



# **ANDREWS COUNTY APPRAISAL DISTRICT**

## **PLAN FOR PERIODIC REAPPRAISAL**

**2027/2028**

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## EXECUTIVE SUMMARY

### TAX CODE REQUIREMENT:

Passage of Senate Bill 1652 amended Section 6.05 of the Texas Property Tax code by adding Subsection (i) to read as follows:

- (i) To ensure adherence with generally accepted appraisal practices, the board of directors of an appraisal district shall develop biennially a written plan for the periodic reappraisal of all property within the boundaries of the district according to the requirements of Section 25.18 and shall hold a public hearing to consider the proposed plan. Not later than the 10<sup>th</sup> day before the date of the hearing, the secretary of the board shall deliver to the presiding officer of the governing body of each taxing unit participating in the district a written notice of the date, time, and place of the hearing. Not later than September 15 of each even-numbered year, the board shall complete its hearings, make any amendments, and by resolution finally approve the plan. Copies of the approved plan shall be distributed to the presiding officer of the governing body of each taxing unit participating in the district and to the Comptroller within sixty (60) days of the approval date.

### Plan for Periodic Reappraisal Requirement:

Senate Bill 1652 amends Section 25.18, Subsections (a) and (b) to read as follows:

- (a) Each appraisal office shall implement the Plan for Periodic Reappraisal of property approved by the board of directors under Section 6.05(i).
- (b) The plan shall provide for the following reappraisal activities for all real and personal property in the district at least once every three years:
  1. identifying properties to be appraised through physical inspection or by other reliable means of identification, including deeds or other legal documentation, aerial photographs, land-based photographs, surveys, maps, and property sketches;
  2. identifying and updating relevant characteristics of each property in the appraisal records;
  3. defining market areas in the district;
  4. identifying property characteristics that affect property value in each market area, including:
    - a. the location and market area of property;
    - b. physical attributes of property, such as size, age, condition;
    - c. legal and economic attributes; and
    - d. easements, covenants, leases, reservations, contracts, declarations, special assessments, ordinances, or legal restrictions;
  5. developing an appraisal model that reflects the relationship among the property characteristics affecting value in each market area and determines the contribution of individual property characteristics;
  6. applying the conclusions reflected in the model to the characteristics of the properties being appraised; and
  7. reviewing the appraisal results to determine value.

## **SCOPE OF RESPONSIBILITY**

The Andrews County Appraisal District has prepared and published this reappraisal plan and appraisal report to provide the Board of Directors, taxing entities, and taxpayers with a better understanding of the district's responsibilities and activities.

The Andrews County Appraisal District is a political subdivision of the State of Texas. It was created effective January 1, 1980. The provisions of the Texas Property Tax Code govern the legal, statutory, and administrative requirements of the appraisal district. The Board of Directors, elected by the taxing units within the boundaries of Andrews County, constitutes the district's governing body. The chief appraiser, appointed by the Board of Directors, is the chief administrator and chief executive officer of the appraisal district.

The appraisal district is responsible for local property tax appraisal and administration for all taxing entities in the county. The taxing entities are as follows:

Andrews County

Andrews County FMFC

Andrews ISD

Andrews County Hospital District

City of Andrews

Each taxing unit sets its own tax rate to generate revenue to pay for such things as police and fire protection, public schools, road and street maintenance, courts, water and sewer systems, and other public services. Property appraisals and estimated values by the appraisal district allocate the year's tax burden on the basis of each taxable property's market value. The appraisal district also determines eligibility for various types of property tax exemptions such as those for homeowners, the elderly, disabled veterans, charitable or religious organizations and agricultural productivity valuation.

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

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

The Texas Property Tax Code defines special appraisal provisions for the valuation of residential homestead property (Sec. 23.23), productivity (Sec. 23.41), real property inventory (Sec. 23.12), dealer inventory (Sec. 23.121, 23.124, 23.1241, 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 1<sup>st</sup> of the year proceeding 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 1<sup>st</sup>.



The Texas Property Tax Code, under Section 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 policy is to conduct a general reappraisal of taxable property every year. Appraised values are reviewed annually and are subject to change.

The appraised value of real estate is calculated using specific information about each property. Using computer-assisted mass appraisal programs and recognized appraisal methods and techniques, the appraisal district compares that information with the data for similar properties and with recent cost and market data. The district follows the standards of the International Association of Assessing Officers (IAAO) regarding its appraisal practices and procedures and subscribes to the standards promulgated by the Appraisal Foundation, known as the Uniform Standards of Professional Appraisal Practice (USPAP) to the extent they are applicable.

### **PERSONNEL RESOURCES**

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

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 Regulations.

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

- \* Chief Appraiser/Chief Executive Officer
- \* Assistant Chief Appraiser/Senior Appraiser/Bookkeeper
- \* BPP Appraiser/Commercial Appraiser Assistant
- \* Real Estate Appraiser/ Deed Clerk
- \* Secretary/ Exemption Clerk
- \* Clerk

The appraisal district contracts with outside vendor, Capitol Appraisal Group LLC for all mineral category G, utility category J, Industrial and Manufacturing Real Category F2, and Industrial and Manufacturing Personal Property Category L2. Starting 2021 we contracted with Western Valuation & Consulting LLC to value our Commercial Real Estate including income properties such as Apartments, Hotels, RV and Mobile Home Parks. Also starting in 2021 we contracted with PBFC&M to value our agricultural property values. In 2026 we contracted with Western Valuation to do the field work on the Real Estate and consult with the Chief Appraiser on the valuation.

All personnel that are performing appraisal work are registered with the Texas Department of Licensing and Regulation and are required to take appraisal courses to achieve the status of Registered Professional Appraiser within five years of employment as an appraiser. After they are awarded their license, they must receive additional training as required to maintain certification. Failure to meet these minimum standards results in termination of employment.

Additionally, the chief appraiser ensures that personnel receives on-the-job training to ensure quality and uniformity of appraisals of all types of property and monitors appraisal activity to ensure that standardized appraisal procedures are being followed by all personnel.

#### **REVALUATION DECISION (REAPPRAISAL CYCLE):**

The ANDREWS CAD, by policy adopted by the Board of Directors and the Chief Appraiser, reappraises all property in the district every year. The reappraisal may consist of field inspections, CAMA, or both. The reappraisal year is a complete appraisal of all properties in the district. Tax year 2027 is a reappraisal year and tax year 2028 is a reappraisal year. Each year, Notices of Appraised Value are mailed to all property owners in the District regardless of any changes that may or may not have occurred.

Additionally, every tax year the District inspects and appraises new construction and adds those properties to the appraisal roll. The district also inspects and reappraises properties that have been remodeled or demolished, properties with additions, properties with fire damage, or properties with any change or damage. These changes are found through building permits issued by the city. Properties outside the city must have a 911 address issued by Andrews County and we are provided a copy. TxDOT has a report of all mobile homes moving in and out of the county. The District staff also maintains a file of newspaper clippings that pertain to changes in property and all District staff remains alert to visual changes in properties. Throughout the year, notes are made on those visual changes and all information is provided to the field appraiser. The field appraiser will also conduct detailed field inspections of properties if requested by the owner and reappraise these properties as necessary.

Andrews CAD compiles all sales by neighborhood and class. Problematic areas are further researched and may indicate the use of market modifiers. The use of these modifiers is the predominant method of adjusting sales for location and time. Values throughout the county may be adjusted by use of market modifiers during the reappraisal year.

#### **ANALYSIS OF AVAILABLE RESOURCES:**

Staffing and budget requirements for tax year 2027 are detailed in the adopted 2026-2027 budget and attached to the written biennial plan by reference. This reappraisal plan is adjusted to reflect the available staffing in tax year 2027 and anticipated staffing for tax year 2028. Budget restraints can impact the cycle of real property re-inspection and personal property on-site review that can be accomplished in the 2027-28 time period. Staff Personnel and Contract Appraisers are listed on page 7.

Existing appraisal practices, which are continued from year to year, are identified and methods utilized to keep these practices current. In the reappraisal year, real property appraisal depreciation tables are tested against verified sales data to ensure they represent current market data. Current cost schedules for commercial real properties are derived and updated from Marshall and Swift Valuation Service every other year. Marshall and Swift Valuation Service is a national based cost manual and is generally accepted throughout the nation by the real estate appraisal industry. Personal property density schedules are tested and analyzed based on renditions and prior year documentation. Due to lack of sales of personal property in the district, the Comptroller's Guide is utilized to appraise personal property and for testing and analysis purposes.



Information Systems (IS) support is detailed and system upgrades are scheduled. Existing maps and data requirements are continually updated and kept current.

The Texas Legislature amended the appraisal review board appeal process by allowing arbitration in addition to filing suit in District Court with certain limitations. It is anticipated that the number of arbitration requests will increase as the public becomes more informed of this option. Time and effort expended on arbitration cases is a good indicator that additional recourses as well as an increase in staffing may become necessary as the arbitration process evolves. All appraisal districts may face arbitration or lawsuits in any appraisal year.

Changes in legislation involving appraisal districts may occur in 2027 when the legislature is called into session. These new laws may require adjustments to the budget, staffing, and programming.

### **PERFORMANCE ANALYSIS:**

Performance Analysis – the equalized values from the previous tax year are analyzed with ratio studies to determine the appraisal accuracy and appraisal uniformity overall and by market area within property reporting categories. Ratio studies are conducted in compliance with the current *Standard on Ratio Studies* of the International Association of Assessing Officers. Mean, median, and weighted ratios are calculated for properties in reporting categories to measure the level of appraisal accuracy. The mean ratio is calculated in each reappraised category to indicate the level of appraisal accuracy by property reporting category. In the 2027 reappraisal year, this analysis is used to develop the starting point for establishing the level and accuracy of appraisal performance. In the 2028 reappraisal year, this analysis is used to develop the starting point for establishing the level and accuracy of appraisal performance. In 2027 and 2028, any reporting category that may have been excluded from reappraisal due to lack of data to support reappraisal will be tested and analyzed to arrive at an indication of uniformity or equity of existing appraisals.

Sales ratio studies are used to evaluate the District's mass appraisal performance. These studies not only provide a measure of performance, but also are an excellent means of improving mass appraisal performance. The District uses ratio studies not only to aid in the reappraisal of properties, but also to test the State Comptroller's Property Tax Division Annual Property Value Study results.

Andrews CAD usually begins ratio studies in late January or early February, with all sales reports being compiled by neighborhood and class inside the city limits and outside the city limits. Within the boundaries, the ratios are analyzed to identify comparable neighborhoods. Outliers and questions that were not identified in the field are reviewed and analyzed. Field cards indicating the results of field inspections of the sold properties are available for each individual sale to further aid in making decisions regarding outliers.

Outliers are characterized as having low or high ratios. They can result from an erroneous or unrepresentative sale price, an error in the appraisal, or a mismatch between the property sold and the property appraised.

Remaining sales are then correlated to indicate comparable neighborhoods within the city. The sales from each comparable neighborhood are grouped (stratified) according to classification. The median



ratio indicated by the sales is then compared to the desired ratio. The coefficient of dispersion is also studied to indicate how tight the ratios are in relation to the measures of central tendency. The median and coefficient of dispersion are good indicators of the types of changes to be made if any are necessary. The use of market modifiers is the predominant method of adjusting sales for location and time to indicate market values. Market modifiers are methods of adjusting property to equal the market without changing the schedules.

### **PLANNING AND ORGANIZATION:**

A calendar of key events with critical completion dates is prepared for each area of work. This calendar identifies key events for appraisal, clerical, customer service, and information systems. A calendar is prepared for tax years 2027 and 2028. Production standards for field activities are calculated and incorporated in the planning and scheduling process.

The field inspections will begin in September 1, 2026 and will complete all inspections and schedules by April 1, 2027 for the 2027 tax year or soon thereafter. The field inspections will begin in September 1, 2028 and will complete all inspections and schedules by April 1, 2028 for the 2028 tax year or soon thereafter.

### **MASS APPRAISAL SYSTEM:**

Computer Assisted Mass Appraisal (CAMA) system revisions are completed by the Information Systems Software Provider. System revisions and procedures are performed by the Provider. Andrews County Appraisal District contracted with the firm of Harris/True Automation for these services.

Appraisal information for each area of work, maps for each area of work, and appraisal cards showing sketches and pictures of the properties included in the area of work will be provided by the District to the field appraisers on the field mobile Ipad.

The District anticipates devoting some programming time to allow for the development of new reports to help manage and edit the information provided by the field appraisers.

### **Real Property Valuation**

Revisions to cost models, income models, and market models are specified, updated, and tested each tax year.

Cost schedules are tested with market data (sales) to insure that the appraisal district is in compliance with Texas Property Tax Code, Section 23.011. Replacement cost new tables as well as depreciation tables are tested for accuracy and uniformity using ratio study tools and compared with cost data from recognized industry leaders, such as Marshall & Swift.

Land schedules are updated using current market data (sales) and then tested with ratio study tools. Value schedules are developed and tested on a pilot basis with ratio study tools.

## **Personal Property Valuation**

Density schedules are tested using data received during the previous tax year from renditions and hearing documentation. Valuation procedures are reviewed, modified as needed, and tested. The latest edition of the Comptroller's Guide is utilized heavily in the appraisal of personal property in the district.

### **Noticing Process**

25.19 appraisal notice forms are provided by the IS Provider. The Provider reviews and edits for updates and changes required by legislative mandates. The district publishes, in the local newspaper, information about the notices and how to protest. The district makes available the latest copy of the Comptroller's pamphlet *Taxpayer's Rights, Remedies, and Responsibilities*.

### **Hearing Process**

Protest hearing scheduling for informal and formal Appraisal Review Board hearings is reviewed and updated as required. Standards of documentation are reviewed and amended as required. The appraisal district hearing documentation is reviewed and updated to reflect the current valuation process and requirements. Compliance with House Bill 201 is insured.

District staff conducts the initial informal hearing with a protesting property owner. If valuation issues are not agreed upon at this level, the protesting property owner may elect to proceed to a formal hearing with the Appraisal Review Board.

Evidence in compliance with HB 201 may be requested by the property owner or the property owner's agent and will be made available at least 14 days prior to the scheduled protest hearing.

### **DATA COLLECTION REQUIREMENTS:**

Andrews Appraisal District cost and value schedules include land, residential improved, commercial improved, and personal property. Data sources currently used by the District include cost information from Marshall and Swift Valuation Service, cost data obtained from local contractors, and renditions provided by the property owners. Marshall and Swift Valuation Service is a national based cost manual and is generally accepted throughout the nation by the real estate appraisal industry. This cost manual is based on cost per unit or square foot and also uses the unit in place method. The unit in place method involves the estimated cost by using actual building components. This national based cost information service provides the base price of buildings by classification with modifications for equipment and additional items. The District's schedule is then modified for time and location.

Field and office procedures are reviewed and revised as required for data collection. Activities for each tax year include new construction, demolition, remodeling, re-inspection of problematic market areas, re-inspection of the universe of properties on a specific cycle, and field or office verification of sales data and property characteristics. On properties that have transferred ownership, the District will verify



the sales price and individual property characteristics as of the date of the sale through field inspection and office research.

Renditions are confidential sources and cannot be used for specific information. However, data from renditions may be compared with data obtained from cost manuals and used to test schedules for accuracy.

Data on individual properties is also collected from the field, compiled, and analyzed. Buildings and other improvements are inspected in the field, measured, and classified. The appraiser estimates the age and condition of the improvements. This data is used to compile depreciation tables. Any notes pertaining to the improvements are made during inspection.

### **New Construction/Demolition**

The appraisers performing reappraisals in the field starting in 2022, now have field mobile Ipad computers that contain specific information regarding the property being appraised. These Ipads contain brief legal descriptions, ownership interests, property use codes, property addresses, land size, and sketches of improvements as well as detailed information of any improvements plus a satellite view of the property with the parcel map overlay for more accuracy.

Appraisal field inspections require the appraisers to check all information on the field Ipad and to update the information when necessary. New construction field and office review procedures are identified and revised as required. Sources of building permits are confirmed. The City of Andrews provides a listing of permits issued during the previous year. The County 911 service provides a list of 911 addresses issued during the year. Additionally, the local newspaper's articles are checked throughout the year for reference purposes.

Local contractors and builders are another source of cost data utilized by the District. Local contractors provide cost data on new structures that is compared to cost information obtained from Marshall Swift Valuation.

### **Remodeling**

Properties with extensive improvement remodeling are identified and field inspections are scheduled to update property characteristic data. Permits issued by the city and visual sightings by District staff are key components in this area. Copies of permits are provided by the District to the field appraiser. Notes made throughout the year as remodeling projects are observed and provided by the District to the field appraiser.

### **Re-inspection of Problematic Market Areas**

Real property market areas, by property classification, are tested for low or high ratio sales and/or high coefficients of dispersion. Market areas that fail any or all of these tests are determined to be problematic. Field inspections are scheduled to verify and/or correct property characteristic data. Additional sales data is researched and verified.



### **Re-inspection of the Universe of Properties**

The International Association of Assessing Officers' *Standard on Mass Appraisal of Real Property*, specifies that the universe of properties should be re-inspected on a cycle of 3 years. The re-inspection includes physically viewing the property, photographing, and verifying the accuracy of the existing data. The field appraiser has an appraisal card of each property to be inspected and makes notes of changes, depreciation changes, remodeling, additions, etc. The annual re-inspection requirements for tax years 2027 and 2028 are identified and scheduled in the reappraisal plan.

### **Field or Office Verification of Sales Data and Property Characteristics**

Sales information is received from various sources. These sources include conversations with local real estate appraisers, agents, and brokers. Also, from deed transactions, the District mails out sales surveys to sellers and purchasers in an effort to obtain additional sales information that may not be otherwise discovered.

These sales are compared to the existing data on the property account and changes are made as indicated. These changes include age and condition as well as any improvements made to the property before the sale takes place. When sales information indicates a difference in the improvement's square footage, the buildings are remeasured.

Sales information must be verified and property characteristic data contemporaneous with the date of sale captured. The sales ratio tools require that the property that sold must equal the property appraised in order that statistical analysis results will be valid.

### **PILOT STUDY BY TAX YEAR:**

New and/or revised mass appraisal models are tested each tax year. Ratio studies, by market area, are conducted on proposed values each tax year. Proposed values on each category are tested for accuracy and reliability. Actual test results are compared with anticipated results and those models not performing satisfactorily are refined and retested. The procedures used for model specification and calibration are in compliance with USPAP, STANDARD RULE 6.

Market Areas are delineated through the review of sales analysis to determine geographic influence on property values. Andrews CAD has defined six urban residential neighborhoods, one rural market, a commercial neighborhood, and an industrial area. The commercial and industrial use areas have been designated as Reinvestment Zone 1 and 2 by the City of Andrews in their economic development and zoning plans. The rural designation may be subdivided should market data analysis indicate an effect on desirability and/or sale price of similar property within an area. Rural designation includes a mix of residential, commercial, and agricultural uses. Andrews has few homogeneous neighborhoods. Some property use types may have comparable desirability to similar properties in other neighborhood designations.

Residential valuation schedules are cost-based tables modified by actual sales with the cost reflecting the actual replacement cost new of the subject property, market research indicates that the common unit of comparison for new residential construction as well as sales of existing housing is the price paid per square foot. The value of extra items is based on their contributory value to the property. This value may be estimated by the price per square foot or a value of the item as a whole. This data is extracted from the market by paired sales analysis and conversations with local appraisers and brokers. These schedules are formulated from the Marshall and Swift Valuation Service Residential Handbook.



The residential schedule is based on quality of construction, size of structure, condition of structure, contributory value of extra items, and land value. Each of these variables has a direct impact on the cost as well as the value of a property. Following is an example of each of the variables and how they may affect market value.

1. **Quality of construction:** Residential construction may vary greatly in quality of construction. The type of construction affects the quality and cost of the material used, the quality of the workmanship, as well as the attention paid to detail. The cost and value of residential property will vary greatly, depending on the quality of construction. The District's Appraisal Manual contains an expanded description of classifications used and is attached by reference.
2. **Size of structure:** The size of a building also has a direct impact on its cost as well as its value. The larger the building, the less the cost per square foot. The District's schedules are graduated in size increments, depending on market conditions. Marshall and Swift Valuation Service also support this size factor. The District's Appraisal Manual contains an expanded description of size increments and square footage breakdown's and is attached by reference.
3. **Condition of improvements:** The District rates conditions as very poor, poor, fair, average, good, very good, and excellent. Upon physical inspection appraisers, using their own judgment of age and condition of the structure, applies a depreciation factor. This factor is based generally on one (1) percent for each two years of age. Properties that, in the opinion of the appraisers, are unlivable are not appraised according to the schedule. Rather, they are appraised at salvage value or are marked as no value at all.
4. **Age of Structure:** The District's field appraiser assigns an approximate effective age. This method is supported by conversations with local appraisers and builders who estimate the economic life of residential properties to be approximately 50 years. Properties in the age 51 and over bracket are given the maximum amount of depreciation unless remodeling or very good upkeep has allowed the structure to maintain a longer life. The effective age and chronological age may or may not be the same depending on the condition of the structure. This depreciation factor is generally based on one (1) percent for each two years of age.
5. **Extra items:** Extra items are valued according to their contributory value to the whole. Examples of extra items include covered porches, patios, screened or enclosed porches, storage buildings, swimming pools, etc. The District's Appraisal Manual contains more specific information regarding extra items and is attached by reference.
6. **Land Value:** The District values land based on market transactions. Units of comparison depend on how the property is purchased and marketed. Large acreage tracts are usually purchased based on the price per acre. Commercial tracts are purchased based on the price per square foot, and residential properties are purchased based on price per front foot. Depth factors are used to modify values according to market indicators. Land prices vary throughout the District, therefore, their values are dependent upon homogenous areas. Land schedules for residential, commercial, agricultural, and industrial properties are available upon request from the District.

Inspections of property are made by exterior perspective, so the interior finish as well as interior components are assumed and are not adjusted. All financing for comparable sales is considered typical to the market. The final estimate of value is a correlation of the comparable sales after net adjustments



have been deducted from the sales price to equal the subject property. The value by this method is estimated by the appraiser and is not a function of the computer.

### **VALUATION BY TAX YEAR:**

Using market analysis of comparable sales and locally tested cost data, market area specific income and expense data, valuation models (Cost Per Square Foot Schedules) are specified and calibrated in compliance with supplemental standards from the International Association of Assessing Officers and the Uniform Standards of Professional Appraisal Practice. The calculated values are tested for accuracy and uniformity using ratio studies. Performance standards are those as established by the *IAAO Standard on Ratio Studies*. Property values in all market areas are updated each reappraisal year. Properties in selected market areas are updated in non-reappraisal years. Tax year 2027 is a reappraisal year. Tax year 2028 is a reappraisal year. *Note: The district will describe its valuation methods by property types.*

#### **RESIDENTIAL REAL PROPERTY**

- Sales Comparison Approach to Value
- Cost Approach to Value
- Income Approach to Value

#### **SPECIAL INVENTORY RESIDENTIAL PROPERTY**

- Sales Comparison Approach to Value
- Cost Approach to Value
- Income Approach to Value

#### **MULTIFAMILY RESIDENTIAL PROPERTY**

- Sales Comparison Approach to Value
- Cost Approach to Value
- Income Approach to Value

#### **COMMERCIAL REAL PROPERTY**

- Sales Comparison Approach to Value
- Cost Approach to Value
- Income Approach to Value

#### **VACANT REAL PROPERTY**

- Sales Comparison Approach to Value
- Cost Approach to Value
- Income Approach to Value

#### **INDUSTRIAL REAL PROPERTY**

- Sales Comparison Approach to Value
- Cost Approach to Value
- Income Approach to Value

**UTILITIES**

Sales Comparison Approach to Value

Cost Approach to Value

Income Approach to Value

**MINERAL INTEREST**

Sales Comparison Approach to Value

Cost Approach to Value

Income Approach to Value

**SPECIAL VALUATION PROPERTIES**

Agricultural Use

Wildlife Management

Timber Use

**BUSINESS TANGIBLE PERSONAL PROPERTY**

Sales Comparison Approach to Value

Cost Approach to Value

Income Approach to Value

**INDUSTRIAL TANGIBLE PERSONAL PROPERTY**

Sales Comparison Approach to Value

Cost Approach to Value

Income Approach to Value

**Sales Comparison Approach to Value**

The sales comparison approach to value is utilized by grouping or clustering sales within the specified neighborhoods and classification of properties. The sales are then tested against appraised values to indicate a ratio for the neighborhood. A neighborhood is a grouping of complementary land uses affected equally by the four forces that influence property value: social trends, economic circumstances, governmental contracts and regulations, and environmental conditions. These factors have an impact on the value of properties within this grouping and in turn on properties being appraised.

Individual neighborhood boundaries within the District vary according to market indications and the type of property being appraised. The boundaries of these neighborhoods may be physical, geographical, or political in nature. Generally, residential neighborhoods consist of individual subdivisions or clusters of subdivisions that contain similar properties located within the city or county rural area. Commercial neighborhoods may be smaller areas within a city, an entire city, or rural area. Industrial neighborhoods may include the entire District. Defining neighborhood boundaries depends on the subject of the appraisal assignment.

If sufficient sales are not found, then sales from competing neighborhoods are found and appropriate adjustments are made in the form of market modifiers. These modifiers are applied to cost schedules to



indicate mass appraisal values for a given neighborhood. Therefore, the sales comparison approach is actually blended with the cost approach to create a hybrid of these two approaches to value.

### **Cost Approach to Value**

The District uses a hybrid cost model developed from Marshall and Swift Valuation Service. The cost model categorizes and values property by class, age, condition, and extra items. Depreciation is derived by age/condition and any additional depreciation that may be necessary. Land value is added to indicate a preliminary market value for like properties within the subject neighborhoods. After cost schedules, depreciation, and land values are applied, then a market modifier may be necessary to adjust the values to actual market conditions. These modifiers apply to improvements only and do not adjust land values. Therefore, the cost approach to value is actually a hybrid of the sales comparison and cost approaches to value.

### **Income Approach to Value**

The income approach to value or rent multipliers are currently not a reliable indicator of value for residential mass appraisal reports unless rents are specified. Databases or data sources for income producing residential properties are not available in the Andrews County area. Therefore, the income approach to value is not used in the **residential** mass appraisal report but is used for other types of properties.

Additional information concerning approaches to value for specific types of properties, such as minerals, utilities, industrial, railroads, pipelines, industrial personal property, etc. may be found in the Plan provided by the Capitol Appraisal Group which performs those appraisals and is attached to this plan by reference.

### **Special Valuation Process**

**Agricultural Use:** Market value for agricultural property is established by acceptable appraisal methodology. The District also values agricultural property by the income approach as set forth in the Texas Property Tax code. This is a special valuation process as there are parameters set forth in the Code regarding capitalization rates. Income and expenses for each different category of agricultural use is estimated from surveys, actual rental data obtained by property owners as well as conversations with local governmental agencies. The formula used is set out by the Texas Property Tax Code and is as follows:  $\text{net-to-land (all ag-related income streams minus all ag-related expenses)} / \text{cap rate} = \text{ag value}$

### **THE MASS APPRAISAL REPORT:**

Each tax year, the required Mass Appraisal Report is prepared and certified by the Chief Appraiser at the conclusion of the appraisal phase of the ad valorem tax calendar (on or about May 15<sup>th</sup>). The Mass Appraisal Report is completed in compliance with STANDARD RULE 6 – 8 of the *Uniform Standards of Professional Appraisal Practice*. The signed certification by the Chief Appraiser is compliant with STANDARD RULE 6 – 9 of *USPAP*. This written reappraisal plan is attached to the report by reference.

## **VALUE DEFENSE:**

Evidence to be used by the appraisal district to meet its burden of proof for market value and equity in both informal and formal appraisal review board hearings is specified and tested. *Note: The appraisal district identifies the evidence to be used in informal and formal hearings by property type and the steps to be taken to insure compliance with House Bill 201.*

**RESIDENTIAL PROPERTY**  
**SPECIAL INVENTORY RESIDENTIAL PROPERTY**  
**MULTIFAMILY RESIDENTIAL PROPERTY**  
**COMMERCIAL REAL PROPERTY**  
**VACANT REAL PROPERTY**  
**INDUSTRIAL REAL PROPERTY**  
**UTILITIES**  
**MINERAL INTEREST**  
**SPECIAL VALUATION PROPERTIES**  
**BUSINESS TANGIBLE PERSONAL PROPERTY**  
**INDUSTRIAL TANGIBLE PERSONAL PROPERTY**

Informal hearings are conducted by phone, mail, or in person by District appraisers. Appraisers may present sales data or data specific to the property in defense of the District values. If the taxpayer wishes to pursue a dispute further, the appraiser or District staff will guide them through the initial phase of the formal protest procedures.

When taxpayers are scheduled for formal hearings, they receive an ARB procedures pamphlet and a copy of the *Taxpayer's Rights, Remedies, and Responsibilities* published by the State Comptroller's office. If protest hearing evidence is requested, the appraisal district has 14 days prior to the protest hearing to make its evidence regarding value disputes available. Information provided, as appropriate, may include but is not limited to: comparable sales and applicable schedules, depreciation tables, a copy of the discount cash flow model developed to calculate the current inventory value, income and expense information derived from the market that has been accumulated and developed into charts containing general data, applicable appraisal reports and research data applicable to the property, etc. **At no time, except as provided by the Texas Property Code will any confidential income, expense, sales, or other information received from taxpayers on specific accounts be released.**

## **COMPUTER ASSISTED MASS APPRAISAL SYSTEM**

The appraisal district field appraisers will enter data reflecting changes and notes made during the field inspection into the Ipad and download to main system when area is complete. Pictures will also be taken by the field appraiser with the Ipad and automatically load to the account.

Appraisal district staff will be responsible for entering all name and address changes received by phone, letter, or from the front counter. Staff will also be responsible for entering any exemption changes, as well as any supplemental changes. Staff is responsible for backing up computer files and maintaining changes to the maps.



The software providers are responsible for providing training and assisting appraisal district staff concerning use of existing and new programs.

### **ARB APPEAL PROCEDURES:**

After the Appraisal Review Board hears and determines all timely filed protests, the District mails, by certified mail with return receipt, mails the ARB orders containing the Board's decision on the protest to the property owners. Property owners have 45 days after receiving a Board Order to either file suit in District Court or to file a request for arbitration. Information on procedures for appealing an ARB order is included in the order along with a Request for Binding Arbitration form.

## **PLANNING A REAPPRAISAL**

Variation in reappraisal requirements requires Andrews County Appraisal District to carefully plan its work before beginning any reappraisal. Although the planning process may vary in specifics, it should involve five (5) basic steps:

1. Assess current performance.
2. Set reappraisal goals.
3. Assess available resources and determine needs.
4. Re-evaluate goals and adjust as necessary.
5. Develop a work plan.

## **STEPS IN A REAPPRAISAL**

The International Association of Assessing Officers (IAAO) textbook, Property Appraisal and Assessment Administration, lists ten steps in a reappraisal. These steps outline those activities performed by Andrews County Appraisal District for the completion of periodic reappraisals. Activities are listed below in the order in which they occur:

1. Performance Analysis:
  - A. ratio study
  - B. equity of existing values
  - C. consistency of values with market activity
2. Revaluation Decision:
  - A. statutory – at least once every three years
  - B. administrative policy
3. Analysis of Available Resources:
  - A. staffing
  - B. budget
  - C. existing practices
  - D. information system support
  - E. existing data and maps

4. Planning and Organization
  - A. target completion dates
  - B. identify performance objectives
  - C. specific action plans and schedules
  - D. identify critical activities with completion dates
  - E. set production standards for field activities
5. Mass Appraisal System:
  - A. forms and procedures revised as necessary
  - B. CAMA (computer assisted mass appraisal) system revisions as required
6. Conduct Pilot Study
  - A. test new/revised appraisal methods as applicable
  - B. conduct ratio studies
  - C. determine if values are accurate and reliable
7. Data Collection
  - A. building permits and other sources of new construction
  - B. check properties that have undergone remodeling
  - C. reinspection of problematic properties
  - D. reinspection of universe of properties on a cyclic basis
8. Valuation:
  - A. market analysis (based on ratio studies)
  - B. schedules development
  - C. application of revised schedules
  - D. calculation of preliminary values
  - E. tests of values for accuracy and uniformity
9. The Mass Appraisal Report
  - A. establish scope of work
  - B. compliance with Standards Rule 6 - 7 of USPAP
  - C. signed certification by the chief appraiser as required by Standards Rule 6-8 of USPAP
10. Value Defense:
  - A. prepare and deliver notices of value to property owners
  - B. hold informal hearings
  - C. schedule and hold formal appeal hearings

\*\*Note—the burden of proof (evidence) of market values and equity falls on the appraisal district.\*\*



# **Andrews County Appraisal District Residential, Commercial, Rural, and Personal Property 2027/2028 Reappraisal Plan**

This plan for reappraisal was written by Andrews County Appraisal District and is in compliance with USPAP requirements.

Pursuant to Section 25.18 of the Texas Property Tax Code, the Andrews County Appraisal District has established the following reappraisal plan to provide for the reappraisal and reinspection of all property within the district at least once every three (3) years.

1. **Two-Year Cycle:** The CAD is divided into two areas. Each year, all real property within one of the areas will be reappraised or physically inspected, data updated and photographed, regardless of ratio study/report findings. These areas are identified as follows:
  - a. 2027-Area One: All property categories within the Andrews city boundary.
  - b. 2028-Area Two: All property categories outside the Andrews city boundary.

**\*\*Note:** all Commercial, Income producing and personal property within the CAD is appraised on an annual basis, regardless of its location.\*\*

2. **Annual Ratio Reports:** In addition to the two-year cycle stated above, ratio studies shall be performed annually to determine areas or categories of properties within the CAD which need to be reappraised within the current year based on sales ratios. Any areas or categories whose ratios are above or below statutory requirements shall be reappraised in the current year regardless of the area in which they are located.

This approach will insure not only that all residential and commercial property within the CAD is reappraised at least once every three years, but also that all other categories within the CAD are reviewed annually so that the appraisal district stays current with respect to market value in those areas where residential and/or commercial property values appear to be changing rapidly.

## **Organization**

Field inspections are carried out by the field appraisers as directed by the chief appraiser. The field appraisers physically inspect areas required by the reappraisal cycle, checks all existing data, works building permits, takes photographs of improvements, draws plans of new improvements for entry into computer, rechecks any property on which a question or problem has arisen. Other duties may be required and will be executed upon direction of the chief appraiser.

Data entry of field work notes and sketches are also performed by appraisal district staff.

The chief appraiser performs market analysis. Sales data is gathered throughout the year from deed records, sales confirmation letters from property owners, and other sources. The market data is analyzed, sales data is confirmed, outliers are identified, existing classification system is reviewed, market schedules are reviewed and updated as necessary, and final market schedules are applied to the universe of properties.

### **2027-2028 Reappraisal Schedule**

#### **September, 2026:**

Begin on-site inspections.

#### **Mid December, 2026:**

1. Begin planning and research sales for ratio studies for all areas within the CAD (input all sales for February Submission).
2. Gather current sales data from sales confirmation letters deed records, and other sources.

#### **January to March, 2027:**

1. Mail any remaining homestead applications, special-use valuation applications, personal property renditions, exemption and abatement applications, and any other forms such as property surveys.
2. Complete field inspections as provided by the reappraisal plan area.
3. Begin running sales ratio reports. Compare with CAD values and sales information.
4. Continue working with the Comptroller's Office regarding the ratio study.
5. Identify necessary schedule adjustments.
6. Begin update of the USPAP report (Mass Appraisal Report).
7. Begin working Business Personal Property and other renditions.

#### **March through April, 2027:**

1. Continue running sales ratio reports.
2. Prepare for PVS and MAP studies by maintaining copies of requirements for the coming study. Sales to be flagged should have notes such as if the sale occurred after January 1<sup>st</sup> and had changes after appraisal such as a lot appraisal with the sale after a new home was constructed and partial completed properties as of January 1 that sold previously for their full sales price. Sale would result in a bad ratio which invalidates the ratio study if included before February 1st.
3. Refine sales analysis and mass appraisal schedule. Statistically test schedules.
4. Complete data entry of all reappraisal and maintenance changes.
5. Assist field appraiser with reappraisal functions as needed.
6. Finalize all field work and data collection activities.
7. Execute mass appraisal/maintenance activities as required.
8. Prepare for mailing 2027 Notices of Value.
9. Mail appropriate letters concerning homesteads, special-use appraisals, etc.
10. Continue working renditions.
11. Provide certified estimated values to taxing units.



**May through June, 2027:**

1. Continue to mail notices of value.
2. Hold informal hearings.
3. Respond to property owners' inquiries, protests, and questions from notice mailings.
4. Mail notices of ARB hearing appointment letter.
5. Mail protest hearing notification letters.
6. Hold ARB hearings.
7. Mail ARB certified change/no change board orders.
8. Mail appropriate ARB pending decision letters.

**July, 2027:**

1. Continue the process of mailing certified ARB orders as needed.
2. Enter into computer all changes as ordered by ARB and notify other CADs if the ordered change falls into an over-lapping area.
3. ARB approval of appraisal records by July 20<sup>th</sup>.
4. Certification of appraisal records and values to taxing units by July 25<sup>th</sup>.
5. Mail Business Personal Property Penalty notification letters and tax collector notification emails.

**As needed throughout the year 2027:**

1. Handle any outstanding protests by scheduling ARB hearings.

Additionally, work outside of the appraisal process must be completed on a timely basis. Andrews County Appraisal District is a small district with limited staff, therefore departments are not designated. District staff must complete, in a timely manner, the work assigned by the chief appraiser or office/business manager. The work schedule, in addition to the above scheduled calendar, is as follows:

**Daily:**

1. Be sure all data entries are complete and any supporting documentation filed/scanned/etc.
2. Ownership and Address verifications and maintenance (name, address, legal, value, situs, etc.) data entry.
3. Drawing maintenance data entry.
4. Maintain prorated accounts.
5. Maintain exempt frozen accounts.
6. Mobile home changes data entry, TDHCA documentation filed/scanned/etc. All values verified.
7. Residential, commercial, personal property, industrial, mineral changes data entry documented. Email confirmation of significant change to chief prior to NAVs. (concerns)
8. Agricultural changes data entry with all qualification data (picture, written inspection, applic).
9. Send appraisal roll changes/tax roll changes quarterly to appropriate taxing units(BOD/ARB) by 10<sup>th</sup> of month following the quarter. Value recap sent to taxing units quarterly.
10. Download pictures provided by the field appraiser.

**As Needed:**

1. Make changes for supplemental accounts. Residential, commercial, personal property, industrial, mineral changes data entry for previous and current year.
2. Update previous years' appraisal dates.
3. Programming changes for seasonal updates (PACS maintenance conducted by CA).
4. Create new reports.
5. Mail letters on properties receiving over-65 exemptions (HS/AG where the property owner is now deceased with new procedures involving Certified Mail on all applications/letters, Self-Addressed Envelope, Second Letter and 60 day time frame prior to removal/Denial (Certified).
6. Homestead letters. After all deeds from December are completed, quarterly mass mailings during the year if needed.
7. Notices of change sent certified mail throughout year certified for omitted property.
8. AG Rollback notices of change sent at NAV time with actual billing after tax rates adopted.
9. Maintain records retention (scan, store, etc.) to comply with State rules.

While the scope of work is not limited to the scheduled tasks, the District has endeavored to identify the **main** yearly tasks. To further pinpoint scheduled tasks, the following calendar has been implemented for District staff, but the work is not limited to the tasks contained in this calendar:

**January, 2027 and 2028:**

1. All personal property renditions are mailed in January with other annual applications.
2. Obtain building permits issued by city and code the appropriate parcel for inspection by a field appraiser. Certificates of occupancy are also noted.
3. Continue with data entry of completed field work.
4. Prepare and key in data on all splits and combines and follow up with mapping procedures (TA).
5. Prepare quarterly reports on major projects with statistics for the Annual Appraisal Report.
6. All ARB value changes acknowledged for no change in value for coming year on required props.
7. Maintain records management program with filing/labeling by year/owner/PACS entry/etc.
8. Mail various applications and document certified mailings.
9. Mail new special-use (ag) applications due to change of ownership during deed changes.
10. Notify the TACs of any changes which require a large refund by notification to CA to send on.
11. Hold the preliminary ARB meeting in May to receive current records, supplemental record changes, complete the Statement of Officer form, administer Oaths of Office, elect officers, etc.
12. Prepare and have available for inspection by the BOD and the ARB the 25.25b change reports.
13. Publish quarter-page ad on availability of exemptions, rendition requirement, special appraisals, and tax deferrals. Website, Newspaper, Counter availability.
14. Publicize the uniform procedure to appraise inventory.
15. Approve or ratify contracts with vendors.
16. Enter data on new abatements.
17. Schedule BOD meeting and include executive session if necessary.
18. Notify appropriate tax units and owners of any completed abatements and provide preliminary estimates of value.
19. Obtain "cap rate" to be used in 2027 appraisals.
20. Request license information from Texas DPS (or voter list) to obtain birth date information to automatically grant over-65 homestead exemptions.
21. Notify format in February and submit current year appraisal roll to each tax unit electronic.



22. Continue data entry of name/address changes, splits and combines, subdivision, and personal property into the current file.
23. Complete "end-of-year clean-up" in the computer and set the computer to accept current year information. Be sure coding/letters/appraisal dates are accurate.
24. District staff trained/participate in webinars on the use of any changes to computer programs.
25. Develop new reports as needed in spreadsheet (Excel) format. Email to CA as requested.
26. Continue to obtain deed changes and key in ownership changes and parcel boundary changes and create new accounts as needed.
27. Continue to provide assistance to property owners and the general public by answering phone calls and assisting with walk-in customers, real estate agents, landmen, etc.
28. Update and maintain maps with any incomplete parcel discovered researched and sent to TA as discovered.
29. Process and sell digital parcel data as requested.
30. Maintain website with accurate information as required.
31. Send sales information/deed transfer information to State Comptroller's Office by February 1.
32. Determine possible dates for Ag Advisory Council meetings and set those meetings up for completion of annual survey.

**February, 2027 and 2028:**

1. Continue keying in recheck notes and use property code if necessary for follow-up.
2. Continue downloading pictures provided by field appraiser.
3. Proof changes keyed in.
4. Continue data entry of sketches/drawings.
5. Call or notify in writing all locked gate owners where a 911 address or visual inspection indicates an improvement.
6. Set up new business accounts.
7. Research returned mail. Check with NCOA as needed. (Before mass mailings)
8. Maintain records management program.
9. Prepare all changes for the ARB meeting. Verify all protest selections on form are acted upon.
10. Maintain Inventory of supplies, paper and envelopes for ordering as needed- notify CA.
11. Notify tax assessors/collectors of any changes which require refunds.
12. Maintain website and update it with any new forms, schedules, deadlines, etc.
13. Require the BOD, ARB, and chief appraiser to sign affidavits regarding delinquent taxes.
14. Set up ARB meeting to approve all changes, approve supplemental accounts, and hold hearings on substantial error motions.
15. ensure that all lawsuits have complied with Section 42.08 payment requirements.
16. Review revisions needed for ARB programs and documents and order necessary supplies.
17. Present preliminary ratio study results to the BOD.
18. Submit updated current year appraisal roll to each taxing unit.
19. Continue data entry of changes and updates.
20. Prepare for annual mailouts.
21. Continue to obtain deed records and make changes to appropriate parcels.
22. Continue with customer service (phone calls, walk-ins, etc.).
23. Continue to maintain maps.

**March, 2027 and 2028:**

1. Continue work on appeal of Comptroller's ratio study, if necessary.
2. Continue updating USPAP (Mass Appraisal Report).
3. Continue data entry of field work.
4. Continue downloading pictures provided by field appraiser.
5. Continue to research returned mail.
6. Maintain records management.
7. Prepare recap of values for supplemental accounts for the ARB and prepare supplemental logs for the ARB.
8. Prepare and key-in new tax agent codes and update changes to existing agent codes.
9. Prepare and mail reminders to those who failed to return homestead applications and/or agricultural applications.
10. Notify tax assessors/collectors of changes that require refunds.
11. Prepare and mail-out letter to agents requiring them to update the accounts they represent and inform them of fiduciary requirements to protest.
12. Be sure that new ARB members are signed up for the mandatory training course.
13. Process rendition extension requests and print and mail letters granting or denying those requests.
14. Submit updated appraisal roll to each tax unit.
15. Update all schedules.
16. Continue to obtain and process deed records.
17. Continue to provide customer service assistance.
18. Continue to maintain maps.

**April, 2027 and 2028:**

1. Complete data entry of changes.
2. Begin preparation of Notices of Value.
3. Mail Notices of Value by May 1.
4. Begin compiling information for evidence packets for property owners filing protests and requesting evidence.
6. Continue data entry processes.
7. Continue to research returned mail.
8. Continue to maintain records management.
9. Prepare change logs for the ARB and BOD.
10. Purchase sufficient postage for mailing Notices of Value.
11. Continue to obtain sales information.
12. Notify each tax assessor/collector of changes that require a refund.
13. Update website to include new information and current year protest forms.
14. Prepare and submit 25.25b reports to the BOD and ARB.
15. Continue to receive and process rendition extension requests and prepare and mail letters granting or denying the requests.
16. Mail letters to taxing units requesting new abatement contracts/TIF Zones for the current year. (This information is to be sent to the Comptroller's Office before July 1.)
17. Submit updated appraisal roll information to each tax unit.
18. Print Notices of Value.
19. Print edits before notices are mailed.



20. Continue to develop reports as needed.
21. Continue to obtain deed records and make changes as indicated.
22. Continue to provide customer service to the general public.
23. Continue to maintain maps.

**May, 2027 and 2028:**

1. Mail Notices of Value.
2. Continue to work renditions and new personal property accounts.
3. Begin working with property owners regarding proposed values and protests filed.
4. Appraisers hold informal hearings with protesting property owners.
5. Provide evidence to property owners submitting evidence requests for protest hearings.
6. Prepare monthly reports.
7. Continue to research returned mail.
8. Continue to maintain records management.
9. Notify taxing units' tax assessors/collectors of appraisal roll changes that require refunds.
10. Process and determine requests for additional 15 days to file renditions (May 30<sup>th</sup> deadline) and mail determinations.
11. BOD must adopt the following year's budget by May 15.
12. By May 15<sup>th</sup>, submit preliminary estimates of value to taxing units.
13. By May 15<sup>th</sup>, submit appraisal records to ARB.
14. Ensure that all new ARB members have attended mandatory training course and that certificates of completion are on file.
15. Publicize protest procedures and deadlines in ¼ page ad in local newspaper.
16. Update parcel information on new improvement values due to expired abatements and percent changes.
17. Begin scheduling protest hearings and mail Notice of Protest letters and reminder letters as necessary.
18. Provide updated appraisal roll information to each taxing unit.
19. Mail, as necessary, preliminary ARB change letters, no change letters, unable to contact letters, and homestead letters.
20. Prepare new reports as needed.
21. Obtain deed records and process changes.
22. Update maps to reflect changes of ownership, splits, combines, etc.
23. Continue to provide customer service to general public.

**June, 2027 and 2028:**

1. Mail penalty letters on non-rendered personal property accounts.
2. Continue working with property owners regarding proposed values and appraisers continue to hold informal hearings.
3. Continue to provide evidence to property owners submitting evidence requests for protest hearings.
4. Prepare monthly reports.
5. Continue to research returned mail.
6. Continue to maintain records management.
7. Notify taxing units' tax assessor/collectors of any appraisal roll changes that require refunds.

8. ARB hearings to begin or continue as needed.
9. Mail ARB certified orders on change, no change determinations.
10. Ensure that the school district has a certified estimate of value and that all units have an estimate of value.
11. Submit abatement contracts executed and reinvestment zones established by taxing units in prior year to the Property Tax Division (must be done by July 1<sup>st</sup>).
12. Prepare proposed AD Budget for the following year and submit to BOD.
13. Continue to schedule protest hearings and mail letters and reminder letters as necessary.
14. Prepare folders for hearings.
15. Post hearing agendas as necessary.
16. Submit appraisal roll changes to each taxing unit.
17. Submit sales information to State Comptroller's Officer by June 1.
18. Obtain deed records and process ownership changes, splits, combines, etc. and ensure that maps are updated to reflect these changes.
19. Continue to provide customer service to the general public.

**July, 2027 and 2028:**

1. Mail all approvals/denials on rendition penalty waiver requests, ARB certified orders and any other necessary correspondence.
2. Continue ARB hearings if necessary until all protests have been heard.
3. Prepare monthly reports.
4. Continue to research returned mail.
5. Continue to maintain records management.
6. Ensure that all ARB changes have been keyed into computer.
7. By July 20<sup>th</sup>, ARB approves the appraisal records for the current year.
8. Check appraisal roll and values for substantial errors.
9. Provide certified values and recaps to all taxing units by July 25<sup>th</sup> and print certified rolls for each unit.
10. Notify taxing units' tax assessor/collectors of appraisal roll changes that require refunds.
11. Prepare and submit 25.25(b) quarterly reports to BOD and ARB.
12. Begin working on the reappraisal calendar for the following year.
13. Obtain deed records and make ownership changes, splits and combines, and update parcels and maps to reflect the changes.
14. Continue to provide customer service to the general public.

**August, 2027 and 2028:**

1. Prepare appraisal cards for the appropriate reappraisal area for the field appraisers, attaching permits and recheck notes.
2. Prepare reports for the State Comptroller's Office.
3. Prepare monthly reports.
4. Continue to maintain records management.
5. Re-check appraisal roll for substantial errors.
6. Generate report of sales information on sales that occurred January 1 through the end of July.
7. Begin fieldwork to examine sales in September.
8. Field examinations continue through April of the following year.
9. Notify taxing units' tax assessors/collectors of appraisal roll changes that require refunds.



10. After certification of rolls, send to Texas Department of Economic Development a listing of all sites with values greater than or equal to \$100 million, in compliance with Section 23.23 of the Texas Property Tax code.
11. Contact entities on primarily charitable organization exemptions to see if renewal of exemption is needed.
12. Have BOD schedule the budget hearing.
13. Publicize the budget and budget hearing date.
14. Submit updated appraisal roll to each taxing unit.
15. Obtain deed records and make ownership changes, splits and combines and update parcels and maps to reflect changes.
16. Continue to provide customer service to the general public.

**September, 2027 and 2028:**

1. Assist taxing units in adopting tax rates.
2. Appraisers will begin field work.
3. Begin working on any arbitration cases.
4. Begin working on September 1 inventory parcels.
5. Prepare Property Value Reports for State Comptroller's office.
6. Begin data entry of changes made by field appraisers and download new pictures taken by field appraisers.
7. Prepare monthly reports.
8. Continue to maintain records management.
9. Notify each taxing units' tax assessor/collector of changes to the appraisal roll that require a refund.
10. Send State Reports to the Property Tax Division.
11. Obtain deed records and make ownership changes, splits and combines, and ensure that parcels and maps are updated to reflect the changes.
12. Continue to provide customer service to the general public.
13. Mail tax statements.

**October, 2027 and 2028:**

1. Field appraisers will continue field inspections.
2. Begin working with the Comptroller's office regarding the ratio study.
3. Mail completed Reports of Property Value to the State Comptroller's office.
4. Continue to key in changes made by field appraisers.
5. Continue to download new pictures taken by the field appraisers.
6. Prepare monthly reports.
7. Continue to maintain records management.
8. Notify each taxing units' tax assessor/collector of appraisal roll changes that requires a refund.
9. Prepare and submit 25.25(b) change report to BOD and ARB.
10. Notify appropriate taxing units of any current year lawsuits.
11. Obtain deed records and make ownership changes, splits and combines and update parcels and maps to reflect those changes.
12. Continue to provide customer service to the general public.

**November, 2027 and 2028:**

1. Appraisers continue field work.
2. Continue working with the Comptroller's office regarding the ratio study.
3. Continue keying in changes made by field appraisers and downloading pictures.
4. Prepare monthly reports.
5. Continue to maintain records management.
6. Prepare new homestead exemption applications for mail-out during the first part of January.
7. Prepare renditions for mail-out during the first part of January.
8. Notify each taxing units' tax assess/collector of appraisal roll changes that require a refund.
9. BOD appoints the following year's Ag Advisory Council at a regular meeting.
10. BOD appoints ARB members for the following year at a regular meeting.
11. Submit updated appraisal roll information to each taxing unit.
12. Obtain deed records and make ownership changes, splits and combines, and update parcels and maps to reflect those changes.
13. Continue to provide customer service to the general public.

**December, 2027 and 2028:**

1. Field appraisers will continue field work.
2. Continue to key in changes provided by the field appraisers and download new pictures.
3. Continue to work on arbitration cases and lawsuits.
4. Continue working with the Comptroller's office regarding the ratio study.
5. Prepare monthly reports.
6. Prepare all homestead exemption applications to surviving spouse of deceased for mail out on January 1<sup>st</sup>.
7. Notify each taxing units' tax assessor/collectors about any changes to the appraisal roll that requires refunds.
8. Submit updated appraisal roll information to the taxing units.
9. Obtain deed records and make ownership changes, splits and combines and update parcels and maps to reflect those changes.
10. Continue to provide customer service to the general public.
11. Continue to maintain records management.

**2028 Reappraisal Schedule**

The same timetable and duties apply in each year. The field appraiser shall physically inspect all property in as described in Area Two. The chief appraiser and CAD staff shall continue to complete the same duties and reappraisal steps as outlined for 2027.



# **Andrews County Appraisal District 2026 Mass Appraisal Report**

## **INTRODUCTION:**

### ***Scope of Responsibility***

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

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

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

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

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

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

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

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

#### **Personnel Resources**

The office of the Chief Appraiser is primarily responsible for overall planning, organizing, staffing, coordinating, and controlling of the district operations. The chief appraiser is also responsible for planning, organizing, directing and controlling the business functions related to human resources, budget, finance, records management, purchasing, fixed assets, facilities and postal services. The chief appraiser is responsible for the valuation of all real and personal property accounts. The property types appraised include commercial, residential, business personal, and industrial. Andrews County Appraisal District currently contracts with the appraisal firm of Capitol Appraisal for appraisals of industrial and mineral properties and industry-related business personal accounts. As of the 2020 appraisal year we also contracted with Western Appraisal for appraisals of our commercial and income properties and PBFC&M law firm to appraise our agricultural properties. Appraisal and fieldwork associated with on-site inspections, in-house sales ratio studies for schedule adjustments and appraisals, residential schedule adjustments and appraisals, ag-value and rural land market value schedule adjustments and appraisals, informal hearings with protesting property owners, representation at ARB hearings, and other appraisal related duties is conducted by the appraisal district in-house appraisers. The chief appraiser is responsible for all values assigned. The appraisal district is also responsible for the following support groups: review appraisals, productivity valuation and special audits. The district's appraisers are subject to the provisions of the Property Taxation Professional Certification Act and must be duly registered with The Texas Department of Licensing and Regulation. Support functions including records maintenance, information and assistance to property owners, and hearings support are coordinated by the chief appraiser.

The appraisal district staff consists of 6 full time employees. The chief appraiser has obtained certifications as follows: Registered Professional Appraiser, RPA and Registered Texas Assessor Collector, RTA. The Assistant Chief Appraiser has obtained certification as Registered Professional Appraiser, RPA. The Business Personal Property Appraiser has also obtained the RPA certification. The Residential Field Appraiser is registered for the RPA Certification. The two



remaining employees provide clerical support and customer service for the appraisal district.

#### **Data**

The district is responsible for establishing and maintaining approximately 122,000 real and personal property accounts covering Andrews County. This data includes property characteristics, ownership, and exemption information. Property characteristic data on new construction is updated through an annual field effort; existing property data is maintained through a field review. Sales are routinely validated during a separate field effort; however, numerous sales are validated as part of the new construction and data review field activities. General trends in employment, interest rates, new construction trends, and cost and market data are acquired through various sources, including internally generated questionnaires to buyer and sometimes the seller, and local real estate agents.

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

#### **Independent Performance Test**

According to Chapter 5 of the Texas Property Tax Code and Section 403.302 of the Texas Government Code, the State Comptroller's Property Assistance Tax Division (PTAD) conducts a property value study (PVS) of each Texas school district and each appraisal district every other year. As a part of this study, the code also requires the Comptroller to: use sales and recognized auditing and sampling techniques, review each appraisal district's appraisal methods, standards and procedures to determine whether the district used recognized standards and practices (MSP Review), test the validity of school district taxable values in each appraisal district and presume the appraisal roll values are correct when values are valid, and determine the level and uniformity of property tax appraisal in each appraisal district. The methodology used in the property value study includes stratified samples to improve sample representativeness and techniques or procedures of measuring uniformity. This study utilizes statistical analysis of sold properties (sale ratio studies) and appraisals of unsold properties (appraisal ratio studies) as a basis for assessment ratio reporting. For appraisal districts, the reported measures include median level of appraisal, coefficient of dispersion (COD), the percentage of properties within 10% of the median, the percentage of properties within 25% of the median, and price-related differential (PRD) for properties overall and by state category (i.e., categories A, B, C, D, and F1 are directly applicable to real property).

There is one independent school district in Andrews CAD for which an appraisal roll is annually developed. The preliminary results of this study are released in January in the year following the year of appraisement. The final results of this study are certified to the Education Commissioner of the Texas Education Agency (TEA) in the following July of each year for the year of appraisement. This outside (third party) ratio study provides additional assistance to the CAD in determining areas of market activity or changing market conditions.

## **Appraisal Activities**

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### **INTRODUCTION**

#### ***Appraisal Responsibilities***

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

#### ***Appraisal Resources***

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

### **PRELIMINARY ANALYSIS**

#### ***Data Collection/Validation***

Data collection of real property involves maintaining data characteristics of the property on CAMA (Computer Assisted Mass Appraisal). The information contained in CAMA includes site characteristics, such as land size and topography, and improvement data, such as square feet of living area, year built, quality of construction, and condition. Field appraisers use listing manual guides that establish uniform procedures for the correct listing of real property. All properties are coded according to these guides and the approaches to value are structured and calibrated based on this coding system. The field appraisers use these manuals during their initial training and as a guide in the field inspection



of properties. Data collection for personal property involves maintaining information on the Personal Property System. The type of information contained in the personal property system includes personal property such as business inventory, furniture and fixtures, machinery and equipment, cost, and location. The field appraisers conducting on-site inspections will use a personal property manual during their initial training and as a guide to correctly list all personal property that is taxable.

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

#### ***Sources of Data***

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

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

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

#### ***Data Collection Procedures***

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

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

### **Data Maintenance**

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

### **INDIVIDUAL VALUE REVIEW PROCEDURES**

#### **Field Review**

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

#### **Office Review**

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

### **PERFORMANCE TEST**

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

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

## **Residential Valuation Process**

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### **INTRODUCTION**

#### ***Scope of Responsibility***

The chief appraiser is responsible for developing equal and uniform market values for residential improved and vacant property. There are approximately 5840 residential improved parcels and 1127 vacant residential properties in Andrews County.

#### ***Appraisal Resources***

- \* Personnel - Residential valuations are performed by the district staff appraisers. Employees of the appraisal district assist in various and appropriate ways.
- \* Data - A common set of data characteristics for each residential dwelling in Andrews County is collected in the field and data is entered into the computer. The property characteristic drives the computer-assisted mass appraisal (CAMA) approach to valuation.

### **VALUATION APPROACH (Model Specification)**

#### ***Area Analysis***

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

#### ***Neighborhood and Market analysis***

Neighborhood analysis involves the examination of how physical, economic, governmental, and social forces and other influences affect property values. The effects of these forces are also used to identify, classify, and stratify comparable properties into smaller, more manageable subsets of the universe of properties known as neighborhoods. Residential valuation and neighborhood analysis is conducted on each of the properties located within a specified school district.

The first step in neighborhood analysis is the identification of a group of properties that share certain traits. A "neighborhood for analysis purposes is defined as the largest geographic grouping of properties where the property's physical, economic, governmental and social forces are generally similar and



uniform. Geographic stratification accommodates the local supply and demand factors that vary across a jurisdiction. Once a neighborhood has been identified, the next step is to define its boundaries. This process is known as "delineation". Some factors used in neighborhood delineation include location, sales price range, lot size, age of dwelling, quality of construction and condition of dwellings, square footage of living area, and story height. Delineation can involve the physical drawing of neighborhood boundary lines on a map, but it can also involve statistical separation or stratification based on attribute analysis. Part of neighborhood analysis is the consideration of discernible patterns of growth that influence a neighborhood's individual market. Few neighborhoods are fixed in character. Each neighborhood may be characterized as being in a stage of growth, stability, or decline. The growth period is a time of development and construction. Generally, in a stage of stability, older neighborhoods can be more desirable due to their stability of residential character and proximity to the workplace and other community facilities. A period of decline reflects diminishing demand or desirability. During decline, general property use may change from residential to a mix of residential and commercial uses. Declining neighborhoods may also experience renewal, reorganization, rebuilding, or restoration, which promotes increased demand and economic desirability.

#### ***Highest and Best Use Analysis***

The highest and best use of property is the reasonable and probable use that supports the highest present value as of the date of the appraisal. The highest and best use must be physically possible, legal, financially feasible, and productive to its maximum. The highest and best use of residential property is normally its current use. This is due in part to the fact that residential development, in many areas, through use of deed restrictions and zoning, precludes other land uses. Residential valuation undertakes reassessment of highest and best use in transition areas and areas of mixed residential and commercial use. In transition areas with ongoing gentrification, the appraiser reviews the existing residential property use and makes a determination regarding highest and best use. Once the conclusion is made that the highest and best use analysis is done to decide the type of residential use on a neighborhood basis. In areas of mixed residential and commercial use, the appraiser reviews properties in these areas on a periodic basis to determine if changes in the real estate market require reassessment of the highest and best use of a select population of properties.

## **DATA COLLECTION AND VALIDATION**

### ***Sources of Data***

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

## **VALUATION AND STATISTICAL ANALYSIS (Model Calibration)**

### ***Cost Schedules***

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

The initial cost schedules developed for the Andrews County Appraisal District were developed using Marshall & Swift, a nationally recognized cost estimator. The schedules were derived in this manner due to the fact that the appraisal district did not have enough newly constructed sold properties at various levels of quality of construction in the district to allow for analysis and statistical testing. Marshall & Swift processes included correlation of quality of construction factors. The results of this comparison were analyzed using statistical measures, including stratification by quality and reviewing estimated building costs plus land to sales prices. As a result of this analysis, a new regional multiplier was developed and used in the district's cost process. This multiplier was used to adjust the Marshall & Swift schedules to bring the schedules to costs reflecting the local market.

### ***Sales Information***

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

### ***Land Analysis***

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

### ***Statistical Analysis***

The chief appraiser performs statistical analysis annually to evaluate whether values are equitable and consistent with the market. Ratio studies are conducted

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

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

#### ***Market Adjustment or Trending Factors***

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

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

#### **TREATMENT OF RESIDENCE HOMESTEADS**

Beginning in 1998, the State of Texas implemented a constitutional classification scheme concerning the appraisal of residential property that receives a residence



homestead exemption. Under the new law, beginning in the second year a property receives a homestead exemption, increases of that property are "capped". The value for tax purposes (appraised value) of a qualified residence homestead will be the LESSER of:

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

Values of capped properties must be recomputed annually. If a capped property sells, the cap automatically expires as of January 1<sup>st</sup> of the following year. In the following year, that home is reappraised at its market value to bring its appraisal into uniformity with other properties.

## **TREATMENT OF ACCOUNTS WITH PRIOR YEAR HEARINGS**

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

## **INDIVIDUAL VALUE REVIEW PROCEDURES**

### ***Field Review***

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

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

The area to be physically inspected each year is identified in the appraisal district's written reappraisal plan. A copy of the district's Written Plan for Periodic Reappraisal is attached to this report by reference.

### ***Office Review***

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

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

## **PERFORMANCE TESTS**

### ***Sales Ratio Studies***

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

### ***Management Review Process***

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

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

## **Commercial Valuation Process**

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### **INTRODUCTION**

#### ***Appraisal Responsibility***

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

#### ***Appraisal Resources***

The improved real property appraisal responsibilities are categorized according to major property types of office, retail, warehouse, and special use (i.e. hotels, clinics, etc.). The appraisal district performs the field inspections and assigns improved commercial property types. The appraisal district is responsible for the land valuations.

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

### **PRELIMINARY ANALYSIS**

#### ***Pilot Study***

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

**Survey of Similar Jurisdictions:** ANDREWS 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, CAD administration and personnel interact with other assessment officials through professional trade organizations including IAAO, TAAD, TAAO and TRCA.

## **VALUATION APPROACH (Model Specification)**

### ***Area Analysis***

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

### ***Neighborhood Analysis***

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

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

### ***Highest and Best Use Analysis***

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

highest and best use. This analysis insures that an accurate estimate of market value (sometimes referred to as value in exchange) is derived.

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

### ***Market Analysis***

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

## **DATA COLLECTION/VALIDATION**

### ***Sources of Data***

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

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

### ***Data Collection Procedures***

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

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

For those properties involved in a transfer of commercial ownership, a sale file is produced, which begins the research and verification process. The initial step in sales verification involves a questionnaire, which is mailed to the

purchaser (grantee) in the transaction. If a questionnaire is answered and returned, the documented responses are recorded into the computerized sales database system. If no information is provided, other sources are sought, but the sales data is documented as being unconfirmed. Actual closing statements are the most reliable and preferred method of sales verification.

#### **VALUATION ANALYSIS (Model Calibration)**

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

#### ***Cost Schedules***

The cost approach to value is applied to all improved real property utilizing the comparative unit method. This methodology involves the utilization of national cost data reporting services as well as actual cost information on comparable properties whenever possible. Cost models are typically developed based on the Marshall & Swift Valuation Service. Cost models include the derivation of replacement cost new (RCN) of all improvements. These include comparative base rates, per unit adjustments, and lump sum adjustments. This approach also employs the sales comparison approach in the valuation of the underlying land value. Time and location modifiers are necessary to adjust cost data to reflect conditions in a specific market and changes in costs over a period of time. Because a national cost service is used as a basis for the cost models, location modifiers are necessary to adjust these base costs specifically for Andrews County. These modifiers are provided by the national cost services.

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

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

#### ***Income Models***

The income approach to value is applied to those real properties which are typically viewed by market participants and "income producing", and for which the income methodology is considered a leading value indicator. The first step in



the income approach pertains to the estimation of market rent on a per unit basis. This is derived primarily from actual rent data furnished by property owners and from local market study publications. This per unit rental rate multiplied by the number of units results in the estimate of potential gross rent.

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

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

Allowable expenses and expense ratio estimates are based on a study of the local market, with the assumption of prudent management. An allowance for non-recoverable expenses such as leasing costs and tenant improvements are included in the expenses. A non-recoverable expense represents costs that the owner pays to lease rental space. Different expense ratios are developed for different types of commercial property based on use. For instance, retail properties are most frequently leased on a triple-net basis, whereby the tenant is responsible for his pro-rata share of taxes, insurance and common area maintenance. In comparison, a general office building is most often leased on a base year expense stop. This lease type stipulates that the owner is responsible for all expenses incurred during the first year of the lease. However, any amount in excess of the total per unit expenditure in the first year is the responsibility of the tenant. Under this scenario, if the total operating expense in year one equates to \$8 per square foot, any increase in expense over \$8 per square foot throughout the remainder of the lease term would be the responsibility of the tenant. As a result, expense ratios are implemented based on the type of commercial property.

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

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

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

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

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

The appraisal district performs valuations on income properties when data is available, excluding mineral and industrial properties. The appraisal district is responsible for obtaining statistics, data, performing statistical testing, and maintaining data for the valuation of this type of property.

### ***Sales Comparison (Market) Approach***

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

### ***Final Valuation Schedules***

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

## **Statistical and Capitalization Analysis**

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

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

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

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

## **INDIVIDUAL VALUE REVIEW PROCEDURES**

### **Field Review**

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

Commercial appraisers are somewhat limited in the time available to field review all commercial properties of a specific use type. However, a major effort is made by the appraisal district to field review as many properties as possible or



an economic area experiencing large numbers of remodels, renovations, or retrofits, changes in occupancy levels or rental rates, new leasing activity, new construction, or wide variations in sale prices. Additionally, the appraisers frequently field review subjective data items such as building class, quality of construction, condition, and physical, functional, and economic obsolescence factors contributing significantly to the market value of the property. In some cases, field reviews are warranted when sharp changes in occupancy or rental rate levels occur between building classes or between economic areas. With preliminary estimates of value in these targeted areas, the appraisers test computer assisted values against their own appraisal judgment. While in the field, the appraisers physically inspect sold and unsold properties for comparability and consistency of values.

### **Office Review**

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

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

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

### **PERFORMANCE TESTS**

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

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

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

### ***Sales Ratio Studies***

Sales ratio studies are an integral part of establishing equitable and accurate market value estimates, and ultimately assessments for taxing jurisdictions. The primary use of sales ratio studies include the determination of a need for general reappraisal, prioritizing selected groups of property types for reappraisal, identification of potential problems with appraisal procedures, assist in market analyses, and to calibrate models used to derive appraised values during valuation or reappraisal cycles. However, these studies cannot be used to judge the accuracy of an individual property appraised value. The Andrews County Appraisal Review Board may make individual value adjustments based on unequal appraisal (ratio) protest evidence submitted on a case-by-case basis during the hearing process.

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

### ***Comparative Appraisal Analysis***

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

## **INDUSTRIAL VALUATION PROCESS**

### ***Appraisal Responsibility***

ANDREWS CAD contracts with Capitol Appraisal for the appraisal of industrial properties. The firm is responsible for developing fair and uniform market values for improved industrial properties and industrial vacant land. The firm is also responsible for the valuation of all tangible general industrial personal property in Andrews CAD.

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

## **BUSINESS PERSONAL PROPERTY VALUATION PROCESS**

### ***Appraisal Responsibility***

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

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

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

### **Valuation Approach (Model Specification)**

#### ***SIC Code Analysis***

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

#### ***Highest and Best Use Analysis***

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



## **Data Collection/Validation**

### ***Sources of Data***

#### **Business Personal Property**

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

#### **Vehicles**

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

#### **Leased and Multi-Location Assets**

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

## **VALUATION AND STATISTICAL ANALYSIS (MODEL CALIBRATION)**

### ***Cost Schedules***

The appraisal district staff relies largely upon the Appraisal Manual developed with the assistance of Eagle Appraisal & Consulting and the Appraisal Guide issued by the Comptroller of Public Accounts. A local modifier is developed and applied to the Guide, where applicable.

### ***Statistical Analysis***

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

### ***Depreciation Schedule and Trending Factors***

Andrews 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 Andrews CAD developed valuation models. The trending factors used by Andrews CAD to develop RCN are based on published valuation guides. The percent good factors used by Andrews CAD are also based on published valuation guides. The index factors and percent good

depreciation factors are used to develop present value factors (PVF), by year of acquisition, as follows:

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

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

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

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

## **INDIVIDUAL VALUE REVIEW PROCEDURES**

### ***Office Review***

#### **Business Personal Property**

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

#### **Vehicles**

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

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

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

## **PERFORMANCE TESTS**

### ***Ratio Studies***

Every other year, the Property Tax Assistance Division of the state comptroller's office conducts a property value study (PVS). The PVS is a ratio study used to gauge appraisal district performance. Results from the PVS play a part in school funding. Rather than a sales ratio study, the personal property PVS is a ratio study state cost and depreciation schedules to develop comparative personal property values. These values are then compared to Andrews CAD's personal property values and ratios are determined.

### ***Internal Testing***

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

## LIMITING CONDITIONS

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

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

### **Certification Statement:**

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

Susan Brewer  
Susan Brewer, Chief Appraiser

4/30/2026  
Date

## **PERSONS PROVIDING SIGNIFICANT MASS APPRAISAL ASSISTANCE**

| <b><u>NAME</u></b> | <b><u>TITLE</u></b>                                         | <b><u>TYPE OF ASSISTANCE</u></b>                                |
|--------------------|-------------------------------------------------------------|-----------------------------------------------------------------|
| Susan Brewer       | Chief Appraiser                                             | Appraisals<br>Research<br>Ratio Studies<br>Schedule Development |
| Haley Hudgens      | Assistant Chief Appraiser                                   | Field Inspections<br>Appraisals<br>Research                     |
| Terri Kraft        | Business Personal Property<br>Appraiser                     | Field Inspections<br>Appraisals<br>Research                     |
| Velma Martinez     | Appraiser                                                   | Field Inspections<br>Research<br>Appraisals                     |
| Craig Nell         | Western Valuation &<br>Consulting, LLC                      | Commercial & Income<br>Field Inspections<br>Appraisals          |
| LeLaina Taylor     | Capitol Appraisal Group, Inc                                | Mineral Appraisals                                              |
| Hailey Jordan      | Capitol Appraisal Group, Inc                                | Mineral Appraisals                                              |
| Tomas Jon Hlavenka | Capitol Appraisal Group, Inc<br>Personal Property Appraisal | Industrial & Business                                           |
| Woodrow Menn       | PBFC&M Law Firm                                             | Agricultural Valuation                                          |



**REAPPRAISAL PLAN**

**COMMERCIAL PROPERTY**

**2027-2028**

**ANDREWS COUNTY**

**APPRAISAL DISTRICT**

**By Western Valuation and Consulting**

## **SUMMARY**

The Andrews County Appraisal District has prepared and published this reappraisal plan 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 Andrews County Appraisal District is a political subdivision of the State of Texas created January 1, 1980. The provisions of the Texas Property 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 Andrews County appraisal district, constitutes the district's governing body. The chief appraiser, appointed by the Board of Directors, is the chief administrator of the appraisal district.

The appraisal district is responsible for local property tax appraisal and exemption administration for four 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 year's tax burden on the basis of each taxable property's market value. The District also determines eligibility for various types of property tax exemptions such as those for homeowners, the elderly, disabled veterans, charitable or religious organizations and agricultural productivity valuation.

In this executive summary, please find the legal requirement of a reappraisal plan passed by the Texas Legislature in the 2005 regular session and our response to these requirements immediately below the law in bold italics. Intricate details of how the plan will be implemented are discussed in the body of this document.

### **TAX CODE REQUIREMENT**

Section 6.05, Tax Code, is amended by adding Subsection (i) to read as follows:

- (i) To ensure adherence with generally accepted appraisal practices, the Board of directors of an appraisal district shall develop biennially a written plan for the periodic reappraisal of all property within the boundaries of the district according to the requirements of Section 25.18 and shall hold a public hearing to consider the proposed plan. Not later than the 10<sup>th</sup> day before the date of the hearing, the secretary of the board shall deliver to the presiding officer of the governing body of each taxing unit participating in the district a written notice of the date, time, and place of the hearing. Not later than September 15 of each even numbered year, the board shall complete its hearings, make any amendments, and by resolution finally approve the plan. Copies of the approved plan shall be distributed to the

presiding officer of the governing body of each taxing unit participating in the district and to the comptroller within 60 days of the approval date.

## **PLAN FOR PERIODIC REAPPRAISAL**

Subsections (a) and (b), Section 25.18, Tax Code, are amended to read as follows:

- (a) Each appraisal office shall implement the plan for periodic reappraisal of property approved by the board of directors under Section 6.05 (i).
- (b) The plan shall provide for the following reappraisal activities for all real and personal property in the district at least once every three years:
  - (1) Identifying properties to be appraised through physical inspection or by other reliable means of identification, including deeds or other legal documentation, aerial photographs, land-based photographs, surveys, maps, and property sketches;

The Andrews County Appraisal District receives listings of all deeds filed in Andrews County through the County Clerk. Deeds are read and abstracted by the clerical staff of the District. Information is recorded in the computer assisted mass appraisal (CAMA) software including grantor, grantee, date of recording, volume, and page in the county clerk's records. Property identification numbers are assigned to each parcel of property that remain with the property for its life.

Business personal property is located by canvassing the county, street by street, using data sources such as yellow pages and other business listing publications to ensure that all property owners are located. All businesses are mailed a rendition about January 1 of each year. Owners are required by state law to list all their business personal property. Failure to render results in an immediate 10% penalty and a possible 50% penalty is fraud is involved in a false rendition. Lists of commercial vehicles are also purchased annually and these vehicles are tied to appropriate business accounts.

Renditions are also required of utility companies, railroads, and pipelines. Utility companies, wind farms, railroads, pipelines and minerals are valued by Capitol Appraisal Group, a professional appraisal company headquartered in Austin.

Maps have been developed for years that show ownership lines for all real estate. These maps are stored digitally using software provided by BIS. The District sends updates of property splits indicated by deeds and surveys to BIS and they make the changes on the maps. The maps are available to the public through the website of the District.

(2) Identifying and updating relevant characteristics of each property in the appraisal records;

For 2027, all of the parcels in the rural area of Andrews County will be updated by personal inspection. The appraisers drive to neighborhoods within the towns and rural areas of Andrews County and gather data about each home, commercial business, or vacant land tract. The appraisers drive from property to property noting the condition of the property and observing and noting any changes to the property since the previous year's inspection. Pictures are captured regularly. Those pictures are stored in the CAMA software and assist the appraiser in making value decisions when he or she returns to the office. Other data stored in the CAMA system includes an exterior sketch of the improvement which allows the computer system to calculate square footage for the various areas of the building, and components within the building such as bathrooms, fireplaces, air conditioning, type of roof, type of exterior, etc. Andrews County will be inspected in 2028 using the same process as noted above.

Business personal property is inspected by the appraisers as he or she looks at commercial property. They look at the quality of inventory, how dense the stocking is, and make general notes about equipment that they see. If their observation is different than the rendition made by the taxpayer, additional information is gathered and a higher value may be assigned than the rendered amount.

(3) Defining market areas in the district;

Annually, the chief appraiser combines similar types of property into "neighborhoods". These neighborhoods have improvements that are of similar construction and type as well as similar years of construction. Market sales are examined to confirm which areas are similar.

Land is also put into regions or neighborhoods with other parcels having similar characteristics, school districts, and amenities. Using these neighborhoods, values are applied to all parcels. The formulae takes into consideration location, size, topography, and other characteristics that the market recognizes as significant.



(4) Identifying property characteristics that affect property value in

each market area, including:

- (A) The location and market area of the property;
- (B) Physical attributes of property, such as size, age, and condition;
- (C) Legal and economic attributes; and
- (D) Easements, covenants, leases, reservations, contracts, declarations, special assessments, ordinances, or legal restrictions;

*Each parcel of property has detailed information recorded in the CAMA system. For land, the legal description, dimensions, size, available utilities, and special characteristics are noted in a form that can be used and compared with other land parcels.*

*Each improvement shows the sketch and dimensions, a picture of the improvement, the class which indicated original construction quality, the year of construction of each part of the improvement, the type of roof, the roof covering, the exterior covering of the improvement, number of baths if available, fireplaces, air conditioning type, and other attributes, as well as overall condition of the improvement.*

(5) Developing an appraisal model that reflects the relationship among the property characteristics affecting value in each market area and determines the contribution of individual property characteristics;

The CAMA system begins with the cost approach to value to estimate original cost of each improvement. That cost is based on local modifiers to the Marshall-Swift cost system, a nationally recognized cost estimation provider. By utilizing these cost systems, properties are equalized as to their original costs. Components measured in the cost include the size of the structure, number of bathroom fixtures, quality of kitchen appliances and number of built-in appliances, type of roof structure, roof covering, exterior covering, special features such as fireplaces, pools, cabinetry, and other special amenities. The market sales are then studied for improvement contributions in each neighborhood and adjustments to cost are applied to each neighborhood in the form of all types of depreciation. Finally, each structure is rated as to its current condition. Ratings range from poor to excellent. Sales are also categorized using the same condition rating system so that sales comparisons will be made to properties of like construction and condition.

Utilities, railroads and pipelines are individually appraised by Capitol Appraisal Group using the three approaches to value. The appraisal is a "unit appraisal" that looks at the entire company to be appraised, values it based on original cost less depreciation, net income to the company, and comparable sales if they exist. Then the value for each jurisdiction is set based on the amount of equipment, lines, or customers, within that jurisdiction.

(6) Applying the conclusions reflected in the model to the characteristics of the properties being appraised; and

By utilizing sales data for each neighborhood, the appraiser measures accrued depreciation of structures by condition rating. Similar properties with similar condition are assigned values per square foot based on the linear regression formulae for that neighborhood. By utilizing the age, quality, condition, construction components, and other variables, the model is developed and applied to all parcels within the neighborhood.

For commercial property and apartments, factors are applied to cost figures to align values with current sales data. Models are developed and the CAMA system applies all the factors and assigns value to each parcel.

(7) Reviewing the appraisal results to determine value.

After completing the process of assigning values to all parcels within a neighborhood using the computer assisted mass appraisal programs, printouts are run to make comparisons of values per square foot and comparison of those appraised values per square foot with current sales data from the neighborhood. A sales ratio is run to determine if the values that have been assigned are within required ratios of law (95%-105%).

Commercial property and apartments are compared by category or type of business. Adjustments are made in mass by the appraiser utilizing the CAMA system. All similar improvements are compared to verify reasonableness of value and equality.

Oil and gas leases are valued individually by Capitol Appraisal Group and the value of each lease is distributed to each operator interest or royalty interest based on ownership provided by the taxpayer, agent, or crude purchaser.

## REVALUATION DECISION (REAPPRAISAL CYCLE)

The Andrews County Appraisal District, by policy, reviews all property in the district every year. Inspections are done at least once every two years.

# Andrews County Appraisal District

## Reappraisal Plan Details

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### Commercial Property Valuation Process

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#### INTRODUCTION

##### *Scope of Responsibility*

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

##### *Appraisal Resources*

**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:***

Staff of Western Valuation and Consulting, LLC

**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.

## **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. If sales are not available, the abstraction or allocation method is used to appraise land.

### ***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 involves 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

### ***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 insures 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.

### ***Sources of Data***

In terms of commercial sales data, Andrews CAD receives a copy of the deeds recorded in Andrews County that convey commercially classed properties. These deeds involving a change in commercial ownership are entered into the sales information system and researched in an attempt to obtain the pertinent sale information. Other sources of sale data include the 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. 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 involves the process of periodically adjusting the mass appraisal formulae, tables and schedules to reflect current local market conditions. Once the models have undergone the specification process, adjustments can be made to reflect new construction procedures, materials and/or costs, which can vary from year to year. The basic structure of a mass appraisal model can be valid over an extended period of time, with trending factors utilized for updating the data to the current market conditions

### ***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 Valuation Service which indicates 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 employs the sales comparison approach in the evaluation of soft or indirect costs of construction. Evaluating market sales of newly developed improved property is an important part of understanding total replacement cost of improvements. What total costs may be involved in the development of the property, as well as any portion of cost attributed to entrepreneurial profit can only be revealed by market analysis of pricing acceptance levels. In addition, market related land valuation for the underlying land value is important in understanding and analyzing improved sales for all development costs and for the abstraction of improvement costs for construction and development. Time and location modifiers are necessary to adjust cost data to reflect conditions in a specific market and changes in costs over a period of time. 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 Andrews County.

Accrued depreciation is the sum of all forms of loss affecting the contributory value of the improvements. 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 five 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, 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. 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 is the next item to consider in the income approach. The projected vacancy and collection loss allowance is established from actual data furnished by property owners and local market survey trends. This allowance accounts for periodic fluctuations in occupancy, both above and below an estimated stabilized level. This feature may also provide for a reasonable lease-up period for multi-tenant properties, where applicable. 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 a rent loss deduction to be estimated for every year that the property's actual occupancy is less than stabilized occupancy.

### ***Sales Comparison (Market) Approach***

Although all three of the approaches to value are based on market data, the Sales Comparison Approach is most frequently referred to as the Market Approach. This approach is utilized not only for estimating land value but also in comparing sales of similarly improved properties to parcels on the appraisal roll. As previously discussed in the Data Collection / Validation section of this report, pertinent data from actual sales of properties, both vacant and improved, is 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 in the CAMA system for utilization on all commercial properties in the district. Market factors reflected within the cost and income approaches are evaluated and confirmed based on market sales of commercial and industrial properties. The appraisers review the cost, income, and sales comparison approaches to value for each of the types of properties with available sales information. The final valuation of a property is estimated based on reconciling these indications of value considering the weight of the market information available for evaluation and analysis in these approaches to value.

### ***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 Andrews County appraiser are responsible for data 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.

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 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 non residential property). The appraiser may review methodology for appropriateness to ascertain that it was completed in accordance with USPAP or more stringent statutory and district policies. This review is performed after preliminary ratio statistics have been applied. If the ratio statistics are generally acceptable overall the review process is focused primarily on locating skewed results on an individual basis. Previous values resulting from protest hearings are individually reviewed to determine if the value remains appropriate for the current year based on market conditions. Each appraiser's review is limited to properties in their area of responsibility by property type (improved) or geographic area (commercial vacant land).

When 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 or industrial real property for which sales are limited. In addition, appraisal ratio studies can be used for properties statutorily not appraised at market value, but reflect the use-value requirement. An example of this are multi-family housing projects subject to



subsidized rent provisions or other governmental guarantees as provided by legislative statutes (affordable housing) or agricultural lands to be appraised on the basis of productivity or use value.

### ***Sales Ratio Studies***

Sales ratio studies are an integral part of estimating equitable and accurate market values, and ultimately property assessments for these taxing jurisdictions. The primary uses of sale ratio studies include the determination of a need for general reappraisal; prioritizing selected groups of property types for reappraisal; identification of potential problems with appraisal procedures; assist in market analyses; and, to calibrate models used to estimate appraised values during valuation or reappraisal cycles. However, these studies cannot be used to judge the accuracy of an individual property appraised value. Overall sales ratios are generated 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 Value Study from the Property Tax Division of the Comptroller's Office. 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. Appraisers average unit prices of sales and average unit appraised values of the same parcels and the comparison of average value changes of sold and unsold properties. These studies are conducted on substrata such as building class and on properties located within various economic areas. In this way, overall appraisal performance is evaluated geographically, by specific property type to discern whether sold parcels have been selectively appraised. When sold parcels and unsold parcels are appraised equally, the average unit values are similar. These sales and equity studies are performed prior to final appraisal and to annual noticing.

# **REAPPRAISAL PLAN**

**2027-2028**

## **ANDREWS COUNTY APPRAISAL DISTRICT**

### **MINERAL, INDUSTRIAL and UTILITIES**

**By Capitol Appraisal Group Inc.**

## Document 1

### **Value Defense Procedures for Informal Meetings and Formal Hearings Industrial Real Property**

**Informal hearings are conducted by phone, mail, or in person by Capitol Appraisal Group appraisers. Appraisers may present sales data or data specific to the property in defense of our values. Income, expense and capitalization data are reviewed and presented if available. If the taxpayer wishes to pursue a dispute further, the appraiser guides them through the initial phase of the formal protest procedures.**

When taxpayers are scheduled for formal hearings they receive an ARB procedures pamphlet and a copy of *Taxpayer's Rights, Remedies, and Responsibilities* published by the State Comptroller's Office. If protest hearing evidence is requested, the appraisal district has 14 days prior to the protest hearing to respond with characteristics and values of comparable properties regarding value disputes. Any income and expense information derived from the market is accumulated and developed into charts containing general data. No confidential income, expense or other information received from taxpayers on specific accounts will be released. Equity evidence is generated by Capitol using programs and tools it has developed to compare other properties to the subject property. Applicable appraisal reports and research data applicable to the property are also included in this packet.

### **Utilities**

**Informal hearings are conducted by phone, mail, or in person by Capitol Appraisal Group appraisers. Appraisers may present sales data or data specific to the property in defense of our values. Income, expense and unit appraisal data (when applicable) are reviewed and presented if available. If the taxpayer wishes to pursue a dispute further, the appraiser guides them through the initial phase of the formal protest procedures.**

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### **Oil and Gas Property**

**Informal hearings are conducted by phone, mail, or in person by Capitol Appraisal Group appraisers. Mineral operators and third party agents with the proper fiduciary in place may also view the parameters used in the appraisal of their oil and gas properties on Capitol's web site at [www.cagi.com](http://www.cagi.com). Other taxpayers with an interest in a mineral lease may request a copy of their appraisals at the same web site. Appraisers may present recent production data and sales prices to compare with the actual income received by the taxpayer in defense of our values. Income, expense and capital expense data are reviewed and presented if available. If the taxpayer wishes to pursue a dispute further, the appraiser guides them through the initial phase of the formal protest procedures.**

When taxpayers are scheduled for formal hearings they receive an ARB procedures pamphlet and a copy of *Taxpayer's Rights, Remedies, and Responsibilities* published by the State Comptroller's Office. Since oil and gas leases have multiple owners, all owners who pursue a formal protest on the same property will be scheduled at the same time for a hearing. If protest hearing evidence is requested, the appraisal district has 14 days prior to the protest hearing to respond with characteristics and values of comparable properties regarding value disputes. No confidential income, expense or other information received from taxpayers on specific accounts will be released. Capitol uses its MINARB procedure to generate copies of the appraisal reports and product pricing data for the current and prior tax years. These reports are also included in this packet.

## **Industrial Personal Property**

**Informal hearings are conducted by phone, mail, or in person by Capitol Appraisal Group appraisers. Appraisers may present general data specific to the property in defense of our values. Renditions other than that of the subject property will not be released. If the taxpayer wishes to pursue a dispute further, the appraiser guides them through the initial phase of the formal protest procedures.**

When taxpayers are scheduled for formal hearings they receive an ARB procedures pamphlet and a copy of *Taxpayer's Rights, Remedies, and Responsibilities* published by the State Comptroller's Office. If protest hearing evidence is requested, the appraisal district has 14 days prior to the protest hearing to respond with characteristics and values of comparable properties regarding value disputes. Capitol provides copies of appraisal reports generated by its Industrial Personal Property System for inclusion in the packet. As previously stated, no confidential renditions of competing properties will be provided as evidence.

## **Client Plan**

In the event that the client's value defense plan differs with the plan of Capitol Appraisal Group, the client's plan will be followed and supersedes the provisions of the Capitol Appraisal plan.

# **Value Defense Procedures for ARB Hearings**

## **Industrial Real Property**

If the taxpayer wishes to pursue a dispute beyond informal proceedings, the appraiser guides him through the initial phase of the formal protest procedures.

When taxpayers are scheduled for formal hearings they receive an ARB procedures pamphlet and a copy of *Taxpayer's Rights, Remedies, and Responsibilities* published by the State Comptroller's Office. If protest hearing evidence is requested, the appraisal district has 14 days prior to the protest hearing to respond with characteristics and values of comparable properties regarding value disputes. Any income and expense information derived from the market is accumulated and developed into charts containing general data. No confidential income, expense or other information received from taxpayers on specific accounts will be released. Equity evidence is generated by Capitol using programs and tools it has developed to compare other properties to the subject property. Applicable appraisal reports and research data applicable to the property are also included in this packet.

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## **Oil and Gas Property**

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## **Industrial Personal Property**

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## **Client Plan**

In the event that the client's value defense plan differs with the plan of Capitol Appraisal Group, the client's plan will be followed and supersedes the provisions of the Capitol Appraisal plan.

**Capitol Appraisal Group, LLC**  
**Formal and Informal Procedures**

It is the Capitol Appraisal policy to follow the formal and informal procedures as established by each individual client. Those policies will supercede the below referenced general practices used by this company if there is a conflict.

**Informal**

Informal meetings with agents or taxpayers/owners on utility properties occur either on the telephone or in the offices of Capitol Appraisal if requested by the agent or owner. This procedure may also take place upon filing of a protest and is useful to finalize issues such as allocations and ownership.

**Formal Meetings**

Formal meetings with agents or taxpayers/owners take place at the physical location as directed by the appraisal district. Discussions with the agents or taxpayer/owners may take place prior to the scheduled meeting time with the Appraisal Review Board. A deadline for timely action is dictated by the appraisal district. Prior to the deadline and in the absence of the agent or taxpayer/owner being physically present there may be telephone conversations to discuss the protested issues. Failure to resolve the protested issue(s) and no representation by the agent or taxpayer/owner will result in the recommendation to affirm the noticed value and "no show" the agent or taxpayer/owner.

Affidavits used for evidence are presented to the Appraisal Review Board as scheduled by the appraisal district.

## **6 Contractor's procedures for identifying new property**

### ***Industrial Real Property***

Industrial properties are identified as part of the appraiser's physical inspection process each year and through submitted data by the property owner. The appraiser may also refer to legal documents, photography and other descriptive items.

### ***Industrial Personal Property***

Through inspection the appraiser identifies personal property to be appraised. The appraiser begins with properties from the previous tax year and identifies new properties from visual identification and/or publications, newspaper articles, or information obtained through the interview of property owners. The appraiser may also refer to other documents, both public and confidential, to assist in identification of these properties. Such documents might include, but are not limited to, the previous year's appraisal roll, vehicle listing services and private directories.

### ***Utility, Railroad and Pipeline Property***

Utility, railroad and pipeline properties that are susceptible to inspection are identified by inspection. The appraiser may also refer to other documents, both public and confidential, to assist in the identification of these properties.

### ***Oil and Gas Property***

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

**Procedure for Evaluating Results  
of Contractor's Property Discovery for all property other than Oil and Gas**

1. Review renditions and compare to appraisal roll.
2. Review local news articles.
3. Have chief appraiser or another appraiser ride with contract personnel during inspection process.
4. Meet with contract personnel and go over any discrepancies.
5. Stay aware of what is going on in the area and meet with contractor about new projects.
6. Review contractor's appraisal roll and discuss any discrepancies.

**Procedure for Evaluating Results  
of Contractor's Oil and Gas Property Discovery**

1. Obtain a list from the Texas Railroad Commission of all new leases currently producing in the CAD.
2. Choose a sample of leases or if time permits list all new leases producing on January 1<sup>st</sup> of current tax year.
3. Check to see if the lease was completed prior to January 1<sup>st</sup> or producing before January 1<sup>st</sup> of current tax year.
4. Compare to list of new leases currently producing or completed prior to January 1<sup>st</sup> of current tax year. If discrepancies exist contact contractor to discover why lease may be left off tax rolls. Some reasons may include but are not limited to: incorrect RRC reporting data, lease being listed under its permit number on current tax roll, or lease being currently listed under a prior RRC lease number.
5. If contractor has accounted for all new production and leases, the CAD has complied with the MAP requirement.

## Document 8

### Procedure for CAD Verification of Services Provided by Appraisal Contractor

1. Verify lists of properties provided by the contractor agree with CAD's lists.
2. Verify appropriate methods of appraisal are used for each type of property [market, cost, income].
  - a. Inquire if there has been any change in agreed appraisal methodology or application.
  - b. Any variations from USPAP guidelines shall be documented and reviewed the following year.
3. Verify that complete and correct data resources, including market data, are used appropriately for each type of property.
  - a. Inquire if there are added or deleted sources.
  - b. If so, document reason for change and track affected properties.
4. Verify that contractor follows laws and statutes applicable for all properties being appraised, including rendition compliance.
  - a. Verify that Property Tax Code [P. T. C.] 1.04 (7) is met for all relevant properties such that both the appraisal approach and its conclusions meet the definition of fair market value.
  - b. For minerals verify compliance with P. T. C 23.175 for mineral properties:
    - Use of Comptroller's Manual for Discounting Oil and Gas Income
    - Use of average product prices for the year prior to Jan 1
5. Verify agreed scheduling of:
  - a. Preliminary appraisal report summarizing progress in completing the year's appraisals.
  - b. Mail dates:
    - Notices of Appraisal
    - Last date to file a protest
    - ARB meeting dates
  - c. Compilation of Certified Estimate of Value in accordance with P. T. C. 26.01 (e)
  - d. copies of all appraisal and supporting data in agreed format



6. Verify timely receipt and correct format of following information:

a. Value

- preliminary appraised value
- preliminary appraisal roll
- certified roll including all documentation

b. Reports

- new property listing
- list of renditions
- protests and waives of protest
- pending protest list
- value change report

## Document 3A

2027-2028

### CAD Plan for Periodic Reappraisal of Industrial Real Property

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

- (a) CAD shall implement the plan for periodic reappraisal of property approved by the board of directors under Section 6.05 (i).
- (b) The plan provides for annual reappraisal of selected industrial property appraised by the CAD. The CAD has a professional services contract with Capitol Appraisal Group, LLC (CAGL) to appraise these properties for the CAD.
  - (1) Identifying properties to be appraised: Appraisal of properties is limited to those indicated in the contract with the appraisal district, unless additionally requested by the appraisal district. Newly discovered properties will be discussed with the appraisal district to confirm they are to be appraised by Capitol Appraisal. Industrial properties are identified as part of the appraiser's physical inspection process each year and through submitted data by the property owner. The appraiser may also refer to legal documents, photography and other descriptive items.
  - (2) Identifying and updating relevant characteristics of each property in the appraisal records: The appraiser identifies and updates relevant characteristics through the inspection process. Confidential rendition, assets lists and other confidential data also provide additional information. Subject property data is verified through previously existing records and through published reports.
  - (3) Defining market areas in the district: Market areas for industrial properties tend to be regional, national and sometimes international. Published information such as prices, financial analysis and investor services reports are used to help define market area.
  - (4) Developing an appraisal approach that reflects the relationship among property characteristics affecting value and determines the contribution of individual property characteristics: Among the three approaches to value (cost, income and market), industrial properties are most commonly appraised using replacement/reproduction cost new less depreciation models because of readily available cost information. If sufficient income or market data are available, those appraisal models may also be used.
  - (5) Comparison and Review: The appraiser considers results that best address the individual characteristics of the subject property and that are based on the most reliable data when multiple models are used. Year-to-year property value changes for the subject property are examined using computer-assisted statistical review. Periodic reassignment of properties among appraisers or the review of appraisals by a more experienced appraiser also contributes to the review process.

## Document 3B

2027-2028

### CAD Plan for Periodic Reappraisal of Industrial Personal Property

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

- (a) CAD shall implement the plan for periodic reappraisal of property approved by the board of directors under Section 6.05 (i).
- (b) The plan provides for annual reappraisal of all industrial personal property appraised by the CAD. The CAD has a professional services contract with Capitol Appraisal Group, LLC (CAGL) to appraise these properties for the CAD.
  - (1) Identifying properties to be appraised: Appraisal of properties is limited to those indicated in the contract with the appraisal district, unless additionally requested by the appraisal district. Newly discovered properties will be discussed with the appraisal district to confirm they are to be appraised by Capitol Appraisal. Through inspection the appraiser identifies personal property to be appraised. The appraiser begins with properties from the previous tax year and identifies new properties from visual identification and/or publications, newspaper articles, or information obtained through the interview of property owners. The appraiser may also refer to other documents, both public and also confidential, to assist in identification of these properties. Such documents might include but are not limited to the previous year's appraisal roll, vehicle listing services and private directories.
  - (2) Identifying and updating relevant characteristics of each property in the appraisal records: Data identifying and updating relevant characteristics of the subject properties are collected as part of the inspection process through directories and listing services as well as through later submissions by the property owner, sometimes including confidential rendition. These data are verified through previously existing records and through public reports.
  - (3) Defining market areas in the district: Market areas for industrial personal property are generally either regional or national in scope. Published price sources are used to help define market areas.
  - (4) Developing an appraisal approach that reflects the relationship among property characteristics affecting value and determines the contribution of individual property characteristics. Personal property is appraised using replacement/reproduction cost new less depreciation models. Income approach models are used when economic and/or subject property income is available, and a market data model is used when appropriate market sales information is available.
  - (5) Comparison and Review: The appraiser reconciles multiple models by considering the model that best addresses the individual characteristics of the subject property. Year-to year property value

changes for the subject property are examined using computer-assisted statistical review. Periodic reassignment of properties among appraisers or the review of appraisals by a more experienced appraiser also contributes to the review process.

## **Document 3C**

**2027-2028**

### **CAD Plan for Periodic Reappraisal of Utility, Railroad and Pipeline Property**

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

- (a) CAD shall implement the plan for periodic reappraisal of property approved by the board of directors under Section 6.05 (i).
- (b) The plan provides for annual reappraisal of all utility, railroad and pipeline property appraised by the CAD. The CAD has a professional services contract with Capitol Appraisal Group, LLC (CAGL) to appraise these properties for the CAD.
  - (1) Identifying properties to be appraised: Appraisal of properties is limited to those indicated in the contract with the appraisal district, unless additionally requested by the appraisal district. Newly discovered properties will be discussed with the appraisal district to confirm they are to be appraised by Capitol Appraisal. Utility, railroad and pipeline properties that are susceptible to inspection are identified by inspection. The appraiser may also refer to other documents, both public and also confidential to assist in identification of these properties. Due to the varied nature of utility, railroad, and pipeline properties there is no standard data collection form or manual. New permitting documents on record with the Railroad Commission of Texas provide a source to identify potential new pipeline projects but does not provide indication if the project was actually started, completed, or a distinct location of the proposed project. Every effort is made to discover new utility, railroad, and pipeline properties through personal observation combined with permitting documents.
  - (2) Identifying and updating relevant characteristics of each property in the appraisal records: The appraiser identifies and updates relevant characteristics through data collected as part of the inspection process and through later submissions by the property owner, sometimes including confidential rendition. Additional data are obtained through public sources, regulatory reports and through analysis of comparable properties.
  - (3) Defining market areas in the district: Market areas for utility, railroad and pipeline property tend to be regional or national in scope. Financial analyst and investor services reports are used to help define market areas.
  - (4) Developing an appraisal approach that reflects the relationship among property characteristics affecting value and determines the contribution of individual property characteristics: For all three types of property, the appraiser must first form an opinion of highest and best use. Among the three approaches to value (cost, income and market),



pipeline value is calculated using a replacement/reproduction cost new less depreciation model [RCNLD]. In addition to the RCNLD indicator, a unit value model may also be used if appropriate data are available. Utility and railroad property are appraised in a manner similar to pipeline except that the RCNLD model is not used.

- (5) Comparison and Review: The appraiser considers results that best address the individual characteristics of the subject property when multiple models are used. Year-to year property value changes for the subject property are examined using computer-assisted statistical review. Periodic reassignment of properties among appraisers or the review of appraisals by a more experienced appraiser also contributes to the review process. These types of property are also subject to review by the Property Tax Division of the Texas Comptroller's Office through their annual Property Value Study.

## **Document 3D**

**2027-2028**

### **CAD Plan for Periodic Reappraisal of Oil and Gas Property**

In accordance with Section 25.18 of the Tax Code:

- (a) CAD shall implement the plan for periodic reappraisal of property as approved by the board of directors under Section 6.05 (i).
- (b) The plan provides for annual reappraisal of all oil and gas property appraised by the CAD. The CAD has a professional services contract with Capitol Appraisal Group, LLC (CAGL) to appraise these properties for the CAD.
  - (1) Identification of new property and its situs. As subsurface mineral properties lie within the earth, they cannot be physically identified by inspection like other real property. However, the inability to directly inspect does not appreciably affect the ability to identify and appraise these properties. To identify new properties, CAGL obtains monthly oil and gas lease information from the Railroad Commission of Texas [RRC] to compare against oil and gas properties already identified. The situs of new properties is determined using plats and W-2/G-1 records from the RRC, as well as CAGL's in-house map resources.
  - (2) Identifying and updating relevant characteristics of all oil and gas properties to be appraised. Relevant characteristics necessary to estimate value of remaining oil or gas reserves are production volume and pattern, product prices, expenses borne by the operator of the property, and the rate at which the anticipated future income should be discounted to incorporate future risk. CAGL obtains information to update these characteristics annually from regulatory agencies such as the RRC, the Comptroller of Public Accounts, submissions from property owners and operators, as well as from published investment reports, licensed data services, service for fee organizations and through comparable properties, when available.
  - (3) Defining market areas in the district and identifying property characteristics that affect property value in each market area. Oil and gas markets are regional, national and international. Therefore they respond to market forces beyond defined market boundaries as observed among more typical real properties.
  - (4) Developing an appraisal approach that best reflects the relationship among property characteristics affecting value and best determines the contribution of individual property characteristics. Among the three approaches to value (cost, income and market), the income approach to value is most commonly used in the oil and gas industry. Through use of the discounted cash flow technique in particular, the appraiser is able to bring together relevant characteristics of production volume and pattern, product prices, operating expenses and discount rate to determine an estimate of appraised value of an oil or gas property.

- (5) Comparison and Review. Use of the income approach is the first step in determining an estimate of market value. After that the appraiser reviews the estimated market value compared to its previous certified value and also compares it to industry expected payouts and income indicators. The appraiser examines the model's value with its previous year's actual income, expecting value to typically vary within in a range of 2-5 times actual annual income, provided all appropriate income factors have been correctly identified. Finally, periodic reassignment of properties among appraisers and review of appraisals by a more experienced appraiser further expand the review process.

## **Document 5**

### **CAD Procedure for Identifying New Utility Properties and Producing Wells**

Appraisal of industrial properties is limited to those properties indicated in the contract with the appraisal district unless the appraisal district requests the appraisal of other properties. Newly discovered properties will be discussed with the appraisal district to confirm they are to be appraised by Capitol Appraisal.

#### **Utility, Railroad and Pipeline Property**

Utility, railroad and pipeline properties that are susceptible to inspection are identified by inspection. The appraiser may also refer to other documents, both public and also confidential to assist in identification of these properties.

#### **Oil and Gas Property**

As subsurface mineral properties lie within the earth, they cannot be physically identified by inspection like other real property. However, the inability to directly inspect does not appreciably affect the ability to identify and appraise these properties. To identify new properties, CAG uses the following procedure:

1. Obtain a list from the Texas Railroad Commission of all leases currently producing or permitted in the CAD. Obtain permit plat for leases contained within the county.
2. Obtain a list of leases currently producing or permitted in neighboring counties with common borders and map relative location of leases to county's border. Obtain permit plat to determine if leases may have lease boundaries extending into county.
3. Using plats of leases with partial or all lease boundaries within the county, create a list of potential additional property to be added to the appraisal roll.
4. Compare list of potential leases with all currently producing leases in the CAD on January 1<sup>st</sup> of current tax year to determine any lease duplication.
5. Check to see if the lease was completed prior to January 1<sup>st</sup> or producing before January 1<sup>st</sup> of current tax year.
6. If lease has not previously been added to the CAD's appraisal roll, do so and obtain ownership.

## **Document 6A**

### **Industrial Real Property Mass Appraisal Procedure and Timeline**

Although valuation is set for either January 1 of the tax year or September 1 of the previous calendar year prior to the current tax year, the appraisal process begins in September of the previous year and continues through August of the tax year.

#### **September 1 of previous year to March 31 of the current tax year**

Discovery and listing. This includes physical inspection of existing properties to appraise and discovery of potential new properties to appraise. New potential properties are reported to the appraisal district to determine if Capitol Appraisal will value the property for the current tax year.

#### **April 1 until complete**

Appraisal of properties both market value and taxable value. Deadlines for completion of appraisals and sending out value notices are based upon individual deadlines set by the appropriate appraisal district. Every effort is made to appraise every property timely so that values can be included in certification. Properties not included in certification are reported to the appraisal district and the appraisal process continues until final value is reached. Supplementing the tax roll with those properties is based upon the timeline established by the appraisal district.

#### **July 25**

Appraisal roll is certified. Every effort is made to ensure all properties have a final valuation by this date. Exceptions may include properties with late renditions, extensions, or other allowable justifications which preclude final valuation by July 25.

#### **July 26 to August 31**

Review current tax year methods and procedures, and begin general property classification research for the next tax year. Special reports for the appraisal districts are created at this time as requested.



## **Document 6B**

### **Industrial Personal Property Mass Appraisal Procedure and Timeline**

Although valuation is set for either January 1 of the tax year or September 1 of the previous calendar year prior to the current tax year, the appraisal process begins in September of the previous year and continues through August of the tax year.

#### **September 1 of previous year to March 31 of the current tax year**

Discovery and listing. This includes physical inspection of existing properties to appraise and discovery of potential new properties to appraise. New potential properties are reported to the appraisal district to determine if Capitol Appraisal will value the property for the current tax year.

#### **April 1 until complete**

Appraisal of properties both market value and taxable value. Deadlines for completion of appraisals and sending out value notices are based upon individual deadlines set by the appropriate appraisal district. Every effort is made to appraise every property timely so that values can be included in certification. Properties not included in certification are reported to the appraisal district and the appraisal process continues until final value is reached. Supplementing the tax roll with those properties is based upon the timeline established by the appraisal district.

#### **July 25**

Appraisal roll is certified. Every effort is made to ensure all properties have a final valuation by this date. Exceptions may include properties with late renditions, extensions, or other allowable justifications which preclude final valuation by July 25.

#### **July 26 to August 31**

Review current tax year methods and procedures, and begin general property classification research for the next tax year. Special reports for the appraisal districts are created at this time as requested.

## **Document 6C**

### **Utility, Railroad and Pipeline Property Mass Appraisal Procedure and Timeline**

Although valuation is set for either January 1 of the tax year or September 1 of the previous calendar year prior to the current tax year, the appraisal process begins in September of the previous year and continues through August of the tax year.

#### **September 1 of previous year to March 31 of the current tax year**

Research and capitalization rate development. For properties valued via the income approach data is obtained and analyzed for calculation of a capitalization rate appropriate to a specific property type.

#### **October to December**

Submission of appraisals to the Property Tax Assistance Division (PTAD) of the Comptroller's office and preparation of value defense for any properties included in their ratio study. Defense documentation and appraisal analysis of the PTAD appraisal is prepared and submitted to the appraisal district or the representative of the taxing jurisdictions whichever is appropriate.

#### **April 1 until complete**

Appraisal of properties both market value and taxable value. Deadlines for completion of appraisals and sending out notice of value are based upon individual deadlines set by the appropriate appraisal district. Every effort is made to appraise every property timely so that values can be included in certification. Properties not included in certification are reported to the appraisal district and the appraisal process continues until final value is reached. Supplementing the tax roll with those properties is based upon the timeline established by the appraisal district.

#### **July 25**

Appraisal roll is certified. Every effort is made to ensure all properties have a final valuation by this date. Exceptions may include properties with late renditions, extensions, or other allowable justifications which preclude final valuation by July 25.

#### **July 26 to August 31**

Review current tax year methods and procedures, and begin general property classification research for the next tax year. Special reports for the appraisal districts are created at this time as requested.

## **Document 6D**

### **Oil and Gas Mass Appraisal Procedures and Timeline**

Capitol Appraisal Group, LLC (CAGL) contracts with Appraisal Districts and other governmental entities to appraise all oil and gas subsurface, producing, mineral interests within the purview of the law.

#### **October-December:**

**SEC 10(k) data gathered for use in discount rate study.**

A base discount rate is developed using the Securities and Exchange Commission (SEC) 10k Standard Measure of Value, before Federal Income Tax (BFIT), for a grouping of Exploration and Production (E&P) companies, and then matching their 10k Standard Measure of Value (BFIT), reserves and costs, through a discounted cash flow (DCF) technique. This reserve and cost match is used with Section 23.175 pricing directives to determine a discount rate necessary to equal the stock and debt value of the companies, as of January 1 for a given tax year. This analysis is calibrated with a WACC for the same companies that are used in the stock and debt analysis. Management determines an appropriate base discount rate to be used.

#### **January:**

**Discount rate study finalized**

#### **November-March:**

**The appraiser commences the annual appraisal cycle with identification of new property and determination of situs.**

"Minerals in place" and an estate or interest in the same, are classified by the state of Texas as real property. They cannot be physically identified by inspection like other real property. However, the inability to directly inspect does not appreciably affect the ability to identify and appraise these minerals in place and estates or interests in the same. CAGL obtains monthly oil and gas lease production information from the Railroad Commission of Texas [RRC] and compares it to existing oil and gas properties already identified and appraised. New properties are identified in this process by comparing existing data to new information obtained from the RRC.

The appraiser determines the validity of new properties and then determines the situs of these new properties by obtaining plats, W-2/G-1 records obtained from the RRC, and using in-house mapping resources.

**January-March:**

**Appraisers begin entering detailed new property information.**

Along with RRC lease specific information, the appraiser enters the lease's legal description, its situs, and detailed lease information obtained from the RRC. This process of discovery and entry into the appraisal system continues year round to identify assessable properties that are obtained because of delays in the RRC reporting system.

**February:**

**Comptroller's 23.175 pricing data and market condition factors are obtained and incorporated into the appraisal system.**

**February-April:**

**Properties are appraised and values are posted on the CAG web site for clients, operators and agents to review and submit information.**

Appraiser(s) access production declines for leases to be appraised. Based on the appraiser's decline rate analysis and review of previous year's appraisal parameters and current Comptroller pricing data, the estimated value for the current appraisal year is determined.

Preliminary appraised values are available from the CAG web site [www.cagi.com](http://www.cagi.com) following appraiser and supervisor review.

**April-May:**

**Preliminary appraisals reviewed.**

Appraisers review operating expenses, product prices, new or revised information about production submitted by operators and agents before Notifications of Value are mailed to taxpayers.

**May-July:**

**Notified values formally & informally reviewed.**

Appraisers work with taxpayers following Notification of Value and continue to review information submitted by royalty owners, operators and agents. The ARB process is part of this review



# MASS APPRAISAL REPORT

## OIL AND GAS RESERVES

### APPRAISED BY CAPITOL APPRAISAL GROUP

2027-2028

#### Overview

Capitol Appraisal Group, LLC. (CAGI) contracts with Appraisal Districts and other governmental entities to appraise all oil & gas subsurface, producing, mineral interests within the purview of the entity. The contractual purpose is to estimate market value as defined in Section 1.04 of the Texas Property Tax Code as of January 1 of each year and report these values to the entity. The results of our work are used as part of the tax base upon which property taxes are levied. Each mineral interest is listed on the appraisal roll separately from other interests in the minerals-in-place in conformance with the Texas Property Tax Code Sec. 25.12. Subsurface mineral rights are not susceptible to physical inspection. This condition creates the need to invoke the **Departure Provision** as Requested by the 2003 edition of the Uniform Standards of Professional Appraisal Practice Standards Rule 6-7 (f). However, the inability to physically examine the subsurface mineral rights does not appreciably affect the appraisal process or the quality of the results.

#### Assumptions and Limiting Factors

All appraisals are subject to the following:

1. Title to the property is assumed to be good and marketable and the ownership interest and legal description is assumed to be correct.
2. No responsibility for legal matters is assumed. Properties are appraised as if free and clear of any encumbrance and operated under responsible ownership and competent management.
3. Not every property is inspected every year.
4. All information in the appraisal documents has been obtained by Capitol Appraisal Group's employees or through other reliable sources.
5. The appraisals were prepared exclusively for ad valorem tax purposes

#### Data Collection

Data on the properties appraised are collected from regulatory agencies, such as the Texas Railroad Commission and the Texas Comptroller of Public Accounts, from submissions by the property operator or owner(s), or from other sources. **Submitted data from operators, taxpayers and/or their agents on the appraised properties are considered "rendition statements" and, as such, are confidential data, subject to Sec. 22.27 of the Texas Property Tax Code.** Additional data are obtained through published sources, regulatory reports, public investment reports, licensed data services, service for fee organizations and through comparable properties, if any. The state of Texas is a non-disclosure state and thus many forms of information, pertinent to the value of the properties, are not available to the appraiser.

## Valuation and Analysis

The Income Method of Appraisal, as described in Section 23.012 of the Texas Property Tax Code, is the principal appraisal method used. The Market Data Comparison Method of Appraisal (section 23.013) and the Cost Method of Appraisal (section 23.011) are considered. Industry averages of reserve replacement cost and acquisition cost are used for comparative purposes. The non-disclosure nature of the laws of Texas makes market data comparison unreliable. However, if within the scope of Capitol's work assignment market sales disclosures on interests are available, then those data is considered. The nearly exclusive reliance on the income approach, using the discounted cash flow (DCF) technique adjusted for specific property risk and market conditions, is typical of the oil and gas industry. Fee for service organizations are used for survey data with respect to price expectations and discount rates, and licensed data services are used for Industry indicators detailing costs, income, acquisitions costs in dollars per barrel of oil equivalent (\$/BOE), finding and development costs (\$/BOE) and reserve replacement costs (\$/BOE) for over 100 E&P companies.

Due to the demands of Section 23.175 of the Texas Property Tax Code and the Texas Constitution, Capitol Appraisal Group, Inc. takes great care to not appraise properties in excess of their fair market value. We analyze a segment of the Petroleum Producing E&P market, determining the impact on their stock and debt value of the pricing requirements of Sec. 23.175 and also the pricing that could be reasonably anticipated from the market. Capitol Appraisal Group Inc.'s opinion of oil and gas prices is guided by the market's anticipation of those prices through the futures market, oil and gas stock prices and oil and gas industry indexes. A base discount rate is developed using the Securities and Exchange Commission (SEC) 10k Standard Measure of Value, Before Federal Income Tax (BFIT), for a grouping of 20 Exploration and Production (E&P) companies, and then matching their 10k Standard Measure of Value (BFIT), reserves and costs, through a discounted cash flow (DCF) technique. This reserve and cost match is used with Capitol's developed pricing scenario and Section 23.175 pricing directives to determine a discount rate necessary to equal the stock and debt value of the companies, as of January 1 for a given tax year.

The Weighted Average Cost of Capital (WACC) technique is also performed for a subset of these companies grouped according to the Petroleum Producing Industry Exploration and Production companies used in the *The Valueline Investment Survey*. These separate pricing scenarios and the resulting discount rates derived from using the aforementioned stock and debt techniques are applied to the universe of oil and gas properties we appraise. In seeking to avoid appraising any oil and gas property **above** its fair cash market value, Capitol Appraisal employs a market adjustment factor (MAF) to its base discount rate in order to apply property specific risk(s). These factors, which create a wide range of discount rates for the properties that Capitol appraises, are necessary to equitably evaluate disparate leases with respect to remaining reserves, price and costs. By performing two DCF income approach appraisals on each property, Capitol Appraisal provides clients with our opinion of market value, while always endeavoring to guard against appraising a mineral lease at greater than its fair cash market value. [A **jurisdictional exception** to the Discounted Cash Flow technique, as this process is described in the Statement on Appraisal Standards #2, 2003 edition of the Uniform Standards of Professional Appraisal Practice, must be taken. Section 23.175(a) of the Texas Property Tax Code both specifies the directives concerning oil and gas pricing that appraisal districts in Texas must follow and also that each appraisal district must adhere to procedure and methodology contained in manuals developed by the Property Tax Division (PTD) of the Texas Comptroller of Public Accounts. Because adherence to this Property Tax Code directive, without discretion, can result in values greater than fair cash market value, we must express caution.]

The resulting oil and gas lease value is then allocated to each owner on the lease based upon his fractional mineral ownership interest. Royalty and working interests have different impacts on their respective values, since only working interests bear the costs of lease operation. Therefore royalty mineral interest owner's values are allocated from 100% of the appraised royalty value of

the lease, according to their fractional royalty interest, while the working interest owner's value(s) are allocated from 100% of the determined working interest value of the lease, according to their fractional working interest.

### **Review and Testing**

Each year we review the estimated market value for each mineral property appraised according to its year-to-year value change and also to industry expected payouts and income indicators. We also examine income projected to be received with the previous year's income and test that income against the lease's appraised value. Market value for income producing properties is a multiple of its monthly or annual income. Our experience through the years indicates that values typically vary within in a range of 2-5 times income, provided all appropriate income factors have been appropriately identified. Periodic reassignment of properties among appraisers and review of appraisals by a more experienced appraiser also contribute to the review process.

Application of appraisal-to-sales ratios is another method for measuring performance. However, single property sales or sales of interest(s) within a property remain difficult to obtain due Texas' disclosure laws. Furthermore many market transactions are normally for multiple properties in multiple areas and include both real and personal property, tangible and intangible. We access licensed databases providing statistical data for company and property sales to compare our efforts. We also measure our performance through comparison of valid single-property market transactions, if any, that are submitted for staff review. Lastly, Capitol Appraisal's mineral appraisal values are subject to review each year in the Property Value Study conducted by the Property Tax Division of the Texas Comptroller of Public Accounts. The Property Tax Division's review as well as comparisons to industry transactions and to single-property market value sales (when available), indicate the validity of the models, techniques and assumptions used.

**MASS APPRAISAL REPORT**  
**BUSINESS PERSONAL PROPERTY**  
**APPRAISED BY CAPITOL APPRAISAL GROUP**

**2027-2028**

**Overview**

This type of property consists of tangible personal property owned by a business or individual for the purpose of producing an income. The Uniform Standards of Professional Appraisal practice define personal property as "identifiable portable and tangible objects which are considered by the general public as being "personal," e.g. furnishings, artwork, antiques, gems and jewelry, collectibles, machinery and equipment; all property that is not classified as real estate.". The Texas Property Tax Code (Sec. 1.04(5)) defines tangible personal property as "...personal property that can be seen, weighed, measured, felt, or otherwise perceived by the senses but does not include a document or other perceptible object that constitutes evidence of a valuable interest, claim, or right and has negligible or no intrinsic value." The Texas Property Tax Code (Sec. 1.04(4)) defines personal property as "...property that is not real property."

Capitol Appraisal Group, Inc. is contracted to reappraise this type of property according to the scope of work in the normal course of business of the client consistent with the Uniform Standards of Professional Appraisal Practice guidelines. The completed appraisals are all retrospective in nature. The purpose of the appraisals is to estimate market value as of January 1 in accordance with the definition of market value established in the Texas Property Tax Code (Sec. 1.04). "Market value" means the price at which a property would transfer for cash or its equivalent under prevailing market conditions if:

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

A separate definition of the value of inventory is found in the Texas Property Tax Code (Sec. 23.12(a)), "...the market value of an inventory is the price for which it would sell as a unit to a purchaser who would continue the business." Additionally, some inventories may qualify for appraisal as of September 1 in accordance with the provisions of Texas Property Tax Code Section 23.12(f).

The effective date of the appraisals is January 1 of the year for which this report is submitted unless the property owner or agent has applied for and been granted September 1 inventory valuation as allowed by Section 23.12(f) of the Texas Property Tax Code. The date of this report is April 20 of the tax year for which it is submitted.

The client for the mass appraisal is the Texas appraisal district named on the last page of this report. The intended users of this report are the client and the property owners of the client appraisal district.

The appraisal results will be used as the tax base upon which a property tax will be levied. A listing of the personal property appraised by Capitol Appraisal Group, Inc. for the appraisal district is available at the appraisal district office. Personal property is normally re-inspected annually.

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

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

### **Assumptions and Limiting Conditions**

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

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

### **Data Collection and Validation**

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

### **Valuation Approach and Analysis**

Personal property is appraised using replacement/reproduction cost new less depreciation models. Replacement costs are estimated from published sources, other publicly available information, and comparable properties. Reproduction costs are based on actual investment in the subject or comparable properties. Depreciation is calculated on the age/life method using typical economic lives and depreciation rates based on published sources, market evidence, and the experience of knowledgeable appraisers. Adjustments for functional and economic obsolescence may be made if utilization and income data for the subject property justify such. Income Approach models (direct capitalization and discounted cash flow) are also used when economic and/or subject property income information is available. Capitalization and discount rates are based on published capital costs for the industry of the subject property. A value

estimate derived from an income approach model in which the operating income of a business was capitalized must be reduced by the value of any real property in order to arrive at the value of the operating personal property. A market data model based on typical selling prices per item or unit of capacity is also used when appropriate market sales information is available. In the case of some personal property types, such as licensed vehicles, market data from published pricing guides is used to construct a market value model. In other cases, models are based on sales information available through published sources or through private sources.

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

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

The mathematical form of each model is described below.

## **Cost Approach**

$$\begin{aligned} & \text{RCN} \\ & -\text{PD} \\ & -\text{FO} \\ & -\text{EO} \\ & =\text{Cost Indicator of Value} \end{aligned}$$

Where:

RCN = Replacement or Reproduction Cost New

PD = Physical Depreciation

FO = Functional Obsolescence

EO = Economic Obsolescence

## **Income Approach**

$$\begin{aligned} & \text{PGR} \\ & -\text{VCL} \\ & -\text{FE} \\ & -\text{VE} \\ & \text{NOI} \end{aligned}$$

NOI/R = Income Indicator of Value

Where:

PGR = Potential Gross Rent

VCL = Vacancy and Collection Loss

FE = Fixed Expenses

VE = Variable Expenses

R = Discount Rate or Cost of Capital

A variation of the income model is:



NOI for year 1 x DF for year 1 = PW of year 1 NOI  
NOI for year n x DF for year n = PW of year n NOI  
Net Reversion x DF for year n = PW of Reversion  
Sum of PW's for all years 1 - n = Income Indicator of Value

Where:

NOI = Net Operating Income

DF = Discount Factor

PW = Present Worth

n = Last year of holding period

## **Market Data Approach**

ASPCP/U = PU

PU x SU = Market Data Indicator of Value

Where:

ASPCP = Adjusted Sales Price of Comparable Property

U = Unit of comparison

ASPU = Adjusted Sales Price per Unit of comparison

SU = Subject Property's number of Units of comparison

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

Highest and best use analysis of personal property is based on the likelihood of the continued use of the personal property in its current and/or intended use. An appraiser's identification of a property's highest and best use is always a statement of opinion, never a statement of fact.

## **Review and Testing**

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

Appraisal-to-sales ratios are the preferred method for measuring performance and are used when possible. However sales for some types of personal property are very infrequent. Furthermore, many market transactions occur for multiple sites and include both real and personal property, tangible and intangible, making analysis difficult and subjective. Performance is also measured through comparison with valid single-property appraisals submitted for staff review. Lastly, Capitol Appraisal Group's industrial appraisal methods and procedures for real and personal property are subject to review by the Property Tax Division of the Texas Comptroller's office. The Comptroller's review as well as appraisal-to-sale ratios and comparisons with single-property appraisals indicate the validity of the models and the calibration techniques employed. Commercial personal property appraised by Capitol Appraisal Group, Inc. is not subject to a methods and procedures review however it is included in the Property Tax Division's annual ratio study with satisfactory results.

**MASS APPRAISAL REPORT**  
**UTILITY, RAILROAD, AND PIPELINE PROPERTIES**  
**APPRAISED BY CAPITOL APPRAISAL GROUP, INC.**

**2027-2028**

**Overview**

This type of property consists of operating property, excluding land, owned by utility, railroad, and pipeline companies, and related personal property and improvements. Capitol Appraisal Group, Inc. is contracted to reappraise this type of property according to the scope of work in the normal course of business of the client consistent with the Uniform Standards of Professional Appraisal Practice guidelines. The completed appraisals are all retrospective in nature. The purpose of the appraisals is to estimate market value as of January 1 in accordance with the definition of market value established in the Texas Property Tax Code (Sec. 1.04). "Market value" means the price at which a property would transfer for cash or its equivalent under prevailing market conditions if:

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

The effective date of the appraisals is January 1 of the year for which this report is submitted unless the property owner or agent has applied for and been granted September 1 inventory valuation as allowed by Section 23.12(f) of the Texas Property Tax Code. The date of this report is April 20 of the tax year for which it is submitted.

The client for the mass appraisal is the Texas appraisal district named on the last page of this report. The intended users of this report are the client and the property owners of the client appraisal district

The appraisal results will be used as the tax base upon which a property tax will be levied. The properties are appraised in fee simple in conformance with the Texas Property Tax Code Sec. 25.06. This is a jurisdictional exception to Standards Rule 6-5 (c) comment of the Uniform Standards of Professional Appraisal Practice 2008. A listing of the utility, railroad, and pipeline properties appraised by Capitol Appraisal Group, Inc. for the appraisal district is available at the appraisal district office. Such utility, railroad, and pipeline properties that are susceptible to inspection (e.g. compressor stations, pump stations, buildings, and power plants) are normally re-inspected at least every three years.

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

### **Assumptions and Limiting Conditions**

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

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

### **Data Collection and Validation**

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

### **Valuation Approach and Analysis**

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

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

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

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

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

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

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

The mathematical form of each model is described below.

## **RCNLD Approach**

$$\begin{aligned} & \text{RCN} \\ & -\text{PD} \\ & -\text{FO} \\ & -\text{EO} \\ & =\text{RCNLD Indicator of Value} \end{aligned}$$

Where:

RCN = Replacement or Reproduction Cost New

PD = Physical Depreciation

FO = Functional Obsolescence

EO = Economic Obsolescence

## Unit Cost Approach

$$\begin{array}{r} \text{OC} \\ -\text{AD} \\ \hline -\text{EO} \\ \hline \end{array} = \text{Unit Cost Approach Indicator of Value}$$

Where:

OC = Original Cost

AD = Allowed Depreciation

EO = Economic Obsolescence

## Unit Income Approach

$$\begin{array}{r} \text{PGR} \\ -\text{VCL} \\ -\text{FE} \\ \hline -\text{VE} \\ \hline \end{array} \text{NOI}$$

NOI/R = Income Indicator of Value

Where:

PGR = Potential Gross Rent

VCL = Vacancy and Collection Loss

FE = Fixed Expenses

VE = Variable Expenses

R = Discount Rate or Cost of Capital

A variation of the income model is:

$$\begin{array}{l} \text{NOI for year 1} \times \text{DF for year 1} = \text{PW of year 1 NOI} \\ \text{NOI for year n} \times \text{DF for year n} = \text{PW of year n NOI} \\ \text{Net Reversion} \times \text{DF for year n} = \text{PW of Reversion} \\ \text{Sum of PW's for all years 1 - n} = \text{Income Indicator of Value} \end{array}$$

Where:

NOI = Net Operating Income

DF = Discount Factor

PW = Present Worth

n = Last year of holding period

## Stock and Debt Approach

$$\begin{array}{r} \text{MVE} \\ +\text{MVD} \\ \hline \end{array} = \text{Market Value of Assets}$$

Where:

MVE = Market value of Equity

MVD = Market value of Debt

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

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

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

### **Review and Testing**

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

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



**MASS APPRAISAL REPORT**  
**INDUSTRIAL PROPERTY**  
**APPRAISED BY CAPITOL APPRAISAL GROUP**

**2027-2028**

**Overview**

This type of property consists of processing facilities and related personal property. Capitol Appraisal Group, Inc. is contracted to reappraise this type of property according to the scope of work in the normal course of business of the client consistent with the Uniform Standards of Professional Appraisal Practice guidelines. The completed appraisals are all retrospective in nature. The purpose of the appraisals is to estimate market value as of January 1 in accordance with the definition of market value established in the Texas Property Tax Code (Sec. 1.04). "Market value" means the price at which a property would transfer for cash or its equivalent under prevailing market conditions if:

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

The effective date of the appraisals is January 1 of the year for which this report is submitted unless the property owner or agent has applied for and been granted September 1 inventory valuation as allowed by Section 23.12(f) of the Texas Property Tax Code. The date of this report is April 20 of the tax year for which it is submitted.

The client for the mass appraisal is the Texas appraisal district named on the last page of this report. The intended users of this report are the client and the property owners of the client appraisal district.

The appraisal results will be used as the tax base upon which a property tax will be levied. The properties are appraised in fee simple in conformance with the Texas Property Tax Code Sec. 25.06. This is a jurisdictional exception to the Standards Rule 6-5 © Comment of the Uniform Standards of Professional Appraisal Practice 2008. A listing of the industrial properties appraised by Capitol Appraisal Group, Inc. for the appraisal district is available at the appraisal district office. Industrial properties are normally re-inspected annually.

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

Capitol's industrial appraisal staff includes licensed engineers as well as experienced appraisers who are knowledgeable in all three approaches to value. Industrial appraisal staff stays abreast

of current trends affecting industrial properties through review of published materials, attendance at conferences, course work, and continuing education. All industrial appraisers are registered with the Texas Board of Tax Professional Examiners.

### **Assumptions and Limiting Conditions**

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

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

### **Data Collection and Validation**

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

### **Valuation Approach and Analysis**

Industrial properties are appraised using replacement/reproduction cost new less depreciation models. Replacement costs are estimated from published sources, other publicly available information, and comparable properties. Reproduction costs are based on actual investment in the subject or comparable properties adjusted for typical changes in cost over time. Depreciation is calculated on the age/life method using typical economic lives and depreciation rates based on published sources, market evidence, and the experience of knowledgeable appraisers. Adjustments for functional and economic obsolescence may be made if utilization and income data for the subject property justify such. Income Approach models (direct capitalization and discounted cash flow) are also used when economic and/or subject property income information is available. Capitalization and discount rates are based on published capital costs for the industry of the subject property. A market data model based on typical selling prices per unit of capacity is also used when appropriate market sales information is available.

Because cost information is the most readily available type of data, the cost approach model is always considered and used. If sufficient data is available either of both of the other two models may also be considered and used. The market data and income approach models may need to

be reduced by the value of the land in order to arrive at a value of improvements and personal property.

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

The mathematical form of each model is described below.

### **Cost Approach**

$$\begin{aligned} & \text{RCN} \\ & -\text{PD} \\ & -\text{FO} \\ & -\text{EO} \\ & \hline & = \text{Cost Indicator of Value} \end{aligned}$$

Where:

RCN = Replacement or Reproduction Cost New  
PD = Physical Depreciation  
FO = Functional Obsolescence  
EO = Economic Obsolescence

### **Income Approach**

$$\begin{aligned} & \text{PGR} \\ & -\text{VCL} \\ & -\text{FE} \\ & -\text{VE} \\ & \hline & \text{NOI} \end{aligned}$$

NOI/R = Income Indicator of Value

Where:

NOI = Net Operating Income  
PGR = Potential Gross Rent  
VCL = Vacancy and Collection Loss  
FE = Fixed Expenses  
VE = Variable Expenses  
R = Discount Rate or Cost of Capital

A variation of the income model is:

NOI for year 1 x DF for year 1 = PW of year 1 NOI  
NOI for year n x DF for year n = PW of year n NOI  
Net Reversion x DF for year n = PW of Reversion  
Sum of PW's for all years 1 - n = Income Indicator of Value

Where:

DF = Discount Factor  
PW = Present Worth  
n = Last year of holding period

## **Market Data Approach**

$$\text{ASPCP}/\text{U} = \text{PU}$$

$$\text{PU} \times \text{SU} = \text{Market Data Indicator of Value}$$

Where:

ASPCP = Adjusted Sales Price of Comparable Property

U = Unit of comparison

PU = Price per Unit of comparison

ASPU = Adjusted Sales Price per Unit of comparison

SU = Subject Property's number of Units of comparison

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

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

### **Review and Testing**

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

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

**Calibration Models**  
**OIL AND GAS RESERVES**  
**CAPITOL APPRAISAL GROUP**

**Review and Testing**

Each year we review the estimated market value for each mineral property appraised according to its year-to-year value change and also to industry expected payouts and income indicators. We also examine income projected to be received with the previous year's income and test that income against the lease's appraised value. Market value for income producing properties is a multiple of its monthly or annual income. Our experience through the years indicates that values typically vary within in a range of 2-5 times income, provided all appropriate income factors have been appropriately identified. Periodic reassignment of properties among appraisers and review of appraisals by a more experienced appraiser also contribute to the review process.

Application of appraisal-to-sales ratios is another method for measuring performance. However, single property sales or sales of interest(s) within a property remain difficult to obtain due Texas' disclosure laws. Furthermore many market transactions are normally for multiple properties in multiple areas and include both real and personal property, tangible and intangible. We access licensed databases providing statistical data for company and property sales to compare our efforts. We also measure our performance through comparison of valid single-property market transactions, if any, that are submitted for staff review. Lastly, Capitol Appraisal's mineral appraisal values are subject to review each year in the Property Value Study conducted by the Property Tax Division of the Texas Comptroller of Public Accounts. The Property Tax Division's review as well as comparisons to industry transactions and to single-property market value sales (when available), indicate the validity of the models, techniques and assumptions used.

**Calibration Models**  
**UTILITY, RAILROAD, AND PIPELINE PROPERTIES**  
**APPRAISED BY CAPITOL APPRAISAL GROUP**

**Review and Testing**

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

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



**Calibration Models**  
**UTILITY, RAILROAD, AND PIPELINE PROPERTIES**  
**APPRAISED BY CAPITOL APPRAISAL GROUP**

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## **Calibration Models**

### **BUSINESS PERSONAL PROPERTY**

#### **APPRAISED BY CAPITOL APPRAISAL GROUP**

##### **Review and Testing**

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Appraisal-to-sales ratios are the preferred method for measuring performance and are used when possible. However sales for some types of personal property are very infrequent. Furthermore, many market transactions occur for multiple sites and include both real and personal property, tangible and intangible, making analysis difficult and subjective. Performance is also measured through comparison with valid single-property appraisals submitted for staff review. Lastly, Capitol Appraisal Group's industrial appraisal methods and procedures for real and personal property are subject to review by the Property Tax Division of the Texas Comptroller's office. The Comptroller's review as well as appraisal-to-sale ratios and comparisons with single-property appraisals indicate the validity of the models and the calibration techniques employed. Commercial personal property appraised by Capitol Appraisal Group, LLC is not subject to a methods and procedures review however it is included in the Property Tax Division's annual ratio study with satisfactory results.

**Calibration Models**  
**INDUSTRIAL PROPERTY**  
**APPRAISED BY CAPITOL APPRAISAL GROUP**

**Review and Testing**

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