

**THE CENTRAL APPRAISAL DISTRICT
OF
TAYLOR COUNTY**



2020

MASS APPRAISAL REPORT

MISSION STATEMENT

The Central Appraisal District of Taylor County (hereinafter "the District") mission statement is to "provide professional, economical, accurate, effective, ethical, and courteous administration of the property tax system in Taylor County."

APPRAISAL DISTRICT DUTIES

In 1980, an appraisal district was established in each Texas County. The District is responsible for appraising property for ad valorem (according to value) tax purposes of each taxing unit that imposes ad valorem taxes on property within Taylor County. An appraisal district is a political subdivision of the State of Texas. Currently, the Property Tax Assistance Division (hereinafter, "PTAD") of the Texas Comptroller's office audits each appraisal district in the state. The PTAD, using annual on-site inspections, verifies that the appraisal district complies with a uniform standard of appraisal methodology, which supports appraisal accuracy. The appraisal district is responsible for estimating local property tax appraisals at market value and exemption administration for each taxing unit that imposes ad valorem taxes on property in Taylor County.

TAYLOR COUNTY GENERAL INFORMATION

Taylor County is a county in west central Texas with a population of 138,034. Its county seat is Abilene, Texas, which is the largest city in the county with a population of 122,084 and is located approximately 151 miles west of Fort Worth. It covers a total area of 919 square miles, of which 916 square miles is land area and 3.8 square miles of water area. Taylor County is traversed from east to west by

the Callahan Divide, a line of steep hills separating the Brazos River and the Colorado River watersheds. Lake Abilene, Kirby Lake, Lytle Lake, and Fort Phantom Hill Reservoir provide water and recreation. The county is semi-arid with an average annual rainfall of 23.78 inches. Temperatures range from an average low of 31.8 degrees in January to an average high of 94.8 degrees in July. Natural resources include oil and gas, stone, clays, sand, and gravel. Transportation needs are met by U.S. Highway 83/84 and 277, Interstate 20, and State Highway 36. Abilene Municipal Airport services the air travel needs of local citizens and visitors to the area.

Taylor County Leading Employers:

- Dyess Air Force Base – 8,400
- Hendrick Health System – 3,200
- Abilene Independent School District – 2,450
- Abilene Christian University – 1,900
- City of Abilene- 1,300
- Abilene State Supported Living Center – 1,225
- Texas Department of Criminal Justice – 1,190
- Blue Cross Blue Shield of Texas – 1,090
- Some other major employers include: Taylor County, Abilene Regional Medical Center, and First Financial Bank.

GENERAL ASSUMPTIONS AND LIMITING CONDITIONS

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

The appraisals were prepared exclusively for ad valorem tax purposes. The property characteristic data upon which the appraisals are based is assumed to be correct.

Validation of sales transactions occurred through questionnaires to buyer and seller, telephone survey, and other local credible sources such as lenders, brokers and appraisers. As such, these transactions were considered reliable.

- No responsibility is assumed for the legal description or for matters including legal or title considerations. Title to any property is assumed to be good and marketable, unless otherwise stated.
- All property is appraised as if free and clear of any and all liens or encumbrances, unless otherwise stated. All taxes are assumed to be current.
- All property is appraised as though under responsible, adequately capitalized ownership and competent property management.
- All engineering is assumed to be correct. Any plot plans and /or illustrative material contained with the appraisal records are included only to assist in visualizing the property.
- It is assumed that there is full compliance with all applicable federal, state and local environmental regulations and laws unless noncompliance is stated, defined and considered in this mass appraisal report.
- It is assumed that all applicable zoning and use regulations and restrictions have been complied with unless a nonconformity has been stated, defined and considered in this mass appraisal report.
- It is assumed that all required licenses, certificates of occupancy, consents or other legislative or administrative authority from any local, state or national government or private entity or organization have been or can be obtained or

renewed for any use on which the value estimate contained in this report is based.

- It is assumed that the utilization of the land and improvements of the properties described are within the boundaries or property lines, and that there are no encroachments or trespasses unless noted on the appraisal record.

Unless otherwise stated in this report, the District is not aware of the existence of hazardous substances or other environmental conditions. The value estimates are predicated on the assumption that there is no such condition on or in the property or in such proximity thereto that it would cause a loss in value. No responsibility is assumed for any such conditions, or for any expertise or engineering knowledge required to discover them.

Texas is a non-disclosure state in which buyers and sellers are not required to report sales transactions to the ad valorem property appraiser. The District uses great diligence in attempting to acquire sales data, but is limited in its ability to gather sales data by the current legislative scheme.

EFFECTIVE DATE OF APPRAISAL AND DATE OF THE REPORT

Except for certain inventories, which the property owner has elected a valuation date of September 1; all appraisals will have an evaluation date of January 1. The date of this report is June 2, 2020.

DETERMINATION OF HIGHEST AND BEST USE FOR REAL PROPERTY

The district's market value appraisals are performed pursuant to Article VII, Sec. 1, Texas Constitution, which provides that property must be taxed in proportion to its value as determined by law, Section 23.01. The Texas Tax Code (hereinafter "the Tax Code") outlines the criteria necessary to support Section 23.01 and implements the provision as follows:

Sec. 23.01. Appraisals Generally

- a) Except as otherwise provided by this chapter, all taxable property is appraised at its market value as January 1.
- b) The market value of property shall be determined by the application of generally accepted appraisal methods and techniques. If the appraisal district determines the appraised value of a property using mass appraisal standards, the mass appraisal standards must comply with the Uniform Standards of Professional appraisal Practice. The same or similar appraisal methods and techniques shall be used in appraising the same or similar kinds of property. However, each property shall be appraised based upon the individual characteristics that affect the property's market value, and all available evidence that is specific to the value of the property shall be considered in determining the property's market value.
- c) Notwithstanding Section 1.04(7)(C), in determining the market value of a residence homestead, the chief appraiser may not exclude from consideration the value of other residential property that is in the same neighborhood as the residence homestead being appraised and would otherwise be considered in appraising the residence homestead because the other residential property:
 - (1) was sold at a foreclosure sale conducted in any of the three years preceding the tax year in which the residence homestead is being appraised and was comparable at the time of sale based on relevant characteristics with other residence homesteads in the same neighborhood; or
 - (2) has a market value that has declined because of a declining economy.

- d) The market value of a residence homestead shall be determined solely based on the property's value as a residence homestead, regardless of whether the residential use by the owner is the highest and best use of the property.
- e) Notwithstanding any provision of this subchapter to the contrary, if the appraised value of a property in a tax year is lowered under Subtitle F, the appraised value of the property as finally determined under that subtitle is considered to be the appraised value of the property for that tax year. In the following tax year, the chief appraiser may not increase the appraised value of the property unless the increase by the chief appraiser is reasonably supported by substantial evidence when all the reliable and probative evidence in the record is considered. If the appraised value is finally determined in a protest under Section 41.41 (a)(2) or an appeal under Section 42.26, the chief appraiser may satisfy the requirement to reasonably support by substantial evidence an increase in the appraised value of the property in the following tax year by presenting evidence showing that the inequality in the appraisal of the property has been corrected with regard to the properties that were considered in determining the value of the subject property. The burden of proof is on the chief appraiser to support an increase in the appraised value of the property under the circumstances described by this subsection.

"Highest and best use" is the reasonably probable and legal use of vacant land or an improved property, which is physically possible, appropriately supported, financially feasible, and results in the highest value. The four criteria the highest and best use must meet are legal permissibility, physical possibility, financial feasibility, and maximum profitability. Except for residence homesteads, this definition of highest and best use still applies to appraisals conducted under the Tax Code.

PROPERTIES APPRAISED

The mass appraisal report is based on all taxable real and personal property known to the district as of the date of this report, except for certain properties still under protest, which valuation was not complete as of the date of this report. Value exceptions or late protests, by law, will be supplemented and finalized to each jurisdiction after the equalization board certifies the 2018 values. The property rights appraised were fee simple interests, except for leasehold interests in property exempt to the holder of the property's title. The latter are appraised under a statutory formula described in Sec. 25.07, the Tax Code. The description and identification of each property appraised is included in the appraisal records submitted to the Taylor County Appraisal Review Board (ARB) each year.

Supporting information used for this report, such as individual property records, sales ratio reports, market studies, modeling documentation, appraisal manuals and procedures, regulations and statutes is voluminous and is generally kept in electronic format; however, the information is available to the general public at the appraisal district or its website, except where protected by statute by confidentiality regulations.

WEBSITE HOMEPAGE

<http://www.taylor-cad.org/>

ORGANIZATION

<http://www.taylor-cad.org/index.php/Organization>

TAX CALENDAR IMPORTANT DATES AND TAX CODE DEADLINES

<http://www.window.state.tx.us/taxinfo/proptax/taxcalendar/>

Taxing entities within Taylor County and other current and historical tax information may be viewed on the website at:

http://www.taylor-cad.org/index.php/Tax_Information

GENERAL INTRODUCTION

Scope of Responsibility

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

The Taylor County Central Appraisal District (CAD) is a political subdivision of the State of Texas created January 1, 1980. The provisions of the Texas Tax Code govern the legal, statutory, and administrative requirements of the appraisal district. A Board of Directors, appointed by the taxing units within the boundaries of the Taylor County appraisal district, 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 19 jurisdictions or taxing units in the county. Each taxing unit sets its own tax rate to generate revenue to pay for police and fire protection, public schools, road and street maintenance, courts, water and sewer systems, and other public services. Property appraisals by the appraisal district allocate the yearly tax of each taxable property based on market value. The District also determines eligibility for various types of property tax exemptions such as those for homeowners, the elderly, disabled veterans, charitable or religious organizations.

Except as otherwise provided by the Tax Code, all taxable property in Taylor County is appraised at "market value" as of January 1. 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 can take advantage of the exigencies of the other.

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

The Texas 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 all real and personal property 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 by each appraisal firm requires adherence to similar professional standards.

Personnel Resources

The office of the Chief Appraiser is primarily responsible for overall planning, organizing, staffing, coordinating, and controlling of district operations. The

administration department's function is to plan, organize, direct and control the business support functions related to human resources, budget, finance, records management, purchasing, fixed assets, facilities and postal services. The appraisal department is responsible for the discovery, listing, and valuation of all real and personal property accounts. The property types appraised include commercial, residential, business personal, mineral, utilities, and industrial. The district's appraisers are subject to the provisions of the Property Taxation Professional Certification Act and must be duly registered with the Texas Department of Licensing and Regulation. Support functions including records maintenance, information and assistance to property owners, and the conducting of ARB hearings coordinated by personnel in support services.

The District staff consists of 29 employees with the following classifications:

- 5 - Official/Administrator (executive level administration)
- 8 - Professional (supervisory and management)
- 8 - Technicians (appraisers, statistical modeler and network support)
- 8 - Administrative Support (professional, customer service, clerical and other)

Data

The district is responsible for the discovery and value estimate of approximately 82,007 real and personal property accounts covering 919 square miles within Taylor County. Data collected includes property characteristics, ownership, and exemption information. Property characteristic data on new construction is updated and existing property data is maintained through an annual field review. Sales are routinely validated during a separate field review. General trends in employment, interest rates, new construction trends, cost, and market data are acquired through various sources, including internally generated questionnaires to buyer and sellers, university research centers, market data centers and vendors such as Marshall Valuation Service. Valuable current and historical information such as Area Market Data, Demographics and Population, Workforce Statistics, and Area Housing Activity and Affordability, is just some of the market data information

that is readily accessible and referred to frequently on the Texas A&M Real Estate Center's

Historical, as well as current national and local mortgage rates, are monitored on such sites as Bankrate.com for potential influences/impacts on market values.

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

Information Systems

The Systems Administrator and the computer mapping department manage and maintain the district's data processing facility, software applications, Internet website, and geographical information system. The district operates from a sequel server database with cooperative data sharing with the City of Abilene, County 911, and other county agencies. The main server hardware/system software is Dell Power Edge T610 Rack Chassis PACS Server, which also operates as server for the GIS Mapping, Power Edge R310 Rack Chassis job server, Power Edge R310 Rack Chassis job server, and Power Edge R310 Rack Chassis web server. The user base is networked through the mainframe using Windows 2008 Server. True Automation provides software services for appraisal and collections applications.

Appraisal District Boundaries

The appraisal district's boundaries align with Taylor County boundaries.

Independent Performance Test

According to Chapter 5 of the Texas Tax Code and Section 403.302 of the Texas Government Code, the State Comptroller's Property Tax Division (PTD) conducts property value study (PVS) of each Texas school district and each appraisal district every other year. As part of this study, the code requires the Comptroller to: use sales and recognized auditing and sampling techniques; review each appraisal district's appraisal methods, standards and procedures to determine whether the district used recognized standards and practices (MSP review); tests the validity of school district taxable values in each appraisal district and presumes the appraisal roll values are correct when values are valid; and, determines the level and uniformity of property tax appraisal in each appraisal district. The methodology used in the property value study includes stratified samples to improve sample representativeness and techniques or procedures of measuring uniformity. This study utilizes statistical analyses of sold properties (sale ratio studies) and appraisals of unsold properties (appraisal ratio studies) as a basis for assessment ratio reporting. For appraisal districts, the reported measures include median level of appraisal, coefficient of dispersion (COD), the percentage of properties within 10% of the median, the percentage of properties within 25% of the median, and price-related differential (PRD) for properties overall and by state category. There are 9 independent school districts that have property in Taylor CAD for which appraisal rolls are annually developed. The preliminary results of this study are released February 1 in the year following the year of appraisal. The results of this study are certified to the Education Commissioner of the Texas Education Agency (TEA) the following July of each year. This outside (third party) ratio study provides additional assistance to the CAD in determining areas of market activity or changing market conditions. The final results of the 2019 Taylor County Value Study can be viewed at: <https://comptroller.texas.gov/taxes/property-tax/pvs/2019p/221index.php>

METHODS AND ASSISTANCE

PROGRAM REPORT

Beginning in 2010, in addition to the Property Value Study as discussed in the previous section of this report, the Texas Comptroller of Public Accounts will conduct a biannual review of the governance of each appraisal district, taxpayer assistance provided, and the operating and appraisal standards, procedures, and methodology used by the district.

The last such final review was conducted by the Property Tax Division in 2018. The results of the review reported that the district's methods, standards, and procedures exceeded requirements in all categories tested. The complete Methods and Assistance Program Report can be found at:

<https://comptroller.texas.gov/taxes/property-tax/map/2018/index.php>

The Final results are on the following page, and the Taylor County CAD passed all requirements. The final report was made available on December 2018. The PTAD will conduct another MAPS review in 2020.

Texas Comptroller of Public Accounts

2018-19 Final Methods and Assistance Program Review

TAYLOR COUNTY CENTRAL APPRAISAL DISTRICT

This review is conducted in accordance with Tax Code Section 5.102(a) and related Comptroller Rule 9.301. The Comptroller is required by statute to review appraisal district governance, taxpayer assistance, operating procedures and appraisal standards.

Mandatory Requirements	PASS/FAIL
1. Does the appraisal district have up-to-date appraisal maps?	PASS
2. Is the implementation of the appraisal district's most recent reappraisal plan current?	PASS
3. Does the appraisal district comply with its written procedures for appraisal?	PASS
4. Are values reproducible using the appraisal district's written procedures and appraisal records?	PASS
Appraisal District Activities	RATING
Governance	MEETS ALL
Taxpayer Assistance	MEETS ALL
Operating Procedures	MEETS ALL
Appraisal Standards, Procedures and Methodology	MEETS ALL

Appraisal District Ratings:

Meets All – The total point score is 100

Meets – The total point score ranges from 90 to less than 100

Needs Some Improvement - The total point score ranges from 85 to less than 90

Needs Significant Improvement – The total point score ranges from 75 to less than 85

Unsatisfactory – The total point score is less than 75

Review Areas	Total Questions in Review Area (excluding N/A Questions)	Total "Yes" Points	Total Score (Total "Yes" Questions/Total Questions) x 100
Governance	15	15	100
Taxpayer Assistance	11	11	100
Operating Procedures	23	23	100
Appraisal Standards, Procedures and Methodology	31	31	100

APPRAISAL ACTIVITIES

INTRODUCTION

Appraisal Responsibilities

The field appraisal staff is responsible for collecting and maintaining property characteristic data for classification, valuation, and other purposes. Accurate valuation of real and personal property by any method requires a comprehensive physical description of personal property, 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 located within the boundaries of Taylor County and the jurisdictions of this appraisal district. The data collection effort involves the field inspection of real and personal property accounts, as well as data entry of all data collected into the existing information system. The goal is to periodically inspect residential, commercial, and personal properties in the district every year. The appraisal opinion of value for all property located in the district is reviewed and evaluated each year.

Appraisal Resources

Personnel - Appraisal activities are conducted with 11 appraisers.

Data - The data gathered by field devices and/or iPads that is used by field appraisers include the existing property characteristic information contained in Computer Assisted Mass Appraisal System (CAMA) from the district's computer system. The data is printed on a property record card, or personal property data sheets. Other data used includes maps, sales data, fire and damage reports, building permits, photos and actual cost and market information. Sources of information are gathered using excellent reciprocal relationships with other participants in the real estate marketplace. The district cultivates sources and gathers information from both buyers and sellers.

Data Collection/Validation

Data collection of real property involves maintaining data characteristics of the property on CAMA (Computer Assisted Mass Appraisal) software. The

information contained in CAMA includes site characteristics, such as land size and topography, and improvement data, such as square footage of living area and other areas of the improvement, year built, quality of construction, and condition. Field appraisers are required to use a property classification system that establishes uniform procedures for the correct listing of real property. All properties are coded according to a classification system. The approaches to value are structured and calibrated based on this coding system and property description and characteristics. The field appraisers use property classification references during their initial training and as a guide in the field inspection of properties. Data collection for personal property involves maintaining information on software designed to record and appraise business personal property. The type of information contained in the BPP file includes personal property such as business inventory, furniture and fixtures, machinery and equipment, with details such as cost and location. The field appraisers conducting on-site inspections use a personal property classification system during their initial training and as a guide to correctly list all personal property that is taxable.

The listing procedure utilized by the field appraisers is available in the district offices. Appraisers periodically update the classification system with input from the valuation group.

Sources of Data

The sources of data collection are through property inspection, new construction field effort, data review/relist field effort, data mailer questionnaires, hearings, sales validation field effort, commercial sales verification and field effort, newspapers and publications, and property owner correspondence by mail or via the Internet. A principal 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 the Building Permit System (BPS). Otherwise, paper permits are received and matched manually with the property's tax account number for data entry.

The Multiple Listing Service of the Abilene Board of Realtors is a reliable source of data, for both property description and market sales data. Area and regional real estate brokers and managers are also sources of market and property information. Data surveys of property owners requesting market information and property

description information is also valuable data. Soil surveys and agricultural surveys of farming and ranching property owners and industry professionals are helpful for productivity value calibration. The Texas Railroad Commission is the source for mineral production data and leasing information. Capital market information is available from Ibbotson's SBBI Valuation Edition and Wall Street Journal, Value Line Investment Survey, and the Oil and Gas Journal. Crude and gas pricing are taken from Plains Marketing and Sunoco Logistics, regional product gathering and marketing companies and the primary buyers for oil and gas produced in the area. Improvement cost information is gathered from local building contractors and Marshall and Swift Valuation Service. Various income and rental surveys are performed by interviewing property managers and operators to determine operating income and expenses for investment and income producing real property. Data review of entire neighborhoods is generally a good source for data collection. Appraisers walk entire neighborhoods to review the accuracy of our data and identify properties that must be relisted. The sales validation effort in real property pertains to the collection of market data for 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 and confirmation of the sales price. In commercial, the commercial sales group is responsible for contacting sales participants to confirm sales 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 reliable 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 owners can review information on their property and forward corrections via e-mail. For the property owner without access to the Internet, letters are sometimes submitted notifying the district of inaccurate data. Properties identified in this manner are added to a work file and inspected at the earliest opportunity. Accuracy and validity in property descriptions and characteristics data is the highest goal and is stressed throughout the appraisal process from year to year. Appraisal opinion quality and validity relies on data accuracy as its foundation.

Data Collection Procedures

The appraisers are assigned specific areas throughout the district to conduct field inspections. These geographic areas of assignment are maintained for several years to enable the appraiser assigned to that area to become knowledgeable of all the factors that drive values for that specific area. Appraisers of real estate and business personal property conduct field inspections and record information using a pen pad device/iPad that holds all data dealing with the property and allows for the entry of corrections and additions that the appraiser may find in his or her field inspection.

The quality of the data used is extremely important in estimating market values of taxable property. While work performance standards are established and upheld for the various field activities, quality of data is emphasized as the goal and responsibility of each appraiser. New appraisers are trained in the specifics of data collection and the classification system set forth and recognized as “rules” to follow. Experienced appraisers are routinely re-trained in listing procedures prior to major field projects such as new construction, sales validation or data review. A quality assurance process exists through supervisory review of the work being performed by the field appraisers. Quality assurance supervision is charged with the responsibility of ensuring that appraisers follow listing procedures, identify training issues and provide uniform training throughout the field appraisal staff.

Data Maintenance

The appraiser begins an area update by downloading complete files of the area that he/she plans to work. Once the files are downloaded, updates to the appraisal file are not available to office personnel ensuring that reappraisal processes do not overlap one another. The field appraiser is responsible for the data entry of his/her fieldwork into the computer file as the area is surveyed. This responsibility includes not only data entry, but also quality assurance. Most of the data collected in the field is input using pen pad devices/iPads and is entered by the appraiser. The data is downloaded back to the main system when the neighborhood or area review work is completed. Data updates and file modification for property descriptions and input accuracy is conducted as the responsibility of the field appraiser and appraisal supervisors.

INDIVIDUAL VALUE REVIEW PROCEDURES

Field Review

The date of last inspection and the appraiser responsible are listed on the CAMA record and property card. If a property owner or jurisdiction disputes the district's records concerning this data during a hearing, via a telephone call or other correspondence received, the record may be corrected based on the evidence provided or an on-site inspection may be conducted. Typically, a field inspection is requested to verify this information for the current year's valuation or for the next year's valuation. Every year a field review of real property located in certain areas or neighborhoods in the jurisdiction is done during the data review/re-list field effort. A field review is performed on all personal property accounts, with available situs, each year.

Office Review

Office reviews are completed on properties where update information has been received from the owner of the property and is considered accurate and correct. Data mailers, sent in masse, or at the request of the property owner, frequently verify some property characteristics or current condition of the property. When the property data is verified in this manner, and considered accurate and correct, field inspections may not be required. The personal property department mails property rendition forms in December of each year to assist in the annual review of the property.

Performance Test

The property appraisers are responsible for conducting ratio studies and comparative analysis. Ratio studies are conducted on property located within certain neighborhoods or districts by appraisal staff. The sale ratio and comparative analysis of sale property to appraised value, forms the basis for determining the level of appraisal and market influences and factors for the neighborhood. This information is the basis for updating property valuation for the entire area of property. Field appraisers, in many cases, may conduct field inspections to ensure the accuracy of the property descriptions at the time of sale for this study. This

inspection is to ensure that the ratios produced are accurate for the property sold and that appraised values utilized in the study are based on accurate property data characteristics observed at the time of sale. Also, property inspections are performed to discover if property characteristics have changed as of the sale date or subsequent to the sale date. Sale ratios should be based on the value of the property as of the date of sale, not after a subsequent or substantial change was made to the property. Properly performed ratio studies are a good reflection of the level of appraisal for the district.

RESIDENTIAL

Residential Property represents approximately 48% of the total market value in Taylor County.



RESIDENTIAL VALUATION PROCESS

INTRODUCTION

Scope of Responsibility

The residential appraisers are responsible for estimating equal and uniform market values for residential improved and vacant property. There are approximately 46,000 residential improved single and multiple family parcels and 8,800 vacant residential properties in Taylor County.

Appraisal Resources

Personnel - *The following appraisers are responsible for estimating the market value of residential property:*

Scott Truitt, Director of Appraisal, TDLR #65946

Rick Mangum, Residential Coordinator, TDLR #70649

Amber B. Howard, Residential Appraiser, TDLR #74506

Ryan Salome, Residential Appraiser, TDLR # 74968

Russell David, Residential Appraiser, TDLR # 74766

Dan Shake, Land Coordinator, TDLR #66821

Belinda Dunlap, Land Appraiser, TDLR #66683

Data – A unique set of data characteristics for each residential dwelling and multiple family units in this district are collected in the field and data entered into the computer via iPads through an iCloud format. The property characteristic data drives the application of computer-assisted mass appraisal (CAMA) under the Cost, Market, and Income Approaches to property valuation.

VALUATION APPROACH

Land Analysis

Residential land valuation analysis is conducted prior to neighborhood sales analysis. The value of the land component to the property is estimated based on available market sales for comparable and competing land under similar usage. A comparison and analysis of comparable land sales is conducted based on a

comparison of land characteristics found to influence the market price of land located in the neighborhood. A computerized file holding the land table, stores the land information required to consistently value individual parcels within neighborhoods given known land characteristics. Specific land influences are considered, where necessary, and depending on neighborhood and individual lot or tract characteristics, to adjust parcels outside the neighborhood norm for such factors as access, view, shape, size, and topography. The appraisers use abstraction and allocation methods to ensure that estimated land values best reflect the contributory market value of the land to the overall property value.

Area Analysis

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

Neighborhood and Market Analysis

A neighborhood is a group of properties that share important characteristics. A neighborhood is typically a distinct group of properties that is often identified by a geographic (physical) boundary, or a group of properties that reacts in a similar manner to market influences.

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 are conducted on various market areas within each of the political entities known as independent school districts. Analysis of comparable market sales forms the basis of estimating market activity and the level of supply and demand affecting market prices for any given market area, neighborhood or district. Market sales indicate the effects of these market forces and are interpreted by the appraiser into an indication of

market price ranges and indications of property component change considering a given time period relative to the date of appraisal. Cost and market approaches to estimate value are the basic techniques utilized to interpret these sales. For multiple family properties the income approach to value is also utilized to estimate an opinion of value for investment level residential property.

The first step in neighborhood analysis is the identification of a group of properties that share certain common traits. A "neighborhood" for analysis purposes is defined as the largest geographic grouping of properties where the property's physical, economic, governmental and social forces are generally similar and uniform. Geographic stratification accommodates the local supply and demand factors that vary across a jurisdiction. Once a neighborhood with similar characteristics has been identified, the next step is to define its boundaries. This process is known as "delineation". Some factors used in neighborhood delineation include location, sales price range, lot size, age of dwelling, quality of construction and condition of dwellings, square footage of living area, and story height.

Delineation can involve the physical drawing of neighborhood boundary lines on a map, but it can also involve statistical separation or stratification based on attribute analysis. Part of neighborhood analysis is the consideration of discernible patterns of growth that influence a neighborhood's individual market. Few neighborhoods are fixed in character. Each neighborhood may be characterized as being in a stage of growth, stability or decline. The growth period is a time of development and construction. As new neighborhoods in a community are developed, they compete with existing neighborhoods. An added supply of new homes tends to induce population shift from older homes to newer homes. In the period of stability, or equilibrium, the forces of supply and demand are about equal. Generally, in the stage of equilibrium, older neighborhoods can be more desirable due to their stability of residential character and proximity to the workplace and other community facilities. The period of decline 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.

Neighborhoods undergo annual review during field inspection and are delineated based on observable aspects of homogeneity. Within the city limits of Abilene

there are approximately 275 residential, and 132 commercial neighborhoods. Rural neighborhoods consist of 45 residential, 12 commercial, and 8 neighborhoods designating the rural cities.

Thirteen rural land regions are analyzed each year in order to develop a base acreage price. Rural farm and ranch sales are grouped by property characteristics, location similarities and development potential. These sales are analyzed on a price per acre basis with regression analysis utilized as a means of analyzing the effects of size, or the economy of scale, within specific markets where there is typically a wide variety of sizes within a specific location. Appraisal schedules are built using regression models for calculating the unit prices. 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.

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 areas of limited 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, unless the property is appraised under a *JURISDICTIONAL EXCEPTION*. The highest and best use must be physically possible, legal, financially feasible, and productive to

the maximum allowed usage of the property. 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. In areas of mixed residential and commercial use, the appraiser reviews properties in these areas on a periodic basis to determine the individual property that qualifies for an appraisal under *JURISDICTIONAL EXCEPTION*.

VALUATION AND STATISTICAL ANALYSIS (Model Calibration)

Cost Schedules

All residential parcels in the district are valued with a replacement cost estimated from identical cost schedules based on the improvement classification system using a comparative unit method. The district's residential cost schedules are estimated from Marshall and Swift, a nationally recognized cost estimator service. These cost estimates are compared with sales of new improvements and evaluated from year to year and indexed to reflect the local residential building and labor market. Costs may also be indexed for neighborhood factors and influences that affect the total replacement cost of the improvements in a smaller market area based on evidence taken from a sample of market sales.

A review of the residential cost schedule is performed annually. As part of this review and evaluation process of the estimated replacement cost, newly constructed sold properties representing various levels of quality of construction in the district are considered. The property data characteristics of these properties are verified, and photographs are taken of the samples. CAD replacement costs are compared against Marshall & Swift, and the indicated replacement cost abstracted from these market sales of comparably improved structures. The results of this comparison are analyzed using statistical measures, including stratification by quality and reviewing of estimated building costs plus land to sales prices. As a result of this analysis, a new regional multiplier or economic index factor and indications of neighborhood economic factors are developed for use in the district's cost process. This new economic index is estimated and used to adjust the district's cost schedule to follow local building costs as reflected by the local market.

Sales Information

A sales file for the storage of “snapshot” sales data at the time of sale is maintained for real property. Residential vacant land sales, along with commercial improved and vacant land sales are maintained in a 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, fee appraisals, multiple listing service, various sale vendors, builders, and realtors. A system of type, source, validity and verification codes has been established to define salient facts related to a property’s purchase or transfer and to help determine relevant market sale prices. The effect of time as an influence on price was considered by paired comparison and applied in the ratio study to the sales as indicated within each neighborhood area. Neighborhood sales reports are generated as an analysis tool for the appraiser in the development and estimation of market price ranges and property component value estimates. Abstraction and allocation of property components based on sales of similar property is an important analysis tool to interpret market sales under the cost and market approaches to value. These analytical tools help determine and estimate the effects of change, about price, as indicated by sale prices for similar property within the current market.

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

Statistical Analysis

The residential valuation appraisers perform statistical analysis annually to evaluate whether estimated values are equitable and consistent with the market. Ratio studies are conducted on each of the 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 generated from sales ratios are evaluated and analyzed for each neighborhood. The level of appraised value is determined by the weighted mean ratio for sales of individual properties

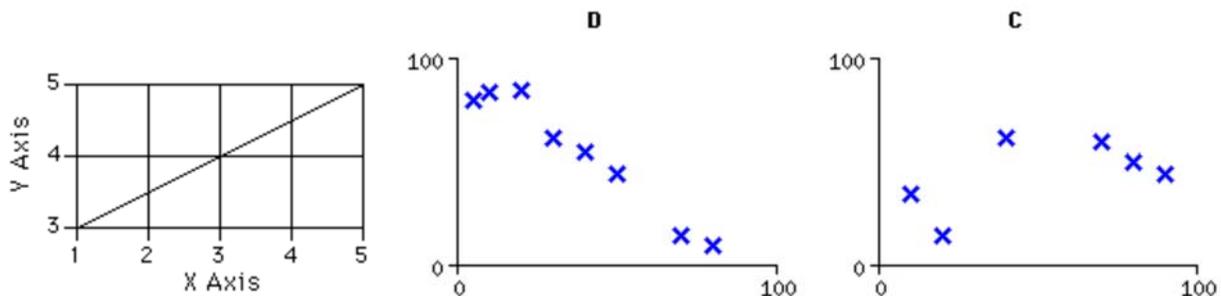
within a neighborhood, and a comparison of neighborhood weighted means reflect the general level of appraised value between comparable neighborhoods.

The appraiser, through the sales ratio analysis process, reviews every neighborhood annually. The first phase involves neighborhood ratio studies that compare the recent sales prices of neighborhood properties to the appraised values of these sold properties. This set of ratio studies affords the appraiser an excellent means of judging the present level of appraised value and uniformity of the sales. 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 or whether the level of market value in a neighborhood is at an acceptable level.

The analysis of trends that exist in neighborhood economics and the characteristics that shape the estimated market values are measured with linear regression statistics.

Appraisers relate physical individual property changes gathered during the annual property inspection to annual depreciation rates. The Depreciation rates are calculated in a spreadsheet that measures the relationship between time adjusted sale prices and replacement cost new of the actual age of each property.

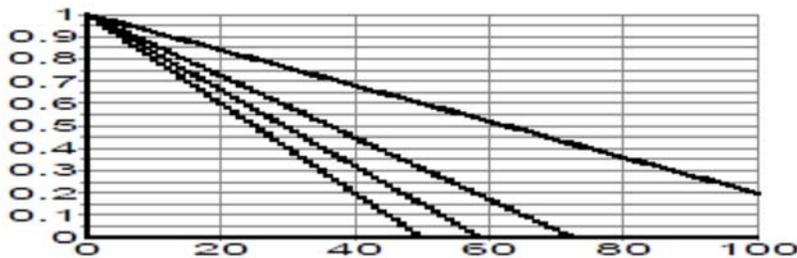
After the appraiser determines the annual depreciation rates the rates are placed in a linear regression model that calculates a best-fit line. Linear regression attempts to explain this relationship with a straight-line fit to the data which best predicts Y from X and distributes an annual depreciation driven by sales prices that can be calculated against the different ages of houses within a neighborhood. The product of the formula ($y = mx + b$) delivers a slope that best fits a scatter of annual depreciation rates and ages of sold properties.



Determining the slope (m) and the intercept (b) is a prerequisite to applying a slope intercept formula and is calculated in a spreadsheet which will identify the relationship between two variables, annual depreciation and age of house.

The slope ($m = \frac{y_2 - y_1}{x_2 - x_1}$) of a line represents the steepness of the line. The slope is measured as the change in dependent variable Y (annual depreciation) as it is associated with a change of one unit on the independent variable X (age of house).

The following graph shows 4 lines that represent different conditions (level of depreciation, fair, average, good, excellent) of houses in a neighborhood. Each slope is based on the change of 1 on the X axis as it is associated with a change on the Y axis. For example, as X changes from 2 to 3, Y changes from 3 to 4. The excellent condition homes depreciate slower than the fair condition homes thus yielding a higher percent good, which calculates a higher price per square foot.



Lines with positive slopes go from the bottom left toward the upper right. Lines with negative slopes go from the upper left to the lower right.

When the appraiser develops and tests the regression models and approves of the results, those results (annual depreciation rates) are distributed to properties with similar conditions within the neighborhood. The distribution of depreciation rates based on sales developed through a regression model ensures all properties in the same condition will depreciate or appreciate at the same level, creating equity in the neighborhood.

Market and Cost Reconciliation and Valuation

Neighborhood analysis of market sales to achieve an acceptable sale ratio or level of appraisal is also the reconciliation of the market and cost approaches to valuation. Market factors are developed from appraisal statistics provided from

market analyses and ratio studies and are used to ensure that estimated values are consistent with the market and to reconcile cost indicators. The district's primary approach to the valuation of residential properties uses a hybrid cost-sales comparison approach. This type of approach accounts for neighborhood market influences not particularly specified in a pure cost model.

The following equation denotes the hybrid model used: $MV = LV + (RCN - AD)$

In accordance with the cost approach, the estimated market value (MV) of the property equals the land value (LV) plus the replacement cost new of property improvements (RCN) less accrued depreciation (AD). As the cost approach separately estimates both land and building contributory values and uses depreciated replacement costs, which reflect only the supply side of the market, it is expected that adjustments to the cost values may be needed to bring the level of appraisal to an acceptable standard as indicated by market sales. Thus, demand side economic factors and influences may be observed and considered. These markets, or location adjustments, may be abstracted and applied uniformly within neighborhoods to account for locational variances between market areas or across a jurisdiction. In accordance with the Market Approach, the estimated market value of the property equals the basic unit of property, under comparison, times the market price range per unit for sales of comparable property. For residential property, the unit of comparison is typically the price per square foot of living area, or the price indicated for the improvement contribution. This analysis for the hybrid model is based on both the cost and market approaches as a correlation of indications of property valuation. A significant unknown for these two indications of value is determined to be the rate of change for the improvement contribution to total property value. The measure of change for this property component can best be reflected and based in the annualized accrued depreciation rate. This cost related factor is most appropriately measured by sales of similar property. The market approach, when improvements are abstracted from the sale price, indicates the depreciated value of the improvement component, and in effect, measures changes in accrued depreciation. The level of improvement contribution to the property is measured by abstraction of comparable market sales, which is the property sale price less land value. The primary unknown for the cost approach is to accurately measure accrued depreciation affecting the amount of loss attributed to the

improvements as age increases and condition changes. This evaluation of cost results in the depreciated value of the improvement component based on age and condition. The evaluation of this market and cost information is the basis of reconciliation and indication of property valuation under this hybrid model. When the appraiser reviews a neighborhood, the appraiser reviews and evaluates a ratio study that compares recent sales prices of properties, appropriately adjusted for the effects of time, within a delineated neighborhood, with the value of the properties based on the estimated depreciated replacement cost of improvements plus land value. The calculated ratio derived from the sum of the sold properties' estimated value divided by the sum of the time adjusted sales prices indicates the neighborhood level of appraisal based on sold properties. This ratio is compared to the acceptable appraisal ratio, 96% to 100%, to determine the level of appraisal for each neighborhood. If the level of appraisal for the neighborhood is outside the acceptable range of ratios, adjustments to the neighborhood are made. If reappraisal of the neighborhood is indicated, the appraiser analyzes available market sales, appropriately adjusted for the apparent effects of time, by market abstraction of property components. This abstraction of property components allows the appraiser to focus on the rate of change for the improvement contribution to the property by providing a basis for calculating accrued depreciation attributed to the improvement component. This impact on value is usually the most significant factor affecting property value and the most important unknown to determine by market analysis. Abstraction of the improvement component from the adjusted sale price for a property indicates the effect of overall market suggested influences and factors on the price of improvements that were a part of this property, recently sold. Comparing this indicated price or value allocation for the improvement with the estimated replacement cost new of the improvement indicates any loss in value due to accrued forms of physical, functional, or economic obsolescence. This is a market driven measure of accrued depreciation and results in a true and relevant measure of improvement marketability, particularly when based on multiple sales that indicate the trending of this rate of change over certain classes of improvements within certain neighborhoods. Based on this market analysis, the appraiser estimates the annual rate of depreciation for given improvement descriptions considering age and observed condition. Once estimated, the appraiser recalculates the improvement

value of all property within the sale sample to consider and review the effects on the neighborhood sale ratio. After an acceptable level of appraisal is achieved within the sale sample, the entire neighborhood of property is recalculated utilizing the indicated depreciation rates taken from market sales. This depreciation factor is the basis for trending all improvement values and, when combined with any other site improvements and land value, brings the estimated property value through the cost approach closer to actual market prices as evidenced by recent sale prices available within a given neighborhood. Therefore, based on analysis of recent sales located within a given neighborhood, estimated property values will reflect the market influences and conditions only for the specified neighborhood, thus producing more representative and supportable values. The estimated property values calculated for each updated neighborhood are based on market indicated factors applied uniformly to all properties within a neighborhood. Finally, with all the market-trend factors applied, a final ratio study is generated 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 update and non-update neighborhoods and verifies appraised values against overall trends as exhibited by the local market, and finally, for the school district.

Treatment of Residential Homesteads

Beginning in 1998, the State of Texas implemented a constitutional classification scheme concerning the appraisal of residential property that receives a residence homestead exemption. Under that law, beginning in the year after a property receives a homestead exemption, increases in the assessed value of that property are capped or limited to not more than 10% increase annually. The value for tax purposes (assessed value) of a qualified residence homestead will be the LESSER of:

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

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

INDIVIDUAL VALUE REVIEW PROCEDURES

Field Review

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

As the district's parcel count has increased through new home construction, and the homes constructed in the 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 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 can physically inspect both sold properties and unsold properties for comparability and consistency of values.

Office Review

When field review is completed, the appraiser conducts a routine valuation review of all properties as outlined in the discussion of ratio studies and market analysis. Valuation reports comparing previous values against proposed and final values are

generated for all residential improved and vacant properties. The percentage of value differences 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.

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

PERFORMANCE TESTS

Sales Ratio Studies

The primary analytical tool used by the appraisers to measure and improve performance is the ratio study. The district ensures that the appraised values that it produces meet the standards of accuracy in several ways. Overall sales ratios are generated for each neighborhood to allow the appraiser to review general market trends within their area of responsibility and provide an indication of market appreciation over a specified period. The PC-based ratio studies are designed to emulate the findings of the state comptroller's property value study for category "A" (single family residences) property.

Management Review Process

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

COMMERCIAL

Commercial Property represents approximately 17% of the total market value in Taylor County.



COMMERCIAL AND INDUSTRIAL PROPERTY VALUATION PROCESS

INTRODUCTION

Scope of Responsibility

This mass appraisal assignment includes all the commercially described real property which falls within the responsibility of the commercial valuation appraisers of the Taylor County Central Appraisal District and located within the boundaries of this taxing jurisdiction. Commercial appraisers appraise the fee simple interest of properties according to statute and court decisions. However, the effect of easements, restrictions, encumbrances, leases, contracts or special assessments are considered on an individual basis, as is the appraisal of any nonexempt taxable fractional interests in real property (i.e. certain multi-family housing projects). Fractional interests or partial holdings of real property are appraised in fee simple for the whole property and divided programmatically based on their prorated interests.

Appraisal Resources

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

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

Scott Truitt, Director of Appraisal, TDLR # 65946

Patrick Carroll, Commercial Appraisal Coordinator, TDLR # 70377

Ryan Fletcher, Commercial Property Appraiser, TDLR # 74820

Brandt Bailey, Commercial Property Appraiser, TDLR # 76016

Sharon Wheat, Senior Personal Property Appraiser, TDLR # 68031

Melanie Davis, Senior Personal Property Appraiser, TDLR # 69236

Jessica Ughanze, Personal Property Appraiser, TDLR # 74810

Rey Smith, Improvement Data Collector, New Improvements Appraiser

Dan Shake, Land Coordinator, TDLR # 66821

Data - The data used by the commercial appraisers includes verified sales of vacant land and improved properties and the pertinent data obtained from each (sales price levels, capitalization rates, income multipliers, equity dividend rates, marketing period, etc.). Other data used by the appraisers 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

Market Study

Market studies are utilized to test new or existing procedures or valuation modifications in a limited sample of properties located in the district and are also considered and become the basis of updating whenever substantial changes in valuation are made. These studies target certain types of improved property to evaluate current market prices for rents and for sales of commercial and industrial real property. These comparable sale studies and ratio studies reveal whether the valuation system is producing accurate and reliable value estimates or whether procedural and economic modifications are required. The appraiser implements this methodology when developing cost approach, market approach, and income approach models.

Taylor 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 statutes. In addition, Taylor CAD administration and personnel interact with other assessment officials through professional trade organizations including the International Association of Assessing Officers, Texas Association of Appraisal Districts and its subchapter Texas Metropolitan Association of Appraisal Districts and the Texas Association of Assessing Officers. District staff strives to maintain appraisal skills and professionalism by continuing education in the form of courses that are offered by several professional associations such as International Association of Assessing Officers (IAAO), Texas Association of Assessing

Officers (TAAO), Texas Association of Appraisal Districts (TAAD) and Texas Department of Licensing and Regulation (TDLR) courses.

VALUATION APPROACH

Land Value

Commercial land is analyzed annually to compare appraised values with recent sales of land in the market area. If appraised values differ from sales prices being paid, adjustments are made to all land in that region. Generally, commercial property is appraised on a price per square foot basis. Factors are placed on individual properties based on corner influence, depth of site, shape of site, easements across site, and other factors that may influence value. The land is valued as though vacant at the highest and best use.

Area Analysis

Area data on regional economic forces such as demographic patterns, regional location factors, employment and income patterns, general trends in real property prices and rents, interest rate trends, availability of vacant land, and construction trends and costs are collected from private vendors and public sources.

Neighborhood Analysis

The neighborhood and market areas are comprised of the land area and commercially classed properties located within the boundaries of this appraisal jurisdiction. These areas consist of a wide variety of property types including multiple-family residential, commercial and industrial. Neighborhood and area analysis involve the examination of how physical, economic, governmental and social forces and other influences may affect property values within subgroups of property locations. 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 and industrial properties these subsets of a universe of properties are generally referred to as market areas, neighborhoods, or economic areas. Economic areas are defined by each of the improved property use types (apartment, office, retail, warehouse and special use) based upon an analysis of similar economic or market forces. These include but are not limited to similarities

of rental rates, classification of projects (known as building class by area commercial market experts), 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 re-delineation 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 have been estimated for these properties.

Highest and Best Use Analysis

The highest and best use is the most reasonable and probable use that generates the highest net to land and present value of the real estate as of the date of valuation, unless the property is appraised with a *JURISDICTIONAL EXCEPTION*. 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 perspective assists in determining if the existing improvements have a transitional use, interim use, nonconforming use, multiple uses, speculative use, is 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 perspective for value may be significantly different than market value, which approximates market price under the following assumptions: (i) no coercion of undue influence over the buyer or seller in an attempt to force the purchase or sale, (ii) well-informed buyers and sellers acting in

their own best interests, (iii) a reasonable time for the transaction to take place, and (iv) payment in cash or its equivalent.

Market Analysis

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

DATA COLLECTION / VALIDATION

Data Collection Manuals

Data collection and documentation for commercial/industrial property is continually updated, providing a uniform system of itemizing the multitude of components comprising improved properties. All properties located in Taylor CAD's inventory are coded according to a specific classification system and the approaches to value are structured and calibrated based on this coding system. Annually, after the sales of property have been researched, verified, keyed into the database, and quality control has been completed, the sales data is summarized into list form and analyzed. The confirmed sales reports, known as the Commercial Improved and Vacant Land sales listings categorize the sales by property and use type, and sort the data by location and chronological order. These sales are used by the Taylor CAD appraisers during the hearings process.

Sources of Data

In terms of commercial sales data, Taylor CAD receives a copy of the deeds recorded in Taylor County that convey commercially classed properties. These deeds involving a change in commercial ownership are entered into the sales information system and researched to obtain the pertinent sale information. Other sources of sale data include the protest hearings process and local, regional and national real estate and financial publications.

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 answered and returned, the documented responses are recorded into the computerized sales database system. If no information is provided, verification of many transactions is then attempted via phone calls to parties thought to be knowledgeable of the specifics of the sale. Other sources contacted are 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, with trending factors utilized for updating the data to the current market conditions. However, at some point, if the adjustment process becomes too involved, the model calibration technique can mandate new model specifications or a revised model structure.

Cost Schedules

The cost approach to value is applied to improved real property utilizing the comparative unit method. This methodology involves the utilization of national cost data reporting services as well as actual cost information on local comparable properties whenever possible. Cost models are typically developed based on the Marshall Swift Valuation Service which indicate estimated hard or direct costs of various improvement types. Cost models include the derivation of replacement cost new (RCN) of all improvements represented within the district. These include comparative base rates, per unit adjustments and lump sum adjustments for

variations in property description, design, and types of improvement construction. This approach and analysis also employ the sales comparison approach in the evaluation of soft or indirect costs of construction, and in the valuation of the underlying land value. Evaluating market sales of newly developed improved property is an important part of understanding total replacement cost of improvements. What total costs may be involved in the development of the property and as well as any portion of cost attributed to entrepreneurial profit can only be revealed by market analysis of pricing acceptance levels. In addition, market related land valuation for the underlying land value is important in understanding and analyzing improved sales for all development costs and for the abstraction of improvement costs for construction and development. Time and location modifiers are necessary to adjust cost data to reflect conditions in a specific market and changes in costs over a period. Because a national cost service is used as a basis for the cost models, location modifiers and estimates of soft cost factors are necessary to adjust these base costs specifically for various types of improvements located in Taylor County. Thusly, local modifiers are additional cost factors applied to replacement cost estimated by the national cost service. Estimated replacement cost new will reflect all costs of construction and development for various improvements located in Taylor CAD as of the date of appraisal.

Accrued depreciation is the sum of all forms of loss affecting the contributory value of the improvements, a function of estimated replacement cost new. It is the measured loss against replacement cost new taken from all forms of physical deterioration, functional and economic obsolescence. Accrued depreciation is estimated and developed based on losses typical for each property type at that specific age. Depreciation estimates have been implemented for what is typical of each major class of commercial property by economic life categories. Estimates of accrued depreciation have been calculated for improvements with a range of variable years expected life based on observed condition considering actual age. These estimates are continually tested to ensure they are reflective of current market conditions. The actual and effective ages of improvements are noted in CAMA. Effective age estimates are based on the utility of the improvements relative to where the improvement lies on the scale of its total economic life and its competitive position in the marketplace. Effective age estimates are considered

and reflected based on 5 levels or rankings of observed condition, given actual age. Additional forms of depreciation such as external and/or functional obsolescence can be applied if observed. A depreciation calculation override can be used if the condition or effective age of a property varies from the norm by appropriately noting the physical condition and functional utility ratings on the property data characteristics. These adjustments are typically applied to a specific condition adequacy or deficiency or property type or location and can be developed via ratio studies or other market analyses.

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

Income Models

The income approach to value is applied to those real properties which are typically viewed by market participants as “income producing”, and for which the income methodology is considered a leading value indicator. The first step in the income approach pertains to the estimation of market rent on a per unit basis. This is derived primarily from actual rent data furnished by property owners and from local market surveys conducted by the district and by information from area rent study reviews. 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 are 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 survey trends. This allowance accounts for periodic fluctuations in occupancy, both above and below an estimated stabilized level. This feature may also provide for a reasonable lease-up period for multi-tenant properties, where applicable. The market derived stabilized vacancy and collection loss allowance is subtracted from the potential gross rent estimate to yield an indication of estimated annual effective

gross rent to the property.

Next a secondary income or service income is considered and, if applicable, 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, when applicable.

Allowable expenses and expense ratio estimates are based on a study of the local market, with the assumption of prudent management. An allowance for non-recoverable expenses such as leasing costs and tenant improvements may be included in the expenses. A non-recoverable expense represents costs that the owner pays to lease rental space. Relevant expense ratios are developed for different types of commercial property based on use and market experience. For instance, retail properties are most frequently leased on a triple-net basis, whereby the tenant is responsible for all operating expenses such as, ad valorem taxes, insurance, and common area and property maintenance. In comparison, a general office building is most often leased on a base year expense stop. This lease type stipulates that the owner is responsible for all expenses incurred during the first year of the lease. As a result, expense ratios are implemented and estimated based on observed market experience in operating various types of commercial property.

Another form of allowable expense is the replacement of short-lived items (such as roof or floor coverings, air conditioning or major mechanical equipment or appliances) requiring expenditures of lump sum costs. When these capital expenditures are analyzed for consistency and adjusted, they 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. For some types of property, typical management does not reflect expensing reserves and is dependent on local and industry practices.

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

Return Rates and income multipliers are used to convert operating income expectations into an estimate of market value for the property under the income approach. These include income multipliers, overall capitalization rates, and discount rates. Each of these multipliers or return rates are considered and used in specific applications. Rates and multipliers may vary between property types, as well as by location, quality, condition, design, age, and other factors. Therefore, application of the various rates and multipliers must be based on a thorough analysis of the market for individual income property types and uses. These procedures are supported and documented based on analysis of market sales for these property types.

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

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

value indication of the property at stabilized occupancy. A variation of this technique allows 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 parcels on the appraisal roll. As previously discussed in the Data Collection/Validation section of this report, pertinent data from actual sales of properties, both vacant and improved, is pursued throughout the year in order to obtain relevant information which can be used in all aspects of valuation. Sales of similarly improved properties can 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. Market factors reflected within the cost and income approaches are evaluated and confirmed based on market sales of commercial and industrial properties. The appraisers review the cost, income, and sales comparison approaches to value for each of the types of properties with available sales information. The final valuation of a property is estimated based on reconciling these indications of value considering the weight of the market information available for evaluation and analysis in these approaches to value.

Statistical and Capitalization Analysis

Statistical analysis of final values is an essential component of quality control. This methodology represents a comparison of the final value against the standard

and provides a concise measurement of the appraisal performance. Statistical comparisons of many different standards are used including sales of similar properties, the previous year's appraised value, audit trails, value change analysis and sales ratio analysis.

Appraisal statistics of central tendency and dispersion generated from sales ratios are calculated for each property type with available sales data. These summary statistics including, but not limited to, the weighted mean 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.

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

INDIVIDUAL VALUE REVIEW PROCEDURES

Field Review

The date of last inspection, extent of that inspection, and the Taylor County 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. Normally, a new field check is then requested to verify this information for the current year's valuation or for the next year's valuation. In addition, if a building permit is filed for a particular property indicating a change in characteristics, that property is added to a work file for review. Finally, even though every property cannot be inspected each year, each appraiser typically designates certain segments of their area of responsibility to conduct field checks.

Commercial appraisers are somewhat limited in the time available to field review all commercial properties of a specific use type. However, a major effort is made by 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, or wide variations in sale prices. Field review of real property accounts is accomplished while business personal property is reviewed and inspected in the field.

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 subject to field inspections and are performed in compliance with the guidelines required by the existing classification system. Office reviews are typically limited by the available market data presented for final value analysis. These sale reviews summarize the pertinent data of each

property as well as comparing the previous value to the proposed value conclusions of the various approaches to value. These evaluations and reviews show proposed value changes, income model attributes or overrides, economic factor (cost overrides) and special factors affecting the property valuation such as new construction status, and a three years sales history (USPAP property history requirement for nonresidential 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 within their area of responsibility, the estimates of value go to noticing. Each parcel is subjected to the value parameters appropriate for its use type.

PERFORMANCE TESTS

The primary tool used to measure mass appraisal performance is the ratio study. A ratio study compares appraised values to market prices. In a ratio study, market values (value in exchange) are typically represented with the range of sale prices (i.e. a sales ratio study). Independent, expert appraisals may also be used to represent market values in a ratio study (i.e. an appraisal ratio study). If there are not enough examples of market price 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 based on productivity or use value.

Taylor CAD has adopted the policies of the IAAO STANDARD ON RATIO STUDIES, regarding its ratio study standards and practices which can be viewed on their website:

http://www.iaao.org/media/standards/Standard_on_Ratio_Studies.pdf

Ratio studies generally have seven basic steps: (1) define the purpose, scope and objectives, (2) design, (3) stratification, (4) collection and preparation of market data, (5) matching of appraisal and market data, and (6) statistical analysis and (7) evaluation and use of results.

Sales Ratio Studies

Sales ratio studies are an integral part of estimating equitable and accurate market values, and ultimately property assessments for these taxing jurisdictions. The primary uses of sale ratio studies include the determination of a need for general reappraisal; prioritizing selected groups of property types for reappraisal; identification of potential problems with appraisal procedures; assist in market analyses; and, to calibrate models used to estimate appraised values during valuation or reappraisal cycles. However, these studies cannot be used to judge the accuracy of an individual property appraised value. The Taylor 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 and for the Property Study from the Property Tax Division of the Comptroller's Office. The appraisers utilize desktop applications such as Quattro Pro and EXCEL programs to evaluate subsets of data by economic area or a specific and unique data item. On the desktop, this July be customized and performed by building class and age basis. In many cases, field checks July 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 commercial 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. Appraiser's average unit prices of sales and average unit appraised values of the same parcels and the comparison of average value changes of sold and unsold properties. These studies are conducted on substrata such as building class and on properties located within various economic areas. In this way, overall appraisal performance is evaluated geographically, by specific property type to discern whether sold parcels have been selectively appraised. When sold parcels and unsold parcels are appraised equally, the average unit values are similar. These sales and equity studies are performed prior to final appraisal and to annual noticing.

BUSINESS PERSONAL PROPERTY

Business Personal Property represents approximately 7% of the total market value in Taylor County.



BUSINESS PERSONAL PROPERTY VALUATION PROCESS

INTRODUCTION

Scope of Responsibility

There are four different personal property types appraised by the district's personal property section: Business Personal Property accounts; Leased Assets; Vehicles and aircraft; and Multi-Location Assets. There are approximately 6500 business personal property accounts in Taylor CAD.

Appraisal Resources

Personnel-

Sharon Wheat, Senior Personal Property Appraiser, TDLR # 68031

Melanie Davis, Senior Personal Property Appraiser, TDLR # 69236

Jessica Ughanze, Personal Property Appraiser, TDLR # 74810

Data- A common set of data characteristics for each personal property account in Taylor CAD is collected in the field and data entered to the district's computer with the use of iPads or iPads. The property characteristic data drives the computer-assisted personal property appraisal (CAPPA) system. The personal property appraisers collect the field data and maintain property files making updates and changes gathered from field inspections, newspapers, property renditions and interviews with property owners.

VALUATION APPROACH (Model Specification)

SIC Code Analysis

Business personal property is classified and utilizes a four-digit numeric codes, called Standard Industrial Classification (SIC) codes that were developed by the federal government to describe business entities having common attributes. These classifications are used by Taylor CAD to delineate personal property by business type.

SIC code identification and delineation is the cornerstone of the personal property valuation system at the district. All the personal property analysis work done in association with the personal property valuation process is SIC code specific. There are approximately 350 personal property SIC codes. SIC codes are delineated based on observable aspects of homogeneity and business use. 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 greatest income and the highest present value as of the date of the appraisal. The highest and best use must be physically possible, legal, financially feasible, and productive to its maximum. The highest and best use of personal property is normally its current use.

DATA COLLECTION/VALIDATION

Data Collection Procedures

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

Sources of Data

Business Personal Property

The district's property characteristic data was collected through a massive field data collection effort coordinated by the district over the recent past and from property owner renditions. From year to year, reevaluation activities permit district appraisers to collect new data via an annual field inspection. 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, Info Nation, Inc., provides Taylor CAD with a listing of vehicles within this jurisdiction. 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 based on the SIC code by the Property Tax Division of the Comptroller's Office and by district personal property valuation 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 an analytical tool by which to determine both the level and uniformity of appraised value by SIC code. Review of the standard deviation or coefficient of dispersion can discern appraisal uniformity within SIC codes.

Depreciation Schedule and Trending Factors:

Business Personal Property

Taylor 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 CAD developed valuation models. The trending factors used by the CAD to develop RCN are based on published

valuation guides. The percent good depreciation factors used by Taylor 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:

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

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

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

This mass appraisal PVF schedule is used to ensure that estimated values are uniform and consistent within the market and reflect current economic pressures of supply and demand.

Computer Assisted Personal Property Appraisal (CAPP)

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

The data sampling process is conducted in the following order: 1) Prioritizing Standard Industrial Classification (SIC) codes for model analysis. 2) Compiling the data and developing the reports. 3) Field checking the selected samples. The models are 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.

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

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

Vehicles

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

Leased and Multi-Location Assets

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 Blue Book 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

A district valuation computer program exists in a mainframe environment that identifies accounts in need of review based on a variety of conditions. Property owner renditions, accounts with field or other data changes, accounts with prior hearings, new accounts, and SIC cost table changes are all considered. The accounts are processed by the valuation program and pass or fail preset tolerance parameters by comparing appraised values to prior year and model values. The appraisers review accounts that fail the tolerance parameters.

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. Rather than a sales ratio study, the personal property PVS is a ratio study using state cost and depreciation schedules to develop comparative personal property values. These values are then compared to Taylor CAD's personal property values and ratios are indicated.

AGRICULTURAL VALUATION

Agricultural Valuation represents approximately 5% of the total market value in Taylor County.



AGRICULTURAL VALUATION PROCESS

INTRODUCTION

Definition of Agricultural Value

Net to land values is the average annual net income that a class of land would be likely to have generated over a five-year period.

Scope of Responsibility

The mass appraisal of agricultural property includes all property classified as 1-d-1 and 1-d agricultural uses, which are appraised on the land's ability to produce agricultural or timber production. The mass appraisal of agricultural property involves applying similar values within the same agricultural categories and classes and is appraised according to the Tax Code guidelines. Appraisal values are calculated using the cash lease method. A cash lease is an agreement between landowner and tenant to lease property at a fixed cash payment.

For land to qualify under this special use, it must be devoted principally to agricultural use.

“Agricultural use” includes producing crops, livestock, poultry, fish, or cover crops. It can also include leaving the land idle for a government program or for normal crop or livestock rotation. Land use for raising certain exotic animals (including exotic birds) to produce human food or other items of commercial value qualifies. Cutting wood for use in fences or structures on adjacent agricultural land also qualifies. Land used to raise or keep bees for pollination to produce human food or other items of commercial value qualifies provided that the land used is not less than 5 or more than 20 acres.”

Section 23 of the Texas Tax Code allows a property owner to have his property taxed on productivity value instead of market value after making the appropriate application to the Appraisal District.

Application Filing and Processing

A sample Agricultural Open Space Application Form as available on the Texas State Comptroller's website can be viewed at

<http://www.window.state.tx.us/taxinfo/taxforms/50-129.pdf>

A property owner must file an application for special appraisal before May 1. For good cause shown, the Chief Appraiser may extend the deadline by written order for a single period not to exceed 60 days. In February of each year, Taylor County compiles a list of properties that had the special-use agricultural appraisal in the previous year but changed ownership during the year. The list generated is used to mail an application form to the new owners requesting that they complete the application to continue to receive the special-use appraisal. If the application form is not returned by May 1, the property owners are noticed at market value. If the application form is still not returned by June 1, the property owners receive a second request for return by June 30. If a property owner files an application after the deadline for filing but prior to the date the Appraisal Review Board approves the records (usually July 20), the application shall be accepted. If it is approved, the property owner is liable for a penalty of 10 percent of the difference between the amount of the tax imposed on the property under the special appraisal and the amount of tax that would have been imposed if the property were taxed at market value. If a property owner files an application after the date the ARB approves the records, the land is ineligible for special appraisal that year. If the Chief Appraiser denies an application, he shall deliver a written notice of the denial to the claimant within five days after the date of the denial. The notice must include a brief explanation of the procedures for protesting the denial.

Once property has been designated for a special appraisal, the property shall continue to be eligible for special appraisal without a new application being filed for the duration of the deed restriction unless the ownership of the land changes or its eligibility ends. If the Chief Appraiser has good cause to believe that the land is ineligible, a new application may be mailed to a property owner in order to confirm the land's eligibility.

An application for agricultural use designation is confidential and **NOT** open to public inspection.

VALUATION APPROACH

The Cost Approach and the Market Approach are not utilized in estimating agricultural values for farm and ranch properties since they are to be estimated based upon their production/income capabilities. Agricultural values are estimated using the Income Approach and are based upon historical cash lease income and expense data. Agricultural Use Questionnaires are mailed out in February of each year requesting income and expense information for farm and ranch properties in Taylor County. Each property that is being used in this manner has stored land segments which reflect the acreage that is pasture and the acreage that is tillable. They are further categorized by their individual production capabilities based upon soil classification maps with a Class 1 being the least productive, and a Class 7 being the most productive soils.

1P-Poorest production capability of native grazing (shallow, rocky, cedar infested)

2P-Low production capability of native grazing

3P-Fair production capability of native grazing

4P-Average production capability of native grazing

5P-Good production capability of native grazing

6P-Very good production capability of native grazing

7P-Excellent production capability of native grazing

1T-Poorest production capability of cropland (typically very poor yields)

2T-Low production capability of cropland

3T-Fair production capability of cropland

4T-Average production capability of cropland (small grains, wheat, hay production)

5T-Good production capability of cropland

6T-Very good production capability of cropland

7T-Excellent production capability of cropland (cotton production)

Section 23 of the Texas Tax Code also allows for this special-use value if the land is used to manage wildlife. It is a qualifying agricultural use, if such land was previously qualified open-space land and is actively used for wildlife management. Wildlife management means actively using land that at the time the wildlife management use began was appraised as qualified open-space land in at least three of the following ways to propagate a sustaining breeding, migrating, or wintering population of indigenous wild animals for human use, including food, medicine, or recreation:

1. Habitat control
2. Erosion control
3. Predator control
4. Providing supplemental supplies of water
5. Providing supplemental supplies of food
6. Providing shelter
7. Making of census counts to determine population

The property owner must submit a written Wildlife Management Plan that displays which of the above specific ways the property will be managed to meet the overall objective. A sample Wildlife Management Plan as available on the Texas Parks and Wildlife website:

http://www.tpwd.state.tx.us/publications/pwdforms/media/pwd_885_w7000_open_space_agric_valuation_wildlife_mgmt_plan.pdf

Guidelines for qualification of agricultural land in Wildlife Management Use as published by the Texas State Comptroller's Office website:

<https://comptroller.texas.gov/taxes/property-tax/ag-timber/index.php>

Agricultural land must be used at a level of intensity that is common in the local area. It must have been devoted to agricultural use for at least five of the past seven years.

Appraisal Resources

Personnel-

Dan Shake, Land Coordinator, TDLR # 66821

Belinda Dunlap, Land Appraiser, TDLR # 66683

Data- Lease information gathered is grouped and placed in a spreadsheet annually by their classifications for analysis. Statistical measures are utilized annually for analyzing the measures of central tendencies most reflective of net income to the land from production, and net income to the land from hunting to assist in selecting the unit prices per acre for agricultural production schedule building for pastureland and crop land. The cash lease information filters into a unit price per acre estimate of net to the land for each soil type/classification, and the estimated potential net income to the land from hunting is added to that net income. This data is what the current year's agricultural values are estimated from. The value of land is determined by capitalizing the average net income the land would have yielded under prudent management from production of agricultural products during the five years preceding the current year for each of the soil classifications/categories of land.

The capitalization rate to be used in determining the appraised value of qualified open-space land is 10 percent or the interest rate specified by the Farm Credit Bank of Texas or its successor on December 31 of the preceding year plus 2-1/2 percentage points, whichever percentage is greater.

Results of annual analysis are compiled for a five-year history. These results are utilized for building agricultural land schedules consistent with said results.

Appraisal Performance Testing

The PTAD of the State Comptroller's Office regularly reviews all values and procedures used in the calculation of the agricultural values. Staff also routinely evaluates its own valuation procedures. Additionally, the Taylor County Agricultural Advisory Board reviews our values and appraisal process.

INDUSTRIAL, UTILITY, AND MINERAL VALUATION PROCESS

INTRODUCTION

Appraisal Responsibility

The Central Appraisal District of Taylor County, currently contracts with the Capitol Appraisal Group located in Austin, Texas to value the District's Industrial, Utility, and Mineral Properties within the county. Their website can be viewed at

<http://www.cagi.com/WebSite/home.htm>

2020 CERTIFIED TOTALS Grand Totals

Taylor County

2020 PRELIMINARY TOTALS

GTA - TAYLOR COUNTY
Grand Totals

Property Count: 82,007

4/23/2020 11:09:22AM

Land		Value			
Homesite:		627,338,469			
Non Homesite:		739,620,940			
Ag Market:		741,609,955			
Timber Market:		0	Total Land	(+)	
				2,108,569,364	
Improvement		Value			
Homesite:		5,300,018,136			
Non Homesite:		5,131,873,033	Total Improvements	(+)	
				10,431,891,169	
Non Real		Count	Value		
Personal Property:	7,254		1,534,077,918		
Mineral Property:	5,371		39,511,874		
Autos:	0		0	Total Non Real	(+)
					1,573,589,792
				Market Value	=
					14,114,050,325
Ag		Non Exempt	Exempt		
Total Productivity Market:	741,141,358		468,597		
Ag Use:	39,936,687		17,299	Productivity Loss	(-)
Timber Use:	0		0	Appraised Value	=
Productivity Loss:	701,204,671		451,298		13,412,845,654
				Homestead Cap	(-)
					11,143,014
				Assessed Value	=
					13,401,702,640
				Total Exemptions Amount	(-)
				(Breakdown on Next Page)	3,734,890,975
				Net Taxable	=
					9,666,811,665

Freeze	Assessed	Taxable	Actual Tax	Ceiling	Count			
DP	47,335,381	30,561,476	131,124.10	135,947.55	617			
DPS	2,016,217	1,485,561	5,917.56	6,203.05	19			
OV65	1,465,913,774	1,137,280,401	4,895,840.37	4,984,095.38	11,029			
Total	1,515,265,372	1,169,327,438	5,032,882.03	5,126,245.98	11,665	Freeze Taxable	(-)	
							1,169,327,438	
Tax Rate	0.634000							
Transfer	Assessed	Taxable	Post % Taxable	Adjustment	Count			
DP	192,604	0	0	0	1			
OV65	14,329,868	11,851,384	8,223,178	3,628,206	68			
Total	14,522,472	11,851,384	8,223,178	3,628,206	69	Transfer Adjustment	(-)	
							3,628,206	
						Freeze Adjusted Taxable	=	
							8,493,856,021	

APPROXIMATE LEVY = (FREEZE ADJUSTED TAXABLE * (TAX RATE / 100)) + ACTUAL TAX
 58,883,929.20 = 8,493,856,021 * (0.634000 / 100) + 5,032,882.03

Tax Increment Finance Value: 0
 Tax Increment Finance Levy: 0.00

2020 CERTIFIED TOTALS

Exemption Breakdown

Taylor County

2020 PRELIMINARY TOTALS

GTA - TAYLOR COUNTY
Grand Totals

Property Count: 82,007

4/23/2020

11:09:32AM

Exemption Breakdown

Exemption	Count	Local	State	Total
DP	646	11,396,480	0	11,396,480
DPS	19	338,330	0	338,330
DV1	546	0	4,987,574	4,987,574
DV1S	64	0	290,000	290,000
DV2	305	0	2,700,062	2,700,062
DV2S	29	0	202,500	202,500
DV3	483	0	4,432,178	4,432,178
DV3S	24	0	225,000	225,000
DV4	945	0	8,159,299	8,159,299
DV4S	55	0	506,958	506,958
DVHS	826	0	147,098,277	147,098,277
DVHSS	103	0	12,776,003	12,776,003
EX	1	0	0	0
EX-XD	6	0	760,267	760,267
EX-XG	8	0	728,563	728,563
EX-XI	9	0	5,232,184	5,232,184
EX-XJ	229	0	186,814,617	186,814,617
EX-XL	12	0	1,268,614	1,268,614
EX-XN	13	0	3,656,316	3,656,316
EX-XR	34	0	825,825	825,825
EX-XU	12	0	3,841,799	3,841,799
EX-XV	3,289	0	2,985,354,669	2,985,354,669
EX-XV (Prorated)	9	0	5,614	5,614
EX366	2,240	0	338,297	338,297
FR	19	0	0	0
FRSS	3	0	574,220	574,220
HS	27,898	129,560,019	0	129,560,019
HT	95	0	0	0
MASSS	2	0	454,469	454,469
OV65	10,755	200,869,086	0	200,869,086
OV65S	1,040	19,276,179	0	19,276,179
PC	10	2,217,576	0	2,217,576
Totals		363,657,670	3,371,233,305	3,734,890,975

2020 CERTIFIED TOTALS
State Category Breakdown

Taylor County	2020 PRELIMINARY TOTALS		
Property Count: 82,007	GTA - TAYLOR COUNTY	Grand Totals	4/23/2020 11:09:32AM

State Category Breakdown

State Code	Description	Count	Acres	New Value	Market Value	Taxable Value
A	SINGLE FAMILY RESIDENCE	42,508		\$113,625,840	\$5,212,780,537	\$4,709,883,159
B	MULTIFAMILY RESIDENCE	1,088		\$4,550,332	\$473,344,309	\$472,941,047
C1	VACANT LOTS AND LAND TRACTS	8,709		\$0	\$111,123,618	\$110,976,340
D1	QUALIFIED OPEN-SPACE LAND	6,245	481,505.4335	\$0	\$741,141,358	\$39,803,284
D2	IMPROVEMENTS ON QUALIFIED OP	1,058		\$174,182	\$8,717,656	\$8,641,386
E	RURAL LAND, NON QUALIFIED OPE	4,554	37,556.1150	\$26,024,824	\$614,307,922	\$567,648,008
ERROR		256		\$0	\$7,905,027	\$7,905,027
F1	COMMERCIAL REAL PROPERTY	3,925		\$42,468,316	\$1,724,572,323	\$1,724,457,216
F2	INDUSTRIAL AND MANUFACTURIN	214		\$511,846	\$427,508,633	\$427,508,633
G1	OIL AND GAS	3,366		\$0	\$39,005,484	\$39,005,484
J1	WATER SYSTEMS	2		\$0	\$122,500	\$122,500
J2	GAS DISTRIBUTION SYSTEM	36		\$664	\$30,215,981	\$30,215,981
J3	ELECTRIC COMPANY (INCLUDING C	151		\$57,489	\$250,267,363	\$250,267,363
J4	TELEPHONE COMPANY (INCLUDI	165		\$31,647	\$25,705,565	\$25,705,565
J5	RAILROAD	74		\$0	\$74,714,510	\$74,714,510
J6	PIPELAND COMPANY	208		\$0	\$85,308,699	\$85,308,699
J7	CABLE TELEVISION COMPANY	7		\$0	\$25,438,728	\$25,438,728
J8	OTHER TYPE OF UTILITY	155		\$0	\$104,628	\$104,628
L1	COMMERCIAL PERSONAL PROPE	5,891		\$0	\$752,090,038	\$751,866,337
L2	INDUSTRIAL AND MANUFACTURIN	146		\$0	\$237,750,566	\$235,722,691
M1	TANGIBLE OTHER PERSONAL, MOE	1,392		\$404,587	\$21,975,745	\$17,452,709
M2	TANGIBLE OTHER PERSONAL, OTH	14		\$0	\$0	\$0
O	RESIDENTIAL INVENTORY	250		\$0	\$6,860,806	\$6,860,806
S	SPECIAL INVENTORY TAX	115		\$0	\$54,134,003	\$54,134,003
X	TOTALLY EXEMPT PROPERTY	5,858		\$47,585,581	\$3,188,954,326	\$127,561
	Totals	519,061.5485		\$235,435,308	\$14,114,050,325	\$9,666,811,665

CERTIFICATION STATEMENT

"I, Gary Earnest, Chief Appraiser for Central Appraisal District of Taylor County, 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."

Gary Earnest

Chief Appraiser