

Montague County Appraisal District

2020 Mass Appraisal Report

INTRODUCTION

Scope of Responsibility

The Montague County Appraisal District has prepared and published a reappraisal plan and this appraisal report to provide our Board of Directors, citizens, taxing entities (Exhibit D) 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 Montague 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 six member Board of Directors, appointed by the taxing units within the boundaries of Montague County, constitutes the district's governing body. The chief appraiser, appointed by the Board of Directors, is the chief administrator and chief executive officer of the appraisal district.

The appraisal district is responsible for local property tax appraisal and exemption administration for seventeen jurisdictions or taxing units in the county. (Exhibit D). Each taxing unit, such as the county, city, school district, water districts, etc., sets its own tax rate to generate revenue to pay for such things as police and fire protection, public schools, road and street maintenance, courts, water and sewer systems, and other public services. Property appraisals by the appraisal district allocate the year's tax burden on the basis of each taxable property's market value. The district also determines eligibility for various types of property tax exemptions such as those for homeowners, the elderly, disabled veterans, charitable or religious organizations as well as special valuations such as agricultural productivity.

Except as otherwise provided by the Property Tax Code, Section 23.01 indicates that all taxable property is appraised at its "market value" as of January 1st. Section 1.04(7) defines "market value" as the price at which a property would transfer for cash or its equivalent under prevailing market conditions if:

- Exposed for sale in the open market with a reasonable time for the seller to find a purchaser;
- Both the seller and the buyer know of all the uses and purposes to which the property is adapted and for which it is capable of being used and of the enforceable restrictions on its use, and;

- Both the seller and buyer seek to maximize their gains and neither is in a position to take advantage of the exigencies of the other.

The Property Tax Code defines special appraisal provisions for the valuation of residential homestead property (Sec. 23.23), productivity (Sec. 23.41), real property inventory (Sec. 23.12), dealer inventory (Sec. 23.121, 23.124, 23.1241 and 23.127), nominal (Sec. 23.18) or restricted use properties (Sec. 23.83) and allocation of interstate property (Sec. 21.03). The owner of property inventory may elect to have the inventory appraised at its market value as of September 1st of the year preceding the tax year to which the appraisal applies by filing an application with the chief appraiser requesting that the inventory be appraised as of September 1st.

The Texas Property Tax Code, under Sec. 25.18, requires each appraisal office to implement a plan to update appraised values for real property at least once every three years. The district's current policy follows the reappraisal plan as approved by the Board of Directors.

The appraised value of real estate is calculated using specific information about each property. Using computer-assisted mass appraisal programs, and recognized appraisal methods and techniques, the district compares that information with the data for similar properties, with recent cost and 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) to the extent they are applicable.

Personnel Resources

The office of the Chief Appraiser is primarily responsible for overall planning, organizing, staffing, coordinating, and controlling of district operations. The administration department's function is to plan, organize, direct and control the business support functions related to human resources, budget, finance, records management, purchasing, fixed assets, facilities and postal services. The appraisal department is responsible for the valuation of all real and personal property accounts. The property types appraised include commercial, residential, business personal, mineral, utilities, and industrial. The district's appraisers are subject to the provisions of the Property Taxation Professional Certification Act and must be duly registered with the Texas Board of Tax Professional Examiners. Administrative support functions include records maintenance, information and assistance to property owners and ARB hearings and other activities as needed.

The appraisal district staff consists of 6 employees with the following classifications:

- 2 - Official/Administrator (executive level administration)
- 2 - Professional (supervisory and management)

- 5 - Technicians (appraisers and network support)
- 5 - Administrative Support (customer service, clerical and other)

Staff Education and Training

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

Appraisers registered with the Texas Department of Licensing & Regulation must successfully complete 182 hours of appraisal courses as prescribed by the TDLR administrative rule 94.21 and pass two additional comprehensive examinations within 60 months of registration in order to achieve certification as a Registered Professional Appraiser (RPA). During each subsequent 24 month period after certification, appraisers must complete 30 hours of continuing education that must include 2 hours of professional ethics, chief appraisers must have 2 hrs of ethics for chief appraisers and a state law & rules course, and 7 hours of USPAP Refresher.

Additionally, all appraisal personnel receive extensive training in data gathering processes including data entry and statistical analyses of all types of property to ensure equality and uniformity of appraisal of all types of property. On-the-job training is delivered by department managers for new appraisers and managers meet regularly with staff to introduce new procedures and regularly monitor appraisal activity to ensure that standardized appraisal procedures are being followed by all personnel.

Data

The district is responsible for establishing and maintaining data on approximately 106,481 real, mineral and personal property accounts covering 931 square miles within Montague 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 field review. Sales are routinely validated during a separate field effort; however, numerous sales are validated as part of the new construction and field inspections. General trends in employment, interest rates, new construction trends, cost and market data are acquired through various sources, including internally generated questionnaires to buyers and sellers, university research centers, and market data centers and vendors.

The district has a geographic information system (GIS) that maintains cadastral maps and various layers of data and aerial photography. The district's website makes a broad range of information available for public access, including information on the appraisal process, property characteristics data, certified values, protests and appeal procedures. Downloadable files of related tax information, including exemption applications and business personal property renditions are also available at <http://www.myswdata.com>.

Information Systems

The information technology and the computer mapping departments manage and maintain the district's data processing facility, software applications, Internet website, and geographical information system. The Mainframe hardware/system software is Dell Power Edge 2800 and Compaq NT server for GIS Mapping. The user base is networked through the mainframe using Windows XP Server. Southwest Data Solutions provides and updates software as necessary for appraisal and administrative applications.

INDEPENDENT PERFORMANCE TEST

According to Chapter 5 of the TPTC 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 part of this annual study, the code 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 analyses 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.

There are nine independent school districts in Montague CAD for which appraisal rolls are annually developed. The preliminary results of this study are released February 1 in the year following the year of appraisal. The final results of this study are certified to the Education Commissioner of the Texas Education Agency (TEA) the following July of each year. 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 field appraisal staff 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 a comprehensive physical description of personal property, land and improvement characteristics. This appraisal staff is responsible for administering, planning and coordinating all activities involving data collection and maintenance of all commercial, residential and personal property types located within the boundaries of Wichita County and the jurisdictions of this 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.

Appraisal Resources

- **Personnel** - The appraisal activities are conducted by one appraiser
- **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 card. Other data used includes maps, sales data, fire and damage reports, building permits, sales tax permits, assumed name filings, business publications, photos and actual cost and market information. Additional information is gathered using reciprocal relationships with other participants in the real estate market place. The district cultivates sources and gathers information from both buyers and sellers participating in the real estate market.

Appraisal Frequency and Method Summary

- **Residential Property**- Residential properties are appraised annually using the most current data on file. Every neighborhood is statistically analyzed to determine if the sales that have occurred are within an acceptable range of the current year estimate of value using sales ratios. Appropriate adjustments are made to neighborhoods that fall outside the range using a process outlined in detail in the Residential Appraisal section of this report. Appraisers inspect approximately one-third of the residential properties through physical inspection or aerial photography each year to update file information on physical condition of the improvement and change in characteristic since the last field check. Exterior photographs of improvements are updated periodically. Additional methods used to review physical characteristics include photographs, property sketches, and other reliable means.

- **Commercial Property-** Commercial and Industrial real estate properties are appraised every other year unless market conditions indicate that a more frequent review is appropriate. Appraisers review approximately one-third of the properties each year to accomplish the goal to appraise all commercial properties. All properties receive an onsite inspection on a three-year cycle to update photographs and physical characteristics. Commercial property values are compared to sales of similar properties in Montague County as well as other cities and communities that have similar sales and economies. The income approach to value is utilized to appraise commercial properties such as shopping centers, apartment complexes, multi-tenant office buildings, restaurants, motels, hotels, and other property types that typically sell based on income.
- **Business Personal Property-** Business personal property accounts are field inspected and appraised every year to record quality and density information where situs is available. An additional review of the account occurs when the annual rendition is received. A rendition is mailed to all known businesses annually to be completed and returned by April 1st and accounts are reviewed when the rendition is received.
- **Minerals-** Annually the mineral valuation department of Pritchard & Abbott, Inc. develops values for mineral interest (full or fractional percentage ownership of oil and gas leasehold interest, the amount and type of which are legally and/or contractually created and specified through deeds and leases, etal.) associated with producing (or capable of producing) leases. Typically all the mineral interests that apply to a single producing lease are consolidated by type (working vs. royalty) with each type then appraised for full value which is then distributed to the various fractional decimal interest owners prorata to their individual type and percentage amount.
- **Utilities and Pipelines-** Utility companies and pipelines are appraised annually by Pritchard & Abbott, Inc., considering all three approaches to value. Where the utility/pipeline has assets in multiple counties or states a unit appraisal is considered. A unit or fractional method is utilized as appropriate.

PRELIMINARY ANALYSIS

Data Collection/Validation

Data collection of real property involves maintaining data characteristics of the property on the CAMA (Computer Assisted Mass Appraisal), developed and maintained by Southwest Data Solutions. A diligent effort is taken to make sure the characteristics accurately reflect the current status of the property. To effectively evaluate the quality of existing data, field studies are done during the reappraisal cycles. The information contained in the CAMA includes site characteristics, such as land size, and improvement data, square foot of improvement area, year built, quality of construction, and condition. Other characteristics include but are not

restricted to the type of foundation, type of roof, type of heating and cooling system, number of baths, number of units, number of rooms, or leasable area. Characteristics are a direct reflection of the improvements. Field appraisers are required to use a property classification system and all properties are coded according to a specific classification. This classification system is similar to the classification system used by Marshall & Swift Valuation Service. References to the district's classifications are found in the Residential or Commercial Field Guides. The approaches to value are structured and calibrated on this coded system and the characteristics. These guides are used for both training and field inspections. In-office preparation, training of staff, entry and validation of data, and quality control is carefully planned.

The types of information recorded and maintained for Business Personal Property include situs, type, kind, quality and density of inventory, furniture and fixtures, machinery and equipment. Texas Department of Transportation records are obtained annually through a vendor who provides a list of potential commercial use vehicles within the district. The field appraisers conducting on site inspections use a personal property classification system as a guide to correctly list all personal property that is taxable.

Sources of Data

The sources of data collection are through inspections of newly constructed and existing improvements, sales validation and field effort, assignment of address from Nortex Regional Panning Commission, septic installations, appraisal review board hearings, property owner correspondence, newspapers and publications, and correspondence with other taxpayers and business owners. Another principal source of data comes from building permits received from tax jurisdictions that require property owners to take out a building permit. Permits (new construction, remodeling, and relocation of improvements, etc), demolition reports, fire reports, and mechanic liens are received on a regular basis and matched with the property identification number for data entry. The Multiple Listing Service of the Montague Board of Realtors and area real estate brokers are another principal source of market and property information. In addition to the above, improvement cost data is gathered from Marshall & Swift Valuation Service and local building contractors.

Property managers and owners provide information on income and expense information as well as occupancy levels. This information is used in the appraisal of investment and income producing real property. Various publications and on-line sources are studied regularly in an effort to obtain knowledge of other aspects of these properties. These include but are not limited to: Texas Real Estate Market Reports, Source Strategies (a Hotel Performance

Factbook), Times & Record News, Aircraft Blue Book, Marshall & Swift resources for commercial, residential, equipment, and inventory, N.A.D.A Auto/Truck/Mobile Home Guide, Assessment Journal-IAAO, USPAP-Appraisal Foundation. In addition, regular meetings are held with other appraisal districts to exchange sales information and discuss unique properties to assist the district in the valuation process.

Sources of data for business personal property are sales tax permits, assumed name filings, business publications, building permits, business licensing by the State of Texas, newspaper articles and other information provided by public and private interest.

Data review of entire neighborhoods and categories of business are generally a good source for data collection. In real estate, the sales validation effort involves on-site inspection by field appraisers to verify the accuracy of the property characteristics and confirmation of the sales price.

Property owners are one of the best sources for identifying incorrect data generating a field check. As the district has increased the amount of information available on the Internet, property owners have the opportunity to review information on their property. Accuracy in property details and characteristics data is one of the highest goals and is stressed throughout the appraisal process from year to year.

Data Collection Procedures

We are a small district we are assigned school districts for the 1/3 that is being reappraised. All appraiser help each other where ever needed. These areas of responsibility are maintained for several years to enable the appraiser assigned to that area or category to become knowledgeable of all the factors that drive values for that specific property type. Appraisers of real estate and business personal property conduct field inspections and record information using a property card, when time allows for the entry of corrections and additions that the appraiser may find in his or her inspection.

The quality of the data is extremely important in determining market values of taxable property. While work performance 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 and classification system set forth and recognized as rules to follow. Experienced appraisers 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 assists supervisory review of the work being performed by the field appraisers to ensure that appraisers follow listing procedures, to identify training issues and provide uniform training throughout the appraisal staff.

Field activity for all of the above is listed in the calendar of events and is monitored carefully. Property characteristics are continually updated during the field activity.

Data Maintenance

The field appraiser is responsible for the data entry of his/her fieldwork into the computer file. This responsibility includes not only data entry, but also quality assurance. Data updates, file modification for property descriptions, and input accuracy are the responsibility of the field appraiser and appraisal supervisors.

INDIVIDUAL VALUE REVIEW PROCEDURES

Field Review

The date of last inspection and the CAD appraiser responsible are listed in the CAMA records. If a property owner or jurisdiction disputes the district's records concerning this data during a hearing, via a telephone call or other correspondence received, the record may be corrected based on the evidence provided or an on-site inspection may be conducted. Typically, a field inspection is performed to verify this information for the current year's valuation or for the next year's valuation.

Office Review

Office reviews are completed on properties where updated information has been received from the owner of the property and is considered accurate and correct. When the property data is verified in this manner, and considered accurate and correct, field inspections may not be required. The personal property department mails property rendition forms in January of each year to assist in the annual review of the property.

PERFORMANCE TEST

Appraisers are responsible for conducting ratio studies and comparative analysis in their assigned market areas (neighborhoods) or property categories. The sale ratio and comparative analysis of sale property to appraised property forms the basis for determining the level of appraisal and market influences and factors for each assigned area. This information is the basis for updating property valuation for the entire area of property to be evaluated. Field appraisers, in many cases, may conduct field inspections to assure the accuracy of the property descriptions at the time of sale for this study. This inspection is to assure that the ratios produced are accurate for the property sold and that appraised values utilized in the study are

based on accurate property data characteristics observed at the time of sale. Also, property inspections are performed to discover if property characteristics have changed as of the sale date or subsequent to the sale date. Sale ratios are based on the value of the property as of the date of sale not after a subsequent or substantial change was made to the property after the negotiation and agreement in price was concluded. Properly performed ratio studies are a good reflection of the level of appraisal for the district.

Residential Valuation Process

INTRODUCTION

Scope of Responsibility

The residential appraisers are responsible for estimating equal and uniform market values for residential improved and vacant property. There are approximately 6,388 residential improved single and multiple family parcels and 4,549 vacant residential properties in Wichita County.

Appraisal Resources

- **Personnel** - The residential appraisal staff consists of three appraisers. The following appraisers are responsible for estimating the market value of residential property:
Kim Haralson, Chief Residential Appraiser
Teri Odom, Asst. Chief Residential Appraiser
Tammie Messer, Residential Appraiser
- **Data** - An individualized set of data characteristics for each residential dwelling and multiple family units in this district are collected in the field and data entered into the computer system. The property characteristic data drives the application of computer-assisted mass appraisal (CAMA) under the Cost, Market, and Income Approaches to property valuation.

VALUATION APPROACH

Land Analysis

Residential land valuation analysis is conducted prior to neighborhood sales analysis. The value of the land component to the property is estimated based on available market sales for comparable and competing land under similar usage. A comparison and analysis of comparable land sales is conducted based on a comparison of land characteristics found to influence the market price of land located in the neighborhood. Specific land influences are considered, where necessary, and depending on neighborhood and individual lot or tract

characteristics, to adjust parcels outside the neighborhood norm for such factors as access, view, shape, size, and topography. The appraisers use abstraction and allocation methods to assure that estimated land values best reflect the contributory market value of the land to the overall property value. The land-to-property value ratio is used to determine market value and assure equity.

Area Analysis

Data on regional economic forces such as demographic patterns, regional locational factors, employment and income patterns, general trends in real property prices and rents, interest rate trends, availability of vacant land, and construction trends and costs are collected from private vendors and public sources. This information provided the field appraiser a current economic outlook on the real estate market.

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 used to identify, classify, and stratify comparable properties into smaller, manageable subsets of the universe of properties known as neighborhoods. Residential valuation and neighborhood analysis are conducted on various market areas within each of the political entities known as Independent School Districts (ISD). Analysis of comparable market sales forms the basis of estimating market activity and the level of supply and demand affecting market prices for any given market area, neighborhood or district. Market sales indicate the effects of these market forces and are interpreted by the appraiser into an indication of market price ranges. Cost and Market Approaches to estimate value are the basic techniques utilized to interpret these sales. For multiple family properties the Income Approach to value is utilized to estimate an opinion of value for investment level residential property.

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

community are developed, they compete with existing neighborhoods. An added supply of new homes tends to induce population shift from older homes to newer homes. In the period of stability, or equilibrium, the forces of supply and demand are about equal. Generally, in the stage of equilibrium, older neighborhoods can be more desirable due to the stability of residential character and proximity to the workplace and other community facilities. The 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.

Neighborhood identification and delineation are the cornerstones of the residential valuation system at the district. All of the residential analysis work done in association with the residential valuation process is neighborhood specific. Neighborhoods are field inspected and delineated based on observable aspects of homogeneity. Neighborhoods are periodically reviewed to determine if further delineation is warranted. Neighborhoods involve similar properties in the same location; a neighborhood group is simply defined as similar neighborhoods in similar locations. Each residential neighborhood is assigned to a neighborhood group based on observable aspects of homogeneity between neighborhoods. Neighborhood grouping is highly beneficial in areas of limited or no sales, or use in direct sales comparison analysis. Neighborhood groups, or clustered neighborhoods, increase the available market data by linking comparable properties outside a given neighborhood. Sales ratio analysis, discussed below, is performed on a neighborhood basis, and in soft sale areas on a neighborhood group basis.

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 the appraiser reviews the existing residential property use and makes a determination regarding highest and best use. Once the conclusion is made that the highest and best use remains residential, further highest and best use analysis is done to decide the type of residential use on a neighborhood basis. As an example, it may be determined in a transition area that older, non-remodeled homes are economic misimprovements, and the highest and best use 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.

VALUATION AND STATISTICAL ANALYSIS (Model Calibration)

Cost Schedules

All residential parcels in the district are valued with a replacement cost estimated from identical cost schedules based on the improvement classification system using a comparative unit method. The district's residential cost schedules are derived from Marshall & Swift, a nationally recognized cost estimator service. These cost estimates are compared to actual costs of similar improvements obtained from local builders. Adjustments were made as necessary to reflect local market costs.

A review of the residential cost schedule is performed annually. As part of this review and evaluation process of the estimated replacement cost, newly constructed sold properties representing various levels of quality of construction in district are considered. The property data characteristics of these properties are verified and photographs are taken of the samples. CAD replacement costs are compared against Marshall & Swift, a nationally recognized cost estimator, and the indicated replacement cost abstracted from the market sales of comparable structures. The results of this comparison are analyzed using statistical measures, including stratification by class, quality and reviewing of estimated building costs plus land to sales prices. As a result of this analysis, a locally adjusted multiplier or economic index factor is developed for use in the district's cost tables.

Sales Information

Sales data is maintained for real property in CAMA. Residential improved and vacant land sales are collected from a variety of sources, including: district questionnaires sent to buyers and sellers, field discovery, protest hearings, Board of Realtor's MLS, builders, and realtors. A system of type, source, validity and verification codes has been established to define salient facts related to a property's purchase or transfer and to help determine relevant market sale prices. The effect of time as an influence on price will be considered as indicated. Neighborhood sales reports are generated as an analysis tool for the appraiser in the development and estimation of market price ranges and property component value estimates. Abstraction and allocation of property components based on sales of similar property is an important analysis tool to interpret market sales under the cost and market approaches to value. These analysis tools help determine and estimate the effects of change, with regard to price, as indicated by sale prices for similar property within the current market.

Monthly time adjustments are estimated based on comparative analysis using paired comparison of sold property. Sales of the same property are considered and analyzed for any indication of price change attributed to a time change or influence. Property characteristics, financing, and conditions of sale are compared for each property sold in the pairing of property to isolate only the time factor as an influence on price.

Statistical Analysis

The residential appraisers perform statistical analysis to evaluate whether estimated values are equitable and consistent with the market. Ratio studies are conducted on each of the residential neighborhoods in the district to judge the two primary aspects of mass appraisal accuracy level and uniformity of value. Appraisal statistics of central tendency generated from sales ratios are evaluated and analyzed for each neighborhood. The level of appraised values is determined by the weighted mean ratio or the median ratio for sales of individual properties within a neighborhood.

The appraiser, through the sales ratio analysis process, reviews every neighborhood. The first phase involved neighborhood ratio studies that compared the recent sales prices of neighborhood properties to the appraised values of these sold properties. This set of ratio studies affords the appraiser an excellent means of judging the present level of appraised value and uniformity of the sales. The appraiser, based on the sales ratio statistics and designated parameters for valuation update, made a preliminary decision as to whether the value level in a neighborhood needed to be updated or whether the level of market value in a neighborhood is at an acceptable level.

Market and Cost Reconciliation and Valuation

Neighborhood analysis of market sales to achieve an acceptable sale ratio or level of appraisal is also the reconciliation of the market and cost approaches to valuation. Market factors are developed from appraisal statistics provided from market analyses and ratio studies and are used to assure that estimated values are consistent with the market and are also used to reconcile cost indicators. The district's primary approach to the valuation of residential properties uses a hybrid cost-sales comparison approach. This type of approach accounts for neighborhood market influences not particularly specified in a purely cost model.

The following equation denotes the basic hybrid model used:

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

Whereas, in accordance with the cost approach, the estimated market value (MV) of the property equals the land value (LV) plus the replacement cost new of property improvements (RCN) less accrued depreciation (AD). As the cost approach separately estimates both land and building contributory values and uses depreciated replacement costs, which reflect only the supply side of the market, it is expected that adjustments to the cost values may be needed to bring the level of appraisal to an acceptable standard as indicated by market sales. Thus, demand side economic factors and influences are observed and considered. These market, or location adjustments, may be abstracted and applied uniformly within neighborhoods to account for locational variances between market areas or across a jurisdiction. This analysis for the hybrid model is based on both the cost and market approaches as a correlation of indications of property valuation.

When the appraiser reviews a neighborhood, the appraiser reviews and evaluates a ratio study that compares current sales prices of properties, within a delineated neighborhood, to the value of the properties' based on the estimated depreciated replacement cost of improvements plus land value. Other sales appropriately adjusted for the effects of time may also be considered within a delineated neighborhood. The measures of central tendency are reviewed with emphasis placed on the median to indicate the neighborhood level of appraisal based on sold properties. This ratio is compared to the acceptable appraisal ratio indicating market value to determine appropriate adjustments for each neighborhood. If the level of appraisal for the neighborhood is outside the acceptable range of ratios, adjustments to the neighborhood were made.

The following equation denotes the expanded hybrid model:

$$MV = (IUNIT \times ISIZE) + FEATURES \times \%GOOD + LV \times NADJ$$

MV = Market Value IUNIT = Replacement Cost New Per Square Foot ISIZE = Improvement Square Feet FEATURES = Improvement Amenities Contributory Value
%GOOD = Percent Good From Normal Depreciation Table LV = Land Value NADJ = Neighborhood (Market Area) Adjustment

If reappraisal of the neighborhood is indicated, the appraiser analyzed available market sales, appropriately adjusted for the apparent effects of time, using a ratio study. These studies develop the adjustments needed to bring the median within the acceptable range. Therefore, based on analysis of recent sales located within a given neighborhood, estimated property values reflect the market influences and conditions only for the specified neighborhood, thus producing more representative and supportable values. The estimated property values calculated for each updated neighborhood is based on market indicated factors applied uniformly to all properties within a neighborhood. Finally, with all the market-trend factors applied, a final ratio study is generated comparing recent sale prices with the proposed appraised values for these sold properties. From this set of ratio studies, the appraiser judges the appraisal level and uniformity in both updated and non-updated neighborhoods and verified appraised values against overall trends as exhibited by the local market, and finally, 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 that law, beginning in the second year a property receives a homestead exemption; increases in the assessed value of that property are "capped." The value for tax purposes (assessed value) of a qualified residence homestead will be the LESSER of:

- The market value; or

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

Assessed values of capped properties must be recomputed annually. If a capped property sells, the cap automatically expires as of January 1st of the year following sale of the property and the property is appraised at its market value. An analogous provision applies to new homes. While a developer owns them, unoccupied residences may be partially complete and appraised as part of an inventory. This valuation is estimated using the district's land value and the percentage of completion for the improvement contribution that usually is similar to the developer's construction costs as a basis of completion on the valuation date. However, in the year following changes in the occupancy or sale, they are appraised at market value.

INDIVIDUAL VALUE REVIEW PROCEDURES

Field Review

The appraiser identifies individual properties in need of field review through sales ratio analysis. Sold properties are field reviewed on a periodic basis to check for accuracy of data characteristics.

As the district's parcel count has increased through new home construction, and the homes constructed in the 40's and early 50's experience remodeling, the appraisers are required to perform the field activity associated with transitioning and high demand neighborhoods. Increased sales activity results in a more substantial field effort on the part of the appraisers to review and resolve sales outliers. Additionally, the appraiser frequently field reviews subjective data items such as quality of construction, condition, and physical, functional and economic obsolescence, and other factors contributing significantly to the market value of the property.

Office Review

Once field review is completed, the appraiser conducts a routine valuation review of all properties as outlined in the discussion of ratio studies and market analysis. Valuation reports comparing previous values against proposed and final values are generated for residential improved and vacant properties. The percentage of value difference are noted for each property within a delineated neighborhood allowing the appraiser to identify, research and resolve value anomalies before final appraised values were released. Previous values resulting from a hearing protest are individually reviewed to determine if the value remains appropriate for the current year.

Once the appraiser is satisfied with the level and uniformity of value for each neighborhood within his area of responsibility, the estimates of value were sent to noticing.

PERFORMANCE TESTS

Sales Ratio Studies

The primary analytical tool used by the appraisers to measure and improve performance is the ratio study. The district ensures that the appraised values it produces meet the standards of accuracy in several ways. Overall sales ratios are generated for each neighborhood to allow the appraiser to review general market trends within their area of responsibility, and provide an indication of market appreciation or market depreciation over a specified period of time. The ratio studies are designed to emulate the findings of the state comptroller's annual property value study for category A property. A final ratio, a neighborhood summary and a gain loss report are compiled for each reappraised neighborhood.

Management Review Process

Once the proposed value estimates are finalized, the appraiser reviews the sales ratios by neighborhood and presented pertinent valuation data, such as median ratio, weighted mean ratio and pricing trends, to the appraisal supervisors and/or the Chief Appraiser for final review and approval. This review included comparison of level of value between related neighborhoods within and across jurisdiction lines. The primary objective of this review is to assure that the proposed values met preset appraisal guidelines appropriate for the tax year 2020.

See Exhibit "A" for example of documents used in establishing the appraisal value of Residential Properties.

Commercial And Industrial Property Valuation Process

INTRODUCTION

Appraisal Responsibility

This mass appraisal assignment includes all of the commercial real property which falls within the responsibility of the commercial valuation appraisers of the district. Commercial appraisers appraise the fee simple interest of properties according to statute and court decisions. However, the affect 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

Personnel - The improved real property appraisal responsibilities are categorized according to major property types of multi-family or apartment, office, retail, warehouse and special use (i.e. hotels, hospitals and, nursing homes).

The following appraisers are responsible for estimating the market value of commercial and industrial property:

Kim Haralson, Chief Business Personal Property Appraiser
Teri Odom, Commercial Property Appraiser

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 appraisers included actual income and expense data, actual contract rental data, leasing information (lease rates, 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

Market Study

The district studies the market including the historical and potential forces of supply and demand that affect properties in Montague County and local conditions that affect specific areas and specific commercial and industrial property types.

Market information is gathered and recorded on improved property to determine current market level for rents and for sales prices of commercial and industrial real property. Comparable rent/sale studies and ratio studies on representative samples of sold properties are observed to determine the accuracy of the district models. Models are calibrated based on the findings of these studies to assure that values fall within an acceptable range. The appraiser uses generally accepted mass appraisal methods and techniques when developing cost approach, market approach, and income approach models.

Field trips, interviews and data exchanges with adjacent appraisal districts are conducted to assure compliance with state statutes. In addition, the district's administration and personnel interact with other assessment officials through professional trade organizations including the International Association of Assessing Officers, Texas Association of Appraisal Districts, Texas Association of Assessing Officers and Red River Chapter of Texas Association of Assessing Officers. The District staff constantly develops appraisal skills and maintains a high degree of professionalism through participation in continuing education in the form of seminars and workshops that are offered by several professional associations such as International

Association of Assessing Officers (IAAO), Texas Association of Assessing Officers (TAAO), Texas Association of Appraisal Districts (TAAD) and courses approved by the Texas Department of Licensing and Regulations (TDLR).

VALUATION APPROACH

Land Value

Commercial land is analyzed at least biennially to compare values generated by district models with recent sales of land in the market area. If the appraised value to sale price ratio is not within an acceptable range, adjustments are made to all land in that market area. If there is not a representative sample of vacant land sales, then additional land sales prices are estimated by the process of abstraction using sales of improved commercial properties. Commercial property is appraised on a price per square foot basis unless analysis of the market indicates a different unit of comparison is more appropriate. Additional adjustments are considered for individual properties based on corner influence, depth of site, shape of site, easements across site, and other factors that may influence value. The land is valued as though vacant at the highest and best use.

Area Analysis

Area 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.

Market Area Analysis

The market areas include vacant commercial land and land with commercially classed improvements. These areas consist of a wide variety of property types including multiple-family residential, commercial and industrial. Market areas are identified by observing the differences in which market forces affect the rent levels and sales prices of properties located within the geographic boundaries of the appraisal district. Market area analysis involves the examination of how physical, economic, governmental and social forces and other influences affect property values within subgroups or property locations. The effects of these forces were used to identify, classify, and organize comparable properties into smaller, manageable subsets of the universe of properties known as market areas. In the mass appraisal of commercial and industrial properties these subsets of a universe of properties are generally referred to as market areas or economic areas.

The market areas are groupings of properties with similar rental rates, classification of improvements (known as building class by area commercial market experts), date of construction, condition, overall market activity or other pertinent influences. Income model valuation (income approach to value estimates) groups properties with similar use into specific

economic areas. Economic areas are periodically reviewed to determine if realignment is required. Geographic boundaries, occupancy levels, income and expense levels, age of the improvements, and capitalization rates were considered in identifying market areas of properties that were valued with weight given to the income approach to value.

Highest and Best Use Analysis

The highest and best use is the most reasonable and probable use that generates the highest net to land and 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 tested as improved and as if the site were vacant. This perspective assists in determining if the existing improvements have a transitional use, interim use, nonconforming use, multiple uses, speculative use, or a different optimum use if the site were vacant. In addition, land area in excess required for highest and best use can be identified. For vacant tracts of land within this jurisdiction, 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 purpose, or interim uses.

This analysis assures an accurate estimate of market value in exchange. Market value in exchange is the most probable sales price under the following assumptions: (i) no coercion of undue influence over the buyer or seller in an attempt to force the purchase or sale, (ii) well-informed buyers and sellers acting in their own best interests, (iii) a reasonable time for the transaction to take place, and (iv) payment in cash or its equivalent. Market value in use represents the value of a property to a specific user for a specific purpose. If the properties current use is it's highest and best use, then value in exchange and value in use are equivalent.

Market Analysis

A market analysis relates directly to examining 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), expense ratio trends, capitalization rate studies is analyzed to determine market ranges in price, operating costs and investment return expectations.

VALUATION ANALYSIS

Model calibration involves the process of periodically adjusting the mass appraisal formulae, tables and schedules to reflect current local market conditions. Once the models have undergone the specification process, adjustments are made to reflect new construction

procedures, materials and/or costs, which can vary from year to year. The basic structure of a mass appraisal model can be valid over an extended period of time, with trending factors utilized for updating the data to the current market conditions. However, at some point, if the adjustment process becomes too involved, the model calibration technique can mandate new model specifications or a revised model structure.

Cost Schedules

The cost approach to value is applied to 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 local comparable properties whenever possible. Cost models are typically developed based on the Marshall Swift Valuation Service which indicate estimated hard or direct costs of various improvement types. Cost models estimate the replacement cost new (RCN) of all improvements located on a specific property. The RCN model uses comparative base rates, per unit adjustments and lump sum adjustments for variations in property description, design, and type of improvement construction to estimate a normal level of direct and indirect cost. Evaluating market sales of newly developed improved property is an important part of understanding total replacement cost of improvements. What total costs may be involved in the development of the property, as well as any portion of cost attributed to entrepreneurial profit can only be revealed by market analysis of pricing acceptance levels. In addition, market related land valuation for the underlying land value is important in understanding and analyzing improved sales for all development costs and for the abstraction of improvement costs for construction and development. 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. The national cost service information used as a basis for the cost models includes local multipliers that are necessary to adjust the base costs specifically for various types of improvements located in Montague County. Additional local modifiers are applied as necessary if the RCN developed from the cost service varies significantly from actual Wichita County costs. Estimated replacement cost new reflects all costs of construction and development for various improvements located in the district as of the date of appraisal.

Appraisal depreciation is loss of value from all causes affecting the property. In relation to the improvements it is the measured loss against replacement cost new taken from all forms of physical deterioration, functional and economic obsolescence. Appraisal depreciation is estimated and developed based on losses typical for each property type at that specific age. Depreciation estimates are implemented for what is typical of each major class of commercial property by economic life categories. Estimates of appraisal depreciation are calculated for improvements using age/life ratio with consideration given to remaining economic life expectancy, condition, and actual and effective age. These estimates are continually tested to ensure they are reflective of current market conditions. The actual and 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. Effective age estimates are considered when

effective age and actual age differ.

Additional forms of depreciation such as external and/or functional obsolescence are applied if observed. 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 condition adequacy or deficiency, property type or location and can be developed via ratio studies or other market analyses.

The result of estimating appraisal depreciation and deducting that from the estimated replacement cost new of improvements indicates the estimated contributory value of the improvements. Adding the estimated land value, as if vacant, to the contributory value of the improvements indicates a property value by the cost approach. Given relevant cost estimates and market related measures of appraisal depreciation, the indicated value of the property by the cost approach becomes a very reliable valuation technique.

Income Models

The income approach to value is applied to those real properties which are typically viewed by market participants as “income producing”, and for which the income methodology is considered a leading value indicator. The 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 surveys conducted by the district and by information from area rent study reviews. The annual per unit rental rate multiplied by the number of units results in the estimate of potential gross income.

A vacancy and collection loss allowance is the next item to consider in the income approach. The projected vacancy and collection loss allowance is established from actual data furnished by property owners and local market survey trends. This allowance accounts for periodic fluctuations in occupancy, both above and below an estimated stabilized level. This feature may also provide for a reasonable lease-up period for multi-tenant properties, where applicable.

Next, secondary income is considered and, if applicable, can be calculated as a percentage of stabilized potential gross income. 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 annual potential gross rent estimate less market derived stabilized vacancy and collection loss allowance with the secondary income added (if present) gives a reliable estimate of 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 may be included in the expenses. A non-recoverable expense represents costs that the owner pays to lease rental space. Relevant expense ratios are developed for different types of commercial property based on use and market experience. For instance, retail properties are most frequently leased on a triple-net basis, whereby the tenant is responsible for all operating expenses, such as ad valorem taxes, insurance, and common area and property 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 term of the lease. As a result, expense ratios are implemented and estimated based on observed market experience in operating various types 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 lump sum costs. When these capital expenditures are analyzed for consistency and adjusted, they are 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. For some types of property, typical management does not reflect expensing reserves and is dependent on local and industry practices.

Subtracting the allowable expenses (inclusive of non-recoverable expenses and replacement reserves when applicable) from the annual effective gross income provides an estimate of annual net operating income to the property.

An appropriate capitalization rate or income multiplier is used to convert operating income expectations into an estimate of market value for the property under the income approach. Rates and multipliers may 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 for individual income property types and uses. These procedures are supported and documented based on analysis of market sales for these property types.

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

publications.

Rent loss concessions are estimated for 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 a rent loss deduction to be estimated for every year that the property's actual occupancy is less than stabilized market occupancy.

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 parcels on the appraisal roll. As previously discussed in the Data Collection / Validation section of this report, pertinent data from actual sales of properties, both vacant and improved, is gathered and recorded 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.

Market and Cost Reconciliation and Valuation

Market area analysis and/or category analysis of market sales to achieve an acceptable sale ratio or level of appraisal is also the reconciliation of the sales comparison and cost approaches to valuation. Market factors are developed from appraisal statistics provided from market analyses and ratio studies and are used to assure that estimated values are consistent with the market and are also used to reconcile cost indicators. The district's primary approach to the valuation of commercial properties uses a hybrid cost-sales comparison approach. This type of approach accounts for local area market influences not particularly specified in a purely cost model.

The following equation denotes the basic hybrid model used:

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

Whereas, in accordance with the cost approach, the estimated market value (MV) of the property equals the land value (LV) plus the replacement cost new of property improvements (RCN) less appraisal depreciation (AD). As the cost approach separately estimates both land and building contributory values and uses depreciated replacement costs, which reflect only the supply side of the market, it is expected that adjustments to the cost values may be needed to bring the level of appraisal to an acceptable standard as indicated by market sales. Thus, demand side economic factors and influences are considered if observed. These adjustments may be abstracted and applied uniformly within market areas or categories to account for variances such as condition, construction class, location or other market influences. This analysis for the hybrid model is based on both the cost and market approaches as a correlation of indications of property valuation.

When the appraiser reviews a market area or category, the appraiser will review and evaluate a ratio study that compares current sales prices of properties to the value of the properties based on the estimated depreciated replacement cost of improvements plus land value. If there is not a sufficient number of comparable sales within the market area or category then the appraiser will use sales from other areas with similar market influences. The calculated ratio derived from the sold properties' appraised value divided by the sales prices will indicate the level of appraisal based on sold properties. This ratio will be compared to the acceptable appraisal ratio to determine the level of appraisal for each market area or category. If the level of appraisal for the market area or area is outside the acceptable range of ratios, adjustments to the market area or category will be made.

The following equation denotes the expanded hybrid model:

$$MV = (IUNIT \times ISIZE) + FEATURES \times \%GOOD + LV \times NADJ$$

MV = Market Value IUNIT = Replacement Cost New Per Square Foot ISIZE = Square Feet of Improvement Area FEATURES = Improvement Amenities Contributory Value %GOOD = Percent Good From Normal Depreciation Table LV = Land Value NADJ = Category/Market Area Adjustment

If reappraisal of the market area or category is indicated, the appraiser will analyze available market sales using a ratio study. These studies will develop the adjustments needed to bring the median within the acceptable range. Therefore, based on analysis of recent sales located within a given market area or category, estimated property values will reflect the market influences and conditions only for the specified market area or category, thus producing more representative and supportable values. The estimated property values calculated for each updated market area or category will be based on market indicated factors applied uniformly to all properties within a market area or category. Finally, with all the market-trend factors applied, a final ratio study will be generated comparing recent sale prices with the proposed appraised values for these sold properties. From this set of ratio studies, the appraiser will judge the appraisal level and uniformity in both updated and non-updated market areas and categories

and will verify appraised values against overall trends as exhibited by the local market, and finally, for the school district as a whole.

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 in the CAMA system for utilization on all commercial properties in the district. Market factors reflected within the cost and income approaches are evaluated and confirmed based on market sales of commercial and industrial properties. The appraisers review the cost, income, and sales comparison approaches to value for each of the types of properties with available sales information. The final valuation of a property is estimated based on reconciling these indications of value considering the weight of the market information available for evaluation and analysis in these approaches to value. Exhibit "C" attached hereto references the results of the 2009 Reappraisal Plan and where the detailed report can be located.

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 calculated for each property type with available sales data. These summary statistics including, but not limited to, the weighted mean and median, provide the appraisers an analytical tool by which to determine both the level and uniformity of appraised value. If a sufficient sample of sales exists within a given category of property, the level of appraised values can be determined by the median for individual properties within a specific type, and a comparison of medians can reflect the general level of appraised value.

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

INDIVIDUAL VALUE REVIEW PROCEDURES

Field Review

The date of last inspection, extent of that inspection, and the Montague CAD appraiser's responsible are listed in the CAMA system. If a property owner disputes the district's records, a field check is performed to verify this information for the current year's valuation or for the next year's valuation. In addition, if a building permit is filed for a particular property indicating a change in characteristics, a field inspection is performed.

In property types or economic areas 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, appraisers review these properties annually. Field review of real property accounts may be accomplished in conjunction with business personal property inspections. 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 and field inspections are performed in compliance with the guidelines required by the existing classification system. Office reviews are typically limited by the available market data presented for final value analysis. These reviews summarize the pertinent data of each property as well as compare the previous value to the proposed value conclusions of the various approaches to value. These evaluations and reviews show proposed value changes; income model attributes or overrides, economic factor (cost overrides) and special factors affecting the property valuation such as new construction status. The appraisers review methodology for appropriateness to ascertain that it is completed in accordance with USPAP or more stringent statutory and district policies. This review is performed after preliminary ratio statistics are applied. If the ratio statistics are generally acceptable overall, the review process is focused primarily on locating skewed results on an individual basis. Previous values resulting from protest hearings are individually reviewed to determine if the value remains appropriate for the current year based on market conditions.

Once the appraiser is satisfied with the level and uniformity of value for each commercial property, the estimates of value go to noticing. Each parcel is subjected to the value parameters appropriate for its use type.

PERFORMANCE TESTS

The primary tool used to measure mass appraisal performance is the ratio study. A ratio study

compares appraised values to market prices. In a ratio study, market values (value in exchange) are typically represented with the range of sale 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 examples of market price in any one category to provide necessary representation then similar market areas or categories may be combined. This can be particularly useful for commercial or industrial real property for which sales are limited. 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 are multi-family housing projects subject to subsidized rent provisions or other governmental guarantees as provided by legislative statutes (affordable housing) or agricultural lands to be appraised on the basis of productivity or use value.

Sales Ratio Studies

Sales ratio studies are an integral part of estimating equitable and accurate market values, and ultimately property assessments for these taxing jurisdictions. The primary uses of sale ratio studies include the determination of a need for general reappraisal; prioritizing selected groups of property types for reappraisal; identification of potential problems with appraisal procedures; assist in market analyses; and, to calibrate models used to estimate appraised values during valuation or reappraisal cycles. However, these studies cannot be used to judge the accuracy of an individual property appraised value.

Overall sales ratios are generated at least annually (or more often in specific areas) to allow appraisers to review general market trends in their area of responsibility and for the Property Study from the Property Tax Division of the Comptroller's Office. The appraisers utilize the application EXCEL to evaluate subsets of data by economic area or a specific and unique data item. This may be customized and performed by building class, age, condition, etc. In many cases, field checks are conducted to assure 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 (appreciation or depreciation).

Comparative Appraisal Analysis

The commercial appraiser may perform an average unit value 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 will 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 sales and equity studies will be performed prior to final appraisal and to annual noticing.

See Exhibit "B" for example of documents used in establishing appraisal value for Commercial Properties.

Business Personal Property Valuation Process

INTRODUCTION

Appraisal Responsibility

There are four different personal property types appraised by the district's personal property section: Business Personal Property accounts; leased assets; vehicles and aircraft; and multi-location assets.

- Personnel - The personal property staff consists of one appraiser.

Kim Haralson, Business Personal Property

- Data - A common set of data characteristics for each personal property account in the district is collected in the field and data entered using a pen pad or on a property card. The property characteristic data drives the computer-assisted personal property appraisal (CAPPA) system. The personal property appraisers collect the field data and maintain electronic property files making updates and changes gathered from field inspections, newspapers, property renditions, sales tax permit listing and interviews with property owners.

VALUATION APPROACH

SIC Code Analysis

Business personal property is classified utilizing a four digit numeric code, called Standard Industrial Classification (SIC) codes that were developed by the federal government to describe property. Personal property is classified by business type and SIC codes.

SIC and business type code identification are the cornerstone of the personal property valuation system at the district. SIC codes are delineated based on observable aspects of homogeneity and business use.

Highest and Best Use Analysis

The highest and best use of property is the reasonable and probable use that supports the greatest income and 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

Data Collection Procedures

Personal property data collection procedures are published and distributed to all appraisers involved in the appraisal and valuation of personal property. The appraisal procedures are reviewed and revised to meet the changing requirements of field data collection.

Sources of Data

Business Personal Property

The district's property characteristic data has been collected over a period of years through field inspections, property owner renditions and other available data sources. Every year field inspections allow the appraiser to record changes and gather additional data.

Leased and Multi-Location Assets

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

VALUATION AND STATISTICAL ANALYSIS (model calibration)

Cost Schedules

Cost data from property owner renditions, hearings, and published cost guides are used to develop the district's cost schedules. The cost schedules are reviewed as necessary to conform to changing market conditions. The schedules are typically in a price per square foot format, but some exception SIC's are in an alternate price per unit format, such as per room for hotels.

Statistical Analysis

The value indicated by a property owner's rendition is compared to the typical value per unit of the appropriate SIC code and/or business type code to determine uniformity and equity.

Depreciation Schedule and Trending Factors:

Business Personal Property

The district's primary approach to the valuation of business personal property is the cost approach. The replacement cost new (RCN) is developed from property owner reported historical cost or from CAD developed valuation models. The trending factors used by the CAD to develop RCN are based on published valuation guides. The percent good depreciation factors used by the district 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:

$$\text{PVF} = \text{INDEX FACTOR} \times \text{PERCENT GOOD FACTOR}$$

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

$$\text{MARKET VALUE ESTIMATE} = \text{PVF} \times \text{HISTORICAL COST}$$

This mass appraisal PVF schedule is used to ensure that estimated values are uniform and consistent within the market and reflect current economic pressures of supply and demand. See attached Exhibit "D" for the 2020 Business Personal Property Reappraisal Summary along with the 2020 Business Personal Property Appraisal Schedule; a density schedule used in appraising inventory and furniture, fixtures, and equipment; a personal property worksheet; description of equipment used to establish the life of each class; and the depreciation table for each classification.

Computer Assisted Personal Property Appraisal (CAPPA)

The CAPPA valuation process has two main objectives: 1) Analyze and adjust estimated asset cost with existing SIC models. 2) Develop new models for business classifications not previously integrated into CAPPA. The delineated sample is reviewed for accuracy of SIC code, square footage, field data, and original cost information. Models are created and refined using actual original cost data to derive a typical replacement cost new (RCN) per square foot for a specific category of assets. The RCN per square foot is depreciated by the estimated age using the depreciation table adopted for the tax year.

The data sampling process is conducted in the following order: 1) Prioritizing Standard Industrial Classification (SIC) codes for model analysis. 2) Compiling the data and developing the reports. 3) Field checking the selected samples. The models are then tested against the previous year's data. The typical RCN per square foot (or applicable unit) is determined by a statistical analysis of the available data.

CAPPA model values are used in the general business personal property valuation program to estimate the value of new accounts for which no property owner's rendition is filed. Model values are also used to establish tolerance parameters for testing the valuation of property for

which prior data years' data exist or for which current year rendered information is available. The calculated current year value or the prior year's value is compared to the indicated model value by the valuation program. If the value being tested is within an established acceptable percentage tolerance range of the model value, the account passes that range check and moves to the next valuation step. If the account fails the tolerance range check, it is flagged for individual review. Allowable tolerance ranges may be adjusted from year to year depending on the analysis of the results of the prior year.

Vehicles

Value estimates for vehicles are based on published book values or depreciated cost, and there are also considerations available for high mileage.

Leased and Multi-Location Assets

Leased and multi-location assets are valued using the PVF schedules mentioned above or published book values.

INDIVIDUAL VALUE REVIEW PROCEDURES

Office Review

Business Personal Property

Accounts with changes in location, size, or business volume are reviewed and updated as needed. Renditions from property owners, information recorded during field inspections, information provided at hearings and Marshall & Swift cost guides are compared to the district's density schedules. Accounts are established for new businesses and accounts for closed business with no assets are set inactive.

Utility Property Valuation Process

INTRODUCTION

Appraisal Responsibility

Utility properties are the tangible assets of various businesses including electric production, transmission, and distribution companies, railroads, petroleum product gathering and delivery pipelines, telephone and communication providers and others and are appraised by Pritchard & Abbott, Inc. The valuation of these properties is considered to be complex due to the involvement of both tangible and intangible property elements that comprise these businesses and due to the size of some of the utilities that are regional and national companies. The appraisal of these companies becomes complex when considering the valuation of the property as a unit in place, evaluating the property by the approaches to value at the company level.

Once the estimated value of the unit is completed, the estimated market value is allocated based on the tangible property assets that are located within Montague CAD.

Appraisal Resources

- **Personnel – Pritchard & Abbott, Inc.**

Data - A common set of data characteristics for each utility property account in the district is collected from the various government regulatory agency records, field inspections, and property owner renditions. This data is entered to the district's computer system. Individual company financial information is gathered through industry specific governmental filings such as Federal Energy Regulatory Commission Reports, Securities and Exchange Commission 10-k filings, and Public Utility Commission publications. Other company information is gathered from annual reports, internal appraisals, and other in-house and industry publications. Property owner renditions are requested to document and list property owned and located in the district's jurisdiction (i.e.: track mileage, number of meters, pipeline size and mileage, substation and transmission capacity, etc.). The property characteristic data drives the computer-assisted appraisal of the property.

The appraisal of utility property considers the three-approach analysis to form an opinion of value for the property.

VALUATION AND STATISTICAL ANALYSIS (model calibration)

Approaches to Valuation, Reconciliation

Valuation of tangible assets for utility companies relies primarily on indications of value based on the cost and income approaches to value. The quantity and quality of the available information is considered to determine the weight given to the results of the approaches.

Value Review Procedures

Review of the valuation of utility property is based on verifying economic and financial factors as well as physical plant. Value estimates for each company are developed and then compared on a per unit basis to similar companies to ensure uniformity. The PTD estimates the value of utility properties and the results, when compared to the appraisal valuation estimated by the district for these properties yield ratios. This ratio study of certain utility properties indicates the level and uniformity of appraisal for this category of property.

Minerals (Oil and Gas Reserves) Valuation Process

Montague Appraisal District contracts with Pritchard & Abbott, Inc. of Fort Worth, Texas for the valuation of minerals within the boundaries of the appraisal district. Please refer to the 2019 and 2020 Biennial Reappraisal Plan that was developed by Pritchard & Abbott, Inc.



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 were based is assumed to be correct. Exterior inspections of the property appraised were performed as staff resources and time allowed. Some interior inspections of property appraised were performed at the request of the property owner and required by the district for clarification purposes and to correct property descriptions.
3. Sales data was obtained from vendors and considered reliable. Validation of sales transactions was also attempted through questionnaires to buyer and seller, telephone survey and field review.
4. I have attached a list of staff providing significant mass appraisal assistance to the person signing this certification.

Certification Statement:

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

Chief Appraiser
Kim Haralson

STAFF PROVIDING SIGNIFICANT MASS APPRAISAL ASSISTANCE

<u>NAME</u>	<u>TITLE</u>	<u>BTPE NUMBER</u>	<u>TYPE OF ASSISTANCE</u>
Kim Haralson, RPA	Chief Appraiser Business Personal Property	64178	Supervise and Performs Data Collection and Valuation Correlation
Teri Odom, RPA	Assistant Chief Appraiser	67485	Data Collection and Valuation Correlation
Tammie Messer, RPA	Senior Appraiser	69821	Data Collection and Valuation Correlation

EXHIBIT A

Document Examples for Residential Appraisal

- Map of Neighborhood
- Summary of Neighborhood
- Field Cards Before and After Changes With Schedules For Class
- Recap of Ratio Study Report – Before Adjustments
- Recap of Ratio Study Report – After Report
- Ratio for Class
- Gain or Loss History Comparison For Neighborhood
- Equality Report

EXHIBIT B

Document Examples for Commercial Appraisal

- Commercial Summary Report by Property Type See Appraisal Manual
- Market Adjustments from Sales Analysis
- Market Adjustment Study
- Market Analysis by Age, Use, Condition
- Sales Ratio Study(Only two Sales on Report No Adjustments)
- Income Model

- Cost Hybrid Model

EXHIBIT C

Business Personal Property Reappraisal Summary - 2018

The District field inspected 968 accounts of Business Personal Property accounts. In addition, Business Personal Property appraisers reviewed 625 renditions submitted by taxpayers.

See attached:

Exhibit C-1 See Montague County Appraisal Manual For Schedules

Exhibit C-2 Density Schedules for Inventory and Furniture, Fixtures & Equipment (Sample)

We use the Comptrollers Density Schedules

Exhibit C-3 Personal Property Field Card

Exhibit C-4 Depreciation Test For Depreciation Table

Exhibit C-5 Depreciation Definitions

Exhibit C-6 Real Estate Depreciation Table

Exhibit C-7 Mobile Depreciation Guide

Exhibit C-8 Personal Property Guide

EXHIBIT D

Intended Users

Jurisdictions

Montague County

Alvord ISD

Bowie ISD

Forestburg ISD

Gold-burg ISD

Montague ISD

Nocona ISD

Prairie Valley ISD

Saint Jo ISD

Slidell ISD

City of Bowie

City of Nocona

City of Saint JO

City of Sunset

Clear Creek Watershed

Farmers Creek Watershed

Nocona Hospital District

All Property Owners

Governmental Entities – open record – anyone could be the user