
2019 CHILDRESS COUNTY APPRAISAL DISTRICT MASS APPRAISAL REPORT

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CHILDRESS COUNTY APPRAISAL DISTRICT

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Childress County Appraisal District 2019 Mass Appraisal Report

INTRODUCTION

Scope of Responsibility

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

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

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

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

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

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

The Texas Property Tax Code, under Section 25.18, requires each appraisal office to implement a plan to update appraised values for real and personal property at least once every three years. The district's Written Plan for Periodic Reappraisal is attached to this report by reference. Appraised values are reviewed annually and are subject to change for purposes of equalization. Personal property, industrial property, complex commercial property, utility property, and mineral property values are reviewed or reappraised every year. Special-use valuations are also updated annually.

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

Personnel Resources

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

The appraisal district staff consists of 2 full time employees, and no part-time employees. The chief appraiser has obtained certifications as follows: RPA, RTA, CTA, and CCA. Other employees have obtained certifications as follows:

Freda Dodson - RTA

Kelsey Bradley - RTA and RPAII

Data

The district is responsible for establishing and maintaining approximately 7,371 real and personal property accounts covering Childress County. This data includes property characteristics, ownership, and exemption information. Property characteristic data on new construction is updated through an annual field effort; existing property data is maintained through a field review. Sales are routinely validated during a separate field effort; however, numerous sales are validated as part of the new construction and data review field activities. General trends in employment, interest rates, new construction trends, and cost and market data are acquired through various sources, including internally generated questionnaires to buyer and sometimes the seller, and local real estate agents.

The district has a geographic information system (GIS) that maintains cadastral maps and various layers of data, including aerial photography.

Independent Performance Test

According to Chapter 5 of the Texas Property Tax Code and Section 403.302 of the Texas Government Code, the State Comptroller's Property Tax Division (PTD) conducts an annual property value study (PVS) of each Texas school district and each appraisal district. As a part of this annual study, the code also requires the Comptroller to: use sales and recognized auditing and sampling techniques, review each appraisal district's appraisal methods, standards and procedures to determine whether the district used recognized standards and practices (MSP Review), test the validity of school district taxable values in each appraisal district and presume the appraisal roll values are correct when values are valid, and determine the level and uniformity of property tax appraisal in each appraisal district. The methodology used in the property value study includes stratified samples to improve sample representativeness and techniques or procedures 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 three (3) independent school districts in Childress CAD for which appraisal rolls are annually developed. The preliminary results of this study are released in January in the year following the year of appraisement. The final results of this study are certified to the Education Commissioner of the Texas Education Agency (TEA) in the following July of each year for the year of appraisement. This outside (third party) ratio study provides additional assistance to the CAD in determining areas of market activity or changing market conditions.

Appraisal Activities

INTRODUCTION

Appraisal Responsibilities

The chief appraiser is responsible for collecting and maintaining property characteristic data for classification, valuation, and other purposes. Accurate valuation of real and personal property by any method requires physical description of personal property, land and building characteristics. This appraisal activity is responsible for administering, planning and coordinating all activities involving data collection and maintenance of all commercial, residential and personal property types that are located within the boundaries of the appraisal district. The data collection effort involves the field inspection of real and personal property accounts, as well as data entry of all data collected into the existing information system. (Eagle Property Tax Appraisal and Consulting, Inc. contractors/appraisers and appraisal district staff assists the chief appraiser in the collection of data and the entry of that data into the information system.) The goal is to periodically field inspect all real property in the appraisal district at least once every three years. Meeting this goal is dependent on budgetary constraints. The above responsibilities are or can be delegated to contracted personnel or in-house staff as deemed appropriate by the chief appraiser.

Appraisal Resources

- * **Personnel** - The appraisal activities consist of the chief appraiser (contracted), two (2) clerks, and contracted appraisal companies.
- * **Data** - The data used by field appraisers includes the existing property characteristic information contained in CAMA (Computer Assisted Mass Appraisal System) from the district's computer system. The data is printed on a property record card (PRD) or on personal property data sheets. Other data used includes maps, sales data, fire and damage reports, building permits, photos, newspaper, etc.

PRELIMINARY ANALYSIS

Data Collection/Validation

Data collection of real property involves maintaining data characteristics of the property on CAMA (Computer Assisted Mass Appraisal). The information contained in CAMA includes site characteristics, such as land size and topography, and improvement data, such as square feet of living area, year built, quality of construction, and condition. Field appraisers use listing manual guides that establish uniform procedures for the correct listing of real property. All properties are coded according to these guides and the approaches to value are structured and calibrated based on this coding system. The field appraisers use these manuals during their initial training and as a guide in the field inspection of properties. Data collection for personal property involves maintaining information on the Personal Property System. The type of information contained in the personal property system includes personal property such as business inventory, furniture and fixtures, machinery and equipment, cost, and location. The field appraisers conducting on-site inspections will use a personal property manual during their initial training and as a guide to correctly list all personal property that is taxable.

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

Sources of Data

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

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

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

Data Collection Procedures

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

The quality of the data used is extremely important in establishing accurate values of taxable property. While production standards are established and upheld for the various field activities, quality of data is emphasized as the goal and responsibility of each appraisal district employee. New employees are trained in the specifics of data collection rules. Experienced employees are routinely re-trained in listing procedures prior to major field projects such as new construction, sales validation, or data review. A quality assurance process exists through supervision to review the work being performed by the field appraiser and data entry personnel. The chief appraiser is charged with the responsibility of ensuring that appraisers and employees follow listing procedures, identify training issues and provide uniform training throughout the appraisal office staff.

Data Maintenance

The field appraiser is responsible for ensuring that field notes are legible and complete and in good order for data entry accuracy and quality assurance.

INDIVIDUAL VALUE REVIEW PROCEDURES

Field Review

The date of the last inspection, extent of that inspection, and the CAD appraiser responsible are listed on the CAMA record. If a property owner or jurisdiction dispute CAD's records concerning this data during a hearing, via a telephone call or correspondence received, CAMA may be altered based on the evidence provided. Typically, 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 data review/re-list field effort.

Office Review

Office reviews are completed on properties where information has been received from the owner of the property. Property owners frequently provide vital data which verifies the property characteristics or current condition of the property. When the property data is verified in this manner, field inspections are not required unless additional verification of data is required.

PERFORMANCE TEST

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

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

Residential Valuation Process

INTRODUCTION

Scope of Responsibility

The chief appraiser is responsible for developing equal and uniform market values for residential improved and vacant property. There are approximately 2,492 residential improved parcels and 633 vacant residential properties in Childress County.

Appraisal Resources

- * Personnel - Residential valuations are performed by the staff of Eagle Property Tax Appraisal & Consulting, Inc. This company is responsible for providing adequate staff. Employees of the appraisal district assist in various and appropriate ways.
- * Data - A common set of data characteristics for each residential dwelling in Childress County is collected in the field and data is entered into the computer. The property characteristic drives the computer-assisted mass appraisal (CAMA) approach to valuation.

VALUATION APPROACH (Model Specification)

Area Analysis

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

Neighborhood and Market Analysis

Neighborhood analysis 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, more manageable subsets of the universe of properties known as neighborhoods. Residential valuation and neighborhood analysis is conducted on each of the properties located within a specified school district.

The first step in neighborhood analysis is the identification of a group of properties that share certain traits. A "neighborhood for analysis purposes is defined as the largest geographic grouping of properties where the property's physical, economic, governmental and social forces are generally similar and uniform. Geographic stratification accommodates the local supply and demand factors that vary across a jurisdiction. Once a neighborhood has been identified, the next step is to define its boundaries. This process is known as "delineation". Some factors used in neighborhood delineation include location, sales price range, lot size, 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. Generally, in a stage of stability, older neighborhoods can be more desirable due to their stability of residential character and proximity to the workplace and other community facilities. A period of decline reflects diminishing demand or desirability. During decline, general property use may change from residential to a mix of residential and commercial uses. Declining neighborhoods may also experience renewal, reorganization, rebuilding, or restoration, which promotes increased demand and economic desirability.

Highest and Best Use Analysis

The highest and best use of property is the reasonable and probable use that supports the highest present value as of the date of the appraisal. The highest and best use must be physically possible, legal, financially feasible, and productive to its maximum. The highest and best use of residential property is normally 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 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 economic misimprovements, and the highest and best of such property is the construction of new dwellings. In areas of mixed residential and commercial use, the appraiser reviews properties in these areas on a periodic basis to determine if changes in the real estate market require reassessment of the highest and best use of a select population of properties.

DATA COLLECTION AND VALIDATION

Sources of Data

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

VALUATION AND STATISTICAL ANALYSIS (Model Calibration)

Cost Schedules

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

The initial cost schedules developed for the Childress County Appraisal District were developed using Marshall & Swift, a nationally recognized cost estimator.

The schedules were derived in this manner due to the fact that the appraisal district did not have enough newly constructed sold properties at various levels of quality of construction in the district to allow for analysis and statistical testing. Marshall & Swift processes included correlation of quality of construction factors. The results of this comparison were analyzed using statistical measures, including stratification by quality and reviewing estimated building costs plus land to sales prices. As a result of this analysis, a new regional multiplier was developed and used in the district's cost process. This multiplier was used to adjust the Marshall & Swift schedules to bring the schedules to costs reflecting the local market. **Note: The base per square foot costs of each classification schedule is based on a compilation of Marshall & Swift information. After ratio studies are conducted, local modifiers are determined by conducting ratio studies. While the base cost per square foot schedule remains unchanged, the local modifiers result in values that are typical and representative of the market for the area. The modified values are statistically tested by conducting additional ratio studies to ensure validity and uniformity of a market area. Modifiers are tested and adjusted, if necessary, on an annual basis.**

Sales Information

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

Land Analysis

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

Statistical Analysis

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

deviation, coefficient of variation and coefficient of dispersion can discern appraisal uniformity within and between school districts.

The chief appraiser, through the sales ratio analysis process, reviews each classification of residence in each school district annually. The first phase involves ratios studies that compare the recent sales prices of properties to the appraised values of these sold properties. This set of ratio studies affords the chief appraiser an excellent means of judging the present level of appraised value and uniformity of the sales. The chief appraiser, based on the sales ratio statistics and designated parameters for valuation update, makes a preliminary decision as to whether the value level in a school district needs to be updated or whether the level of market value in a school district is at an acceptable level. This analysis process may be assigned to the contracted appraisal company.

Market Adjustment or Trending Factors

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

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

TREATMENT OF RESIDENCE HOMESTEADS

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

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

Values of capped properties must be recomputed annually. If a capped property sells, the cap automatically expires as of January 1 of the following year. In the following year, that home is reappraised at its market value to bring its appraisal into uniformity with other properties. This is tracked through the computer software utilized by the appraisal district.

TREATMENT OF ACCOUNTS WITH PRIOR YEAR HEARINGS

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

INDIVIDUAL VALUE REVIEW PROCEDURES

Field Review

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

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

The area to be physically inspected each year is identified in the appraisal district's written reappraisal plan.

Office Review

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

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

PERFORMANCE TESTS

Sales Ratio Studies

The primary analytical tool used by the chief appraiser to measure and improve performance is the ratio study. The district ensures that the appraised values that it produces meet the standards of accuracy in several ways. Overall sales ratios are generated for each school district to allow the chief appraiser to review general market trends and to provide an indication of market appreciation over a specified period of time. Sales ratio studies are generated from computer statistical software for each school district and the appraisal district as a whole. Reported in the sales ratio statistics for each school district is a level of appraised value and uniformity profile by structure type (classification), median level of appraisal, weighted mean, and coefficient of dispersion. The computer-based ratio studies are designed to emulate the findings of the State Comptroller's annual property value study for category A properties (single-family residential property).

Management Review Process

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

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

Commercial Valuation Process

INTRODUCTION

Appraisal Responsibility

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

Appraisal Resources

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

DATA - The data used by the commercial appraisers includes verified sales of vacant land and improved properties and the pertinent data obtained from each (sales price levels, capitalization rates, income multipliers, equity dividend rates, marketing period, etc.). Other data used by the appraiser includes actual income and expense data (typically obtained through the hearings process), 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 are also reviewed to provide additional support for market trends.

PRELIMINARY ANALYSIS

Pilot Study

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

Childress CAD administration and personnel interact with other assessment officials through professional trade organizations including IAAO, TAAD, TAAO and TRCA.

VALUATION APPROACH (Model Specification)

Area Analysis

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

Neighborhood Analysis

The neighborhood is comprised of the land area and commercially classed properties located within the boundaries of the appraisal district. This area consists of a wide variety of property types including residential, commercial, and industrial. 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 neighborhoods. In the mass appraisal of commercial properties, these subsets of a universe of properties are generally referred to as market areas or economic areas.

Economic areas are defined by each of the improved property use types (apartment, office, retail, warehouse, and special use) based upon an analysis of similar economic or market forces. These include, but are not limited to, similarities of rental rates, classification of projects (known as building class by area commercial market experts), dates of construction, overall market activity or other pertinent influences. Economic area identification and delineation by each major property use type is the benchmark of the commercial valuation system. All income model valuation (income approach to value estimates) is economic area specific. Economic areas are periodically reviewed to determine if re-delineation is required.

Highest and Best Use Analysis

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

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

Market Analysis

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

DATA COLLECTION/VALIDATION

Sources of Data

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

In terms of commercial sales data, Childress CAD receives a copy of the deeds recorded in Childress County that convey commercially classed properties. The deeds involving a change in commercial ownership are entered into the sales information system and researched in an attempt to obtain the pertinent sale information. Other sources of sale data include the hearings process, word of mouth, and local publications.

Data Collection Procedures

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

The quality of data used is of paramount importance to accurate valuation of taxable property. While production standards are established and upheld for the various field activities, quality of data is emphasized as the goal and responsibility of each appraiser. New appraisers are trained in the specifics of data collection.

For those properties involved in a transfer of commercial ownership, a sale file is produced, which begins the research and verification process. The initial step in sales verification involves a questionnaire, which is mailed to the purchaser (grantee) in the transaction. If a questionnaire is answered and returned, the documented responses are recorded into the computerized sales database system. If no information is provided, other sources are sought, but the sales data is documented as being unconfirmed. Actual closing statements 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 the current market conditions. Once the models have undergone the specification process, adjustments can be made to reflect new constructions 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. 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, location modifiers are necessary to adjust these base costs specifically for Childress County. These modifiers are provided by the national cost services.

Depreciation schedules are developed based on what is typical for each property type at that specific age. Depreciation schedules have been implemented for what is typical of each major class of commercial property by economic life categories. Schedules have been developed for improvements with varying years of expected life. The actual age, if known, and the effective ages of improvements are noted in CAMA. Effective age estimates are based on the utility of the improvements relative to where the improvement lies on the scale of its total economic life and its competitive position in the marketplace.

Market adjustment factors such as external and/or functional obsolescence can be applied if warranted. A depreciation calculation override can be used if 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.

Income Models

The income approach to value is applied to those real properties which are typically viewed by market participants and "income producing", and for which the income methodology is considered a leading value indicator. 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 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, a secondary income or service income is calculated 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 equates to \$8 per square foot, any increase in expense over \$8 per square foot throughout the remainder of the lease term would be the responsibility of the tenant. As a result, expense ratios are implemented based on the type of commercial property.

Another form of allowable expense is the replacement of short-lived items (such as roof or floor coverings, air conditioning, or major mechanical equipment or appliances) requiring expenditures of large sums. When these capital expenditures are analyzed for consistency and adjusted, they may be applied 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.

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.

Eagle Property Tax Appraisal & Consulting, Inc., a valuation firm, has been contracted by the district to perform valuations on income properties in this district, excluding mineral properties. The firm is responsible for obtaining statistics, data, performing statistical testing, and maintaining data for the valuation of this type of property.

Sales Comparison (Market) Approach

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 not only for estimating land value but also in comparing sales of similarly improved properties to each parcel on the appraisal roll. As previously discussed in the Data Collection/Validation section of this report, pertinent data from actual sales of properties, both vacant and improved, is pursued throughout the year in order to obtain relevant information, which can be used in all aspects of valuation. Sales of similarly improved properties can provide a basis for the depreciation schedules in the cost approach, rates and multipliers used in the income approach, and as a direct comparison in the sales comparison approach. Improved sales are also used in ratio studies, which afford the appraiser an excellent means of judging the present level and uniformity of the appraised values.

Final Valuation Schedules

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

Statistical and Capitalization Analysis

Statistical analysis of final values is an essential component of quality control. This methodology 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.

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

The appraisers review every commercial property annually through the sales ratio analysis process. The first phase involves ratio studies that compare the recent sales prices of properties to the appraised values of sold properties. This set of ratio studies affords the appraiser an excellent means of judging the present level of appraised value and uniformity of the appraised values. 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 level of market value is at an acceptable level.

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

INDIVIDUAL VALUE REVIEW PROCEDURES

Field Review

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

Commercial appraisers are somewhat limited in the time available to field review all commercial properties of a specific use type. However, a major effort is made by the appraisal district to field review as many properties as possible or an economic area experiencing large numbers of remodels, renovations, or retrofits, changes in occupancy levels or rental rates, new leasing activity, new construction, or wide variations in sale prices. Additionally, the appraisers frequently field review subjective data items such as building class, quality of construction, condition, and physical, functional, and economic obsolescence factors contributing significantly to the market value of the property. In some cases, field reviews are warranted when sharp changes in occupancy or rental rate levels occur between building classes or between economic areas. With preliminary estimates of value in these targeted areas, the appraisers test computer assisted values against their own appraisal

judgment. While in the field, the appraisers physically inspect sold and unsold properties for comparability and consistency of values.

Office Review

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

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

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

PERFORMANCE TESTS

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

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

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

Sales Ratio Studies

Sales ratio studies are an integral part of establishing equitable and accurate market value estimates, and ultimately assessments for taxing jurisdictions. The primary use of sales ratio studies includes 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 derive appraised values during valuation or reappraisal cycles. However, these studies cannot be

used to judge the accuracy of an individual property appraised value. The Childress County Appraisal Review Board may make individual value adjustments based on unequal appraisal (ratio) protest evidence submitted on a case-by-case basis during the hearing process.

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

Comparative Appraisal Analysis

The commercial appraiser performs an average unit comparison in addition to a traditional ratio study. These studies are performed on commercially classed properties by property use type (such as apartment, office, retail and warehouse usage or special use). The objective to this evaluation is to determine appraisal performance of sold and unsold properties. Appraisers average unit prices of sales and average unit appraised values of the same parcels and the comparison of average value changes of sold and unsold properties. These studies are conducted on substrata such as building class and on properties located within various economic areas. In this way, overall appraisal performance is evaluated geographically, by specific property type to discern whether sold parcels have been selectively appraised. When sold parcels and unsold parcels are appraised equally, the average unit values are similar. These horizontal equity studies are performed prior to annual noticing.

INDUSTRIAL VALUATION PROCESS

Appraisal Responsibility

Childress CAD contracts with Wardlaw Appraisal Group, LC for the appraisal of industrial properties. The firm is responsible for developing fair and uniform market values for improved industrial properties and industrial vacant land. The firm is also responsible for the valuation of all tangible general industrial personal property in Childress CAD. Childress CAD may, in some cases, subcontract with another appraisal company for the appraisal of this type of property.

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

BUSINESS PERSONAL PROPERTY VALUATION PROCESS

Appraisal Responsibility

There are four different personal property types appraised by the district:

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

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

Valuation Approach (Model Specification)

SIC Code Analysis

Four-digit numeric codes, called Standard Industrial Classification (SIC) codes, were developed by the federal government. These classifications may be used by Childress CAD as a way to classify personal property by business type.

Highest and Best Use Analysis

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

Data Collection/Validation

Sources of Data

Business Personal Property

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

Vehicles

An outside vendor, *Just Texas*, provides Childress CAD with a listing of vehicles registered commercially in Childress County. The vendor develops this listing from the Texas Department of Transportation Title and Registration Division records. Other sources of data include property owner renditions and field inspections.

Leased and Multi-Location Assets

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

VALUATION AND STATISTICAL ANALYSIS (MODEL CALIBRATION)

Cost Schedules

Due to lack of viable information within the district, the appraisal district staff relies largely upon the most current *Appraisal Guide* provided by Eagle Property Tax Appraisal & Consulting, Inc. A local modifier is developed and applied to the Appraisal Guide's schedules, where applicable.

Statistical Analysis

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

Depreciation Schedule and Trending Factors

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

$$PVF = \text{Index Factor} \times \text{Percent Good Factor}$$

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

$$\text{Market Value Estimate} = PVF \times \text{Historical Cost}$$

This mass appraisal PVF schedule is used to ensure that estimated values are uniform and consistent within the market.

INDIVIDUAL VALUE REVIEW PROCEDURES

Office Review

Business Personal Property

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

Vehicles

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

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

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

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 gauge appraisal

district performance. Results from the PVS play a part in school funding. Rather than a sales ratio study, the personal property PVS is a ratio study state cost and depreciation schedules to develop comparative personal property values. These values are then compared to Childress CAD's personal property values and ratios are determined.

Internal Testing

Childress CAD can test new or revised cost and depreciation schedules by running the valuation program in a test mode (if there is sufficient valid sales data) prior to the valuation cycle. This can give the district a chance to make additional refinements to the schedules if necessary.

LIMITING CONDITIONS

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

1. The appraisals were prepared exclusively for ad valorem tax purposes.
2. The property characteristic data upon which the appraisals are based is assumed to be correct. Exterior inspections of the property appraised were performed as staff resources and time allowed.
3. Validation of sales transactions was attempted through questionnaires to buyers and field reviews. In the absence of such confirmation, residential sales data obtained from vendors was considered reliable.
4. I have attached a list of those providing significant mass appraisal assistance to the person signing this certification.

Certification Statement:

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


Twila Butler, Chief Appraiser

PERSONS PROVIDING SIGNIFICANT MASS APPRAISAL ASSISTANCE

<u>NAME</u>	<u>TITLE</u>	<u>TYPE OF ASSISTANCE</u>
Gary L. Zeitler	Owner, Eagle Property Tax Appraisal Consulting, Inc.	Ratio Studies Schedule Studies and Development Research Field Inspections Appraisals
Twila Butler	Appraiser MAP Specialist	Field Inspections Ratio Studies Schedule Studies and Development Research Appraisals MAP Review
David Ballard	Appraiser Commercial Properties	Research Schedule Studies and Development Ratio Studies Field Inspections Appraisals

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

Wardlaw Appraisal Group, L.C. Mineral, Utility, Industrial, & Personal Property 2019 Mass Appraisal Report

INTRODUCTION

Appraisal Responsibility

Wardlaw Appraisal Group, L.C. (WAG) is a contract mass appraisal firm responsible for developing fair and uniform market values on certain complex properties for client appraisal districts in Texas. The complex properties we appraise include mineral, utility, industrial, and personal properties. The client appraisal districts use these property appraisals as part of the appraisal roll for each of the taxing jurisdictions. WAG is under contract to support ten (10) Texas appraisal districts in 2019. Those appraisal districts are Brooks, Childress, Denton, El Paso, Kenedy, Kleberg, La Salle, Runnels, Starr, Webb, and Zapata.

Each contract between WAG and our client appraisal districts specifies our appraisal responsibilities in support of that district. Generally, those responsibilities are to discover, inspect, appraise, and maintain ownership records of the specific properties that are the subject of the contract. The properties covered under our contracts generally fall under the Texas Property Tax Code Categories G (minerals), J (utility), F1 (commercial real), F2 (industrial real), L1 (commercial personal) and L2 (industrial personal). The appraisal districts contract with WAG to provide these services because the districts do not have the personnel or resources to perform the appraisal internally.

Appraisal Resources

- **Personnel** – WAG maintains a professional employee and consulting staff that is skilled and experienced in property tax appraisal, engineering, information technology, administration, and division order maintenance. The appraisal staff consists of six (7) registered appraisers, six of whom are Registered Professional Appraisers (RPA), and two (2) of who are Registered Professional Engineers in Texas. These appraisal personnel are listed in Attachment 'A'. All appraisers maintain a current registration in good standing with TDLR. Our appraisers improve and supplement their mass appraisal skills by participating in continuing education classes and by attending property tax related conferences.
- **Data** – The appraisers inspect their assigned properties, if appropriate, to obtain information about buildings, site improvements, process and shop equipment, and various items of personal property. In addition, appraisal personnel use information provided by property owners concerning the cost to purchase, install, and construct items of real and personal property. For mineral interests, data is collected from regulatory agencies such as the Texas Railroad Commission and the Texas Comptroller of Public Accounts, as well as from published data sources and fee-for-service companies.

VALUATION APPROACH (MODEL SPECIFICATIONS)

MINERAL APPRAISAL

Discounted Cash Flow analysis is the Income Method of Appraisal (Section 23.012 of the Texas Property Tax Code) used as the most appropriate technique for determining the market value of mineral properties. It is the primary appraisal method used for mineral properties. The Market Data Comparison Method of Appraisal (Section 23.013) and the Cost Method of Appraisal (Section 23.011) are also used. In addition, petroleum industry tendencies for acquisition and replacement cost (usually in dollars per barrel of oil equivalent) are considered. Because the sales and purchase prices of oil and gas properties are not generally disclosed, the Market Data Comparison method can seldom be used.

WAG uses discounted cash flow analysis to appraise every producing lease in the appraisal districts we support. The appraised value of each lease is distributed to each working interest, royalty, and overriding royalty interest owner based upon their decimal interest in the lease.

The oil and gas lease market values are reviewed and tested to ensure reasonableness and consistency. The reviews and testing include comparative analysis of the value, production, decline and price change from the previous year's appraisal. Additionally, comparative rules of thumb are reviewed to determine if the market value is in the correct range. The most common of these rules of thumb is that the appraised value of a mineral interest is often within 24-60 months revenue.

Additionally, the Property Tax Division of the Texas Comptroller of Public Accounts performs a Property Value Study each year, which effectively provides testing, and a comparative review of the mineral appraisals on a statistical sample of the leases in many of our counties.

UTILITY, INDUSTRIAL AND PERSONAL PROPERTY APPRAISAL

Area Analysis

The scope of market forces affecting industrial products and the capital goods used in the production process tends to extend beyond regional considerations. The effects of information and transportation technology are such that many industrial market forces are measured globally. One exception to this general concept is the market for industrial land. The pricing of land tends to be closely tied to possible alternative uses in the area. For this reason, the CAD appraisers assigned to land valuation analyze market forces for specific areas and adjust land value schedules appropriately.

Area Analysis

Neighborhood analysis of the type of properties valued by the industrial appraiser is not meaningful. Industrial properties do not have the type of generic "sameness" that is appropriate for neighborhood models.

Highest and Best Use Analysis

The highest and best use of real or personal property is the most reasonable and probable use of the property on the date of appraisal that is physically and financially feasible, legal, and that derives maximum production from the property. Usually, the current use of the property is the highest and best use of that property. Industrial facilities are most commonly located in areas that support industrial use. In areas where mixed used does occur, the highest and best use of the property is examined by the appraiser to estimate the effect of this factor.

Market Analysis

Market analysis is the basis for finalizing value estimates on properties for which the utility, industrial and personal property appraiser has responsibility. Even though many utility and industrial properties are unique in nature, the market for this type property is analyzed to determine how the values of similar properties, or properties that are as similar as possible, are affected by market forces. Some industrial properties, such as machine shops, have many facilities that can be compared to similar subject properties in terms of type and size of equipment, type of property fabricated or services at the subject facility, and other factors. Those similarities help the appraiser estimate the value of the subject property.

Cost Analysis

The Cost Approach to value is applied to most personal property. This approach is utilized in conjunction with the Market and Income approaches to arrive at a final market value for most utility companies and many industrial companies. For the Cost Approach, depreciation schedules are developed based on the percent good typical for each property type at any specific age. Depreciation schedules have been implemented for what is typical of each major class of property by economic life categories. Schedules have been developed for improvements with varying years of expected life. The actual age, if known, and the effective ages of improvements are noted. 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 when 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.

Many utility, industrial and personal properties use the same types of buildings and, depending on the type of business, may use the same types of manufacturing or service equipment. Many of the buildings encountered at industrial facilities are generic in construction, such as pre-engineered metal buildings. The cost per square foot to construct these type structures can be used to estimate values at facilities that have similarly constructed buildings. However, the building as constructed will have differences that must be taken into account when estimating the final value of the property being reviewed. The majority of these typical type buildings are appraised by CAD personnel.

However, some industrial properties, such as specialty chemical plants, are so unique in nature that the appraiser must use additional information such as output quantity, type of

product manufactured, and other factors to estimate the value of the subject property. However, the manner in which the entire business operation is put together may make a particular facility unique. The district uses information from similar businesses to examine the real property values at a particular business, but the individual characteristics of the business being reviewed determine the value estimation. Some industrial buildings are use specific and therefore have no comparable properties.

A similar analysis is used for personal property. Many items of personal property, such as furniture and fixtures, computers, and even machinery and equipment are generic in construction, but individual characteristics that affect value, such as usage, environment where used, and level of care will have an effect on the final value estimations. When cost data for this type of property is available and considered reliable, it is used for value estimation purposes at other plant facilities. However, on-site inspection and information provided by the property owner will affect the final value.

Income Analysis

Capitalization analysis is used in the income approach models. This methodology involves the capitalization of net operating income as an indication of market value for a specific property. Capitalization rates, both overall 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 type of company.

Many utility companies are appraised on a Unit Appraisal Model, which utilizes both the income and cost approaches to value. Information from publically available sources such as FERC and RRC reports are utilized to arrive at the input parameters for these types of properties.

DATA COLLECTION/VALIDATION

Data Collection

An extended range of variations may exist within the same class of utility, industrial or personal property, and there are a multitude of property types within the industrial category. For this reason, effective data collection procedures would be very difficult to organize in a single comprehensive manual. WAG uses many different publications available to the industry, such as the Oilfield Appraiser and the Equipment Newsletter, and other companion data acquisition forms to standardize data collection for schedule building that are later assigned to the industrial appraisal staff. The data generated by these forms enables the appraiser to use the software to value industrial properties.

Industrial personal property also consists of many different classes of assets with a wide range of variation within each class. The district has adopted the convention of listing assets and estimating effective age of assets in the field. The field listing is then compared with information furnished by the property owners during the final valuation review.

Sources of Data

The original real and personal property data used by WAG on behalf of the CADs have been maintained on the CAD computer system. The district and contract appraisal personnel have updated that information based on field review, renditions, and personal contact information. For Commercial vehicles, an outside vendor, Just Texas, provides the appraisers with a listing of vehicles registered commercially in the County. The vendor develops this listing from the Texas Department of Transportation Title and Registration Division records. As new facilities are built, the appraisal personnel collect all the real and personal property data necessary to value the property initially and thereafter update the information when the property is again visited. Other sources of data include publications such as the Texas Register regarding waste control permits, various refining and chemical industry magazine articles, and Texas Industrial Expansion articles on new construction.

Data Collection Procedures

The district and contract appraisal personnel annually or periodically visit assigned plants and facilities. The frequency of the visit is determined by the nature of the business conducted at each facility. For example, refineries and chemical plants are continually changing or adding to processes to extract greater efficiencies or make new products, but machines shops may not add or remove equipment over a period of two or more years.

The appraisers take with them the past data on the building and site improvements and the prior listing of personal property at the facility being visited. Changes to the existing structures and personal property are noted and that information is used for value estimation purposes. . In addition, if possible, pictures are taken at the time of inspection to validate information provided on the rendition or to utilize for the appraisal if no rendition is submitted. If cost information for the real or personal property is supplied later, the field data can be compared to that information to judge the accuracy of the information.

The WAG appraisal staff members are not assigned any one geographical area of the county. The category of property, the nature of the business, and whether or not the district has the staff resources available can each be a determining factor in identifying which properties are appraised by WAG and which properties are appraised by the district's appraisal staff. WAG appraisers are trained by accompanying appraisers who have performed field visit and appraisal functions for a number of years. In additions each WAG appraiser is registered with the Texas Department of Licensing and Regulation and is either a RPA or is working towards the RPA designation. Each WAG appraiser is responsible for the completeness and correctness of their valuation work, but a new appraiser is encouraged to seek the advice of and review by experienced appraisal staff.

VALUATION ANALYSIS (MODEL CALIBRATION)

Final Valuation Schedules

WAG develops schedules based on indexed Marshall & Swift depreciation factors, as well as the schedules prepared by other appraisal districts, state appraisers and other cost estimates for use in the valuation of all business and industrial personal property. In addition, appraisal personnel, utilize actual cost data developed from both publicly available sources as well as proprietary information received from other companies without identifying information, to update these schedules annually.

INDIVIDUAL VALUE REVIEW PROCEDURES

Field Review

WAG personnel periodically review their assigned real and personal property accounts. These accounts are physically inspected on a one to two-year cycle. Certain properties are reviewed annually because past experience shows that changes are occurring continually in the real or personal property at that facility.

The results of prior year hearings, renditions, and indications of new activity are another source that initiates required field visits. Many times during hearings, issues are presented that cause a value adjustment. Those issues must be field checked to see if these influences will be on-going and warrant permanent value adjustments or are transitory. The information will be recorded so the appraiser will be better able to estimate the property value. Any new construction or business activity is noted and the information necessary to value the property is recorded.

Part of the field review includes noting any land characteristics that would affect the land value. The district values all land for the properties over which it has responsibility, including those properties assigned to WAG. WAG advises the district of any characteristics that would affect the value of the land associated with an assigned facility.

Office Review

All properties are reviewed in the office by the WAG appraiser assigned to each particular utility, industrial, or personal property. The office review relies on historical information in the utility, industrial, or personal property file as the basis for deciding on the estimated value to be placed on the property for the current tax year.

The date of last inspection, extent of that inspection, and the appraiser responsible are listed in the WAG system. If a property owner disputes the district's records concerning this data in a protest hearing, the property record may be altered based on the credibility of the evidence provided.

When valuing utility, industrial or personal property, the type of furniture, equipment, computers, etc., will be used along with any cost data provided by the property owner to estimate the value. Experience in valuing similar property at other facilities will help the appraiser estimate the value of the subject facility. Individual characteristics of the property, such as usage and maintenance will have a bearing on the value calculated by use of the WAG schedules.

PERFORMANCE TESTS

Sales Ratio Studies

Ratio studies are an important tool to examine how close appraised values are to market values. The ratio study may use available sales data or independent, expert appraisals. Typically, there are not enough sales of utility and industrial properties to show representativeness of that class of property in a ratio study. Ratio studies of utility and industrial properties normally rely on independent appraisals as an indicator of market values.

Comparative Appraisal Analysis

This type of analysis is not normally performed on industrial property due to the unique nature of the property. Time and budget constraints regarding available appraisal staff also plays a role in the type of analysis that occurs. Only in an instance where a jurisdiction would file a jurisdiction challenge with the Appraisal Review Board would the district perform such an analysis.

If a CAD receives a jurisdiction challenge on a utility or industrial property category, the appraisers assigned to those accounts will research the appraisal roll to see what other similar properties exist. The real commercial property values can be compared on an average value per square foot of structure basis, but the location and type of improvement must be carefully accounted for in the valuation differences between two properties with the same square footage. Differences in location and type of improvement often account for a greater difference in market value than simple square footage. In like manner, the personal property values can be compared per category, such as furniture and fixtures, machinery and equipment, etc., but a comparison of the type and use of the property must be examined to ensure property value uniformity.

Attachment A
Wardlaw Appraisal Group Registered Personnel

PROPERTY TAX APPRAISER CERTIFICATION		
TDLR #	NAME	TYPE
74200	CRAIN, MALLORY M.	APPRAISER, RPA
73616	MCFARLANE, KATHLEEN M.	APPRAISER, RPA
74717	SHERWIN, PROCTOR	APPRAISER, RPA
66026	WARDLAW, MARGARET A.	APPRAISER, RPA
70182	WILLIAMS, CHARLES R.	APPRAISER, RPA
71700	WILLIAMS, HAZIEL M.	APPRAISER, RPA
73672	WILLIAMS, C NOAH	APPRAISER
PROFESSIONAL ENGINEERING CERTIFICATION		
PE#	NAME	BRANCH
76914	WARDLAW, MARGARET PEGGY ANNE	PETROLEUM
77254	WILLIAMS, CHARLES RAY JR	PETROLEUM
PROFESSIONAL ENGINEERING FIRM CERTIFICATION		
FIRM #	FIRM NAME	
5194	WARDLAW APPRAISAL GROUP LC	



PROPERTY CLASSIFICATION										
CAD	G1 & G2 (MINERAL)		L1 & L2 (PERSONAL)		J (UTILITY)		F2 & F1 (INDUSTRIAL REAL)		CAD TOTAL	
	ACCOUNTS	VALUE	ACCOUNTS	VALUE	ACCOUNTS	VALUE	ACCOUNTS	VALUE	ACCOUNTS	VALUE
BROOKS	8,095	\$148,546,470	91	\$14,971,280	169	\$171,559,770	2	\$666,140	8,357	\$335,743,660
CHILDRESS	39	\$561,120	21	\$8,200,570	81	\$206,844,900	0	\$0	141	\$215,606,590
DENTON	152,264	\$799,061,350	459	\$855,590,260	2,120	\$1,440,185,560	1	\$901,590	154,844	\$3,095,738,760
EL PASO	0	\$0	366	\$2,015,162,130	320	\$826,522,500	9	\$832,344,050	695	\$3,674,028,680
KENEDY	4,999	\$121,224,930	60	\$703,195,940	104	\$221,902,230	3	\$744,230	5,166	\$1,047,067,330
KLEBERG	4,965	\$85,045,910	64	\$51,628,930	297	\$242,802,440	0	\$0	5,326	\$379,477,280
LA SALLE	59,148	\$5,352,692,060	0	\$412,254,460	0	\$761,760,390	67	\$337,357,900	59,215	\$6,864,064,810
RUNNELS	5,980	\$34,277,130	325	\$82,707,470	206	\$141,499,740	56	\$12,011,960	6,567	\$270,496,300
STARR	30,975	\$326,848,140	178	\$686,589,590	343	\$293,272,080	11	\$34,532,310	31,507	\$1,341,242,120
WEBB	63,382	\$6,338,007,120	241	\$775,820,610	307	\$1,259,611,330	10	\$1,949,250	63,940	\$8,375,388,310
ZAPATA	47,916	\$379,083,350	124	\$44,219,210	185	\$172,627,190	10	\$731,180	48,235	\$596,660,930
TOTALS	377,763	\$13,585,347,580	1,929	\$ 5,650,340,450	4,132	\$ 5,738,588,130	169	\$ 1,221,238,610	383,993	\$ 26,195,514,770



CERTIFICATION

I certify that, to the best of my knowledge and belief:

- The statements of fact contained in this report are true and correct
- The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and the personal, impartial and unbiased professional analysis, opinions and conclusions of either myself or of the other appraisers who support and appraise property for our client CDs.
- I have no present or prospective interest in the property that is the subject of this report, and I have no personal interest with respect to the parties involved.
- I have no bias with respect to any property that is the subject of this report or to the parties involved with this assignment,
- My engagement in this assignment was not contingent upon developing or reporting predetermined results.
- My compensation for completing this assignment is not contingent upon the reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
- My analyses, opinion, and conclusions were developed, and this report has been prepared in conformity with the Uniform Standards of Professional Appraisal Practice.
- We have made personal inspections of many but not all properties that are the subject of this report.
- No one outside of Wardlaw Appraisal Group provided significant mass appraisal assistance to Wardlaw Appraisal Group personnel.

Charles R Williams, P.E., RPA
President

8/31/2019

Date