



RAINS COUNTY APPRAISAL DISTRICT  
PRELIMINARY REAPPRAISAL PLAN

APPRAISAL YEARS 2019 AND 2020

Public hearing to be held

May 17, 2018

As adopted on June 21, 2018

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## Executive SUMMARY

### TAX CODE REQUIREMENT

Passage of Senate Bill 1652 amended the Tax Code to require a written biennial reappraisal plan. The following details the changes to the Tax Code:

#### The Written Plan

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 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 adjustments, 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

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

1. Each appraisal office shall implement the plan for periodic reappraisal of property approved by the board of directors under Section 6.05 (i).
2. The plan shall provide for the following reappraisal activities for all real and personal property in the district at least once every three years:
  - (a) 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;
  - (b) 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, and 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.

## REVELAUTAION DECISION (REAPPRAISAL CYCLE)

The Rains County Appraisal District by policy adopted by the Chief Appraiser and Board of Directors reappraises all property in the district by the following precincts, Precincts, 2, 3 then the next year Precincts 1 and 4... The reappraisal year is a complete appraisal of all properties in the designated precincts; therefore, both years covered by this plan are reappraisal years.

## REAPPRAISAL YEAR ACTIVITIES

1. Performance Analysis — the equalized values from the previous appraisal year are analyzed with ratio studies to determine appraisal accuracy and appraisal uniformity overall and by market area within property categories. Ratio studies are conducted in compliance with the current Standard on Ratio Studies of the International Association of Assessing Officers.
2. Analysis of Available Resources- staffing and budget requirements for appraisal year 2019 are detailed in the 2019 budget, as adopted by the Board of Directors. Existing appraisal practices, which are continued from year to year, are identified and methods utilized to keep these practices current are specified by district management. Information systems support is detailed with year specific functions identified and system upgrades scheduled as necessary. Existing maps and data requirements are specified and updates scheduled as required.
3. Planning and Organization — a calendar of key events with critical completion dates is prepared for the district. This calendar identifies the key events for the preparation of the appraisal roll. A calendar is prepared and included for appraisal year 2019 and 2020. Production standards for field activities are calculated and incorporated in the planning and scheduling process in order to reach goals I mandates set by both district management and the Tax Code.

4. Mass Appraisal System - Computer Assisted Mass Appraisal (CAMA) system revisions required are specified and scheduled with information systems and the district's software vendor. All computer forms and information systems procedures are reviewed and revised as required.
5. Data Collection Requirements- field and office procedures are reviewed and revised as required for data collection. Activities scheduled for each appraisal year include new construction, demolition, remodeling, re-inspection of problematic market areas, reinspection of the universe of properties on a specific cycle, and field or office verification of sales data and property characteristics.
6. Pilot study by appraisal year — new and/or revised mass appraisal models/schedules are tested each appraisal year. Ratio studies, by market area, are conducted using proposed values each appraisal year. Proposed values in each category are tested for accuracy and reliability using standardized testing procedures and ratio study statistics.
7. Valuation by appraisal year — using market analysis of comparable sales and locally tested cost data, valuation models are specified and calibrated in compliance with supplement standards from the International Association of Assessing Offices and the Uniform Standards of Professional Appraisal Practice. The calculated values are tested for accuracy and uniformity using ratio studies.
8. 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 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.
9. Value defense — evidence to be used by the appraisal district to meet its burden of proof for market value and appraisal equity in both informal and formal hearings is specified and tested.

## REVALUATION DECISION

The Rains Appraisal District by policy adopted by the Chief Appraiser and its Board of Directors reappraises property in the district annually. Therefore, both years covered by this reappraisal plan are reappraisal years.

## PERFORMANCE ANALYSIS

In each appraisal year, the previous appraisal year's equalized values are analyzed with ratio studies to determine appraisal accuracy and appraisal uniformity overall. In its annual procedures, the district tests value by market area within state property reporting categories. Ratio studies are conducted in compliance with the current Standard on Ratio Studies from the international Association of Assessing Officers. Mean, median, and weighted mean ratios are calculated as measures of central tendency for properties in each reporting category to measure the level of appraisal (appraisal accuracy). The median ratio is the primary measure of central tendency analyzed in each market area to indicate the level of appraisal (appraisal accuracy) by property reporting category. In each appraisal year this analysis is used to develop the starting point of establishing the level of accuracy of appraisal performance. The district also calculated the coefficient of dispersion and price related differential in each market area to indicate the uniformity or equity of existing appraisals

## ANALYSIS OF AVAILABLE RESOURCES

Staffing and budget requirements for appraisal 2020 are detailed in the 2020 appraisal district budget, as adopted by the Board of Directors. This reappraisal plan is adjusted to reflect the available staffing in appraisal year 2020 and the anticipated staffing for appraisal year 2020 Staffing will impact the cycle of real property re-inspection and personal property on-site review that can be accomplished in this time period.

Existing appraisal practices, which are continued from year to year, are identified and district staff is appropriately trained in order to keep their skills current. In each reappraisal year, real property appraisal cost new tables and depreciation tables are updated and based upon cost data obtained from the Marshall Valuation Service (also known as Marshall and Swift). The preliminary values produced by these updates are tested against verified sales data and adjustments are made necessary to fit Local market area. Income studies by commercial real property use type are conducted and models are updated from current market data. This includes a review of economic rents and capitalization rates from the local market, data obtained through ARB hearing process, and information from published sources. Personal property density schedules are analyzed, tested, and updated based on cost data obtained by rendition and ARB hearings documentation.

information system support is detailed with year specific functions identified and system upgrades are scheduled with the district's software vendor. Computer generated forms are reviewed for revisions based on year and reappraisal status. Legislative changes are scheduled for completion and also tested through coordination between the district information system department and its software vendor. Existing maps and data requirements are specified and updated coordinated between

the district's GIS department and information systems department in order to make these tools available to the appraisal staff.

The Rains County Appraisal District, as well as all appraisal districts in Texas, is specifically hindered when valuing property due to the lack of mandatory sales disclosure. The lack of mandatory sales disclosure restricts the information that is available to CAD's when using sales comparison approach, especially on the high end of the value spectrum of residential property and with regards to most non-residential real property. The lack of mandatory sales price disclosure also impacts value developed via the income approach by restricting the type of data necessary to calculate an overall capitalization rate from sold comparable properties. Should mandatory sale price disclosure become law; the district will have an additional tool with which to value property which will foster further accuracy and equity in appraisals.

## PLANNING AND ORGANIZATION

A calendar of key events with critical completion dates is prepared for the district. This calendar identifies the key events for developing the appraisal roll. A separate calendar is prepared for appraisal years 2019 and 2020. Production standards for field activities are calculated and incorporated in the planning and scheduling process. This plan encompasses the normal processes carried out for as the schedule for by the precincts, every three years as prescribed in the property tax code. Therefore, catastrophic events or significant legislative action may be a detrimental effect to the district's operations and require changes to this plan.

The district has broken down the county into two main categories that will be appraised every three years as described by the Property Tax Code. For 2019 the following Precincts will be reappraised. This will cover all property in precinct 2 (two) and precinct 3 (three). Then for 2020 Precincts 4 (four) and Precincts 1 (one) will be appraised. By the end of 2018 reappraisal this will have the entire county covered then the process will start all over with the precincts 2 & 3 this will be laid out in the district reappraisal plan for 2019-2020.

## CALENDAR OF KEY EVENTS 2019 APPRAISAL YEAR

Events	9/2/2019 08/01/16	9/4/2019 3/1/2019
Create 2019 Year Layer in CAMA System	5/17/2018	7/19/2018
Field Operations/Discovery Process - Appraisal Depts Precincts 3 & 2	4/19/2018 1/1/2019	7/19/2018 12/31/2019
Adopt Biennial Reappraisal Plan Covering 2019 & 2020	1/11/2019	1/1/2019
Adopt 2019 Appraisal District Budget	1/1/2019	To Deadline
TDLR Education Courses RPA Track as Necessary	1/31/2019	1/31/2019
Statutory Date of Appraisal (Unless Sept. Granted Inventory Process Exemptions and Special Use Applications	12/31/2018 3/15/2019	4/15/2019 3/15/2019
Preliminary Property Value Study Released	2/12/2019	2/12/2019
Personal Property Renditions Mailed	N/A	N/A
PVS Protest Deadline if Necessary	5/1/2019	7/3/2019
Full Valuation Effort- Model Specification/Calibration Included	4/15/2019 4/15/2019	5/31/2019 5/15/2019
Export Overlapping CAD Values as Applicable	4/15/2019	6/1/2019
Import Mineral Totals from Capital	6/1/2019	7/19/2019
Mail 25.19 Appraisal Notices	5/31/2019	5/31/2019
Turn Over Records to ARB	6/15/2019	6/15/2019
Informal Hearing Scheduled	7/15/2019	7/15/2019
Formal Hearing Scheduled	7/24/2019	7/24/2019
Primary Protest Deadline	As necessary	
Personal Property Protest Deadline	Every third Thursday of the	
Certified Estimates of Value Due to School Districts	month	
Certification of the Appraisal Roll		

### Regularly Scheduled Meetings

Monthly ARB Hearings as Necessary	
Monthly Board of Directors Meeting	
Beginning	Ending
Date	Date

## CALENDAR OF KEY EVENTS 2020 APPRAISAL YEAR

Events	Monthly Board of Directors Meeting	Beginning Date	Ending Date
Create 2020 Year Layer in CAMA System			
Field Operations/Discovery Process - Appraisal Depts Precincts 1 & 4		9/11/2020	9/4/2020
Adopt Biennial Reappraisal Plan Covering 2019-2020		08/03/20	3/5/2021
Adopt 2020 Appraisal District Budget		5/17/2018	7/19/2018
TDLR Education Courses RPA Track as Necessary		5/17/2020	7/18/2020
Statutory Date of Appraisal (Unless Sept. Granted Inventory)		1/1/2020	12/31/2020
Process Exemptions and Special Use Applications		1/1/2020	1/1/2020
Preliminary Property Value Study Released		1/3/2018	To Deadline
Personal Property Renditions Mailed		1/31/2020	1/31/2018
PVS Protest Deadline if Necessary		3/16/2020	4/15/2020
Full Valuation Effort- Model Specification/Calibration Included		3/16/2020	3/16/2020
Export Overlapping CAD Values as Applicable		2/12/2020	2/12/2020
Import Mineral Totals from Capital		n/a	n/a
Mail 25.19 Appraisal Notices		5/1/2020	7/3/2020
Tum Over Records to ARB		4/15/2020	6/1/2020
Informal Hearing Scheduled		5/4/2020	5/4/2020
Formal Hearing Scheduled		4/15/2020	6/1/2020
Primary Protest Deadline		6/1/2020	7/17/2020
Personal Property Protest Deadline		6/1/2020	6/1/2020
Certified Estimates of Value Due to School Districts		6/15/2020	6/1/2020
Certification of the Appraisal Roll		7/16/2020	7/16/2020
		7/15/2020	7/15/2020
		As necessary	

### Regularly Scheduled Meetings

Monthly ARB Hearings as Necessary

Every third Thursday of the month

## 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. District currently, and for the foreseeable future contracts with True Automation, Inc. for software services. All automated forms and information system procedures are reviewed routinely and revised as required. The following details these procedures as it relates the 2017 and 2018 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 appraisal applications as necessary and applicable.

Cost schedules are tested with market data (sales) to ensure 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 known 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. Property categories are reviewed to ensure their continued applicability. 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

Density schedules are updated using data received during the previous appraisal year from renditions and hearing documentation. Valuation procedures are reviewed, modified as necessary, and tested.

## NOTICING PROCESS

Section 25.19 appraisal notice forms are reviewed, edited for updates and changes are approved by the appraisal district management team. 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 processes 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 definition of market areas, and reinspection of the universe of properties on specific cycles (4-6 years per IAAO Standards).

### DEFINING MARKET AREAS

According to The Appraisal of Estate 12<sup>th</sup> Edition, a market area is "the defined geographic area in which the subject property competes for the attention of market participants. The county consists of one primary school district therefore the staff groups properties that cover the entire county for the purposes of valuation and analysis. The district staff will assign neighborhood codes to comparable properties conforming to the definition of market area; giving specific consideration to market characteristics and the specific life cycle of the neighborhood in compliance with USPAP Standards.

## NEW CONSTRUCTION 1 DEMOLITION

New construction field and office review procedures are identified and revised as required in order completing the data collection phase. Field production standards are established and procedures for monitoring tested to meet field review deadlines. Sources of building permit data is confirmed and system input procedures are identified. The process of verifying the demolition or new construction of improvements is specified by each department. Building plans and or blueprints are obtained and dimensions are entered into the system by data collection staff. The appraisal staff checks the accuracy of the measurements in the field during review. This is 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 deadline, usually March 1.

## RE-INSPECTION OF PROBLEMATIC MARKET AREAS

The International Associations of Assessing Officers, Standard on Mass Appraisal of Real Property specifies that the universe of properties should be re-inspected on a cycle of 4-6 years. The re-inspection includes the use of photography and imagery to augment an individual onsite visit. The district has acquired Pictometry which allow the review of data characteristics and measurement of improvements using oblique digital photography. The annual re-inspection requirements for appraisal years 2015 and 2016 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 sale 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 roughly equal, the sale is usually excluded from the observation pool in the ratio study as an outlier.

## 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 supplement 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 appraisal year and updated as indicated.

The following details the plan valuation methods by department and or property type.

## RESIDENTIAL REAL PROPERTY

### Cost Approach

The district uses a hybrid cost-market approach when valuing 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:

$$MV = LV + [RCN LD] MA$$

(Market Value Equal Land Value plus Replacement Cost New Less Depreciation Equal Market Adjustment)

In applying the calculations of the model above, the district staff values the land as though vacant and available for development to its highest and best use. The replacement cost less depreciation (RCNLD) of the improvements are multiplied by the appropriate neighborhood market adjustment factor (MA) to arrive at 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, 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 for land valuation; the comparable sale approach, allocation by abstraction, allocation by ratio and the capitalization of ground rent. The district will utilize elements of all these land valuation methods depending upon market area and availability of market data. In area where insufficient vacant land sales exist the district employs the allocation method to establish land values in a neighborhood. Land value adjustments may be made when uniformity standards are not realized or land to building ratios become disproportionate. The appraisers will develop a base lot or primary land rate and assign land tables to each neighborhood. Land characteristics 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 value 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 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 specified neighborhood, thus producing more representative and supportive values. The market adjustment factor calculated for each neighborhood will be applied uniformly to all properties within that neighborhood and 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. The sales prices will be adjusted for differences from the subject and the market value for the subject is estimated from the adjusted sales price comparable properties.

At present, the district does not develop estimates of value for single family properties using the traditional sales comparison approach in mass 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 appeal process but may be utilized for valuation more widely in the future as time and available data permits.

## 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 type 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 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 lot 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 of time that the property is likely to hold 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.

## 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:

$$MV = LV + RCNLD$$

### Market Value Equals Land Value plus Replacement Cost New Less Depreciation

This methodology involves the use of national sources of cost data as well as actual cost information gathered from the local market when every 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 applied to the specific characteristics of the subject property of the appraisal.

Depreciation schedules have been implemented for economic lives and condition that are 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. The schedules will be tested annually to ensure they will be reflective in current market conditions in Rains 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 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 on 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 schedule, condition rating, 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). f

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 improvement to yield an estimate of market value by the cost approach. Any estimate of value completed by the cost approach will be accordance with Section 23.011 of the Tax Code.

### Sales Comparison Approach

Pertinent data form actual sales of properties will be obtained throughout the year and the appraisal staff will analyze the relevant information. The 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 cost approach, rates and multipliers used in the income approach, and 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 by the Commercial department 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 proper ties in the district as appropriate. Any estimate of value completed by the sales comparison approach will be made in accordance Section 23.013 of the 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 which are bought and sold based on the property's ability to produce an income; therefore, the price paid for the property is directly related to the amount of income the property is capable of producing. The commercial 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 I market area are developed and deployed for use in valuation.

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

$$\begin{aligned}
& \text{PRG Potential Gross Rent} \\
& \text{-V \&C Vacancy \& Collections} \\
& \text{EGR Effective Gross Rent +SI} \\
& \text{Secondary Income EGI} \\
& \text{Effective Gross Income} \\
& \text{-Allowable EXP (Expenses)} \\
& \text{- Reserves for Replacement} \\
& \text{NOI Net Operation Income} \\
\text{Value} &= \text{NOI / CAP Rate}
\end{aligned}$$

This income model reflects the normalization of an income stream from Potential Gross Rent (PGR) at 100% occupancy to an indication of Net Operating Income (NOI). 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 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 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. Adjustment 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 Tax Code.

### UTILITIES, RAILROADS, AND PIPELINES

The Rains 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:

$$MV = RCN - D$$

(Market Value Equal Replacement Cost New Minus Depreciation)

And

Allocated Unit Appraisal

Each of the value 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 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 & INDUSTRIAL PROPERTIES

The Rains County 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 will utilize a form 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 indication of present worth.

As mineral reserves are subsurface in nature, this situation make specific physical inspection unavailable as a method of collecting data. The appraisal firm will collect data from the Texas Railroad Commission, Comptroller of Public Accounts, renditions from owners, published sources, and data service 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 Rains 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 of the 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. These classes determined from field inspections, applications, and agricultural activity. The agriculture appraisal staff will collect lease data from owners and agricultural lessees on an ongoing basis in order to develop "net-to-land" figures by agricultural classification.

## BUSINESS TANGIBLE PERSONAL PROPERTY

These property types will be valued each year by the district's appraisal staff. The Personal Property' Department engages in an annual canvas filed review to identify new businesses to be added to the roll, movement of existing businesses to different locations or business closing, and data review of current property chrematistics 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 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 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 adjusted as necessary. The revised models will be tested in accordance to accepted methods and techniques.

These model's values will be 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 will be conducted.

The percent good depreciation factors utilized will be based on the depreciation schedules for furniture, fixture, 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:

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

Market Value Equal Replacement Cost New Times Percent Good Factor

Leased equipment and multi-location assets may be valued using original costs and percent good depreciation schedule 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 vehicle's will be based on data furnished by recognized sources such as NADA (National Automobile Dealers Association) among others. Any sales of personal property will be considered and appropriated weight will be given base 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

This reappraisal plan specifies the scope of work planned by the Rains County Appraisal District in order to produce the official appraisal roll for 2015 and 2016. Each appraisal year the USPAP requires Mass Appraisal Report will be prepared and certified by 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 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 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:

- (e) Property sales information
- (f) property sales adjustments grids (g) property equity adjustment grids (h) gross rent / income multiplier data
- (i) Performa and actual income data
- (j) property characteristics data including photos as applicable
- (k) aerial photography
- (l) cost approach reports as applicable
- (m)property renditions as applicable (n) published reports regarding cost, market, or income data
- (o) schedules and models utilized
- (p) any other information collected by the district

Certification:

I certify that, to the best of my knowledge and belief:

- The statements of fact contained in this report are true and correct.
- The reported analysis, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and is my personal, unbiased professional analyses, opinions, and conclusions.
- I have no present or prospective interest in the properties that are the subject of this report, except for those properties that are personally owned, and I have no personal interest with respect to the parties involved.
- I have no bias with respect to any property that is the subject of this report or to the parties involved with this assignment.

My compensation is not contingent upon the reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value estimate, the attainment of a stipulated result, or the occurrence of a subsequent event.

■ My analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Uniform Standards of Professional Appraisal Practice.

No one provided significant professional assistance to the person signing this report.

Sherrri McCall, Chief Appraiser  
Rains County Appraisal District



Chairman, Board of Directors

7-19-18

Date: