,000 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, Pictometry 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

Pictometry 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 *Pictometry* 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 Pictometry'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	46,066 parcels
B1	1-4 unit multi-family	824 parcels

C1	Vacant Platted Lots (City, Rural)	9,225 parcels
D	Real acreage with Ag (Improved or vacant)	17,197 parcels
E	Real- Non-qualified open space land & Residential Improvements	7,785 parcels
M	Mobile homes (Does not own land)	1,670 parcels
O1	Residential Inventory	1,716 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, Pictometry 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	104 parcels
C1C	Commercial & Industrial land	1,082 parcels
F1-F2	Improved Commercial & Industrial	4,189 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 Pictometry 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 6,090 BPP accounts, 654 utility accounts, 142 special inventory accounts and 17,929 mineral accounts.

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	7,028 Parcels

SPECIFIC GOALS FOR APPRAISAL, SUPPORT, AND RESOURCES

2021

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 Pictometry desk inspection project including re-application

Continue re-application process for special/absolute exemptions

Expand data verification monitors

Information Technology

Enhancements to Website;

2022

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 Pictometry desk inspection project including re-application

Continue re-application process for special/absolute exemptions

Information Technology

Continue Website Enhancements.

Upgrade digitizing equipment

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 2021/2022 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		
	Trenna Waw	Director of Administration (Customer Service)
	Angie Wilson	Director of Human Resources
	Vicki Matthews	Director of Mapping / GIS
	Brenda Arzate	Director of Information Technology
Appraisal	Annette Cofer	Director of Special Operations
	Jennifer Hightower	Director of Residential Appraisal
	Joel Hendry	Director of Appraisal

Appendix B. Contract Appraisal Firm-Attached

Document 3A

2021-2022

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 3B

2021-2022

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

Document 3C

2021-2022

CAD Plan for Periodic Reappraisal of

Utility, Railroad and Pipeline Property

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

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

(b) The plan provides for annual reappraisal of all utility, railroad and pipeline property appraised by the CAD. The CAD has a professional services contract with Capitol Appraisal Group, LLC (CAGL) to appraise these properties for the CAD.

(1) Identifying properties to be appraised: Appraisal of properties is limited to those indicated in the contract with the appraisal district, unless additionally requested by the appraisal district. Newly discovered properties will be discussed with the appraisal district to confirm they are to be appraised by Capitol Appraisal. Utility, railroad and pipeline properties that are susceptible to inspection are identified by inspection. The appraiser may also refer to other documents, both public and also confidential to assist in identification of these properties. Due to the varied nature of utility, railroad, and pipeline properties there is no standard data collection form or manual. New permitting documents on record with the Railroad Commission of Texas provide a source to identify potential new pipeline projects but does not provide indication if the project was actually started, completed, or a distinct location of the proposed project. Every effort is made to discover new utility, railroad, and pipeline properties through personal observation combined with permitting documents.

(2) Identifying and updating relevant characteristics of each property in the appraisal records: The appraiser identifies and updates relevant characteristics through data collected as part of the inspection process and through later submissions by the property owner, sometimes including confidential rendition. Additional data are obtained through public sources, regulatory reports and through analysis of comparable properties.

(3) Defining market areas in the district: Market areas for utility, railroad and pipeline property tend to be regional or national in scope. Financial analyst and investor services reports are used to help define market areas.

(4) Developing an appraisal approach that reflects the relationship among property characteristics affecting value and determines the contribution of individual property characteristics: For all three types of property, the appraiser must first form an opinion of highest and best use. Among the three approaches to value (cost, income and market), pipeline value is calculated using a replacement/reproduction cost new less depreciation

Document 3D

2021-2022

CAD Plan for Periodic Reappraisal

of Oil and Gas Property

In accordance with Section 25.18 of the Tax Code:

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

(b) The plan provides for annual reappraisal of all oil and gas property appraised by the CAD. The CAD has a professional services contract with Capitol Appraisal Group, LLC (CAGL) to appraise these properties for the CAD.

(1) Identification of new property and its situs. As subsurface mineral properties lie within the earth, they cannot be physically identified by inspection like other real property. However, the inability to directly inspect does not appreciably affect the ability to identify and appraise these properties. To identify new properties, CAGL obtains monthly oil and gas lease information from the Railroad Commission of Texas [RRC] to compare against oil and gas properties already identified. The situs of new properties is determined using plats and W-2/G-1 records from the RRC, as well as CAGL's in-house map resources.

(2) Identifying and updating relevant characteristics of all oil and gas properties to be appraised. Relevant characteristics necessary to estimate value of remaining oil or gas reserves are production volume and pattern, product prices, expenses borne by the operator of the property, and the rate at which the anticipated future income should be discounted to incorporate future risk. CAGL obtains information to update these characteristics annually from regulatory agencies such as the RRC, the Comptroller of Public Accounts, submissions from property owners and operators, as well as from published investment reports, licensed data services, service for fee organizations and through comparable properties, when available.

(3) Defining market areas in the district and identifying property characteristics that affect property value in each market area. Oil and gas markets are regional, national and international. Therefore they respond to market forces beyond defined market boundaries as observed among more typical real properties.

(4) Developing an appraisal approach that best reflects the relationship among property characteristics affecting value and best determines the contribution of individual property characteristics. Among the three approaches to value (cost, income and market), the income approach to value is most commonly used in the oil and gas industry. Through use of the discounted cash flow technique in particular, the appraiser is able to bring together relevant characteristics of production volume and pattern, product prices, operating expenses and discount rate to determine an estimate of appraised value of an oil or gas property.

EAGLE PROPERTY TAX

APPRAISAL & CONSULTING, Inc.

REAPPRAISAL PLAN

2021-2022

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 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 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 Grayson 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 2021 is a reappraisal year and tax year 2022 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 2021 and 2022. 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, 2020 and will complete all inspections and schedules by April 1, 2021 for the 2021 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, 2021 and will complete all inspections and schedules by April 1, 2022 for the 2022 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 physically viewing the property, photographing, and verifying the accuracy of the existing data. **The annual re-inspection requirements for tax years 2021 and 2022 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 Schedules are updated using current market data (sales) and then tested with ratio study tools. Value schedules are developed and tested on a pilot basis with ratio study tools.

PERSONAL PROPERTY VALUATION
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.

EAGLE PROPERTY TAX APPRAISAL & CONSULTING, INC.
The list of contractors with Eagle Property Tax Appraisal & Consulting, Inc. is attached.

2021-2020 AGRICULTURAL PRODUCTIVITY VALUATION AND GUIDES

Introduction

A publication manual by the State Comptroller's Office entitled *Guidelines for the Valuation of Open-Space Land* gives suggested guidelines pursuant to the Texas Constitution, Article VIII, Section 1-d and 1-d-1.

The manual is an official administrative rule that has the force of law, and has been adopted by the State Comptroller's office and approved by a committee composed of the Governor, the Comptroller, the Attorney General, the Agricultural Commissioner, and the General Land Office Commissioner.

Suggestions from this publication set the basic procedural guidelines for determination of agricultural use values set forth in this report.

Purpose

The purpose of this section of the appraisal manual is to estimate the agricultural productive value of the lands in the Grayson Central Appraisal District.

Assumptions and Limiting Conditions

Appraisals for ad valorem tax purposes require assumptions and generalizations on land categories. The inherent nature of ad valorem tax appraisals prohibit each parcel of land from being individually and extensively analyzed.

This appraisal is conducted for the purpose as stated, and should not be used for any other purpose.

Land Categorization System

In mass appraisal for ad valorem tax purposes, the derivation of value on an individual basis is not practical or advisable. For this reason, a system of land categorization is utilized that enables homogeneous land types to fall into a land category or classification.

The development of a workable and comprehensive land categorization system is an important phase in an agricultural use evaluation. The land categorization system must adjust for physical, legal, and economic factors relative to agricultural use. The land categorizations system must also be harmonious with the market value categorization system to allow for the rollback provisions of the Texas Constitution. This co-ordination of agricultural categories and market categories facilitates the efficient use of personnel in the tax equalization process and in tax administration.

Land Productivity Valuation

Two amendments to the Texas Constitution permit agricultural and open-space land to be taxed generally on its agricultural-use or productivity value. This means that taxes would be assessed against the productive value of the land instead of the selling price of the land in the open market. This permits the land to be taxed in proportion to its ability to produce agricultural products and not based on the land's value to society in general.

The legal basis for special land appraisal is found in the Texas Constitution in Article VIII, Sections 1-d and 1-d-1. The two types of land valuation are commonly called "ag-use" or "1-d" and "open-space" or "1-d-1". The corresponding provisions of the Texas Property Tax Code are Sections 23.41 through 23.46, Agriculture Land and Sections 23.51 through 23.57, Open-space Land.

The purposes of the provisions are similar. Under both provisions, the land must be in agricultural use and is valued in the same manner. However, there are differences in the qualifications that must be met in order to receive the productivity valuation.

1. **Ag-use or 1-d qualifications:**
   a. The land must be owned be a natural person (partnerships, corporations, or organizations may not qualify.)

b. The land must have been in agricultural use for three (3) years prior to claiming this valuation. The owner must apply for the designation each year and file a sworn statement about the use of the land.
c. The agricultural business must be the land owner's primary occupation and source of income.

2. Open-space or 1-d-1 qualifications:

a. The land may be owned by an individual, corporation, or partnership.
b. The land must be currently devoted principally to agricultural use to the degree of intensity that is common for the area.
c. The land must have been devoted to a qualifying agricultural use for at least five (5) of the past even (7) years.
d. Agricultural business need not be the principle business of the owner.
e. Once an application for 1-d-1 is filed and approved, a landowner is not required to file again as long as the land qualifies unless ownership changes or the chief appraiser requests another application to confirm current qualification.

The possibility for a "rollback tax" exists under either form of special-use land appraisal.

This liability for additional tax is created under 1-d valuation by either sale of the land or a change in use of the land. It extends back to the three years prior to the year in which the sale or change occurs.

Under 1-d-1, a rollback is triggered by a change in use to a non-agricultural purpose that would not qualify for productivity valuation. Taxes are rolled back or recaptured for the five years p[receding the year of the change.

The additional tax is measured by the difference between taxes paid under productivity valuation provisions and the taxes which would have been paid if the land had been put on the tax roll at market value.

These provisions are effective only if applications are filed with the appraisal district office in a timely manner. Applications should be filed between January 1 and May 1. Applications received and May 1 and until the appraisal records are approved by the ARB are subject to a penalty for late filing. Applications may not be filed after the records are approved for that tax year by the ARB.

Classifications

It is the opinion of the Grayson Central Appraisal District that the attached land descriptions and classification guidelines are valid for mass appraisal purposes and can be applied uniformly throughout the appraisal district.

It should be noted that these guidelines are to be used as general guide for qualifying agricultural land. Exceptions to the general rule will be handled on a case by case basis.

Agricultural Land Qualification Policy Statement

The general policy of the Grayson Central Appraisal District is in accordance with the State Property Tax Code's qualification guidelines for agricultural use. The district's policy is that in order for ag-use valuation to be applied, the land must:

1. Be utilized to the "degree of intensity" generally accepted in Grayson CAD.
2. Be managed in a "typically prudent manner".
3. Be a substantial tract of land.

In accordance to the State Property Tax Code guidelines, the net-to-land is based on a five-year average of the years preceding the year of the appraisal. This five-year average tends to remove fluctuations in value because of varying prices, yields, weather conditions, and costs. Only the factors associated with the land's capacity to produce marketable agricultural and recreational (hunting) products are considered in estimating the productivity values.

Definitions of Key Words and Phrases

Prudent: Capable of making important management decisions, shrewd in the management of practical affairs. Specifically, the law states that the land must be utilized as would an ordinary and prudent manager in the area of the taxing unit. Normally, prudent farm or ranch managers are ordinary farmers in terms of acres farmed as well as management ability. Given that all other factors remain constant, the number of acres farmed determines the farmer's capital structure. It is assumed that prudent farm or ranch managers in a given area are assumed to have similar equipment of similar value and utility.

Substantial: Ample to satisfy; considerable in quantity. Specifically, the law states that the agricultural land must be an identifiable and substantial tract of land. This means that the tract must be of adequate size to be economically feasible to farm or ranch.

Typically: exhibiting the essential characteristics of a group. Specifically, the law states that ag land will be utilized as would a typical or ordinary prudent manager. Statistically, a typically prudent manager is the median farmer or rancher.

Agricultural use to the degree of intensity generally accepted in the area: farming or ranching to the extent that the typically prudent manager in the area of the taxing unit would farm or ranch on an identifiable and substantial tract of land when the tract is devoted principally to agricultural use. The farming and ranching practices (cropping patterns, planting rates, fertilization methods, harvesting and marketing techniques, etc.) are those of a typically prudent farm or ranch manager.

Area: that land that is located inside the jurisdictional boundaries of the Grayson Central Appraisal District.

Principally: the more important use in comparison with other uses to which the land is put.

Appendix D. Properties to be Appraised-Attached

JIMMY HUBBARD

2021

MAP	ISD	# ACCTS
D018	SDE	121
D019	SDE	281
D020	SDE	70
D021	SDE	98
D022	SDE	462
D023	SDE	250
D024	SDE	470
D032	SDE	213
D033	SDE	208
D034	SDE	59
D035	SDE	57
D036	SDE	80
D037	SDE	402
D038	SDE	143
D045	SDE	139
D046	SDE	202
D048	SDE	150
D049	SDE	140
D056	SDE	60
11	SDE	63
11A	SDE	132
11B	SDE	122
11C	SDE	38
23	SDE	53
23A	SDE	27
23B	SDE	22
25	SDE	22
48	SDE	50
063A	SDE	4
64	SDE	28
75	SDE	25
TOTAL:		4191

2022

MAP	ISD	#ACCTS
D025	SDE	275
D026	SDE	362
D027	SDE	64
D028	SDE	37
D029	SDE	418
D030	SDE	441
D031	SDE	305
D039	SDE	221
D040	SDE	159
D041	SDE	149
D042	SDE	167
D043	SDE	183
D044	SDE	376
D050	SDE	65
D051	SDE	2
D052	SDE	12
D053	SDE	16
D054	SDE	6
D055	SDE	118
S002	SDE	2
S060	SDE	0
39	SDE	55
39A	SDE	20
40	SDE	51
40A	SDE	10
41	SDE	53
41A	SDE	147
46	SDE	75
101	SDE	213
102	SDE	141
TOTAL:		4143

2020

MAP	ISD	# ACCTS
D001	SDE	35
D002	SDE	491
D003	SDE	4
D004	SDE	277
D005	SDE	58
D006	SDE	186
D007	SDE	26
D008	SDE	189
D009	SDE	362
D010	SDE	426
D011	SDE	427
D012	SDE	212
D013	SDE	63
D014	SDE	66
D015	SDE	279
D016	SDE	181
D017	SDE	478
24	SDE	21
24A	SDE	34
24B	SDE	106
47	SDE	208
47A	SDE	55
TOTAL:		4184

JASON WILBURN

2021 2022 2023

MAP	ISD	# ACCTS
241	SHO	104
242	SHO	185
243	SHO	35
244	SHO	43
245	SHO	15
270	SGU	68
271	SHO	65
271A	SHO	1
272	SVA	104
273	SHO	49
274	SVA	143
275	SVA	40
287	SVA	156
287A	SVA	21
288	SVA	235
288A	SVA	28
288C	SVA	20
289	SVA	84
289A	SVA	32
291	SGU	34
292	SGU	332
293	SGU	450
313	SVA	285
313A	SVA	25
313B	SVA	39
313C	SVA	175
H001	SHO	107
H002	SHO	237
H005	SHO	10
H006	SHO	72
V001	SVA	214
TOTAL:		3408

MAP	ISD	#ACCTS
187	SHO	113
187B	SHO	120
204	SHO	158
205	SHO	59
206	SHO	48
224	SHO	176
225	SHO	127
225A	SHO	17
226	SHO	90
227	SHO	63
240	SHO	191
290	SGU	181
290A	SVA	24
294	SGU	128
295	SGU	20
296	SGU	65
306	SGU	25
307	SGU	54
308	SGU	89
309	SGU	50
310	SVA	152
310A	SVA	41
310B	SVA	58
310C	SVA	46
311	SVA	55
312	SVA	66
G001	SGU	185
G002	SGU	95
V002	SVA	296
V003	SVA	238
V004	SVA	182
V005	SVA	33
TOTAL:		3245

MAP	ISD	# ACCTS
179A	SHO	79
181	SHO	38
207	SHO	20
208	SHO	39
221	SHO	35
222	SHO	75
223	SHO	60
246	SHO	21
247	SHO	51
248	SGU	29
249	SGU	10
250	SGU	35
251	SGU	35
252	SGU	25
253	SGU	32
254	SGU	4
266	SGU	55
267	SGU	21
268	SGU	48
269	SGU	176
269A	SGU	89
269B	SGU	48
269C	SGU	30
269D	SGU	34
276	SVA	54
277	SVA	61
284	SVA	117
285	SVA	225
286	SVA	102
292A	SGU	49
292B	SGU	53
314	SVA	707
314A	SVA	77
315	SVA	102
316	SVA	156
H003	SHO	242
H004	SHO	254
R001	SHO	49
TOTAL:		1648

DUSTY KOLLMANSBERGER

2021 2022 2023

MAP	ISD	# ACCTS
104	SDE	254
105	SDE	166
105A	SDE	46
111	SBE	35
112	SBE	47
113	SBE	129
114	SBE	64
115	SBE	97
116	SBE	67
117	SDE	162
197	SBE	143
198	SBE	37
202	STB	43
203	STB	144
203A	STB	45
203B	STB	25
226A	STB	7
232	SWW	55
233	SWW	143
233A	SWW	65
A001	SBE	75
X001	SWW	203
X002	SWW	139
X003	SWW	209
X004	SWW	142
X005	SWW	53
X006	SWW	71
TOTAL:		2666

MAP	ISD	#ACCTS
67	SDE	225
67A	SDE	8
106	SDE	83
106A	SDE	63
107	SDE	169
108	SDE	127
109	SBE	205
110	SBE	153
110A	SBE	34
143	SBE	143
144	SBE	161
144A	SBE	3
145	SBE	23
146	SBE	102
187A	STB	40
199	SWW	70
229	STB	100
230	STB	201
230A	STB	35
234	SWW	84
235	STB	85
236	STB	98
236A	STB	21
236B	STB	5
237	STB	232
278	STB	176
280	SWW	63
281	SWW	161
281A	SWW	21
282	SWW	86
283	STB	165
317	SWW	69
318	SWW	87
N001	STB	99
N002	STB	97
N003	STB	99
Z001	SWW	35
TOTAL:		3628

MAP	ISD	# ACCTS
42	SDE	76
43	SDE	164
44	SDE	14
45	SDE	11
66	SDE	85
68	SDE	63
69	SDE	83
70	SDE	12
71	SDE	15
72	SDE	158
73	SDE	230
073A	SDE	13
74	SDE	45
147	SBE	146
147A	SBE	17
147B	SBE	47
148	SBE	69
189	STB	93
189A	STB	38
190	STB	133
190A	STB	24
191	STB	70
192	STB	92
192A	STB	27
193	SBE	127
193A	SBE	13
194	STB	120
195	SBE	52
196	SBE	73
200	STB	104
201	STB	38
228	STB	70
231	SWW	129
238	STB	82
239	STB	121
279	STB	123
B001	SBE	92
B002	SBE	151
B003	SBE	123
B004	SBE	83
F001	SDE	30
K001	SWW	22
TOTAL:		3278

MERANDA TAYLOR

2021

MAP	ISD	# ACCTS
3	SPB	2
4	SPB	7
004A	SPB	70
5	SPB	338
005A	SPB	165
005B	SPB	101
005C	SPB	31
005D	SPB	86
9	SPB	2
10	SPB	61
12	SPB	211
12A	SPB	60
12B	SPB	62
12C	SPB	91
12D	SPB	59
22	SPB	204
22A	SPB	249
22B	SPB	63
22C	SPB	256
26	SPB	93
26A	SPB	467
48	SPB	75
76	SPB	326
77	SPB	99
77A	SPB	28
78	SPB	94
79	SPB	87
80	SPB	10
81	SSS	14
82	SSS	69
89	SSS	54
90	SSS	116
91	SSS	42
92	SSS	16
95	SSS	111
96	SSS	82
97	SSS	41
98	SPB	84
122	SSS	15
123	SSS	324
123A	SSS	87
124	SSS	42
125	SSS	161
TOTAL:		4653

2022

MAP	ISD	#ACCTS
27	SPB	58
27A	SPB	68
27B	SPB	194
27D	SPB	41
28	SPB	156
28A	SPB	104
28B	SPB	191
28E	SPB	60
28F	SPB	27
29	SPB	81
29A	SPB	96
29B	SPB	333
29C	SPB	85
29D	SPB	88
30	SPB	3
30A	SPB	53
30B	SPB	86
35	SPB	90
35A	SPB	64
35B	SPB	69
35C	SPB	12
36	SPB	120
37	SPB	73
38	SPB	192
53A	SSS	139
126	SSS	198
131	SSS	179
132	SSS	37
133	SSS	71
134	SSS	90
135	SSS	61
136	SSS	64
137	SSS	157
137A	SSS	148
137B	SSS	46
176	SSS	30
177	SSS	41
178	SSS	63
179	SSS	89
208A	SSS	26
208B	SSS	15
209	SSS	35
Q001	SSS	64
Q002	SSS	47
Q003	SSS	74
Q004	SSS	7
TOTAL:		4025

2023

MAP	ISD	# ACCTS
49	SPB	396
049A	SPB	63
P001	SPB	59
P002	SPB	34
P003	SPB	304
P004	SPB	34
P005	SPB	63
P007	SPB	104
50	SPB	145
51	SPB	169
52	SPB	89
052A	SPB	70
052B	SPB	77
052C	SPB	74
052D	SPB	37
58	SSS	67
59	SPB	31
59A	SPB	10
60	SPB	71
61	SPB	185
061A	SPB	22
62	SPB	174
63	SPB	177
121	SSS	40
121A	SSS	79
157	SSS	139
157A	SSS	103
157B	SSS	95
157C	SSS	18
157D	SSS	68
158	SSS	72
159	SSS	80
160	SSS	69
161	SSS	73
162	SSS	105
163	SSS	27
164	SSS	7
165	SSS	81
180	SSS	129
180A	SSS	64
180B	SSS	33
180C	SSS	42
Y001	SSS	20
Y002	SSS	49
Y003	SSS	16
Y004	SSS	71
Y005	SSS	47
TOTAL:		3982

ANNUAL

AREA	MAP	#ACCTS
TEXINS		191
VFW		83
AM LEG		39
ELKS		59
FLOWING		34
LGTHSE		41
MILLCR		39
LTLMIN		57
TOTAL:		543

BRAD DURHAM

2021

MAP	ISD	# ACCTS
E001	SWB	
2	SWB	17
7	SWB	13
8	SWB	7
18	SWB	587
19	SWB	46
57	SWB	84
84	SWB	49
85	SWB	43
87	SWB	90
88	SWB	106
128	SWB	210
129	SWB	96
211	SCO	81
212	SCO	76
216	SCO	135
263	STI	29
297	STI	35
298	STI	19
300	SPP	46
301	SPP	36
302	SPP	81
303	SPP	62
304	SPP	33
305	SPP	101
W001	SWB	242
W002	SWB	108
W003	SWB	266
W004	SWB	375
W005	SWB	288
W006	SWB	51
W007	SWB	110
W008	SWB	64
TOTAL:		3586

2022

MAP	ISD	#ACCTS
6	SWB	3
13	SWB	5
13A	SWB	480
14	SWB	8
14A	SWB	348
20	SWB	112
20A	SWB	152
20B	SWB	158
21	SWB	288
21A	SWB	336
21B	SWB	223
31	SWB	125
31A	SWB	56
33	SWB	476
34	SWB	53
34A	SWB	22
53	SWB	111
86	SWB	72
94	SWB	146
127	SWB	142
130	SWB	221
167	SWB	136
168	SWB	162
168A	SWB	2
169	SWB	178
171	SWB	55
215	STI	48
218	SCO	77
219	SCO	31
258	STI	60
264	STI	10
265	STI	52
299	STI	37
TOTAL:		4345

2023

MAP	ISD	# ACCTS
15	SWB	420
16	SWB	126
17	SWB	290
32	SWB	96
54	SWB	166
55	SWB	105
56	SWB	57
83	SWB	104
93	SWB	154
127A	SWB	81
166	SWB	29
170	SWB	68
172	SCO	72
173	SCO	81
174	SCO	32
175	SCO	39
210	SCO	72
213	SCO	293
214	SCO	50
214A	SCO	14
217	SCO	115
220	SCO	24
255	STI	25
256	STI	40
257	SCO	59
259	STI	40
259A	STI	24
260	STI	31
261	STI	51
262	STI	215
C001	SCO	109
C002	SCO	95
C003	SCO	288
C004	SCO	148
T001	STI	81
T002	STI	98
T003	STI	70
T004	STI	192
TOTAL:		3045

ANNUAL

AREA	MAP	#ACCTS
BIG MINERAL RESORT	53	33
CEDAR MILLS RESORT	21	41
CEDAR BAYOU RESORT	31	4
CEDAR POINT RESORT	21	42
GAINESVILLE BOAT CLUB	21	200
MARINE QUEST RESORT	8	4
WALNUT CREEK RESORT	34	33
TOTAL:		357

DARLA EFFLANDT

2021

MAP	ISD	# ACCTS
076C	SSH	56
100	SSH	169
100A	SSH	37
100B	SSH	14
118	SSH	150
118A	SSH	112
120	SSH	97
120A	SSH	35
120B	SSH	2
120C	SSH	7
138	SSH	170
139	SSH	13
140	SSH	33
141	SSH	115
151	SSH	219
151A	SSH	19
182	SSH	134
182A	SSH	136
185	SSH	34
186	SSH	81
S004	SSH	140
S007	SSH	147
S008	SSH	8
S009	SSH	40
S010	SSH	28
S015	SSH	47
S018	SSH	11
S020	SSH	58
S021	SSH	233
S022	SSH	111
S023	SSH	93
S030	SSH	489
S031	SSH	377
S032	SSH	483
S033	SSH	242
S034	SSH	39
S037	SSH	61
S038	SSH	128
S039	SSH	36
S040	SSH	150
S041	SSH	316
S050	SSH	23
S053	SSH	122
S055	SSH	38
S056	SSH	83
S057	SSH	66
TOTAL:		5058

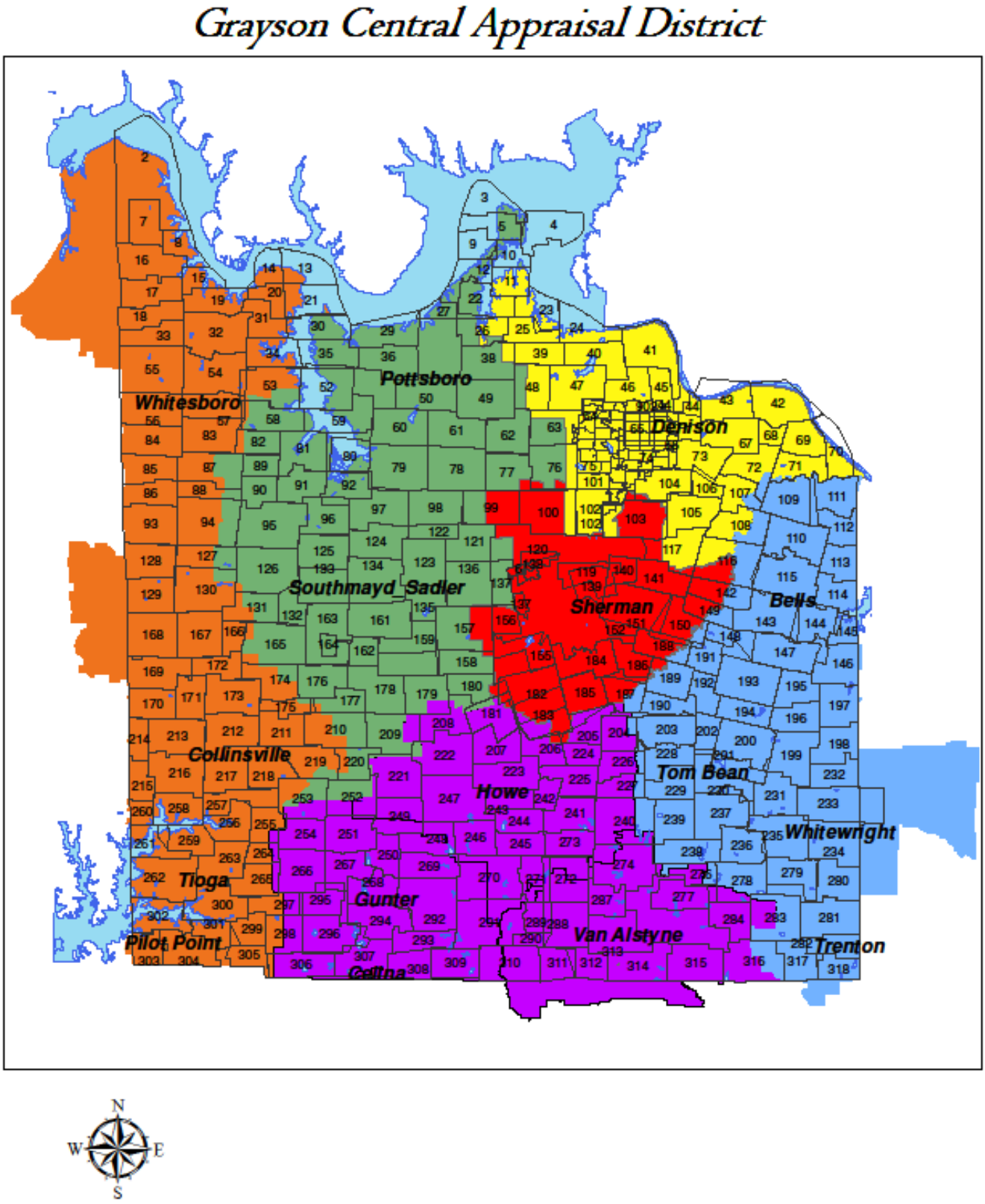
2022

MAP	ISD	#ACCTS
103	SSH	301
103A	SSH	51
103B	SSH	119
103C	SSH	12
142	SSH	50
149	SSH	104
149A	SSH	16
150	SSH	94
150A	SSH	11
152	SSH	20
153	SSH	18
153A	SSH	56
183	SSH	83
184	SSH	175
188	SSH	61
S005	SSH	1
S006	SSH	143
S011	SSH	21
S012	SSH	143
S013	SSH	303
S014	SSH	154
S016	SSH	280
S017	SSH	474
S024	SSH	590
S026	SSH	129
S027	SSH	71
S028	SSH	477
S029	SSH	448
S036	SSH	284
S042	SSH	464
TOTAL:		5153

2023

MAP	ISD	# ACCTS
99	SSH	79
99A	SSH	173
119	SSH	549
119A	SSH	41
119B	SSH	62
119C	SSH	0
154	SSH	10
154A	SSH	85
155	SSH	911
155A	SSH	63
155B	SSH	153
156	SSH	125
156A	SSH	19
156B	SSH	20
S019	SSH	182
S025	SSH	412
S035	SSH	465
S043	SSH	549
S044	SSH	44
S046	SSH	373
S047	SSH	519
S048	SSH	439
S049	SSH	47
S052	SSH	379
S058	SSH	36
S059	SSH	192
TOTAL:		5927

Appendix E. Market Areas Map



Appendix F. Reappraisal Timeline

*2020-2021 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 2020-2021 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 printing and routing field inspections.
- 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
- Before Feb. 1, Mass mailings begin 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.

March

- (Target date March 1) All residential and commercial field work completed.
- All data entry finalized.
- Auto book match up completed by True Automation and work unmatched.
- 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.
- April 30 Prepare and certify Preliminary totals for all taxing entities, set freezes for new value and transfers.

May

- Mail Real Property Notices of Appraised Value.
- Begin the informal inquiry process with property owners on real property accounts.
- May 15 BPP Extension filing deadline.
- Mail BPP Notices of Appraised Value and then 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.
- (Target date end of May) 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.**