

## **MASS APPRAISAL SYSTEM**

Computer Assisted Mass Appraisal (CAMA) system revisions are specified by the district management team and scheduled with Information systems and the district's software vendor. The district currently, and for the foreseeable future contracts with Pritchard & Abbott, Inc. services. All automated forms and IS procedures are reviewed routinely and revised as required. The following details these procedures as it relates to the 2023 and 2024 appraisal years

### **REAL PROPERTY VALUATION**

Revisions to cost models, income models, and market models are specified, updated, and tested each appraisal year. Market area boundaries are reviewed and adjusted as indicated by growth patterns and market preferences. Deeds are processed on an ongoing basis to transfer ownership, establish the basis for land size, and assign account numbers to newly platted lots as an addition to the appraisal roll. The district will also update and process exemption and special use appraisal applications as necessary and applicable.

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 based on cost data from the Marshall Valuation Service (also know as Marshall and Swift). The resulting schedules are tested for accuracy and uniformity using ratio study tools.

Land tables are updated using current market data (sales) and then tested with a ratio study. Value modifiers are developed for property categories by market area and tested on a pilot basis before deployment with a ratio study / calibration tools.

Income, expense, and occupancy data is updated in the income models for each property use category and market area. Cap rate studies are completed using current sales data when available and published sources are also utilized. The resulting models are tested using ratio study tools.

### **PERSONAL PROPERTY VALUATION**

All income-producing business personal property located within District boundaries is subject to tax. Business use vehicles are also listed in the appraisal records and subject to ad valorem taxation. Personal property schedules are used to value business furniture, fixtures, equipment, and inventory. Additionally, personal property values are obtained by some other sources.

Business owners are required by Texas Law to render their business personal property each year. The appraiser considers rendered values during the appropriate phase of valuation analysis. Rendered values are often used as the basis for the CAD value if the value rendered is reasonable for the type of business and within acceptable ranges when compared to the JHCAD/PTAD or Marshall & Swift personal property schedules. Should the property owner choose not to render the property, or if the rendered amount does not fit acceptable ranges, then the JHCAD/PTD schedule or the Marshall & Swift schedule is used to value the property.

Depreciation of the property is determined by the age of the property and its expected life. Valuation and depreciation schedules are included in the JHCAD appraisal manual. Business vehicles are valued based on NADA Used Car Guide trade-in value for the particular make, model, and age of the vehicle. The Appraisal District uses a report obtained from Texas Motor Vehicle Listings to determine ownership, make, model, and vehicle characteristics to determine NADA trade-in value. This report along with the aforementioned renditions and physical observations are used to discover and list vehicles that are taxable. When adverse factors, such as high mileage, are known, appropriate adjustments are made.

The U. S. Coast Guard and the Texas Parks and Wildlife Department provide lists to the CAD regarding taxable watercraft. The ownership, make, name, and type of watercraft are provided on these lists. Fair market value estimate of taxable watercraft is based on the same techniques used to value other business personal property.

## **NOTICING PROCESS**

Section 25.19 appraisal notice forms are reviewed, edited for updates, and the appraisal district management team approves changes. These revisions include updates from the Comptroller's Property Tax Division as well as specific legislative changes as required. Updates also include the latest copy of the Comptroller's *Taxpayers Rights and Remedies*.

## **HEARING PROCESS**

Protest hearing scheduling for informal and formal Appraisal Review Board hearings is reviewed and updated as required by protest load in order to certify by July 25 according to law. 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 legal requirements.

# **DATA COLLECTION REQUIREMENTS**

## **IDENTIFICATION AND UPDATE OF RELEVANT CHARACTERISTICS AFFECTING VALUE**

Field and office procedures are reviewed and revised as required for the data collection process. Activities scheduled for each appraisal year include the review of new construction, demolition, remodeling, re-inspection of problematic market areas, and re-inspection of the universe of properties on a specific cycle (3 years per District's policy).

### **NEIGHBORHOOD ANALYSIS Defining Market Areas**

Initially, property is considered based on its location within particular boundaries. The most common boundary used to define location is the school district boundary. In all types of property, valuation analysis and neighborhood analysis is conducted on school districts. The IAAO defines a neighborhood as the environment of a subject property that has a direct and immediate effect on value. For our purposes, the school district boundary is the environment of the subject property, therefore; Jim Hogg ISD is considered the CAD's primary market area.

According to *The Appraisal of Real Estate 12th Edition*, a market area is "the defined geographic area in which the subject property competes for the attention of market participants." The district staff groups properties by market area, which are considered to be "Neighborhoods" for the purposes of valuation and analysis. The district staff will assign neighborhood codes to comparable properties conforming to the definition of a market area; giving specific consideration to market characteristics and the specific life cycle of the neighborhood in compliance with *USPAP* Standards. In 2023-2024, Jim Hogg ISD is the only recognized market area for appraisal analysis and appraisal schedule maintenance.

### **NEW CONSTRUCTION /DEMOLITION**

New construction field and office review procedures are identified and revised as required in order to complete the data collection phase. Field production standards are established and procedures for monitoring tested to meet field review deadlines. Sources of new utility meters and septic tank permit data is confirmed and system input procedures are identified. The process of verifying the demolition or new construction of improvements is done through field inspection. Building plans and or blueprints are obtained, when possible, and dimensions are entered into the system by data collections staff. The appraisal staff checks the accuracy of the measurements in the field during data review. This critical annual activity is projected and entered on the key events calendar for each appraisal year.

## **REMODELING**

Market areas with extensive improvement remodeling are identified, verified, and field activities scheduled to update property characteristic data. Updates to valuation procedures are tested with ratio studies before being finalized in valuation modeling. This field activity is also posted to the key events calendar and is monitored carefully to finish by the established deadlines.

## **RE-INSPECTION OF PROBLEMATIC MARKET AREAS**

Real property market areas, by property classification, are tested for: low or high protest volumes; low or high sales ratios; or high coefficients of dispersion. Market areas that fail any or all of these tests are determined to be potentially problematic. Field reviews are scheduled to verify and/or correct property characteristic data and review neighborhood delineation. Additional sales data is researched and verified as applicable. In the absence of adequate market data, clusters of comparable neighborhoods are identified for use in valuation and defense.

## **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 the use of photography and imagery to augment an individual onsite visit. The annual re-inspection requirements for appraisal years 2023 and 2024 are identified by property type or property classification and scheduled on the key events calendar as part of the field operation.

## **FIELD OR OFFICE VERIFICATION OF SALES DATA AND PROPERTY CHARACTERISTICS**

Sales information must be verified and property characteristic data contemporaneous with the date of sale is captured in the sale record. The sales ratio tools require that the property that sold must equal the property appraised in order that statistical analysis results will be valid. In the event that these are not equal, the sale is usually excluded from the observation pool in the ratio study.

## **OFFICE AUDIT**

The sales ratio analysis and associated individual property value audit or review is conducted in the office on a year around basis. As stated above, properties that do not fit a homogenous statistical profile are set aside for review by a senior appraiser. In all classes of property, a number of different reports are generated on our computer to provide information on statistical measures, i. e. percent of

increase, increase from prior year, percent of change to land value, percent of change to improvement value, etc. This type of information along with the other forms of analysis described in this report often helps locate areas or property types in need of reappraisal.

## **MARKET ADJUSTMENT**

The Ratio Study Procedures provide accurate information regarding the level of appraisal of the various classes and categories of properties. For the purpose of valuing residential property, the CAD approach to value is described by the IAAO as a hybrid cost-sales comparison approach. This commonly accepted mass appraisal technique considers local influences not always accounted for in the cost approach. The following equation explains this theory:  $MV = MA (RCN - D) + LV$ .

Where MV equates to market value, MA equals market adjustment, RCN-D is the replacement cost new of the dwelling, less depreciation, and LV is the estimate of land value based on highest and best use. Market value equals market adjustment times RCNLD + land.

In areas where the sales ratio indicates that the property located within a given neighborhood is not being appraised at the legally permissible level of appraisal, the market adjustment process described in the previous paragraph is conducted. Base cost estimates are compared to sales and a ratio is derived. The ratio is divided into a target ratio, and a neighborhood adjustment factor is determined. Each homogenous parcel in that given neighborhood is programmatically adjusted according to the factor derived from the process. This adjustment factor is keypunched to a computer program and each parcel is adjusted programmatically. Ongoing neighborhood analysis and delineation ensures the accuracy of this process.

## **PILOT STUDY**

New and/or revised mass appraisal models are tested on randomly selected market areas. These modeling tests (sales ratio studies) are conducted each appraisal year. 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 model calibration are in compliance with *Uniform Standards of Professional Appraisal Practice*, STANDARD RULE 6.

## **VALUATION BY APPRAISAL YEAR**

Using market analysis of comparable sales and locally tested cost data, specific income and expense data, and information gathered from renditions, valuation

models are specified and calibrated in compliance with the 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 by market area and property category. Performance standards utilized are those as established by the *IAAO Standard on Ratio Studies*. Property values in all market areas are reviewed each reappraisal year and updated as indicated by existing market data.

The following details the planned valuation methods by department and or property type:

## **RESIDENTIAL REAL PROPERTY**

### **Cost Approach**

The district uses a hybrid cost-market approach when valuing residential properties. The comparative unit, also known as the square-foot method, will be used to develop an indication of the basic cost of a structure. Adjustments will then be made for amenities of individual properties based upon characteristics that affect value in the market. The district's cost tables are, and will continue to be, based upon information obtained from the Marshall Valuation Service, also known as *Marshall and Swift*. These cost figures are adjusted to the local market to reflect current local labor and material costs. Neighborhood Market Adjustment factors will be developed from appraisal statistics provided by ratio studies to ensure that estimated values reflect both the supply and demand side of the market in each specific neighborhood. The following equation is the hybrid model used by the district:

$$MV = [RCNLD] MA + LV$$

In the formula above, the replacement cost new less depreciation (RCNLD) of the improvements are multiplied by the appropriate neighborhood market adjustment factor (MA) to arrive at a current improvement value. The current improvement value is added to the land value (LV) to arrive at an estimate of market value (MV). Market adjustments will be applied uniformly within neighborhoods to account for market preferences affecting value in each location throughout the district.

Residential land values will be estimated using the base lot method, square foot method, or acreage method of appraisal. The individual method utilized in each neighborhood is designed to mirror the market in that area. As such, the chosen method for each individual neighborhood will be selected based upon how properties are selling or which method best accounts for perceived differences among the universe of properties. There are four accepted methods of land valuation; the comparable sales approach, allocation by abstraction, allocation by ratio, and the capitalization of ground rent. The district will utilize elements of all of these land valuation methods depending upon market area and availability of market data. In areas where insufficient vacant land sales exist, the district will utilize the

allocation methods to establish land values in a neighborhood. The appraisers will develop a base lot or primary land rate and assign land tables to each neighborhood. Land adjustments will be applied to individual properties, where necessary, to adjust for such influences as view, shape, size, and topography, and any other characteristic that affects value in a neighborhood.

If neighborhood statistics indicate that values need to be updated, the appraiser will employ cost calibration to bring the initial values closer to what the market indicates values should be in that area. This process involves comparing the initial depreciated cost figures for properties that sold to the sale contributory improvement values of those properties (Sale Price – Land Value). An adjustment factor is calculated for each property in the data pool and statistics are calculated for the indicated adjustments. The factor that best represents the acceptable range of market value is selected for each neighborhood. The sales used to determine the market adjustment factor will reflect the market influences and conditions for the specified neighborhood, thus producing more representative and supportable values. The market adjustment factor calculated for each neighborhood will be applied uniformly to all properties within that neighborhood and a second set of ratio study statistics will be generated to compare the level and uniformity of values in the neighborhood as adjusted.

### **Sales Comparison Approach**

As indicated in *Property Appraisal and Assessment Administration* (IAAO, 1990), in the absence of a sale of the subject property, sales prices of comparable properties are usually considered the best evidence of market value. The sales comparison approach mimics the behavior of the market by comparing the properties being appraised with comparable properties that have recently sold. Their sales prices will then be adjusted for differences from the subject and a market value for the subject is estimated from the adjusted sales prices of comparable properties.

At present, the district does not develop estimates of value for single-family properties using the traditional sales comparison approach in mass for valuation purposes. The district's software package allows for the creation of sales comparison grids that adjust for characteristic differences among properties, but the district has yet to value entire neighborhoods through this application of the market approach. The sales grids that are generated are utilized most frequently during the appeals process, but may be utilized for valuation more widely in the future as time and available data permit.

### **Income Approach**

The income approach is based on the principle that the value of an investment property reflects the quality and quantity of the income it is expected to generate over its economic life. In other words, value is the estimated present value of future benefits. The appraiser must estimate income from a property and capitalize the income into an estimate of current value.

The model used to estimate the present value of income expected in the future is represented by the following formulas known as IRV.

$$\text{Value} = \text{Income}/\text{Rate}$$

The income approach is most suitable for types of properties frequently purchased and held for the purpose of producing income, such as apartments, commercial buildings, and office buildings. It is not conducive to the valuation of single-family residential properties as these properties are purchased by consumptive users and therefore, do not routinely generate an income stream.

## **INVENTORY RESIDENTIAL PROPERTY**

Residential improved and vacant property is appraised in compliance with Section 23.12 (a) of the Texas Property Tax Code.

In general, the district uses its land value estimates and the actual itemized construction, labor, and material costs, plus other soft or indirect costs to estimate market value as of the appraisal date to estimate the value of improved inventory. The market values of improved inventory will be reviewed annually and inventory adjustments will be eliminated when ownership transfers from the developer or builder.

Vacant residential inventory will be valued using a discounted cash flow formula that considers value relative to the income or cash flow, an appropriate discount rate, and the amount to time that the property is likely to be held or lots sold out of inventory. Since there is no legal requirement that developers or builders render their inventory, a preliminary estimate of inventory value may be difficult to estimate. In these cases, inventory discounts will be applied as a result of an appeal.

## **LAND ANALYSIS**

Land analysis is conducted generally by our experienced market analysts. Highest and best use determinations generally occur at this time. Base lot square footage rates, acreage rates, primary and residual price rates, and hard code unit prices are established during this phase of the appraisal operation. A computerized land table containing the necessary information by ISD and neighborhood, and any other pre-specified area, assist the analyst in consistently valuing land based on its location, size, configuration, and topography elements. When possible, the sales comparison approach is used to assist in the development of unit prices. The land appraisal techniques of allocation by abstraction and allocation by ratio are used to best reflect the value of the land as vacant in areas where build-out has occurred or in areas where vacant land sales are not available.



## APPRAISAL OF RURAL LAND

This section provides general guidelines to assist appraisers in the market valuation of rural lands. Appraised values based on market valuation must be established for all taxable land in each taxing jurisdiction, regardless of whether the land qualified, or would qualify, for productivity valuation under either Article VIII, Section I-d of Section I-d-1 of the Texas Constitution. Market values so determined must be submitted to the Appraisal Review Board for determination of protests for all taxable land in each jurisdiction, including land that qualifies for productivity valuation. In addition, appraised values based on market valuation must be retained for land receiving productivity valuation for rollback purposes.

The rural land market can best be understood by dividing it into three distinct types of markets—the production, investment, and consumptive land markets--each based on the principal factor which influences value. Discussion of these market influences and common examples of each are presented below.

### *The Production Land Market*

The principle factor influencing value of rural land in the production land market is the income potential associated with agricultural production. In the production land market, land values will reflect the productive capacity of soils, the availability of irrigation water, and the topographic features which influence the ability of a producer to use the land for agricultural purposes. Most areas of the Texas Rio Grande are still dominated by production-market influences.

### *The Investment Land Market*

The principal factor influencing the market value of rural land in the investment land market is the appreciation potential of land investments. The investment land market is not composed strictly of speculators who purchase land with the intent to make a quick profit by resale, but also includes individuals who purchase land for conversion into subdivisions or for other types of development. In addition, the investment land market includes individuals who purchase land as a means of preserving their capital for a later use, or as a hedge against inflation. Although investment-market influences exist in all areas of the state, they are the principal market influences in suburban areas.

### *The Consumptive Land Market*

The principal factor influencing the market value of rural land in the consumptive land market is the satisfaction that land ownership provides. The consumptive land market is often characterized by the purchase of small tracts of land to be used for recreational purposes. For instance, an individual who lives in a city or town

may purchase a 10-acre tract of land in a rural area to visit on weekends with his family. Generally, the value of land located within 200 miles of major population centers is most heavily affected by consumption-market influences.

The most distinctive features of the rural land market are that all three types of market influences, in combination with supply, establish market values. For this reason, it is important that the appraiser be knowledgeable of the key factors that influence value and of the relative influence each of these factors has upon value when establishing procedures for the valuation of rural land in a jurisdiction.

## **ANALYSIS OF LOCAL MARKET**

From a practical standpoint, using a fee-appraisal approach to appraise each individual tract of land in a jurisdiction is not possible. Fee appraisers make detailed appraisals of individual parcels by obtaining comparable sales of other land in the jurisdiction and adjusting each comparable sale to the subject property to estimate the value of the subject property. In this way, fee appraisers allow market transactions that have occurred regarding other properties to define the market value of the subject property. Common types of adjustments made by fee appraisers to comparables in estimating market values of subject properties include adjustments for date of sale, for size of tract, for productivity factors, for improvement value, and for special amenities.

Central appraisal district appraisers must also use market transactions to define factors that influence rural land values in their jurisdictions. However, unlike fee appraisers, these appraisers can not compare each tract individually to each market transaction identified to make adjustments because of the volume of properties to be appraised. Appraisal office appraisers must, therefore, incorporate the factors indicated by market transactions into general standards or schedules of value. Such schedules are normally comprised of per acre prices that will be multiplied by the number of acres in an individual tract to develop an estimate of the value of the tract. Schedules of this kind should be divided into as many categories or classes as are necessary to reasonably reflect market values when applied to individual tracts of land found in the jurisdiction.

## **COMMERCIAL AND MULTIFAMILY REAL PROPERTY**

### **Cost Approach**

The cost approach to value will be applied using the comparative unit, or square foot method of cost estimating. The following is the basic model that the district utilizes when employing the cost approach:

$$MV = RCNLD + LV$$

This methodology involves the use of national sources of cost data as well as actual cost information gathered from the local market whenever possible. Cost models utilized by the district are based on data obtained by the Marshall Valuation Service also known as *Marshall and Swift*. These costs include comparative base rates, per unit adjustments, and lump sum adjustments as appropriate and necessary to account for the specific factors affecting value. Time and location modifiers will be applied as necessary to adjust cost data to reflect conditions in a specific market as well as changes in costs over a period of time. A cost estimate will be generated by the appraisal staff based upon the cost schedules as they are applied to the specific characteristics of the subject property of the appraisal.

Depreciation schedules have been implemented for economic lives and condition that is typical of each major class of commercial property-by-property use. The schedules utilized by the district are developed using recognized sources and mirror *Marshall and Swift*. These schedules will be tested annually to ensure they will be reflective of current market conditions in Jim Hogg County. The actual and effective ages of improvements are judged by the appraiser and noted in the improvement records contained within each property record. Effective age estimates will be based on the utility of the improvements relative to the improvement's total economic life, condition, and its competitive position in the marketplace. These adjustments are generally determined during field operations.

Certain adjustment factors such as external and or functional obsolescence will be applied to properties as applicable based upon market data. These adjustments will typically be applied to a specific property type or location and will be developed through ratio studies or other market analyses. Accuracy in the development of the cost schedules, condition ratings, and depreciation schedules usually minimize the necessity of this type of an adjustment factor. The sum total of depreciation, also expressed as the loss in value from all causes, is subtracted from the replacement cost new of the structure to arrive at a replacement cost new less depreciation (RCNLD).

The cost approach requires the district to value the land utilizing one of the four accepted methods of land valuation: the sales comparison approach, allocation by abstraction, allocation by ratio, or the capitalization of ground rent. Once the land is valued by the method deemed most appropriate in terms of the data available, the resulting land value is added to the RCNLD of the improvements to yield an estimate of market value by the cost approach. Any estimate of value completed by the cost approach will be made in accordance with Section 23.011 of the Texas Property Tax Code.

### **Sales Comparison Approach**

Pertinent data from actual sales of properties will be obtained throughout the year and the appraisal staff will analyze the relevant information. This data will be utilized in all aspects of the appraisal process.

Sales of similarly improved properties will provide a basis for the test of depreciation schedules used in the cost approach, rates and multipliers used in the income approach, and as a direct comparison in the sales comparison approach. Improved sales will also be used in ratio studies, which afford the appraiser a means of judging the present level and uniformity of the appraised values. The ratio studies used are in compliance with the current IAAO *Standard on Ratio Studies*.

Based on the market data gathered and analyzed by the appraisal staff, the cost and income models will be calibrated annually. The calibration results will be added to the schedules and models in the CAMA system to apply to all commercial properties in the district as appropriate. Any estimate of value completed by the sales comparison approach will be made in accordance with Section 23.013 of the Texas Property Tax Code.

### **Income Approach**

The income approach to value will be applied to those real properties that are typically viewed by market participants as income producing. Income producing properties are those that are bought and sold based on the property's ability to produce an income; therefore, the price paid for a property is directly related to the amount of income the property is capable of producing. The appraisal staff utilizes income and expense data furnished by property owners; data collected by staff and information from local market study publications. Income models by property use and neighborhood / market area are developed and deployed for use in valuation.

The following model is the basis for commercial property valuation by the income approach:

$$\begin{array}{r} \text{PGR} \\ -\text{V\&C} \\ \hline \text{EGR} \\ +\text{SI} \\ \hline \text{EGI} \\ -\text{Allowable EXP} \\ -\text{Reserves for Replacement} \\ \hline \text{NOI} \end{array}$$

$$\text{Value} = \text{NOI} / \text{CAP Rate}$$

This income model reflects the normalization of an income stream from Potential Gross Rent at 100% occupancy to an indication of Net Operating Income. The process involves estimating the rental producing capacity of the subject property under prudent management (PGR). Market derived vacancy and collections (V&C) losses are subtracted from the potential gross rent to arrive at effective gross rent (EGR). Any net income from secondary property uses (vending income or parking income, etc.) (SI) are added to the effective gross rent to yield an estimate of effective gross income (EGI).

Allowable expenses are the expenses that are recurring annual expenses necessary to operate the property sufficiently to achieve the projected level of effective gross income. These vary by property type and are researched by the commercial appraisal staff. Once identified or projected, the allowable expenses are subtracted from the effective gross income. Reserves for replacement are estimated by considering the amortized costs of replacing certain building components whose economic lives are shorter than total economic life of the improvement (carpets, roof cover, air conditioning, etc.). Generally, these are calculated by either dividing the replacement cost new of the item by its economic life, a flat reserve amount per unit justified by the market, or a percentage of EGI; whichever is deemed appropriate. Once all allowable expenses and reserves have been identified or calculated, these amounts are subtracted from the effective gross income to yield an estimate of net operating income (NOI).

Rates and multipliers will be used to convert the income stream into an estimate of market value. These include gross 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 will be based on a thorough analysis of the market.

Direct Capitalization will be used in the income approach models. This methodology involves dividing the net operating income by the appropriate capitalization rate to arrive at an indication of market value for a specific property. Capitalization rates utilized will be derived from the market as to estimate what a market participant would require from an investment as of the date of appraisal. Additionally, overall capitalization rates may be derived from the summation method, band-of-investment, debt coverage ratio, or obtained from published sources for similar properties. The capitalization rates utilized will relate directly to satisfying the market return requirements of both the debt and equity positions of a real estate investment.

In valuing property by the income approach, the district will consider the income characteristics of all properties, as they are available. Adjustments will be made as necessary and appropriate and the models, schedules, and value indications developed will be made pursuant to section 23.012 of the Texas Property Tax Code.

## **UTILITIES, RAILROADS, AND PIPELINES**

The Jim Hogg County Appraisal District will contract with an appraisal firm with specific expertise for the valuation of utility, railroad, and pipeline properties. These properties will be reappraised annually by the firm using recognized methods and techniques as required by the *Uniform Standards of Professional Appraisal Practice*. The appraisal models considered in the valuation of these properties will be:

$MV = RCN - D$   
And  
Allocated Unit Appraisal

Each of the values produced by these models will be considered and the property value will be allocated to the taxing entities based upon the method that is deemed most appropriate by property type.

The appraisal firm(s) will consider all factors affecting value, conduct physical inspection as necessary, research information from published sources, and receive copies of renditions from property owners in the development of their appraisal. Based upon the information gathered in these processes, data characteristics of these properties will be updated annually in accordance with tax code requirements.

## MINERAL INTERESTS

The Jim Hogg County Appraisal District will also contract with an appraisal firm with specific expertise in the appraisal of oil and gas properties to value mineral interests. The appraisal firm will reappraise these properties annually.

The appraisal firm(s) will utilize a form of yield capitalization of the income approach called Discounted Cash Flow Analysis (DCF) in order to accurately value these interests. The factors affecting the value of mineral interests include reserve estimates, production volume and pattern, product prices, operator expenses, and the discount rates applied to discount future income into an indication of present worth.

As mineral reserves are subsurface in nature, this situation makes specific physical inspection unavailable as a method of collecting data. The appraisal firm(s) will collect data from the Texas Railroad Commission, Comptroller of Public Accounts, and renditions from owners, published sources, and data services to identify characteristics affecting value. All of the information gathered will be considered in the estimation of the value of mineral interests.

## SPECIAL VALUATION PROPERTIES

The Jim Hogg County Appraisal District values agricultural and wildlife management land in compliance with the Comptroller's *Manual for the Appraisal of Agricultural Land*. This publication prescribes that the cash lease and the share lease methods of appraisal are appropriate when developing productivity value estimates.

The cash lease method is a modified income approach using the lease amount (income per acre) minus expenses (landowner) to yield the “net-to-land” value per acre. “Net-to-land” values will be averaged for a five-year period to give an average “net-to-land” factor that will be divided by the appropriate capitalization rate for the year to give a value per class of agricultural production. The agriculture appraisal staff will collect lease data from owners and lessees on an ongoing basis in order to develop “net-to-land” figures by agricultural classification.

## **BUSINESS AND INDUSTRIAL TANGIBLE PERSONAL PROPERTY**

These property types will be valued each appraisal year by the district’s appraisal staff. The Personal Property Department engages in an annual canvas field review to identify new businesses to be added to the roll, movement of existing businesses to different locations or business closings, and data review of current property characteristics in property records. Once pertinent data is updated in the field, property rendition forms will be sent to owners in order that they may declare their taxable personal property according to current law. The information obtained from renditions will be utilized by the district to develop an estimate of market value. Generally, estimates of value developed for industrial and personal property will be produced by mid to late May of each appraisal year. The notices of appraised value for these property types are generally mailed in early to mid June.

### **Cost Approach**

The primary approach to the valuation of business and industrial personal property will be the cost approach. Cost schedules will be developed by the district’s staff and applied to specific business codes. These schedules will be reviewed and updated annually to conform to changing market conditions.

Valuation models will be created and refined using actual original cost data obtained from renditions to derive the replacement cost new (RCN) per applicable unit for a specific category of assets. The data obtained will be compiled for review and models will be built and or adjusted as necessary. The revised models will be tested in accordance to accepted methods and techniques.

These model values will be used specifically to estimate the value of new accounts for which no property owner’s rendition is filed. The models will also be utilized to test renditions filed by property owners or their agents. In the event that property rendition information falls significantly outside of a statistical tolerance from the model, further review of the property may be conducted.

The percent good depreciation factors utilized will be based on the depreciation schedules for furniture, fixtures, and equipment as developed by district staff tested

against *Marshall and Swift*. This mass appraisal percent good depreciation schedule is used to ensure that estimated values are uniform and consistent within the market. RCN and percent good depreciation factors will be utilized to develop value estimates using the following formula:

$$MV = RCN \times \text{PERCENT GOOD FACTOR}$$

Leased equipment and multi-location assets may be valued using original costs and percent good depreciation schedules mentioned above.

### **Sales Comparison Approach**

Business personal property is typically sold as part of the business as a whole, which makes this approach less suitable for valuing most personal property. This approach is generally suitable for the valuation of certain types of vehicles and heavy equipment. Value estimates for vehicles will be based on data furnished by recognized sources such as NADA among others. Any sales of personal property will be considered and appropriate weight will be given based upon individual circumstance.

### **Income Approach**

The income approach has limited use in the appraisal of machinery, equipment, furniture, fixtures, and leasehold improvements because of the difficulty in estimating future net benefits. The exception to this is in the case of leased equipment. When reliable data on equipment leases is available, the income approach may be used to estimate the fair market value of the equipment.

## **THE MASS APPRAISAL REPORT**

Each appraisal year the required Mass Appraisal Report will be prepared and certified by the Chief Appraiser at the conclusion of the appraisal phase of the ad valorem tax calendar (on or about May 15th). 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 will be compliant with STANDARD RULE 6-9 of *USPAP*.

## **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 annually.



A variety of evidence is utilized by the district depending on the property type of the subject of the protest. In addition, the district updates the evidence supplied to an owner, agent, or the Appraisal Review Board to be contemporaneous with the valuation procedures utilized. Some examples of the evidence that may be used include, but are not limited to:

1. Property sales information
2. Property sales adjustment grids
3. Property equity adjustment grids
4. Gross Rent / Income Multiplier data
5. Proforma and actual income data
6. Property characteristics data including photos as applicable
7. Aerial photography
8. Cost approach reports as applicable
9. Property Renditions as applicable
10. Published reports regarding cost, market, or income data
11. Schedules and or models utilized
12. Any other information collected by the district

## **EQUITY PROTEST**

- Step 1: Determine the Market Value of the Subject.
- Step 2: Calculate the Subject Property's Appraisal Ratio.
- Step 3: Consider the Appraisal District's Ratio Study Evidence  
Specific Category Ratio Study for the Neighborhood  
Specific Category Ratio Study for the Appraisal District  
Specific Category Ratio Study for the School District  
Overall Ratio Study for the Appraisal District  
Overall Ratio Study for the School District
- Step 4: Determine the Median Appraisal Ratio
- Step 5: Make the Final Determination for the Subject Property

# Exhibit A

## **JIM HOGG CAD 2023 REAPPRAISAL WORK TIMELINE (PROPOSED)**

### **August thru September 2022**

Work 1st-2nd utility meter and  
septic tank permits

Work Rechecks (revisits)

Discover new subdivisions

Field work: all real property in the town of Hebbronville north of Galbrath street, including las Lomita's subdivision north of hwy 16 will be reappraised.

Data Entry

### **October thru December 2022**

3rd Quarter utility meter and  
septic tank permits

Continue field work inspecting rural areas to identify any new construction also identify any new construction Within the town of Hebbronville not being reappraised.

Review and analyze cost tables and compare new construction cost from all residential properties

Quality control

State Clerical

Report

Review problem areas (discovered from conference hearings and current sales reports.)

Data Entry

Run sales valuation reports/ Analysis

### **January thru**

### **March 2023**

Begin personal property inspections for Jim Hogg County

Drive out to new construction areas.

Work 4th Quarter utility meter and septic  
tank permits

Work Rechecks

Complete field work in areas reappraised in Hebbronville, complete by March 31.

Redefine market areas if necessary

Data Entry

Quality control

Perform Sales Analysis/ Market shifts

Test results of neighborhood adjustments with sales ratios

Analyze preliminary and final values

Audit Final Values

### **April-July 2023**

Data Entry

Prepare final sales reports and maps for protest season.

Informal/Formal procedures

## **JIM HOGG CAD 2024 REAPPRAISAL WORK TIMELINE (PROPOSED)**

### **August thru September 2023**

Work 1st-2nd quarter utility  
meter and septic tank permits  
Work Rechecks (revisits)  
Discover new subdivisions  
Field work all rural properties in the county will be re-appraised including South Fork Estate South  
of Hwy 16.  
Data Entry

### **October thru December 2023**

3rd Quarter utility meter and  
septic tank permits.  
Continue field work on all of the rural areas, including South Fork Estate South of Hwy 16.  
Review and analyze cost tables and compare new construction cost from all residential properties  
Quality control  
State Clerical  
Report  
Review problem areas (discovered from conference hearings and current sales  
reports.)  
Data Entry  
Run sales valuation reports/ Analysis

### **January thru March 2024**

Begin personal property inspections for Jim Hogg ISD  
Drive out to new construction areas.  
Work 4th Quarter utility meter and septic  
tank permits  
Work Rechecks  
Complete field work in rural areas, including South Fork Estate South of Hwy 16,  
complete by March 31.  
Redefine market areas if necessary  
Data Entry  
Quality control  
Perform Sales Analysis/ Market shifts  
Test results of neighborhood adjustments with sales ratios  
Analyze preliminary and final values  
Audit Final Values

### **April-July 2024**

Data Entry  
Prepare final sales reports and maps for protest season.  
Informal/Formal procedures

**Jim Hogg CAD 2023-2024 Reappraisal Plan**  
**Estimated Parcel Counts by ISD**

	<b>Jim Hogg</b>
A SINGLE FAMILY RESIDENCE	2078
B MULTIFAMILY RESIDENCE	27
C1 VACANT LOT	473
C2 COLONIA LOTS	36
D1 QUALIFIED OPEN-SPACE LAND	1612
D2 IMPROVEMENTS ON OPEN-SPACE LAND	239
E NON-QUALIFIED LAND & IMPROVEMENTS	218
F COMMERCIAL REAL PROPERTY	208
G OIL AND GAS	2286
H PERSONAL VEHICLES	
J INDUSTRIAL	143
L COMMERCIAL PERSONAL	244
M TANGIBLE OTHER PERSONAL	16
N INTANGIBLE PROPERTY	
O RESIDENTIAL INVENTORY 378	
S SPECIAL INVENTORY TAX	
X TOTALLY EXEMPT PROPERTY	1091
Total	8671

## JIM HOGG CAD ANNUAL EVENTS CALENDAR

	Event	Dept/Staff	Comments:
<b>January</b>	<b><i>*Source-Property Tax Calendar</i></b>		<b><i>*Property Tax Code</i></b>
-			
1	<b>New Appraisal Year - Dept's begin working on:</b>		
•	Accounts flagged for review, 4th quarter building permits, and pick-up of	Appraisal	
	new construction continues		
•	Sales Ratio Analysis begins	Appraisal	
•	New businesses, work sales permits, renditions & Mobile Home Park tenant lists	Personal Prop	
•	Mail & process Homestead Exemptions for new owners	Taxpayer Info	
•	Continue setting up new subdivision plats & ownership updates & map projects	Mapping	
1	<i>*Date that values and qualification for certain exemptions are determined</i>		<i>*Sections 11.42, 23.01,</i>
	<i>(except for inventories appraised Sept. 1).</i>		<i>23.12</i>
2	<i>*Date rendition period begins; continues through April 15th</i>		<i>*Section 22.23</i>
•	Print & Mail BPP Renditions- businesses, watercraft & aircraft	Personal Property	
•	Submit Ad to newspapers- <b>Low Income Apartment Cap Rate</b>	Admin/Comm Appr	<i>*Sec. 11.1825</i>
•	Administer Oath of Office to newly elected Board of Directors (chosen in	Admin/ARB Dept.	BOD-at scheduled meeting
	uneven yrs)& ARB Members (every year-staggered terms).		ARB-at scheduled meeting
•	Board of Directors Approve: Taxpayer Liaison Officer, Investment Policy &	BOD	BOD-at scheduled meeting
	Agricultural Advisory Board		
•	Accountant submits District's Investment Policy for approval by CAD's BOD.	Accounting	at scheduled BOD meeting
31	<i>*Deadline-Texas Comptroller's preliminary Property Value Study.</i>	Appraisal	<i>*Section 403.302</i>

	Event	Dept/Staff	Comments:
	<i>*Last day for chief appraiser to deliver applications for agricultural designation</i>	Appraisal	<i>*Section 11.44 , 23.43</i>
	<i>and exemptions requiring annual applications.</i>		
	<i>*Last day for appraisal district to give public notice of capitalization rate</i>	Appraisal	<i>*Sec.11.1825</i>
	<i>used to appraise property with low and moderate income housing exemption.</i>		
<b>February</b>			
<b>1</b>	• Second Quarter Allocation letters sent to entities	Accounting	
	• Neighborhood Adjustments begin	Appraisal	
<b>15</b>	• Exemption verification letters mailed to entities	Administration	
<b>17</b>	• Submit Ads to newspapers- <b>Taxpayer Rights &amp; Exemptions</b>	Administration	
<b>28</b>	<i>*Last day to request cooperative housing appraisal.</i>		<i>*Section 23.19</i>
<b>March</b>			
<b>1</b>	• Test results of Neighborhood Adjustments with Sales Ratios.	Appraisal	
<b>14</b>	<i>*Deadline to file written appeal of PVS findings with the State Comptroller.</i>		<i>*Section 403.303</i>
	• Audit Appraisal work-clerical & market data	Appraisal	
<b>18</b>	• Submit Ad to newspapers- <b>Protest &amp; Appeals Procedures</b>	Administration	<i>*Section 41.41,41.70</i>
<b>23</b>	• Submit Letter to Tax-Assessor Collectors regarding form which rolls are provided	Administration	<i>*Section 26.01(a) *by April 1st</i>
<b>31</b>	<i>*Last day for qualified community housing development corporations to file listing of property acquired or sold during the past year with chief appraiser.</i>		<i>*Section 11.182</i>



	Event	Dept/Staff	Comments:
	Event	Dept/Staff	Comments:
<b>April</b>			
	<ul style="list-style-type: none"> <li><b>NOTICES ARE MAILED. Informal Hearings begin the next day.</b></li> </ul>	All Departments	Set up Phone Bank
	<ul style="list-style-type: none"> <li>***Appraisal Review Board Members attend training classes***</li> </ul>	ARB	*Section 5.041
<b>1</b>	*Last day (or as soon as practicable thereafter) for chief appraiser to mail notices of appraised value for single-family residence homestead properties.	CA/Data Proces/IT	*Sections 25.19, 1.07-1.11
<b>1</b>	*Last day for the chief appraiser to notify the taxing units of the form in which the appraisal roll will be provided for them.		*Section 26.01(a)
<b>15</b>	*Last day for property owners to file personal property renditions and property information reports unless they request a filing extension in writing.		*Section 22.23
<b>30</b>	<ul style="list-style-type: none"> <li>*Last day for chief appraiser to certify estimate of school district's preliminary taxable value for school districts, counties &amp; cities and send notification letters of values to each entities tax-assessor collector.</li> </ul>	Chief Appraiser	*Section 26.01 *mail letters for delivery before April 30th
<b>May</b>			
<b>1</b>	<ul style="list-style-type: none"> <li><b>Operations Survey</b> - sent by PTAD to be returned in 60 days</li> </ul>	All Departments	
<b>1</b>	<ul style="list-style-type: none"> <li>Third Quarter Allocation letters sent to entities</li> </ul>	Accounting	
<b>2</b>	*Last day for property owners to file these applications or reports with the CAD:		*Section 11.43
	<ul style="list-style-type: none"> <li>Some exemption applications</li> </ul>		
	<ul style="list-style-type: none"> <li>Notice property no longer entitled to an exemption not requiring annual applic.</li> </ul>		*Section 11.43
	<ul style="list-style-type: none"> <li>Property no longer qualifies for 1-d &amp; 1-d-1 Ag use &amp; other special uses properties</li> </ul>		*Sec. 23.43,23.54,23.75



	Event	Dept/Staff	Comments:
	•Railroad Rolling Stock reports		*Sec. 24.32
	•Requests for separate listing of separately owned land & Imps.		*Sec. 25.08
	•Requests for proportionate taxing of a planned unit development property		*Sec. 25.09
	•Request for separate listing of undivided interests		*Sec. 25.11
	•Request for joint taxation of separately owned mineral interests		*Sec. 25.12
2	*Last day (or as soon as practible thereafter) for chief appraiser to mail notices of appraised value for properties other than single-family residence homesteads.		*Section 25.19
16	<b>Formal Hearings Begin</b>	ARB/Support Staff	
16	*Last day for property owners to file renditions and property information reports if they requested an extension in writing. (Can be extended 15 days for good cause)		*Section 22.23
•	*Last day (or as soon as practicable thereafter) for chief appraiser to mail notices of appraised value, denial of exemptions and denial of special appraisals.	CA	*Sec. 11.45,23.44,23.57, ,
•	*Date (or as soon as practicable thereafter) for chief appraiser to prepare appraisal records & submit to ARB.	CA	*Sec. 25.01, 25.22
19	*Last day for chief appraiser to count taxing units' resolutions to change CAD's finance method.		*Section 6.061
24	*Last day for chief appraiser to notify taxing units of change in the CAD's finance method.		*Section 6.061
31	*Last day for taxing units to file challenges with ARB(or within 15 days after ARB receives appraisal records, whichever is later).		*Section 41.04

	Event	Dept/Staff	Comments:
	<i>*Last day for property owners to file protest with ARB (or by 30th day after</i>		<i>*Section 41.44</i>
	<i>notice of appraised value is delivered, whichever is later).</i>		
	Event	Staff/Dept.	Comments
<u>June</u>			
1	<i>*Last day for religious organizations to amend charters and file new applications</i>		<i>*Section 11.20 &amp; 11.421</i>
	<i>for Section 11.20 exemptions.</i>		
14	<i>*Last day for chief appraiser to submit recommended budget to CAD board and</i>	Accounting/CA	<i>*Section 6.06</i>
	<i>taxing units(unless taxing units have changed CAD's fiscal year).</i>		<i>"before June 15th"</i>
16	<i>*Beginning date that CAD board may pass resolution to change CAD finance method,</i>		<i>*Section 6.061</i>
	<i>subject to taxing units' unanimous approval. Period ends August 15th</i>		
30	<i>*Last day for private schools to amend charters to conform with Section 11.21 &amp; file</i>		<i>*Section 11.422</i>
	<i>new applications for exemptions(or within 60 days of exemption denial, whichever later).</i>		
	<i>*Last day for CAD's to report formation of reinvestment zones and tax abatement</i>		<i>*Section 312.005</i>
	<i>agreements to the Texas Comptroller.</i>		
	<i>• Reappraisal Plan submitted to Board of Directors *</i>	Appraisal/CA	
<u>July</u>			
1	<i>*Last day for ARBs to complete review of railroad rolling stock values for</i>	ARB	<i>*Section 24.35</i>
	<i>submission to Texas Comptroller (or as soon as practicable thereafter).</i>		
20	<i>*Date ARB must approve appraisal records, but may not do so if more that 5%</i>	ARB	<i>*Section 41.12</i>
	<i>of total appraised value remains under protest. The board of directors of a CAD</i>		

	Event	Dept/Staff	Comments:
	<i>with a population of 1 million or more may postpone the deadline to August 30th.</i>		
25	<i>*Last day for Texas Comptroller to certify apportionment of railroad rolling stock</i>		<i>*Section 24.38</i>
	<i>value to counties, with supplemental records after that date.</i>		
•	<i>*Last day for chief appraiser to certify appraisal roll to each taxing unit .</i>	CA	<i>*Section 26.01</i>
	The chief appraiser also shall certify the district appraisal roll to the comptroller	IT	
25 •	Secretary of CAD board of directors sends written notification to all entities of	BOD	<i>*even yrs (2014,2016,,)</i>
	public hearing about Reappraisal Plan.* (10 days prior to BOD mtg)		<i>Section 6.06(b)</i>
<b>August</b>			
•	Appraisers begin field reviews & pick-up of new construction for new year	Appraisal	
1	<i>*Last day for property owners to apply for September 1 inventory appraisal for</i>		<i>*Section 23.12</i>
	<i>the next year.</i>		
1 •	Fourth Quarter Allocation letters sent to entities.	Accounting	
1 •	Electronic Appraisal Report Submission (EARS) to Comptroller (after Supp 1-annually)	Commercial Appr/IT	<i>*Section 5.07</i>
	Comptroller will send back report in Sept-Oct. -CAD mails Report of Prop Val to entities by November 1st.		
9 •	<b>Board of Directors Elections</b> -Odd yrs.- CA notifies entities of election process.	CA	nomination forms sent
	(*mail early in month so entities can include on September Agendas)		
15 •	Mail Approved Reappraisal Plan to entities. (every 2 years)	Administration	
	<i>*Last day for CAD board to pass resolution to change CAD finance method, subject</i>		<i>*Section 6.061</i>
	<i>to taxing unit's unanimous consent.</i>		
	<i>*Last day for CAD board to pass resolution to change number of directors, method</i>		<i>*Section 6.031</i>
	<i>for appointing or both, and deliver to each taxing unit.</i>		



	Event	Dept/Staff	Comments:
31 •	Submit Ad-Public Hearing for CAD Budget at Board of Directors Meeting	Administration	*Section 6.062 *10 days
			prior to BOD mtg
	Event	Staff/Dept.	Comments
31 •	Secretary of CAD Board of Directors sends entities written notification of Budget	BOD	10 days prior to Public
	Hearing during September's Board of Directors meeting.		Meeting
	<i>*Last day for property owner to give, in writing, correct address to CAD for tax bill</i>		<i>*Section 33.011</i>
	<i>(penalties &amp; interest waived if the bill is not sent to correct address 21 days before delinquency date).</i>		
	<i>*Last day taxing units may file resolutions with the CAD board to oppose proposed</i>		<i>*Section 6.061</i>
	<i>change in the CAD finance method.</i>		
	<i>*Last day taxing unit entitled to vote for appointment of CAD directors to file a</i>		<i>*Section 6.031</i>
	<i>resolution opposing a change by the CAD board in selection of directors.</i>		
<u>September</u>			
1	<i>*The following years taxable value of inventories may be determined as of this date,</i>		<i>*Section 23.12</i>
	<i>at property owner's written option.</i>		
15 •	<i>*Last day for CAD board to adopt CAD budget, unless a district has changed its</i>	BOD	<i>*Section 6.06</i>
	<i>fiscal year. BOD approves budget at scheduled meeting.</i>		
	<i>*Last day for CAD board to notify taxing units in writing if a proposal to change a</i>		<i>*Section 6.061</i>
	<i>finance method by taxing units' unanimous consent has been rejected.</i>		
	<i>*Last day for CAD board to notify taxing units in writing if a proposal to change the</i>		<i>*Section 6.031</i>
	<i>number or method of selecting CAD directors is rejected by a voting taxing unit.</i>		
16 •	Approved CAD Budget is mailed to entities.	Administration	
16 •	Submit Ad to newspaper for Appraisal Review Board	Administration	

	Event	Dept/Staff	Comments:
	Applicants for the next year	on	
20	• Submit Ad to newspaper for Auditor (even yrs) Depository (odd yrs). BOD approves	Accounting/ Admin	Auditor-Sect. 6.063
	in October & November meetings.* for Oct. 1st publication		Depository-Sect. 6.09
<b>October</b>			
1	• CAD Board of Director Elections- <i>Before October 15</i> , eligible voting entities may nominate by resolution one candidate for each position on the board.*		*Odd yrs (2015, 2015, etc.)
12	• Valuation Service Contract approval scheduled at monthly BOD meeting.*	BOD	*Odd yrs (2015, 2015, etc.)
	• Board of Directors interview & select new Appraisal Review Board members.*	BOD	*at scheduled BOD meeting
15	• Mail copy of approved Audit report to presiding officers of taxing entities	Administration	Section 6.063(b)
27	• CAD Board of Director Elections- <i>Before October 30</i> , Chief Appraiser prepares	CA	*deadline to return-Dec. 16
	ballot and delivers it to the presiding officer of each entitled voting entity.*		
<b>November</b>			
1	• First Quarter Allocation letters sent to entities	Accounting	
	• Mail Report of Property Values to Entities, TAC's & Comptroller (receive in Oct. from Comptr)	Appraisal/A dmin	mailed 1st wk of Nov.
<b>December</b>			
15	• Mail Dealer Declaration forms(motor vehicles, vessels, manufactured houses,	Taxpayer Info	Mail before January 1
	heavy equipment, etc.)		
	• Before December 15th, the entities governing bodies shall submit their votes for new CAD Board of Directors. *		*Odd yrs (2015, 2015,etc)
	*Source Texas Property Tax Code		