Hill County Appraisal District
2024 Mass Appraisal Report

INTRODUCTION

Scope of Responsibility

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

The Hill County Appraisal District (HCAD) is a political subdivision of the State of Texas. The provisions of the Texas Property Tax Code govern the legal, statutory, and administrative requirements of the appraisal district. A member board of directors, appointed by the taxing units within the boundaries of Hill 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 36 jurisdictions or taxing units in the county. Hill CAD currently collects taxes for 21 taxing units. Each taxing unit, such as the county, a city, school district, municipal utility district, etc., sets its own tax rate to generate revenue to pay for such things as police and fire protection, public schools, road and street maintenance, courts, water and sewer systems, and other public services. Appraisals established by the appraisal district allocate the year's tax burden on the basis of each taxable property's January 1st market value. We also determine eligibility for various types of property tax exemptions such as those for homeowners, the elderly, disabled veterans, and charitable and religious organizations.

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

- exposed for sale in the open market with a reasonable time for the seller to find a purchaser;

- both the seller and the buyer know of all the uses and purposes to which the property is adapted and for which it is capable of being used and of the enforceable restrictions on its use, and;

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

The 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. 23.03). The owner of real property inventory may elect to have the inventory appraised at its market value as of September 1st of the year preceding the tax year to which the appraisal applies by filing an application with the chief appraiser 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 is to conduct a general reappraisal of real property every year. Appraised values are reviewed annually and are subject to change for purposes of equalization. Personal property is appraised every year.

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

Personnel Resources

The Chief Appraiser is primarily responsible for overall planning, organizing, staffing, coordinating, and controlling of district operations. The 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, 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 Department of Licensing and Regulation (TDLR). Support functions including

records maintenance, information and assistance to property owners, and hearings support are coordinated by the Assistant Chief Appraiser.

The appraisal district staff consists of 16 employees with the following classifications:

- 1 - Official/Administrator (Executive level administration)

- 3 - Professional (Supervisory and Management)

- 6 - Technicians (Appraisers, program appraisers and network support)

- 6 - Administrative Support (professional, customer service, clerical and other)

Data

The district is responsible for establishing and maintaining approximately 49,000 real and personal property accounts covering 987 square miles within Hill County. This data includes property characteristic and ownership and exemption information. Property characteristic data on new construction is updated through an annual field effort; existing property data is maintained through a field review that is prioritized by *last field review* inspection date. Sales are routinely validated during a separate effort; however, numerous sales are validated as part of the new construction and data review activities. General trends in employment, interest rates, new construction trends, and cost/market data are acquired through various sources, including internally generated questionnaires to buyer and seller, 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, including zip code, facet and aerial photography. The district's website www.hillcad.org makes a broad range of information available for public access, including detailed information on the appraisal process, property characteristics data, sales information, certified values, interface maps, protests and appeal procedures, and a tax calendar. Downloadable files of related tax information and district forms, including exemption applications and business personal property renditions are also available and linked to the State Comptroller's website.

Information Systems

The Internet Website database is hosted and maintained offsite by a Windows server. Hill CAD operates under a relational database, Microsoft SQL Server. The hardware/system software is Microsoft/Dell; Microsoft Windows Server 2022 hosts our LAN and document imaging; Microsoft Windows Server and ESRI operates the geographic information system; and the user base is served by Windows 10 PC's.

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 a part of this annual study, the code also requires the Comptroller to: use sales and recognized auditing and sampling techniques; review each appraisal district's appraisal methods, standards and procedures to determine whether the district used recognized standards and practices (MAP review); test the validity of school district taxable values in each appraisal district and presume the appraisal roll values are correct when values are valid; and determine the level and uniformity of property tax appraisal in each appraisal district. The methodology used in the property value study includes stratified samples to improve sample representativeness and techniques or procedures of measuring uniformity. This study utilizes statistical analysis of sold properties (sale ratio studies) and appraisals of unsold properties (appraisal ratio studies) as a basis for assessment ratio reporting. For appraisal districts, the reported measures include median level of appraisal, coefficient of dispersion (COD), the percentage of properties within 10% of the median, the percentage of properties within 25% of the median, and price-related differential (PRD) for properties overall and by state category (i.e., categories A, B, C, D and F1 are directly applicable to real property).

There are 12 independent school districts in Hill CAD for which appraisal rolls are annually developed and 7 overlapping school districts. The preliminary results of this study are released in January in the year following the year of appraisement. The final results of this study are certified to the Education Commissioner of the Texas Education Agency (TEA) in the following July of each year for the year of appraisement. This outside (third party) ratio study provides additional assistance to the CAD in determining areas of market activity or changing market conditions.

Appraisal Activities

INTRODUCTION

Appraisal Responsibilities

The 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 physical description of personal property, and land and building characteristics. This appraisal activity is responsible for administering, planning and coordinating all activities involving data collection and maintenance of all commercial, residential and personal property types which are located within the boundaries of Hill County. 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. The goal is to periodically field inspect all residential and commercial properties in Hill County every 2 years, and personal properties every year. Sales data is analyzed and all values are reviewed annually.

Appraisal Resources

- **Personnel** - The appraisal activities consist of 5 appraisers and 2 clerical personnel. The Chief Appraiser and Assistant Chief Appraisers assist in appraisal activities. The appraisers are responsible for all types of properties. Utility and industrial properties are outsourced to Thomas Y. Pickett.

- **Data** - The data used by field appraisers includes the existing property characteristic information contained in CAMA (Computer Mass Appraisal System) from the district's computer system. The data is printed on a property record card (PRD), or personal property data sheets. Other data used includes maps, sales data, fire and damage reports, building permits, photos and actual cost information.

PRELIMINARY ANALYSIS

Data Collection/Validation

Data collection of real property involves maintaining data characteristics of the property on CAMA (Computer Assisted Mass Appraisal). The information contained in CAMA includes site characteristics, such as land size and topography, and improvement data, such as square foot of living area, year built, quality of construction, and condition. Field appraisers use Appraisal Manuals that establish uniform procedures for the correct listing of real property. All properties are coded according to these manuals and the approaches to value are structured and calibrated

based on this coding system. The field appraisers use these manuals during their initial training and as a guide in the field inspection of properties. Data collection for personal property involves maintaining information on PERS (Personal Property System). The type of information contained in PERS includes personal property such as business inventory, furniture and fixtures, machinery and equipment, cost and location. The field appraisers conducting on-site inspections use a personal property manual during their initial training and as a guide to correctly list all personal property that is taxable. The personal property manual is published by the State Comptroller's office.

The procedure manuals that are utilized by the field appraisers are available in the district offices. If a property owner/agent wants a copy of the listing procedural manual, the Assistant Chief Appraiser will handle this request. Appraisers periodically update the listing procedural manuals with input.

Sources of Data

The sources of data collection are through the new construction field effort, data review/relist field effort, data mailers, hearings, sales validation field effort, commercial sales verification, newspapers and publications, and property owner correspondence. A source of data comes from building permits received from taxing jurisdictions that require property owners to take out a building permit. Where available, permits are received electronically and loaded to our Building Permit System (BPS). Otherwise, paper permits are received and matched manually with the property's tax account number for data entry.

Data review of entire neighborhoods is generally a good source for data collection. Appraisers drive entire neighborhoods to review the accuracy of our data and identify properties that have to be relisted. The sales validation effort in real property pertains to the collection of data of properties that have sold. In residential, the sales validation effort involves on-site inspection by field appraisers to verify the accuracy of the property characteristics data and confirmation of the sales price. In commercial, both grantees and grantors are contacted to confirm sale prices and to verify pertinent data.

Property owners are one of the best sources for identifying incorrect data that generates a field check. Frequently, the property owner provides sufficient enough data to allow correction of records without having to send an appraiser on-site. As the district has increased the amount of information available on the Internet, property owner's requests to correct data inconsistencies has also increased. For the property owner without access to the Internet, letters are often submitted notifying the district of inaccurate data. Properties identified in this manner are added to a work file and inspected at our earliest opportunity. Informal hearings with property owners offer an opportunity to question the validity of the data and to produce evidence that is useful.

Data Collection Procedures

Field data collection requires organization, planning and supervision of the field effort. Data collection procedures have been established for residential, commercial, and personal property. The appraisers are assigned throughout Hill County to conduct field inspections. Appraisers conduct field inspections and record information either on a property record card (PRD), a personal property data sheet or iPad.

The quality of the data used is extremely important in establishing accurate values of taxable property. While production standards are established and upheld for the various field activities, quality of data is emphasized as the goal and responsibility of each appraiser. New appraisers are trained in the specifics of data collection set forth in the listing manual 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 exists through supervisory review of the work being performed by the field appraisers. The Assistant Chief Appraiser is charged with the responsibility of ensuring that appraisers follow listing procedures, identify training issues and provide uniform training throughout the field appraisal staff. The Assistant Chief Appraiser and clerical staff assists in quality assurance.

Data Collection on Mobile Devices

Appraisers are currently using Apple iPad's that are running on Harris Govern's Computer Assisted Mass Appraisal (CAMA) Cloud system to compile field work data. The mobile devices enable an appraiser to access Eagleview (aerial images) mobile app while in the field. This makes the task of reappraisal much easier and saves the district paper, ink, and other costs including man-hours.

Data Maintenance

The field appraiser is responsible for the data entry of his/her fieldwork directly into the computer file. This responsibility includes not only data entry, but also quality assurance. At times during high volumes of data collections, clerical staff members assist the appraisers in data entry.

INDIVIDUAL VALUE REVIEW PROCEDURES

Field Review

The date of last inspection, extent of that inspection, and the CAD appraiser responsible are listed on the CAMA record. If a property owner or jurisdiction dispute the district's records concerning this data during a hearing, via a telephone call or correspondence received, CAMA may be altered based on the evidence provided. Typically, a field inspection is requested to verify this evidence for the current year's valuation or for the next year's valuation. Each year, a field review of certain areas or neighborhoods in the jurisdiction is done during the data review/re-list field effort.

Office Review

Office reviews are completed on properties where information has been received from the owner of the property. Data mailers, sent in mass, or at the request of the property owner, frequently verify the property characteristics or current condition of the property. When the property data is verified in this manner, field inspections are not required.

PERFORMANCE TEST

The appraisers are responsible for conducting ratio studies and comparative analysis. The Chief Appraiser and Assistant Chief Appraiser assist in conducting ratio studies and comparative analysis. (Refer to the individual valuation process summary reports).
Field appraisers, in many cases may conduct field inspections to ensure the ratios produced are accurate and the appraised values utilized are based on accurate property data characteristics.

Reappraisals

It is HCAD's practice to physically review, inspect and appraise property every two years. The county is split into two cycles with different areas that are physically reviewed annually. HCAD budget limitations prohibit the district from staffing enough employees and resources to review the entire county in a given year. For the 2024-year non-reappraisal areas were worked with Eagleview, sales, deeds, newspaper listings and building permits. Field inspections through reappraisals were in the Abbott, Axtell, Blum, Bynum, Dawson, Frost, Hillsboro, Hubbard, Itasca, Malone, Milford, Mt Calm, Penelope, and Rio Vista ISD's. However, values district wide are reviewed annually to ensure compliance with state laws and as discussed in *IAAO's Property Appraisal and Assessment Administration*.

Residential Valuation Process

INTRODUCTION

Scope of Responsibility

The appraisers are responsible for developing equal uniform market values for residential improved and vacant property. There are approximately 19,000 residential improved parcels and over 10,000 vacant residential properties in Hill County.

Appraisal Resources

- **Personnel** - The following staff members may be responsible for determining residential values: April Aguirre, Heather Dyer, Jon Hlavenka, Jonathon Orr, Jon Williams, Julia Scott, Mike McKibben, Christy Ann Turner and Julie Dawe.

- **Data -** A common set of data characteristics for each residential dwelling in Hill County is collected in the field and data entered to the computer. The property characteristic data drives the computer-assisted mass appraisal (CAMA) approach to valuation.

VALUATION APPROACH (Model Specification)

Area Analysis

Data on regional economic forces such as demographic patterns, regional 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 provides the field appraiser a current economic outlook on the real estate market in areas as deemed applicable. Information is obtained from real estate publications and sources such as continuing education as approved by (PTEC) the Property Tax Education Coalition.

Neighborhood and Market Analysis

Neighborhood analysis involves the examination of how physical, economic, governmental and social forces and other influences affect property values. The effects of these forces are also used to identify, classify, and stratify comparable properties into smaller, manageable subsets of the universe of properties known as neighborhoods. Residential valuation and neighborhood analysis is conducted on each of the political entities known as Independent School Districts (ISD).

The first step in neighborhood analysis is the identification of a group of properties that share certain common traits. A "neighborhood" for analysis purposes is defined as the largest geographic grouping of properties where the property's physical, economic, governmental and social forces are generally similar and uniform. Geographic stratification accommodates the local supply and demand factors that vary across a jurisdiction. Once a neighborhood has been identified, the next step is to define its boundaries. This process is known as "delineation". Some factors used in neighborhood delineation include location, sales price range, lot size, age of dwelling, quality of construction and condition of dwellings, square footage of living area, and story height. Delineation can involve the physical drawing of neighborhood boundary lines on a map, but it can also involve statistical separation or stratification based on attribute analysis. Part of neighborhood analysis is the consideration of discernible patterns of growth that influence a neighborhood's individual market. Few neighborhoods are fixed in character. Each neighborhood may be characterized as being in a stage of growth, stability or decline. The growth period is a time of development and construction. As new neighborhoods in a community are developed, they compete with existing neighborhoods. An added supply of new homes tend to induce population shift from older homes to newer homes. In the period of stability, or equilibrium, the forces of supply and demand are about equal. Generally, in the stage of equilibrium, older neighborhoods can be more desirable due to their stability of residential character and proximity to the workplace and other community facilities. The period of decline 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 is the cornerstone of the residential valuation system at the district. All 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. Neighborhood delineation is periodically reviewed to determine if further neighborhood delineation is warranted. Whereas 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 cost-derived 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 with ongoing gentrification, the appraiser reviews the existing residential property use and makes a determination regarding highest and best use. Once the conclusion is made that the highest and best use remains residential, further highest and best use analysis is done to decide the type of residential use on a neighborhood basis. As an example, it may be determined in a transition area that older, non-remodeled homes are 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 from identical cost schedules using a comparative unit method. The district's residential cost schedules, originally adopted from Marshall & Swift, have been customized to fit Hill County's local residential building and labor market. The cost schedules are reviewed regularly as a result of state legislation requiring that the appraisal district cost schedules be within a range of plus or minus 10% from nationally recognized cost schedules.

An extensive review and revision of the residential cost schedule was performed for this tax year. As part of this process, newly constructed sold properties at various levels of quality of construction in Hill County were reviewed. The property data characteristics of these properties were verified and photographs were taken of the samples. CAD dwelling costs were compared against Marshall & Swift, a nationally recognized cost estimator. This process included correlation of quality of construction factors from CAD and Marshall & Swift. The results of this comparison were analyzed using statistical measures, including stratification by quality and reviewing estimated building costs plus land to sales prices. As a result of this analysis, a new regional multiplier was developed to be used in the district's cost process. This new regional multiplier was used to adjust the division's cost schedule to be in compliance with the state legislative mandate described above. In addition to the mainframe cost schedules, PC spreadsheet applications have been created to address unique appraisal situations, such as different levels of

remodeling and typical housing features not normally accounted for in the mainframe benchmark cost system.

Sales Information

Hill CAD uses a sale-type code to identify elements of a sale transaction. A sales file for the storage of sales data at the time of sale is maintained. Residential vacant land sales, along with commercial improved and vacant land sales are also maintained in the sales information system. Residential improved and vacant sales are collected from a variety of sources, including: district questionnaires sent to buyer and seller, field discovery, protest hearings, Comptroller's PVS, various sale vendors, fee appraisals, builders, and realtors. A system of type, source, validity and verification codes was established to define salient facts related to a property's purchase or transfer. School district or neighborhood sales reports are generated as an analysis tool for the appraiser in the development of value estimates.

Land Analysis

Residential land analysis is conducted by each of the appraisers. A computerized land table file stores the land information required to consistently value individual parcels within neighborhoods. Specific land influences are used, where necessary, to adjust parcels outside the neighborhood norm for such factors as view, shape, size, and topography, among others. The appraisers use abstraction and allocation methods to ensure that the land values created best reflect the contributory market value of the land to the overall property value.

Statistical Analysis

The appraisers perform statistical analysis annually to evaluate whether values are equitable and consistent with the market. Ratio studies are conducted on each of the approximately 231 residential valuation neighborhoods in the district to judge the two primary aspects of mass appraisal *accuracy--level* and *uniformity of value*. Appraisal statistics of central tendency and dispersion generated from sales ratios are available for each stratified neighborhood within an ISD and summarized by year. These summary statistics including, but not limited to, the weighted mean, median, standard deviation, coefficient of variation, and coefficient of dispersion provide the appraisers a tool by which to determine both the level and uniformity of appraised value on a stratified neighborhood basis. The level of appraised values is determined by the weighted mean for individual properties within a neighborhood, and a comparison of neighborhood weighted means reflect the general level of appraised value between comparable neighborhoods. Review of the standard deviation, coefficient of variation, and coefficient of dispersion discerns appraisal uniformity within and between stratified neighborhoods.

Every neighborhood is reviewed annually by the appraiser through the sales ratio analysis process. The first phase involves neighborhood ratio studies that compare the recent sales prices

of neighborhood properties to the appraised values of these sold properties. This set of ratio studies affords the appraiser an excellent means of judging the present level of appraised value and uniformity of the sales. The appraiser, based on the sales ratio statistics and designated parameters for valuation update, makes a preliminary decision as to whether the value level in a neighborhood needs to be updated in an upcoming reappraisal, or whether the level of market value in a neighborhood is at an acceptable level.

Market Adjustment or Trending Factors

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

The following equation denotes the hybrid model used:

$$MV = MA [LV + (RCN - D)]$$

Whereas, the market value equals the market adjustment factor times the land value plus the replacement cost new less depreciation. As the cost approach separately estimates both land and building values and uses depreciated replacement costs, which reflect only the supply side of the market, it is expected that adjustments to the cost values are needed to bring the level of appraisal to an acceptable standard. Market, or location adjustments are applied uniformly within neighborhoods to account for locational variances between market areas or across a jurisdiction.

If a neighborhood is to be updated, the appraiser uses a cost ratio study that compares recent sales prices of properties appropriately adjusted for the effects of time within a delineated neighborhood with the properties' actual cost value. The calculated ratio derived from the sum of the sold properties' cost value divided by the sum of the sales prices indicates the neighborhood level of value based on the unadjusted cost value for the sold properties. This cost-to-sale ratio is compared to the appraisal-to-sale ratio to determine the market adjustment factor for each neighborhood. This market adjustment factor is needed to trend the values obtained through the cost approach closer to the actual level of market evidenced by recent sales prices within a given neighborhood. The sales used to determine the market adjustment factor will reflect the market influences and conditions only for the specified neighborhood, thus producing more representative and supportable values. The market adjustment factor calculated for each updated neighborhood is applied uniformly to all properties within a neighborhood. Once the market-trend factors are applied, a second set of ratio studies is generated that compares recent sale prices with the proposed appraised values for these sold properties. From this set of ratio studies, the appraiser judges the appraisal level and uniformity in both updated and non-updated

neighborhoods, and finally, for the school district as a whole. Hill CAD has developed a worksheet to be used in calculating market adjustments and trend factors.

TREATMENT OF RESIDENCE HOMESTEADS

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

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

Values of capped properties must be recomputed annually. If a capped property sells, the cap automatically expires as of January 1st of the following year. In that following year, that home is reappraised at its market value to bring its appraisal into uniformity with other properties. An analogous provision applies to new homes. While a developer owns them, unoccupied residences can be appraised as part of an inventory using the district's land value and the developer's construction costs as of the valuation date. However, in the year following the sale, they are reappraised at market value.

Monthly time adjustments were developed using the sales ratio trend analysis method. For each school district, sales-to appraisal ratios based on unadjusted cost values were stratified on a quarterly basis. Statistics produced from the quarterly market data include measures of central tendency (mean and median) that represent the level of appraised values, and measures of uniformity (coefficient of dispersion and coefficient of variation) that represent the consistency of appraised values within and between strata. The resulting quarterly medians were graphically plotted for examination and analysis. A linear regression routine was performed on each of the school district samples, along with specific market areas. Linear regression statistics, such as the coefficient of determination (R^2) and the P-value, identify the reliability and significance, respectively, of the regression outcome, namely, the independent variable of time. A quarterly time adjustment for each market area sample was produced. Analysis was then performed on each school district sample to determine the appropriate quarterly time adjustment to be employed, or if a time adjustment was even warranted. Once the market areas quarterly time adjustment was determined, a monthly time adjustment was calculated.

INDIVIDUAL VALUE REVIEW PROCEDURES

Field Review

The appraiser identifies individual properties in critical need of field review through sales ratio analysis. Sold properties with a high variance in sales ratios are field reviewed to check for accuracy of data characteristics and the neighborhood is analyzed.

As the district's parcel count has increased through new home construction, and the homes constructed in the boom years of the late 70's and early 80's experience remodeling, the appraisers are required to perform the field activity associated with transitioning and high demand neighborhoods. Increased sales activity has also resulted in a more substantial field review effort on the part of the appraisers to review and resolve sales outliers. Additionally, the appraiser frequently field reviews subjective data items such as quality of construction, condition, and physical, functional and economic obsolescence, factors contributing significantly to the market value of the property. After preliminary estimates of value have been determined in targeted areas, the appraiser takes valuation documents to the field to test the computer-assisted values against his own appraisal judgment. During this review, the appraiser is able to physically inspect both sold properties and unsold properties for comparability and consistency of values.

Office Review

Given the ample resources and time required to conduct a routine field review of all properties, homogeneous properties consisting of tract housing with a low variance in sales ratios and other properties having a recent field inspection date are value reviewed in the office. Valuation reports comparing previous values against proposed and final values are generated for all residential improved and vacant properties. The dollar amount and 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 are 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, the estimates of value are ready for Notice and Hearings.

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 that it produces meet the standards of accuracy in several ways. Overall sales ratios are generated for each neighborhood within each

ISD to allow the appraiser to review general market trends and provide an indication of market appreciation over a specified period of time. The neighborhood descriptive statistic, along with frequency distributions and scatter diagrams are reviewed for each neighborhood being updated for the current tax year. In addition to the mainframe sales ratios by school district and neighborhood, sales ratios are generated from a PC-based statistical application in Microsoft EXCEL. Reported in the sales ratio statistics for each school district is a level of appraisal value and uniformity profile by land use, sales trends by 12 month time frame, and appraisal value ranges. The PC-based ratio studies are designed to emulate the findings of the state comptroller's annual property value study for category A property.

Management Review Process

Once the proposed value estimates are finalized, the appraiser reviews the sales ratios by neighborhood and presents pertinent valuation data, such as, history of hearing protest, sale-to-parcel ratio, and level of appraisal to the Chief Appraiser for final review and approval. This review includes comparison of level of value between related neighborhoods within and across jurisdiction lines. The primary objective of this review is to ensure that the proposed values have met preset appraisal guidelines appropriate for the tax year in question.

Commercial Valuation Process

INTRODUCTION

Appraisal Responsibility

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

Appraisal Resources

The 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 appraisers responsible for commercial valuations are: Christy Ann Turner, Jon Hlavenka, Heather Dyer, Mike McKibben, Julia Scott, April Aguirre, JT Orr and Julie Dawe, in addition to various appraisers employed by Thomas Y. Pickett.

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

PRELIMINARY ANALYSIS

Pilot Study

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

approach models.

Survey of similar jurisdictions: Hill CAD coordinates its discovery and valuation activities with adjoining Appraisal Districts. Numerous field trips, interviews and data exchanges with adjacent appraisal districts have been conducted to ensure compliance with state statues. In addition, Hill CAD administration and personnel interact with other assessment officials through professional trade organizations including the International Association of Assessing Officers (IAAO), Texas Association of Appraisal Districts (TAAD) and its subchapter Texas Rural Chief Appraisers Association (TRCA) and the Texas Association of Assessing Officers (TAAO).

VALUATION APPROACH (Model Specification)

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. Continuing education is as approved by the Property Tax Education Coalition (PTEC)

Neighborhood Analysis

The neighborhood is comprised of the land area and commercially classed properties located within the boundaries of this taxing jurisdiction. This area consists of a wide variety of property types including residential, commercial and industrial. Neighborhood analysis involves the examination of how physical, economic, governmental and social forces and other influences affect property values. The effects of these forces are also used to identify, classify, and organize comparable properties into smaller, manageable subsets of the universe of properties known as neighborhoods. In the mass appraisal of commercial properties these subsets of a universe of properties are generally referred to as market areas or economic areas.

Economic areas are defined by each of the improved property use types (apartment, office, retail, warehouse and special use) based upon an analysis of similar economic or market forces. These include, but are not limited similarities of rental rates, classification of projects (known as building class by area commercial market experts), date of construction, overall market activity or other pertinent influences. Economic area identification and delineation by each major property use type is the benchmark of the commercial valuation system. All income model valuation (income approach to value estimates) is economic area specific. Economic areas are periodically reviewed to determine if redelineation is required. The geographic boundaries, as well as income, occupancy and expense levels and capitalization rates by age within each economic area for all commercial use types and its corresponding income model may be found in the Appraisal Manual.

Highest and Best Use Analysis

The highest and best use is the most reasonable and probable use that generates the highest present value of the real estate as of the date of valuation. The highest and best use of any given property must be physically possible, legally permissible, financially feasible, and maximally productive. For improved properties, highest and best use is evaluated as improved and as if the site were still vacant. This assists in determining if the existing improvements have a transitional use, interim use, nonconforming use, multiple uses, speculative use, excess land, or a different optimum use if the site were vacant. For vacant tracts of land within this 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. In many instances, the property's current use is the same as its highest and best use. This analysis ensures that an accurate estimate of market value (sometimes referred to as value in exchange) is derived.

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

Market Analysis

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

DATA COLLECTION / VALIDATION

Data Collection Manuals

The primary manual pertinent to data collection and documentation is the Appraisal Manual. This manual is continually updated, providing a uniform system of itemizing the multitude of components comprising improved properties. All properties located in Hill CAD's inventory are coded according to this manual and the approaches to value are structured and calibrated based on this coding system. This manual is updated annually.

Annually, prior to the hearing season and after the sales have been researched, verified, keyed into the database, and quality control has been completed, the sales data are summarized and

produced into report listings. These reports are available to the public for use during hearings, and are also used by the Hill CAD appraisers during the hearings process.

Sources of Data

In terms of commercial sales data, Hill CAD receives a copy of the deeds recorded in Hill County that convey commercially classed properties. The deeds involving a change in commercial ownership are entered into the sales information system and researched in an attempt to obtain the pertinent sale information. Other sources of sale data include the hearings process; local, regional and national real estate; financial publications; and publication services such as Crexi, Hotel Factbook, Costar, LoopNet..

For those properties involved in a transfer of commercial ownership, a sale file is produced which begins the research and verification process. The initial step in sales verification involves a computer-generated questionnaire, which is mailed to both parties in the transaction (Grantor and Grantee). If a questionnaire is not returned, a second questionnaire could be mailed. If a questionnaire is answered and returned, the documented responses are recorded into the computerized sales database system. If no information is provided, verification is then attempted via phone calls to both parties. If the sales information is still not obtained, other sources are contacted such as the brokers involved in the sale, property managers or commercial vendors. In other instances, sales verification is obtained from local appraisers or others that may have the desired information. Finally, closing statements are often provided during the hearings process. The actual closing statement is the most reliable and preferred method of sales verification.

VALUATION ANALYSIS (Model Calibration)

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

Cost Schedules

The cost approach to value is applied to all improved real property utilizing the comparative unit method. This methodology involves the utilization of national cost data reporting services as well as actual cost information on comparable properties whenever possible. Cost models are typically developed based on the Marshall Swift Valuation Service or Boeckh. Cost models include the derivation of replacement cost new (RCN) of all improvements. These include comparative base

rates, per unit adjustments and lump sum adjustments. This approach also employs the sales comparison approach in the valuation of the underlying land value. Time and location modifiers are necessary to adjust cost data to reflect conditions in a specific market and changes in costs over a period of time. Because a national cost service is used as a basis for the cost models, locational modifiers are necessary to adjust these base costs specifically for Hill County. These modifiers are provided by the national cost services.

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

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

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 study publications. This per unit rental rate multiplied by the number of units results in the estimate of potential gross rent.

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

Next a secondary income or service income is calculated as a percentage of stabilized effective

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

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

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

Subtracting the allowable expenses (inclusive of non-recoverable expenses and replacement reserves) from the effective gross income yields an estimate of net operating income.

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

Capitalization analysis is used in the income approach models. This methodology involves the capitalization of net operating income as an indication of market value for a specific property. Capitalization rates, both overall (going-in) cap rates for the direct capitalization method and terminal cap rates for discounted cash flow analyses, can be derived from the market. Sales of improved properties from which actual income and expense data are obtained provide a very

good indication of what a specific market participant is requiring from an investment at a specific point in time. In addition, overall capitalization rates can be derived from the built-up method (band-of-investment). This method relates to satisfying the market return requirements of both the debt and equity positions of a real estate investment. This information is obtained from real estate and financial publications.

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

Sales Comparison (Market) Approach

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

Final Valuation Schedules

Based on the market data analysis and review discussed previously in the cost, income and sales approaches, the cost and income models are calibrated and finalized. The calibration results are keyed to the schedules and models on the mainframe CAMA system for utilization on all commercial properties in the district. The schedules and models are summarized in the Appraisal Manual. This manual is provided to appraisers and is made available to the public in an easy to understand format.

Statistical and Capitalization Analysis

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

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

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

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

INDIVIDUAL VALUE REVIEW PROCEDURES

Field Review

The date of last inspection, extent of that inspection, and the Hill CAD appraiser responsible, are listed in the CAMA system. If a property owner disputes the District's records concerning this data in a protest hearing, CAMA may be altered based on the credibility of the evidence provided. Typically, a new field check is then requested to verify this evidence 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, that property is added to a work file.

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

Office Review

Office reviews are completed on properties not subject to field inspections and are performed in compliance with the guidelines contained in the Appraisal Manual. The Appraisal Manual outlines the application of the three approaches to value.

Office reviews are typically limited by the data presented in final value reports. These reports summarize the pertinent data of each property as well as comparing the previous values (two year value history) to the proposed value conclusions of the various approaches to value. These reports show proposed percentage value changes, income model attributes or overrides, economic factor (cost overrides) and special factors affecting the property valuation such as new construction status, prior year litigation and a three years sales history (USPAP property history requirement for non-residential property). The appraiser may review methodology for appropriateness to ascertain that it was completed in accordance with USPAP or more stringent statutory and district policies. This review is performed after preliminary ratio statistics have been 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. Each appraiser's review is limited to properties in their area of responsibility by property type (improved) or geographic area (commercial vacant land).

Once the appraiser is satisfied with the level and uniformity of value for each commercial property, the estimates of value are ready for notice and hearings. Audit reports are reviewed for quality assurance. Parcel's requiring additional review are put on rework lists. Although the value estimates are determined in a computerized mass appraisal environment, audit reports and

rework lists enable an individual parcel review of value anomalies before the estimate of value is released for the Notice & Hearings.

PERFORMANCE TESTS

The primary tool used to measure mass appraisal performance is the ratio study. A ratio study compares appraised values to market values. In a ratio study, market values (value in exchange) are typically represented by sales prices (i.e., a sales ratio study). Independent, expert appraisals may also be used to represent market values in a ratio study (i.e., an appraisal ratio study). If there are not enough sales to provide necessary representativeness, independent appraisals can be used as indicators for market value. This can be particularly useful for commercial, warehouse 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.

Hill CAD has adopted the policies of the IAAO STANDARD ON RATIO STUDIES, regarding its ratio study standards and practices. Ratio studies generally have six basic steps: (1) determination of the purpose and objectives, (2) data collection and preparation, (3) comparing appraisal and market data, (4) stratification, (5) statistical analysis, and (6) evaluation and application of the results.

Sales Ratio Studies

Sales ratio studies are an integral part of establishing equitable and accurate market value estimates, and ultimately, assessments for this taxing jurisdiction. 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 derive appraised values during valuation or reappraisal cycles. However, these studies cannot be used to judge the accuracy of an individual property appraised value. The Hill County Appraisal Review Board may make individual value adjustments based on unequal appraisal (ratio) protest evidence submitted on a case-by-case basis during the hearing process.

Overall sales ratios are generated by use type semi-annually (or more often in specific areas) to allow appraisers to review general market trends in their area of responsibility. The appraisers utilize desktop applications such as EXCEL programs to evaluate subsets of data by economic area or a specific and unique data item. On the desktop, this may be customized and performed by building class and age basis. In many cases, field checks may be conducted to ensure the ratios produced are accurate and the appraised values utilized are based on accurate property

data characteristics. These ratio studies aid the appraisers by providing an indication of market activity by economic area or changing market conditions (appreciation or depreciation).

Comparative Appraisal Analysis

The appraiser performs 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 then average unit prices of sales and average unit appraised values of the same parcels and the comparison of average value changes of sold and unsold properties. These studies are conducted on substrata such as building class and on properties located within various economic areas. In this way, overall appraisal performance is evaluated geographically, by specific property type to discern whether sold parcels have been selectively appraised. When sold parcels and unsold parcels are appraised equally, the average unit values are similar. These horizontal equity studies are performed prior to annual Notice & Hearings.

Industrial Valuation Process

INTRODUCTION

Appraisal Responsibility

The appraisers and/or contract appraisers of the Hill County Appraisal District are responsible for developing fair, uniform market values for improved industrial properties and industrial vacant land. The appraiser is also responsible for the valuation of all tangible general industrial personal property in Hill County. There are over 600 parcels of industrial real and personal property in Hill County.

Appraisal Resources

- **Personnel** – Hill CAD contracts with the Thomas Y. Pickett (TYPCO) appraisal firm to value properties for which the district does not have the available personnel or resources. See Thomas Y. Pickett's Mass Appraisal Report page 41.

- **Data** - The appraisers and contract appraisal staff inspect their assigned properties to obtain information about buildings, site improvements, process and shop equipment, and various items of personal property. In addition, appraisal personnel use information provided by property owners concerning the cost to purchase, install, and construct items of real and personal property. The individual characteristics of the property being appraised are the primary factors that drive the appraised value.

VALUATION APPROACH (MODEL SPECIFICATION)

Area Analysis

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

Neighborhood Analysis

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

Highest and Best Use Analysis

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

Market Analysis

Market analysis is the basis for finalizing value estimates on properties for which the appraiser has responsibility. Even though many industrial properties are unique in nature, the market for this type property is analyzed to see how the values of similar (or as similar as possible) properties are affected by market forces. Industrial properties, such as machine shops, have many similar facilities that can be compared to the subject property in terms of type and size of equipment, type of property fabricated or serviced at the subject facility, and other factors. Those similarities help the appraiser estimate the value of the subject property. However, some facilities, such as plants, may be so unique in nature that the appraiser must use the closest available plant in terms of output quantity, type of product manufactured, and other factors to estimate the value of the subject property. Many industrial properties use the same type of building and, depending on the type of business, may use the same type of manufacturing or service equipment. However, the manner in which the entire business operation is put together makes that particular facility unique. The district uses information from similar businesses to examine the real and personal property values at a particular business, but the individual characteristics of the business being reviewed determine the value estimation. Many of the buildings encountered at industrial facilities are generic in construction, such as pre-engineered metal buildings. The cost per square foot to construct these type structures can be used to estimate values at facilities that have similarly constructed buildings. However, the building as constructed will have differences that must be taken into account when estimating the final value of the property being reviewed.

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

DATA COLLECTION/VALIDATION

Data Collection Manuals

Please refer to the attachment at the end of this report that was prepared by TYPCO.

Sources of Data

The original real and personal property data used by Hill CAD was supplied by the taxing jurisdictions. Since that time, the district and contract appraisal personnel have updated that information based on field review. As new facilities are built, the appraisal personnel collect all the real and personal property data necessary to value the property initially and thereafter update the information when the property is visited again. The district receives building permit information from some of the cities. Other sources of data include field inspections, publications such as the Texas Register regarding waste control permits, various industry magazine articles, and Texas Industrial Expansion articles on new construction.

Data Collection Procedures

The district and contract appraisal personnel annually or periodically visit assigned sites. The frequency of the visit is determined by the nature of the business conducted at each facility.

The appraisers take with them the historical data on the buildings and site improvements and the previous listing of personal property at the facility being visited. Changes to the existing structures and personal property are noted and that information is used for value estimation purposes. If cost information for the real or personal property is supplied later, the field data can be compared to that information to judge the accuracy of the information.

The district and contract firm appraisal staff members are not assigned any one geographical area of the county. The nature of the business and whether or not the district has the staff resources available determines which properties are valued by contract firms and which properties are valued by the district's appraisal staff. New district appraisers are trained by accompanying appraisers who have performed field visit and appraisal functions for a number of years. Each district appraiser is responsible for the completeness and correctness of their valuation work, but a new appraiser is encouraged to seek the advice of and review by experienced appraisal staff if that person is not sure of their value estimation results.

VALUATION ANALYSIS (MODEL CALIBRATION)

Final Valuation Schedules

The schedules used by the district are those integrated into commercial building valuation systems such as Marshall & Swift and other cost estimators for real property improvements. The real property valuation schedules are updated periodically through the use of update disks, paper copies and online downloads.

Hill CAD develops schedules based on indexed Marshall & Swift depreciation factors for use in the valuation of all business and industrial personal property. These schedules are updated annually by Hill CAD appraisal staff. The contract appraisal firms use similar schedules and methodology based on their experience in valuing real and personal property.

INDIVIDUAL VALUE REVIEW PROCEDURES

Field Review

The district's personnel periodically review their assigned real and personal property accounts where there is evidence of change at a particular facility. When there is not, these accounts are revisited on a two-year cycle. Certain properties are reviewed annually because past experience shows that changes are occurring continually in the real or personal property at that facility. Properties assigned to contract appraisal firms are reviewed annually because changes also occur regularly at these facilities.

The results of prior year hearings and indication of building permits being issued are another source of required field visits. Many times during hearings, issues are presented that cause a value adjustment. Those issues must be field checked to see if these influences will be on-going and warrant permanent value adjustment or are transitory and permanent adjustment is not warranted. This information needs to be recorded so the appraiser will be better able to estimate the property value. Building permits must be field checked to see what effect these have on existing structures. Any new construction is noted and the information necessary to value the structure is recorded. Additionally, any structure demolition is noted so the improvement value can be adjusted accordingly.

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

Office Review

All properties not subjected to field review are reviewed in the office by the district appraiser assigned to particular real or personal properties. The office review relies on historical information in the real or personal property file as the basis for deciding on the estimated value to be placed on the property for the current tax year.

When valuing real property, the characteristics of the property being reviewed are the driving force in value estimation. Experience in valuing other real property, such as a similar building elsewhere, helps the appraiser decide the estimated value to be placed on the subject improvements.

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

PERFORMANCE TESTS

Sales Ratio Studies

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

Comparative Appraisal Analysis

This type of analysis is usually not done on industrial properties due to the unique nature of the property and also because of time and budget constraints regarding available appraisal staff. Only in an instance where a jurisdiction would file a jurisdiction challenge with the Appraisal Review Board would the district perform such an analysis.

If a jurisdiction challenge is received by Hill CAD on an industrial category of properties, the appraisers assigned to those accounts will research the appraisal roll to see what other similar properties exist. The real property values can be compared on an average value per square foot of structure basis, but the differences from one facility to another must be carefully compared because it is unlikely that two different facilities are going to build like improvements and use them in similar ways. In like manner, the personal property values can be compared per category, such as furniture and fixtures, machinery

and equipment, etc., but the same comparison of the type of and use of the property must be examined to ensure property comparison.

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 Multi-Location Assets. There are over 2,000 business personal property accounts in Hill County.

Appraisal Resources

- **Personnel** - The personal property staff consists of 1 appraiser and outsources accounts to TYPCO. The Chief Appraiser offers assistance with Business Personal Property.

- **Data** - A common set of data characteristics for each personal property account in Hill County is collected in the field and data entered to the district's computer. The property characteristic data drives the computer-assisted personal property appraisal system. The field data is collected by the personal property appraiser.

VALUATION APPROACH (Model Specification)

SIC Code Analysis

Four-digit numeric codes, called Standard Industrial Classification (SIC) codes that were developed by the federal government might be used. These classifications are used by Hill CAD as a way to classify personal property by business type. Hill CAD has further stratified these codes by adding alpha suffixes to SIC codes in order to group business types that have similar personal property characteristics.

SIC code identification and delineation is the cornerstone of the personal property valuation system at the district. All of the personal property analysis work done in association with the personal property valuation process is SIC code specific. There are in excess of 20 Hill CAD personal property SIC codes. SIC codes are delineated based on observable aspects of homogeneity. SIC code delineation is periodically reviewed to determine if further SIC code delineation is warranted.

Highest and Best Use Analysis

The highest and best use of property is the reasonable and probable use that supports the highest present value as of the date of the appraisal. The highest and best use must be physically

possible, legal, financially feasible, and productive to its maximum. The highest and best use of personal property is normally its current use.

DATA COLLECTION/VALIDATION

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. The most recent revision of the personal property data collection procedures was this year.

Sources of Data

Business Personal Property

The district's property characteristic data was originally received from the Hill County, and various school district records in 1980, and where absent; were collected through a massive field data collection effort coordinated by the district over a period of time. When revaluation activities permit, district appraisers collect new data via an annual field drive-out. This project results in the discovery of new businesses not revealed through other sources. Various discovery publications such as the Court Reporter and state sales tax listings are also used to discover personal property. Tax assessors, city and local newspapers, and the public often provide the district information regarding new personal property and other useful facts related to property valuation.

Vehicles

An outside vendor provides Hill CAD with a listing of vehicles within Hill County. The vendor develops this listing from the Texas Department of Transportation (DOT) Title and Registration Division records. Other sources of data include property owner renditions and field inspections.

Leased and Multi-Location Assets

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

VALUATION AND STATISTICAL ANALYSIS (model calibration)

Cost Schedules

Cost schedules are developed by SIC code by district appraisers. The cost schedules are developed by analyzing cost data from property owner renditions, hearings, state schedules, and published cost guides. 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

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

Depreciation Schedule and Trending Factors:

Business Personal Property

Hill CAD's primary approach to the valuation of business personal property is the cost approach. The replacement cost new (RCN) is either developed from property owner reported historical cost or from Hill CAD developed valuation models. The trending factors used by Hill CAD to develop RCN are based on published valuation guides. The percent good depreciation factors used by Hill CAD are also based on published valuation guides. The index factors and percent good depreciation factors are used to develop present value factors (PVF), by year of acquisition, as follows:

PVF = INDEX FACTOR x 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:

MARKET VALUE ESTIMATE = PVF x HISTORICAL COST

This mass appraisal PVF schedule is used to ensure that estimated values are uniform and consistent within the market. Hill CAD currently uses the depreciation schedule developed by the State Comptroller's office for Business Personal Property.

Computer Assisted Personal Property Appraisal (CAPPA)

The CAPPA valuation process has two main objectives: 1) Analyze and adjust 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 by the State Comptroller's office.

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 built and adjusted using internally developed software. 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 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.

<u>Vehicles</u>

Value estimates for vehicles are provided by an outside vendor and are based on NADA published book values. Vehicles that are not valued by the vendor are valued by an appraiser using PVF schedules or published guides and via the internet.

<u>Leased and Multi-Location Assets</u>

Leased and multi-location assets are valued using the PVF schedules mentioned above. If the asset to be valued in this category is a vehicle, then NADA published book values are used. Assets that are not valued by the vendor are valued by an appraiser using PVF schedules or published guides.

INDIVIDUAL VALUE REVIEW PROCEDURES

Office Review

<u>Business Personal Property</u>

All personal property accounts are field reviewed annually.

<u>Vehicles</u>

A vehicle master file is received from an outside vendor and vehicles in the district's system from the prior year are programmatically matched to current DOT records. The vehicles remaining after

the matching process are sorted by owner name and the owners are then prioritized by the number of vehicles owned. These vehicles are then matched to existing accounts and new accounts are created as needed. Vehicles that are not valued by the vendor are valued by an appraiser using PVF schedules or published guides and via the internet.

<u>Leased and Multi-Location Assets</u>

Leasing and multi-location accounts that have a high volume of vehicles or other assets are loaded programmatically if reported by the property owner. Accounts that render by hard copy are data entered by the appraiser.

After matching and data entry, reports are generated and reviewed by an appraiser. Accounts are noticed, with corrections being made during correspondence with property owners.

PERFORMANCE TESTS

Ratio Studies

Every other year the Property Tax Division of the State Comptroller's office conducts a property value study (PVS). The PVS is a ratio study used to gauge appraisal district performance. Results from the PVS play a part in school funding. The personal property PVS is a ratio study using state cost and depreciation schedules to develop comparative personal property values. These values are then compared to Hill CAD's personal property values and ratios are formed.

Internal Testing

Hill CAD can test new or revised cost and depreciation schedules by running the valuation program in a test mode prior to the valuation cycle. This can give appraisers a chance to make additional refinements to the schedules if necessary.

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LIMITING CONDITIONS

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

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

2. The property characteristic data upon which the appraisals are based is assumed to be correct. Exterior inspections of the property appraised were performed as staff resources and time allowed.

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

4. I have attached a list of staff providing significant mass appraisal assistance to the person signing this certification.

CERTIFICATION STATEMENT:

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

Mike McKibben
Chief Appraiser

PERSONS PROVIDING SIGNIFICANT
MASS APPRAISAL ASSISTANCE

*All assisting staff members below are Registered Professional Appraisers (RPA)

NAME	TITLE	TDLR NUMBER	TYPE OF ASSISTANCE
Michael McKibben	Chief Appraiser	61283	Supervising Data Collection and Value Review
Julia Scott	Assistant Chief Appraiser	69060	Assist in Supervising Data Collection and Value Review
Christy Ann Turner	Assistant Chief Appraiser	72561	Assist in Supervising Data
Julie Dawe		70316	Hill CAD Appraiser
Jonathon Orr		74867	Hill CAD Appraiser
April Aguirre		75032	Hill CAD Appraiser
Jon Hlavenka		72728	Hill CAD Appraiser
Heather Dyer		76598	Hill CAD Appraiser
Jon Williams		71338	Hill CAD GIS Specialist

APPRAISED BY THOMAS Y PICKETT

OIL AND GAS RESERVES

2024

Executive Summary

- Thomas Y. Pickett & Co., Inc. ("Thomas Y. Pickett" or "Pickett") annually reappraises all producing mineral leases within the CAD's boundaries using a Discounted Cash Flow ("DCF") methodology;
- Thomas Y. Pickett uses the Comptroller's <u>Manual for Discounting Oil and Gas Income</u> pursuant to Tax Code Section 23.175;
- Thomas Y. Pickett determines oil and gas prices in accordance with Tax Code Section 23.175;
- Thomas Y. Pickett's written procedures for identifying new properties are included herein.

Overview

Oil and gas reserves consists of interests in subsurface mineral rights. Thomas Y. Pickett & Co. is contracted to reappraise this type of property annually for the appraisal district. The completed appraisals are all retrospective in nature. The purpose of the appraisals is to estimate market value as of January 1 in accordance with the definition of market value established in the Texas Property Tax Code (Sec. 1.04). "Market value" means the price at which a property would transfer for cash or its equivalent under prevailing market conditions if:

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

The appraisal results will be used as the tax base upon which a property tax will be levied. Each mineral interest is listed on the appraisal roll separately from other interests in the mineral in place in conformance with the Texas Property tax Code Sec. 25.12. A listing of the oil and gas properties appraised by Pickett for the appraisal district shall be made available at the appraisal district office. Subsurface mineral rights are not susceptible to physical inspection. This condition creates the

need to invoke the Departure Provision as required by the Standards Rule 6-7 (f) comment of the Uniform Standards of Professional Practice. However, the inability to physically examine the property does not affect the appraisal process or the quality of the results. The appraisal district is aware of this limiting condition and agrees that it is appropriate.

Documents relevant to an understanding of these appraisals include the confidential rendition, if any, filed with the appraisal district by the owner or agent of the property; the Texas Comptroller's Manual for Discounting Oil and Gas Income; other reports described in the Texas Property Tax Code; and other confidential data supplied by the owner or agent; the General Appraisal Manual adopted by the Texas Comptroller of Public Accounts; Property Assessment Valuation published by the International Association of Assessing Officers and adopted by the Texas Comptroller of Public Accounts and the Texas Property Tax Code.

Pickett's oil and gas appraisal staff includes licensed engineers as well as experienced appraisers who are knowledgeable in all three approaches to value. Oil and gas appraisal staff stays abreast of current trends affecting oil and gas properties through review of published materials, attendance at conferences, course work and continuing education. All oil and gas appraisers are registered with the Texas Department of Licensing and Regulation, (formerly, the Texas Board of Tax Professional Examiners).

Assumptions and Limiting Conditions

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

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

Property Discover and Data Collection Process

Mineral properties are identified and appraised based on their Railroad Commission Identification Number (RRCID). Upon completion of a new well, a Completion Report must be submitted to the Railroad Commission (RRC). The RRC then issues a RRCID. Production from that property is reported by RRCID. Periodically, wells are completed and start producing prior to being issued a RRCID. The production from these wells still must be reported to the RRC and are usually reported by Drilling Permit Number (DP). Since mineral properties are appraised using a Discounted Cash Flow analysis, production data is required to do the analysis. The RRC is the primary source of that data.

Procedure:

1. At the beginning of the year, the RRC database is searched for new wells that started producing prior to January 1 of the appraisal year. These wells are identified by RRCID or Drilling Permit (DP) number and added to the mineral appraisal database for the county. A well is considered to have value as of January 1 if it has reported production prior to that date, has filed a completion report showing completion prior to that date, or was perforated into a producing formation which showed the presence of oil or gas prior to January 1.

2. Completion reports and plats are retrieved from the RRC to identify the location of the producing wells. These locations are cross-referenced with jurisdictional maps to establish situs.

3. Division of Interest (DOI) statements are requested from the operator of the well to establish working and royalty interests.

4. Additional reviews of the RRC database are done periodically during the year to identify any wells that may have been added to the RRC database after the first of the year, but were completed prior to January 1 of the appraisal year. New producing wells identified after the appraisal period are supplemented, going back up to five years.

Other appraisal data on the subject properties are collected from required regulatory reports from the Texas Railroad Commission and the Texas Comptroller of Public Accounts and by the property owner. Submitted data may be on a rendition form or in other modes that require confidentiality. Subject property data are verified through previously existing records and through published reports. Additional data are obtained and verified through published sources, regulatory reports and through analysis of comparable properties, if any. Due to the unique nature of many oil and gas properties there is no standard data collection form or manual.

Valuation Approach and Analysis

The three generally accepted approaches used in determining the Market Value of assets are the cost, income, and market approaches. The following is a brief description of the three general approaches to value.

Cost Approach
The cost approach considers the replacement cost of an asset as an indicator of value. The cost approach is based on the assumption that a prudent investor would pay no more for an asset than the amount for which he could replace or recreate the asset. The cost approach is sometimes performed by estimating the replacement cost of an asset functionally similar to the subject. Often, historical cost data can be used to indicate the current cost of reproduction or replacement. Adjustments are made for physical deterioration and the functional and economic obsolescence of the appraised asset.

Income Approach
The income approach measures the present worth of anticipated future net cash flows generated by the subject assets. The net cash flows are forecast for an appropriate period, or capitalized in the case of a single period model, and then discounted to present value using an appropriate discount rate.

Market Approach
The market approach is performed by observing the price at assets comparable to the subject asset are bought and sold. Adjustments are made to the data to account for capacity differences and other relevant differences between the subject asset and the comparable assets.

Depending on the facts and circumstances of a particular appraisal, applying the three approaches independently of one another can yield conclusions that are substantially different.

As the appraisal is performed, the strengths of the individual approaches are considered and the influence of each approach in the appraisal process is weighed according to its likely accuracy.

All oil and gas interest values are arrived at through an appraisal of the whole property. Each fractional interest is then assigned a value on the basis of its relative share of expenses, income

and the value of the operating equipment. Multiple producing zones in the same well may be treated as separate properties.

Oil and gas properties are principally appraised through the income approach to value. Specifically, the discounted cash flow (DCF) technique is used almost exclusively. The almost exclusive reliance on income approach methods, adjusted for risk and market conditions, is typical of the oil and gas industry in dealings between buyers and sellers as well as in single-property appraisals. A mineral property's intrinsic value is derived from its ability to generate income by producing oil and/or gas reserves.

Income approach calibration involves the selection of the cost of capital or discount rate appropriate to the type of property being appraised as well as adjusting the projected revenue stream to reflect the individual characteristics of the subject property. The DCF model is also calibrated through the use of lease operating expenses that reflect the individual characteristics of the subject property.

A jurisdictional exception to the DCF model, as this process is described in the Statement on Appraisal Standards No. 2 of the Uniform Standards of Professional Appraisal Practice, must be taken. Section 23.175 (a) of the Texas Property Code specifies that the price of oil and gas used for the first year of the DCF analysis must be the monthly average price of the oil and gas received from the interest for the preceding year multiplied by a market condition factor as promulgated by the Texas Comptroller's office. Furthermore, the prices used for succeeding years are based upon escalation factors also stipulated by the Texas Comptroller's office.

Highest and best use analysis of the oil and gas reserves is based on the likelihood of the continued use of the reserves in their current use. An appraiser's identification of a property's highest and best use is always a statement of opinion, never a statement of fact.

Review and Testing

Review of appraisals is performed through a comparison of income indicators and compliance with Section 23.175 of the Texas Property Tax Code. A review of property values with respect to year-to-year changes and with respect to industry-accepted income indicators is conducted annually. The periodic reassignment of properties among appraisers or the review of appraisals by an experienced appraiser also contributes to the review process.

Appraisal-to-sales ratios are the preferred method for measuring performance, however sales are very infrequent and often the sales conditions are not made public for the sales that do occur.

Furthermore, market transactions normally occur for multiple sites and include real and personal property, tangible and intangible, making analysis difficult and subjective. Performance is also measured through comparison with valid single-property appraisals submitted for staff review. Finally, Pickett's mineral appraisal methods and procedures are subject to review by the Property Tax Assistance Division of the Texas Comptroller's office. The Comptroller's review, as well as comparisons with single-property appraisals, indicates the validity of the models and the calibration techniques employed.

<center>**APPRAISED BY THOMAS Y PICKETT**

INDUSTRIAL PROPERTY

2024</center>

Overview

Industrial property consists of processing facilities and related personal property. Thomas Y. Pickett & Co., Inc. ("Thomas Y. Pickett" or "Pickett") is contracted to reappraise this type of property annually for the appraisal district. The completed appraisals are all retrospective in nature. The purpose of the appraisals is to estimate market value as of January 1 in accordance with the definition of market value established in the Texas Property Tax Code (Sec. 1.04). "Market value" means the price at which a property would transfer for cash or its equivalent under prevailing market conditions if:

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

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

The appraisal results will be used as the tax base upon which a property tax will be levied. The properties are appraised in fee simple in conformance with the Texas Property Tax Code Sec. 25.06. This is a jurisdictional exception to the Standards Rule 6-5 (c) Comment of the Uniform Standards of Professional Appraisal Practice. A listing of the industrial properties appraised by Pickett for the appraisal district is available at the appraisal district office. Industrial properties are re-appraised annually. Properties are inspected annually where necessary and at least bi-annually.

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

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

Assumptions and Limiting Conditions

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

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

Discovery Process and Procedures

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

Valuation Approach and Analysis

The three generally accepted approaches used in determining the Market Value of assets are the cost, income, and market approaches. The following is a brief description of the three general approaches to value.

Cost Approach
The cost approach considers the replacement cost of an asset as an indicator of value. The cost approach is based on the assumption that a prudent investor would pay no more for an asset than the amount for which he could replace or recreate the asset. The cost approach is sometimes performed by estimating the replacement cost of an asset functionally similar to the subject. Often, historical cost data can be used to indicate the current cost of reproduction or replacement. Adjustments are made for physical deterioration and the functional and economic obsolescence of the appraised asset.

Income Approach
The income approach measures the present worth of anticipated future net cash flows generated by the subject assets. The net cash flows are forecast for an appropriate period, or capitalized in the case of a single period model, and then discounted to present value using an appropriate discount rate.

Market Approach
The market approach is performed by observing the price at assets comparable to the subject asset are bought and sold. Adjustments are made to the data to account for capacity differences and other relevant differences between the subject asset and the comparable assets.

Depending on the facts and circumstances of a particular appraisal, applying the three approaches independently of one another can yield conclusions that are substantially different. As the appraisal is performed, the strengths of the individual approaches are considered and the influence of each approach in the appraisal process is weighed according to its likely accuracy.

Industrial properties are generally appraised using replacement/reproduction cost new less depreciation models. Replacement costs are estimated from published sources, other publicly available information and comparable properties. Reproduction costs are based on actual

investment in the subject or comparable properties adjusted for typical changes in cost over time. Depreciation is calculated on the age/life method using typical economic lives and depreciation rates based on published sources, market evidence and the experience of knowledgeable appraisers. Adjustments for functional and economic obsolescence may be made if utilization and income data for the subject property justify such. Income Approach models (direct capitalization and discounted cash flow) are also used when economic and/or subject property income information is available. Capitalization and discount rates are based on published capital

costs for the industry of the subject property. A market data model based on typical selling prices per unit of capacity is also used when appropriate market sales information is available.

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

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

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

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

Review and Testing

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

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

APPRAISED BY THOMAS Y PICKETT

UTILITY, RAILROAD AND PIPELINE PROPERTIES

2024

<u>Overview</u>

Utility, railroad, and pipeline properties consists of operating property, excluding land, owned by utility, railroad and pipeline companies and related personal property and improvements. Thomas Y. Pickett & Co., Inc. ("Thomas Y. Pickett" or "Pickett") is contracted to reappraise this type of property annually for the appraisal district. The completed appraisals are all retrospective in nature. The purpose of the appraisals is to estimate market value as of January 1 in accordance with the definition of market value established in the Texas Property Tax Code (Sec. 1.04). "Market value" means the price at which a property would transfer for cash or its equivalent under prevailing market conditions if:

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

The effective date of the appraisals is January 1 of the year for which this report is submitted.

The appraisal results will be used as the tax base upon which a property tax will be levied. The properties are appraised in fee simple in conformance with the Texas Property Tax Code Sec. 25.06. This is a jurisdictional exception to the Standards Rule 6-5 (c) Comment of the Uniform Standards of Professional Appraisal Practice 2004. A listing of the utility, railroad and pipeline properties appraised by Pickett for the appraisal district is available at the appraisal district office. All properties are reappraised annually. Such utility, railroad and pipeline properties that are susceptible to inspection (e.g. compressor stations, pump stations, buildings and power plants) are normally re-inspected at least every three years.

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

<u>Assumptions and Limiting Conditions</u>

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

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

Discovery Procedures and Data Collection

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

Valuation Approach and Analysis

The three generally accepted approaches used in determining the Market Value of assets are the cost, income, and market approaches. The following is a brief description of the three general approaches to value.

Cost Approach
The cost approach considers the replacement cost of an asset as an indicator of value. The cost approach is based on the assumption that a prudent investor would pay no more for an asset than the amount for which he could replace or recreate the asset. The cost approach is sometimes performed by estimating the replacement cost of an asset functionally similar to the subject. Often, historical cost data can be used to indicate the current cost of reproduction or replacement. Adjustments are made for physical deterioration and the functional and economic obsolescence of the appraised asset.

Income Approach
The income approach measures the present worth of anticipated future net cash flows generated by the subject assets. The net cash flows are forecast for an appropriate period, or capitalized in the case of a single period model, and then discounted to present value using an appropriate discount rate.

Market Approach
The market approach is performed by observing the price at assets comparable to the subject asset are bought and sold. Adjustments are made to the data to account for capacity differences and other relevant differences between the subject asset and the comparable assets.

Depending on the facts and circumstances of a particular appraisal, applying the three approaches independently of one another can yield conclusions that are substantially different. As the appraisal is performed, the strengths of the individual approaches are considered and the influence of each approach in the appraisal process is weighed according to its likely accuracy.

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

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

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

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

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

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

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

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

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

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

Review and Testing

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

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