

The Gillespie Central Appraisal District has prepared and published this reappraisal plan to provide our Board of Directors, citizens and taxpayers with a better understanding of the district's responsibilities and activities.

Reappraisal Plan 2019-2020

August 21, 2018

Gillespie Central Appraisal District
1159 South Milam Street
Fredericksburg, Texas 78624
(830)997-9807

Scott Fair, RPA
Chief Appraiser

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INTRODUCTION

Scope of Responsibility

The Gillespie Central Appraisal District (GCAD) has prepared and published this reappraisal plan as required by and in accordance with Texas Property Tax Code (Tax Code) Sections 6.05(i) and 25.18. It is intended to provide our Board of Directors, taxing units, and citizens with a better understanding of the district's responsibilities and activities. This report has several parts: a general introduction and several sections describing the appraisal effort by the appraisal district.

The (GCAD) is a political subdivision of the State of Texas created effective January 1, 1980. The provisions of the Tax Code govern the legal, statutory, and administrative requirements of the appraisal district. A five-member Board of Directors, appointed by the taxing units within the boundaries of Gillespie County, constitutes the district's governing body. The chief appraiser, appointed by the Board of Directors, is the chief administrator and chief executive officer of the appraisal district.

The appraisal district is responsible for local property tax appraisal and exemption administration for eight jurisdictions or taxing units in the district. The taxing units include:

- Gillespie County
- City of Fredericksburg
- Doss Consolidated Common School District
- Fredericksburg Independent School District
- Harper Independent School District
- Gillespie Water Control & Improvement District
- Hill Country Underground Water Conservation District
- Stonewall Water Control & Improvement District

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

All taxable property is appraised at its "market value" as of January 1st, except as otherwise provided by the Tax Code. The Tax Code defines market value as the price at which a property would transfer for cash or its equivalent under prevailing market conditions if:

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

The Tax Code defines special appraisal provisions for the valuation of residential homestead property (Sec. 23.23), agricultural land (Sec.23.41, 23.51), real property inventory (Sec. 23.12), dealer inventory (Sec. 23.121, 23.124, 23.1241 and 23.127), nominally valued (Sec. 23.18) or restricted use properties

(Sec. 23.83) and allocation of interstate property (Sec. 21.03). The owner of an inventory may elect to have the inventory appraised at its market value as of September 1st of the year preceding the tax year to which the appraisal applies by filing an application with the chief appraiser requesting that the inventory be appraised as of September 1st (Sec. 23.12).

The Texas Property Tax Code, under Sec. 25.18, requires each appraisal office to implement a plan to update appraised values for real property at least once every three years. The district's current policy is to conduct a general reappraisal of taxable property every one to two years. Appraised values are reviewed annually and are subject to change annually. Business personal properties, minerals and utility properties are appraised every year.

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

Tax Code Requirement

Sec. 6.05. Appraisal Office

- (a) Except as authorized by Subsection (b) of this section, each appraisal district shall establish an appraisal office. The appraisal office must be located in the county for which the district is established. An appraisal district may establish branch appraisal offices outside the county for which the district is established.
- (b) The board of directors of an appraisal district may contract with an appraisal office in another district or with a taxing unit in the district to perform the duties of the appraisal office for the district.
- (c) The chief appraiser is the chief administrator of the appraisal office. The chief appraiser is appointed by and serves at the pleasure of the appraisal district board of directors. If a taxing unit performs the duties of the appraisal office pursuant to a contract, the assessor for the unit is the chief appraiser. The chief appraiser must hold a professional designation listed in this section.
- (d) The chief appraiser is entitled to compensation as provided by the budget adopted by the board of directors. He may employ and compensate professional, clerical, and other personnel as provided by the budget.
- (e) The chief appraiser may delegate authority to his employees.
- (f) The chief appraiser may not employ any individual related to a member of the board of directors within the second degree by affinity or within the third degree by consanguinity, as determined under Chapter 573, Government Code. A person commits an offense if the person intentionally or knowingly violates this subsection. An offense under this subsection is a misdemeanor punishable by a fine of not less than \$100 or more than \$1,000.

- (g) The chief appraiser is an officer of the appraisal district for purposes of the nepotism law, Chapter 573, Government Code. An appraisal district may not employ or contract with an individual or the spouse of an individual who is related to the chief appraiser within the first degree by consanguinity or affinity, as determined under Chapter 573, Government Code.
- (h) The board of directors of an appraisal district by resolution may prescribe that specified actions of the chief appraiser relating to the finances or administration of the appraisal district are subject to the approval of the board.
- (i) To ensure adherence with generally accepted appraisal practices, the board of directors of an appraisal district shall develop biennially a written plan for the periodic reappraisal of all property within the boundaries of the district according to the requirements of Section 25.18 and shall hold a public hearing to consider the proposed plan. Not later than the 10th 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 for the hearing. Not later than September 15 of each even-numbered year, the board shall complete its hearings, make any amendments, and by resolution finally approve the plan. Copies of the approved plan shall be distributed to the presiding officer of the governing body of each taxing unit participating in the district and to the comptroller within 60 days of the approval date.

Sec. 25.18. Periodic Reappraisals

- (a) Each appraisal office shall implement a plan for periodic reappraisal of property approved by the board of directors under Section 6.05(i).
- (b) The plan shall provide for the following reappraisal activities all real and personal property in the district at least once every three years:
 - (1) identifying properties to be appraised through physical inspection or by other reliable means of identification, including deeds or other legal documentation, aerial photographs, land-based photographs, surveys, maps, and property sketches;
 - (2) identifying and updating relevant characteristics of each property in the appraisal records;
 - (3) defining market areas in the district;
 - (4) identifying property characteristics that affect property value in each market area, including:
 - (A) the location and market area of property;
 - (B) physical attributes of property, such as size, age, 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.

REVALUATION DECISION

According to the Texas Property Tax Code Section 25.18, the plan shall provide for the following reappraisal activities of all real and personal property in the district at least once every three years. Gillespie County has maintained brisk rates of property transactions and sales price increases. It is anticipated that this will continue into 2019 and 2020. Properties are evaluated annually due to market conditions. The 2019 year will be a reappraisal year. The 2020 year will be maintaining and updating appraisals, unless market conditions indicate all properties should be revalued.

INSPECTION TARGETS

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 4-6 years. The re-inspection includes the remeasurement of at least two sides of each improved property. Additionally, the use of aerial photography such as Pictometry ChangeFinder on a three-year cycle can be utilized to meet this requirement.

The district has gone through personnel and office changes over the last several years and physical inspections lagged in some areas. This biennial there will be three targeted areas for physical inspections.

The first area will be the district's review of property utilizing updated Pictometry photography and the Pictometry ChangeFinder system. The ChangeFinder system is software that detects changes in structures; it finds properties that had structures added, modified, or deleted. After reviewing properties with Pictometry software, appraisers follow up with field inspections as necessary for individual properties. The annual re-inspection requirements for the 2019 and 2020 tax years are identified by property type and property classification and are scheduled on the calendars of appraisal events. The target time frame is to work through the changes in the office in the summer of 2019 and begin field work for the identified properties in the fall of 2019. It is expected that the field work for this will continue into 2020.

The second area is properties that were not physically inspected in previous reappraisal plans. A listing of properties will be developed in the summer of 2018 targeting properties for inspection. The listing will be generated by neighborhood. Inspections of these properties will begin in the fall of 2018 and it is anticipated that these inspections will continue through 2019.

The third area of targeted properties are properties that have been flagged for reinspection. Reasons for being flagged include building permits, septic permits, utility connections reports, requests from property owners, and appraiser discovery. The number of flagged properties has been about 2000 per year in recent years.

APPRAISAL RESOURCES AND RESPONSIBILITIES

Personnel Resources

The chief appraiser is primarily responsible for overall planning, organizing, staffing, coordinating, and controlling of district operations. The administration department's function is to plan, organize, direct and control the business support functions related to human resources, budget, finance, records management, purchasing, fixed assets, facilities and postal services. The appraisal department is responsible for the valuation of all real and personal property accounts. The property types appraised include commercial, residential, farm and ranch, business personal, mineral, utilities, and industrial. The

district's appraisers are subject to the provisions of the Property Taxation Professional Certification Act and must be duly registered with the Texas Department of Licensing and Regulation. Support functions including records maintenance, information and assistance to property owners, and hearings are coordinated by personnel in support services. The property tax collections department's main function is the collection of property tax, but they do serve as a support to appraisal functions during parts of the year.

The field appraisal staff is responsible for collecting and maintaining property characteristic data for classification, valuation, and other purposes. Accurate valuation of real and personal property by any method requires a comprehensive physical description of personal property, and land and building characteristics. This appraisal activity is responsible for administering, planning and coordinating all activities involving data collection and maintenance of all commercial, residential and personal property types located within the boundaries of GCAD. The data collection effort involves the field inspection of real and personal property accounts, as well as data entry of all data collected into the existing information system. The goal is to periodically field inspect residential, commercial, and personal properties in the district every third year. The appraisal opinion of value for all property located in the district is reviewed and evaluated each year.

The appraisal district office staff consists of 14 employees with the following classifications:

- 1 - Official/Administrator (executive level administration)
 - Scott Fair, RPA, Chief Appraiser
- 3- Professional (supervisory and management)
 - Melissa Longoria, RPA, Office Manager
 - Leah Strackbein, Property Tax Collections Manager
 - Shawn Davis, RPA, Deputy Chief Appraiser
- 5 - Technicians (appraisers)
 - Scott Smith, RPA, Appraiser
 - Dustin Althaus, RPA, Appraiser
 - Steven Stech, Appraiser
 - Phillip Kee, Appraiser
 - Debbie Anderson, Business Personal Property Appraiser
- 3 - Administrative Support (professional, customer service, clerical and other)
 - June Dartez, Deed Abstractor/Exemption Specialist
 - Aileen Hayes, Data Entry
 - Carol Durst, Receptionist
- 2 – Property Tax Collections (primarily collections, also customer service, clerical and other)
 - Karen Atkins, Senior Clerk
 - Chelsea Grobe, Clerk

According to the IAAO (International Association of Assessing Officers) *Guide to Assessment Administration Standard*, small taxing units run from 1,500 to 1,700 parcels per staff member and large taxing units run from 3,000 to 3,500 parcels per staff member with an average of 2,500. In 2018 GCAD had 32,496 parcels and 11 appraisal staff members. This equates to 2,954 parcels per staff member.

Financial Resources

According to Section 6.06 of the Texas Property Tax Code, the district must annually prepare and adopt a budget. This budget must then be submitted and approved by the voting taxing units within the

district. The current year budget (2018) for GCAD is \$1,012,900 or \$31.17 per parcel. This does not include the budget for property tax collections. The 2019 and 2020 budgets have not been adopted as of the date of this Reappraisal Plan. The proposed 2019 budget is \$1,071,759 or \$32.98 per parcel.

Information Technology Resources

The district utilizes a main computer system provided by True Automation’s PACS system to maintain all of the real, personal and mineral properties. This software resides on two servers located in the district’s office and is accessed by individual workstations on a local network. PACS maintains an individual property account with all information required by the Tax Code. Required information includes owner name, legal description, situs, and physical attributes. Additionally, PACS allows for pictures, maps, and scanned images to be placed in the individual accounts. PACS also allows the district to produce ratio studies and appraisal uniformity tests on demand.

The district also utilizes several computer programs to maintain and view property maps. ArcMap, a product of ESRI, is used to build and maintain a map database of parcels, roads, and other layers. ArcGIS Runtime, a product of ESRI, and Pictometry CONNECTExplorer, are imbedded in PACS. ArcMap, PACS GIS Viewer, and Pictometry CONNECTExplorer are used to view ownership maps and they allow for tracking of property ownership, roads, aerial photography, water influence, and topography. The district has utilized Pictometry since 2009, with new photography scheduled in 2019. This software is very beneficial in locating property and analyzing the uniformity of appraisal.

Data Resources

The district subscribes to multiple sources for appraisal information. The following is a list of data resources used by the district to obtain information for appraisal of property.

<u>Source</u>	<u>Property Type</u>	<u>Valuation Method</u>
Marshall & Swift Valuation Service	Residential, Commercial	Cost
NADA Appraisal Guides	Personal Property	Market
Realty Rates	Commercial	Income
Source Strategies	Commercial	Income

Local professionals provide the district with local construction costs and rental information. Septic permits, building permits, construction applications are gathered from city, county, and state offices and used for the discovery of new property.

Ownership information is obtained from deed records maintained in the Gillespie County Clerk’s office. Unrecorded Contracts for Deed are provided by grantors and grantees of the transactions. The internet is also becoming a valuable tool in providing information on specific properties, sales and cost information, as well as market economy analysis.

APPRAISAL FREQUENCY AND METHOD SUMMARY

Residential Property

Residential property is examined at least every three years through field inspections and/or Pictometry with appraisers inspecting each structure, noting condition of the improvement and looking for changes that might have occurred to the property since the last on-site check. In some subdivisions and neighborhoods where change of condition is frequent, homes are examined annually. Exterior pictures are taken of homes upon inspection. Every subdivision and neighborhood are statistically analyzed

annually to ensure that sales that have occurred in the subdivision during the past 18 months are within an acceptable range of appraised value. If the sales do not indicate that range, adjustments are made to the subdivision and neighborhood using a process outlined in detail in the Residential Appraisal section of this report.

Commercial Property

Commercial and industrial real estate is analyzed at least every three years through field inspections and/or Pictometry to verify class and condition. Real estate accounts are analyzed against sales of similar properties in GCAD. Sometimes a particular type of real estate is compared to sales outside of Gillespie County due to the particulars of that property type and the dearth of sales of similar properties in Gillespie County. The income approach to value is also utilized to appraise commercial properties such as shopping centers, apartment complexes, office buildings, restaurants, motels and hotels, and other types of property that typically sell based on net operating income.

Farm and Ranchland

Farm and ranchland property are examined at least every three years through field inspections and Pictometry with appraisers inspecting each property, noting condition of any improvements, land characteristics, agricultural use, and looking for changes that might have occurred to the property since the last on-site check. In some subdivisions and neighborhoods where change of condition is frequent, properties are examined annually. Exterior pictures are taken of improvements upon inspection. Every subdivision and neighborhood are statistically analyzed annually to ensure that sales that have occurred in the subdivision during the past 18 months are within an acceptable range of appraised value. If the sales do not indicate that range, adjustments are made to the subdivision and neighborhood.

Business Personal Property

Business personal property (BPP) is appraised annually. Every business is required by state law to file a rendition of their property used to produce income. Similar businesses to a subject are analyzed annually to determine consistency of appraisal per unit of comparison. Businesses are categorized using NAICS codes. Rendition laws provide additional information on which to base values of all BPP accounts.

Minerals

The GCAD has minimal mineral accounts and GCAD contracts with an appraisal firm to value these properties.

Utilities and Pipelines

The GCAD contracts with an outside firm to annually value utility and pipeline properties.

DATA COLLECTION / VALIDATION

Data collection of real property involves maintaining data characteristics of the property in the PACS CAMA system. The information contained in PACS includes site characteristics, such as land size and topography, and improvement data, such as square foot of living area, year built, quality of construction, and condition. Field appraisers are required to use a property classification system that establishes uniform procedures for the correct listing of real property. All properties are coded according to a classification system. The approaches to value are structured and calibrated based on this coding system and property description and characteristics. The field appraisers use property classification manuals as a guide in the field inspection of properties. Data collection for personal property involves maintaining information on the PACS CAMA software designed to record and value

business personal property. The type of information contained in the BPP file includes personal property such as business inventory, furniture and fixtures, machinery and equipment, with details such as cost and location. The field appraisers conducting on-site inspections use a personal property classification manual as a guide to correctly list all personal property that is taxable. The listing procedure utilized by the field appraisers is available in the district office. Appraisers periodically update the classification system.

Section 25.02 (a) of the Property tax Code defines the information that must be maintained in the appraisal records.

Sec. 25.02. Form and Content

- (a) The appraisal records shall be in the form prescribed by the comptroller and shall include:
- (1) the name and address of the owner or, if the name or address is unknown, a statement that it is unknown;
 - (2) real property;
 - (3) separately taxable estates or interests in real property, including taxable possessory interests in exempt real property;
 - (4) personal property;
 - (5) the appraised value of land and, if the land is appraised as provided by Subchapter C, D, E, or H, Chapter 23, the market value of the land;
 - (6) the appraised value of improvements to land;
 - (7) the appraised value of a separately taxable estate or interest in land;
 - (8) the appraised value of personal property;
 - (9) the kind of any partial exemption the owner is entitled to receive, whether the exemption applies to appraised or assessed value, and, in the case of an exemption authorized by Section 11.23, the amount of the exemption;
 - (10) the tax year to which the appraisal applies; and
 - (11) an identification of each taxing unit in which the property is taxable.

This and other relevant additional information is maintained through the district's PACS CAMA system and is regularly maintained and updated annually.

Sources of Data

The sources of data collection are through property inspection, Pictometry, Pictometry ChangeFinder, new construction field effort, data review/relist field effort, data mailer questionnaires, deed records, hearings, sales validation field effort, commercial sales verification and field effort, newspapers and publications, and property owner correspondence by mail or via the Internet. A principal source of data comes from building permits received from taxing jurisdictions that require property owners to take out a building permit. Paper permits are received and matched manually with the property's tax account number for data entry. Area and regional real estate brokers and salespeople are also sources of market and property information. Data surveys of property owners requesting market information and property description information is also valuable data. Soil surveys and agricultural surveys of farming and ranching property owners and industry professionals are helpful for productivity value calibration. Improvement cost information is gathered from local building contractors and Marshall and Swift Valuation Service. Various income and rental surveys are performed by interviewing property managers and operators to determine operating income and expenses for investment and income producing real property.

Data review of entire neighborhoods is generally a good source for data collection. Appraisers inspect entire neighborhoods to review the accuracy of our data and identify properties that have to be relisted. The sales validation effort in real property pertains to the collection of market data for properties that have sold. In residential appraisal the sales validation effort involves on-site inspection by field appraisers to verify the accuracy of the property characteristics and confirmation of the sales price. Property owners are one of the best sources for identifying incorrect data that generates a field check. Sometimes the property owner provides reliable data to allow correction of records without having to send an appraiser on-site. As the district has increased the amount of information available on the internet property owners have the opportunity to review information on their property. Accuracy and validity in property descriptions and characteristics data is the highest goal and is stressed throughout the appraisal process from year to year. Appraisal opinion quality and validity relies on data accuracy as its foundation.

Data Collection Procedures

The appraisers are assigned specific areas throughout the district to conduct field inspections. These geographic areas of assignment are maintained for several years to enable the appraiser assigned to that area to become knowledgeable of all the factors that drive values for that specific area. Appraisers of real estate and business personal property conduct field inspections and record information for entry into the appraisal system computer. The quality of the data used is extremely important in estimating market values of taxable property. While work performance standards are established and upheld for the various field activities, quality of data is emphasized as the goal and responsibility of each appraiser. New appraisers are trained in the specifics of data collection and the classification system set forth and recognized as “rules” to follow. Experienced appraisers are routinely re-trained in listing procedures prior to major field projects such as new construction, sales validation or data review. A quality assurance process exists through data entry review and supervisory review of the work being performed by the field appraisers. Quality assurance supervision is charged with the responsibility of ensuring that appraisers follow listing procedures, identify training issues and provide uniform training throughout the field appraisal staff.

DISTRICT MARKET AREAS

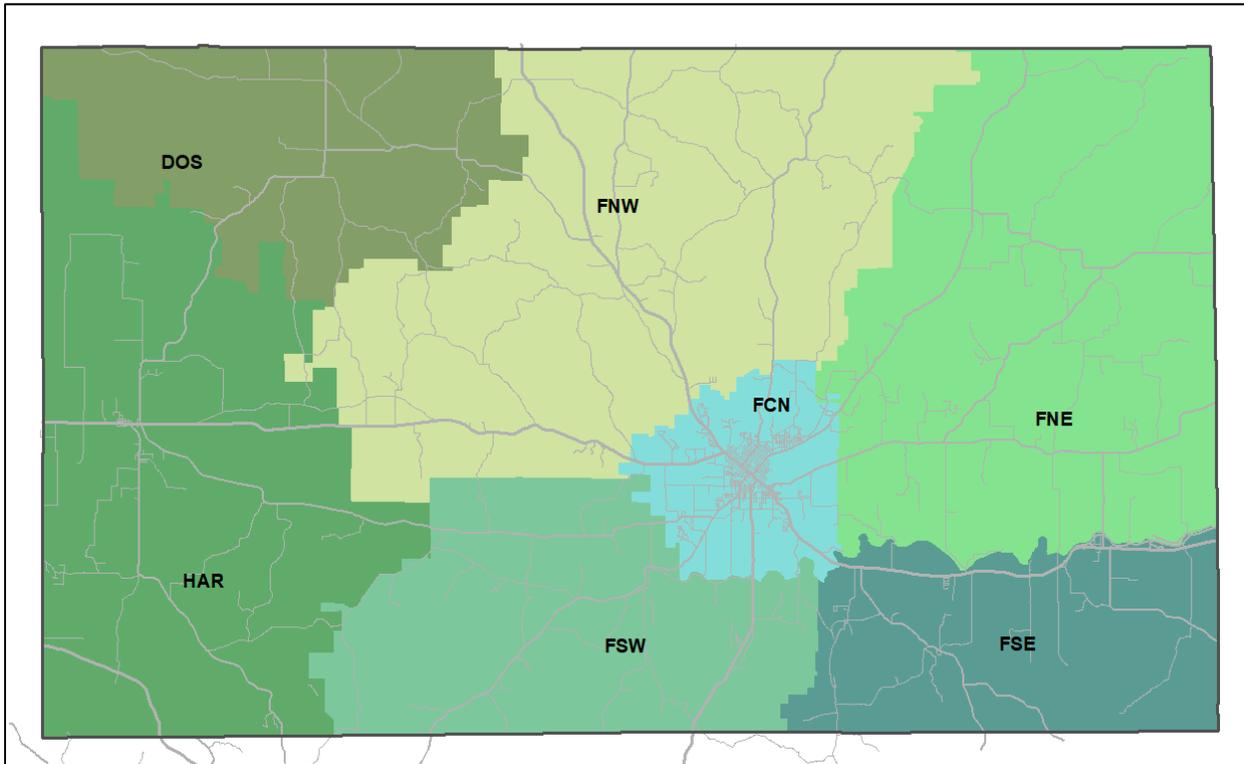
The GCAD utilizes three different classifications of market areas; regions, subsets, and neighborhoods. Market area is an encompassing general term and is further refined by each classification.

Regions

Regions are the broadest market area definition used by Gillespie CAD. There are 7 regions. These are geographical areas based primarily on school district lines and the quadrants. Regions give the district the ability to analyze sales and ownership regardless of subdivision or abstract. They are also utilized to distribute workload amongst the appraisers for reappraisal.

The following table and map indicate the region market areas analyzed by GCAD.

REGION	DESCRIPTION	GENERAL AREA
FCN	Fredericksburg ISD Central	City of Fredericksburg and ETJ
FNE	Fredericksburg ISD Northeast	Willow City Area
FNW	Fredericksburg ISD Northwest	Hilltop and Cherry Springs Areas
FSE	Fredericksburg ISD Southeast	Stonewall and Luckenbach Areas
FSW	Fredericksburg ISD Southwest	Highways 16 South and 87 South
HAR	Harper ISD	All of Harper ISD in Gillespie County
DOS	Doss CCSD	All of Doss CCSD in Gillespie County

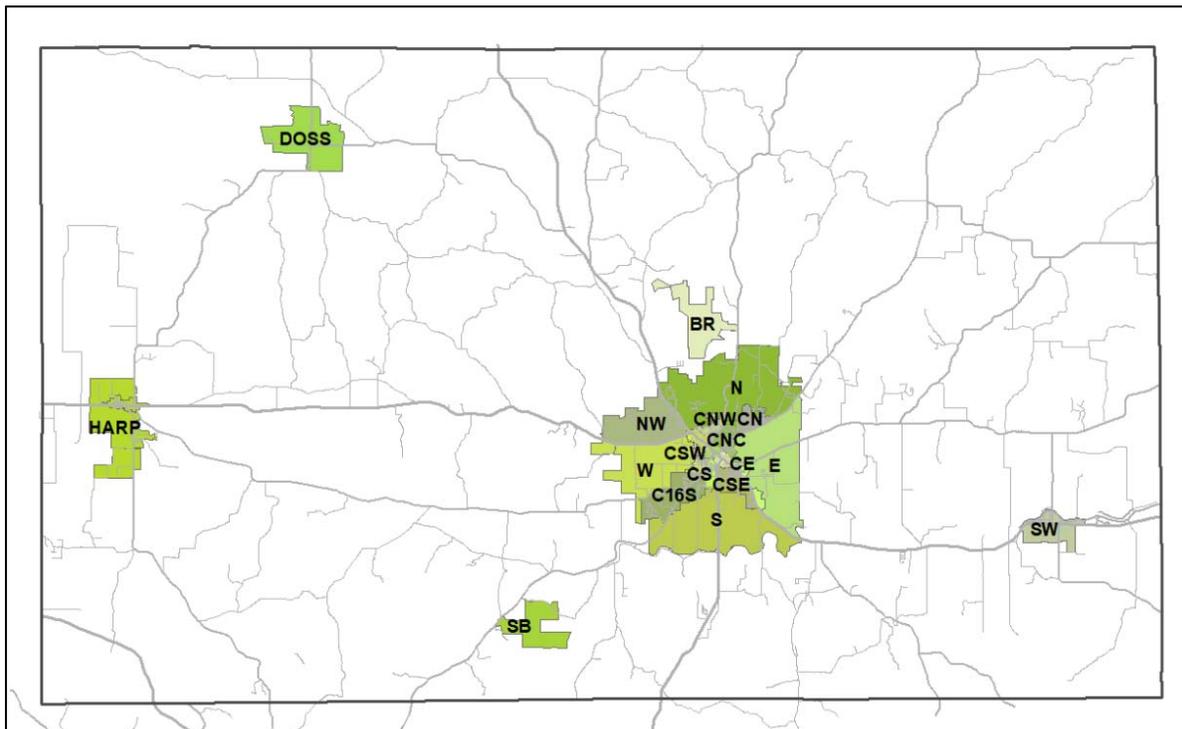


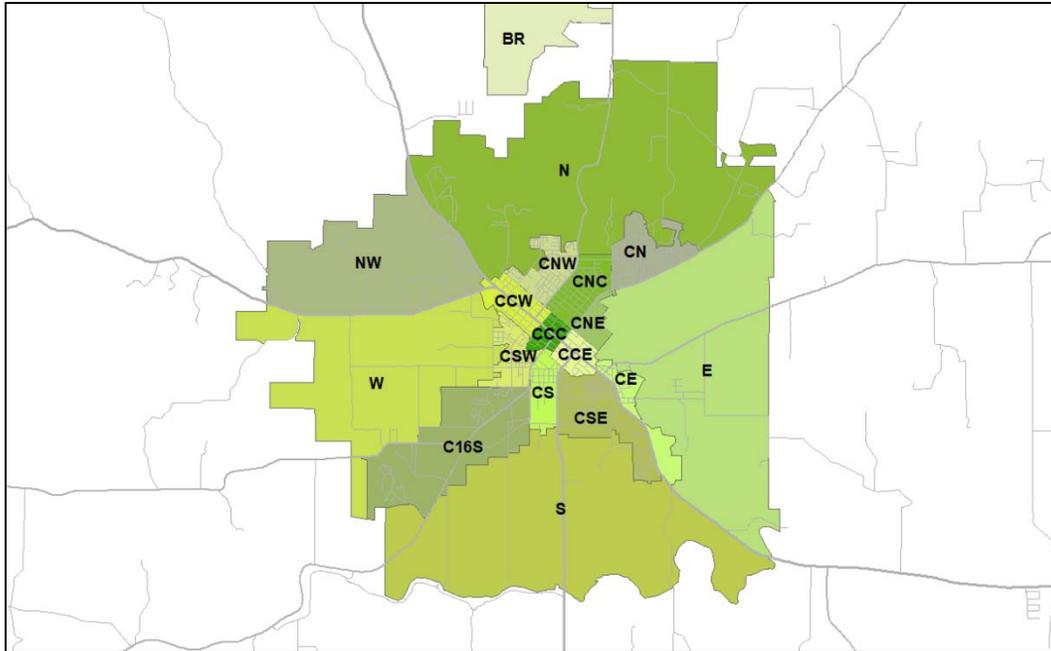
Subsets

Subsets further refine the market areas into 22 areas. Doss (DOSS), Harper (HARP) and Stonewall (SW) are unincorporated communities, each with their own subset. Boot Ranch (BR) is an exclusive and private golf course community. Snaffle Bit (SB) is a large ranch once owned by the lieutenant governor that has been subdivided into multiple ranchettes. The remaining Subsets break the City and ETJ into similar areas. Subsets give the district the ability to analyze sales and ownership regardless of subdivision or abstract. They are also utilized to distribute workload amongst the appraisers for reappraisal.

The following table and maps indicate the Subset market areas for GCAD.

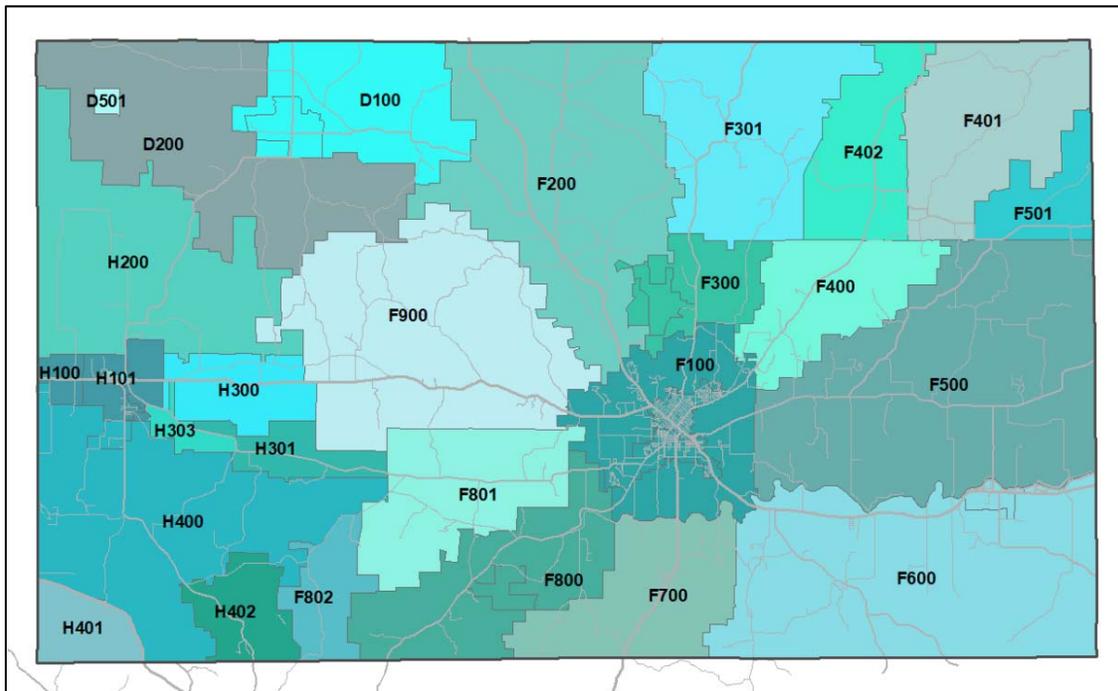
SUBSET	DESCRIPTION	GENERAL AREA
BR	Boot Ranch	Boot Ranch golf course community
C16S	City South along Hwy 16	Primarily commercial along Kerrville highway
CCC	City Central Center	Downtown CBD
CCE	City Central East	Downtown CBD east
CCW	City Central West	Downtown CBD west
CE	City East	Residential east part of town
CN	City North	North part of town on Hwy 16 N
CNC	City North Central	Residential older part of central town
CNE	City Northeast	Residential northeast part of town
CNW	City Northwest	Residential northwest part of town
CS	City South	Residential between Hwy 16 and 87
CSE	City Southeast	Residential between Hwy 87 S and 290 E
CSW	City Southwest	Residential South west of Hwy 16 S
DOSS	Doss	Unincorporated community of Doss
E	East of City, close in	ETJ between Hwy 16 N and 290 E
HARP	Harper	Unincorporated community of Harper
N	North of City, close in	ETJ area between Hwy 87 N and 16 N
NW	Northwest of City, close	German Emigrant Outlots between Hwy 87 N and 290 W
S	South of City, close in	ETJ to river between Hwy 16 S and 290 E
SB	Snaffle Bit	Multiple ranch tracts originally Snaffle Bit Ranch
SW	Stonewall	Unincorporated community of Stonewall
W	West of City, close in	German Emigrant Outlots between 290 W and 16 S





Neighborhoods

Neighborhoods are the most precise or refined market area the CAD utilizes. They are typically divided into two categories, rural abstract land and subdivisions. There are 27 rural abstract land neighborhoods. Each of these neighborhoods is analyzed annually for sales ratio analysis and these Neighborhoods are also utilized for allocating property inspections. In addition to the rural abstract land neighborhoods each recorded and most unrecorded subdivisions are coded with a neighborhood code. Each of these neighborhoods is analyzed annually for sales ratio analysis and these Neighborhoods are also utilized for allocating property inspections. The following table and maps indicate the Subset market areas for GCAD.



PERFORMANCE TEST

The chief appraiser and deputy chief appraiser are responsible for conducting ratio studies and comparative analysis. Ratio studies are conducted on property located within certain neighborhoods or districts by appraisal staff. The sale ratio and comparative analysis of sale property to appraised property forms the basis for determining the level of appraisal and market influences and factors for the neighborhood. This information is the basis for updating property valuation for the entire area of property to be evaluated. Field appraisers, in many cases, may conduct field inspections to insure the accuracy of the property descriptions at the time of sale for this study. This inspection is to ensure that the ratios produced are accurate for the property sold and that appraised values utilized in the study are based on accurate property data characteristics observed at the time of sale. Also, property inspections are performed to discover if property characteristics had changed as of the sale date or subsequent to the sale date. Sale ratios should be based on the value of the property as of the date of sale not after a subsequent or substantial change was made to the property after the negotiation and agreement in price was concluded. Properly performed ratio studies are a good reflection of the level of appraisal for the district.

Ratio Studies

Ratio studies are conducted by the appraisal staff to determine the accuracy of appraisals to market value. A ratio study compares the appraised value to market value. Typically, a sample of properties is compared to sales of comparable property. In some instances, independent appraisals are compared to the district's appraised values of like property. To compute this ratio the following formula is utilized:

$$\text{Appraised Value} / \text{Market Value} = \text{Ratio}$$

The district is required to appraise most properties at 100% of market value. There are several exceptions, such as agricultural productivity value.

In addition to the CAD preparing its own multiple "in house" ratio studies, the district is independently audited biennially by the Texas Comptroller's Property Tax Assistance Division. According to their Property Value Study results the district has historically been appraising property district wide within the required ratio range.

Appraisal Uniformity

Appraisal uniformity is a measure of appraisal consistency and equity. Appraisal uniformity is used to gauge ratio study performance. According to the International Association of Assessing Officers (IAAO), the Coefficient of Dispersion (COD) is the most used measure of uniformity in ratio studies. The COD measures the average percentage deviation of the ratios from the median ratio and it is expressed as a percentage. Low COD's tend to be associated with good appraisal uniformity. The IAAO has set standards for COD's based on the type of property in the ratio study.

The formula for computing the COD is as follows:

$$(\text{Average Absolute Deviation}) / (\text{Median assessment} / \text{sale price}) \times 100 = \text{COD}$$

$$(\text{AAD} / \text{Median A/S}) \times 100 = \text{COD}$$

The IAAO standards are as follows:

<u>Type of Property</u>	<u>COD</u>
Single-family residential	
Newer, more homogenous areas	10.0 or less
Older, more heterogeneous areas	15.0 or less
Rural, residential and seasonal	20.0 or less
Income-producing properties	
Larger, urban jurisdictions	15.0 or less
Smaller, rural jurisdictions	20.0 or less
Vacant land	20.0 or less

The district receives COD's as part of the Property Value Study conducted independently by the PTD as well as reviewing COD levels on ratio studies on a regular basis.

MASS APPRAISAL SYSTEM

The district has been operating True Automation's PACS appraisal software previously mentioned since 2007. PACS enables the efficient entry, analysis and export of appraisal data. All computer forms and procedures in PACS are reviewed and revised as required. The following details these procedures as it relates to the 2019 and 2020 tax years.

Real Property Valuation

Revisions to cost models, income models, and market models are specified, updated and tested each tax year. Cost schedules are tested with market data (sales) to ensure that the appraisal district complies with Texas Property Tax Code, Section 23.011. Replacement cost new tables as well as depreciation tables are tested for accuracy and uniformity using ratio study tools and comparing cost data from recognized industry leaders, such as Marshall & Swift.

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

Income, expense, and occupancy data is updated in the income models for each market area and cap rate studies are completed using current sales data. The resulting models are tested using ratio study tools.

Personal Property Valuation

Appraisals and schedules are updated using data received from renditions, discovery, and Appraisal Review Board hearing documentation. Valuation procedures are reviewed, modified as needed, and tested.

Notice Process

Notices of Appraised Value (Tax Code, Section 25.19) are reviewed and edited for updates and changes approved by the chief appraiser. Updates include the latest version of the Comptroller's *Property Tax Remedies*.

Hearing Process

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

DATA COLLECTION REQUIREMENTS

Field and office procedures are reviewed and revised as required for data collection. Activities scheduled for each tax year include inspections of new construction, demolition, or remodeling; re-inspection of changing market areas; and physical re-inspection of the universe of properties on a specific cycle (4-6 years).

New Construction / Demolition

New construction field and office review procedures are identified and revised as required. Field production standards are established and procedures for monitoring tested. Source of building permits is confirmed and system input procedures are identified. Process of verifying demolition of improvements is specified. This critical annual activity is projected and entered on the key events calendar for each tax 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 finalized in the valuation modeling. This field activity when entered in the key events calendar must be monitored carefully.

Re-Inspection of Changing Market Areas

Real property market areas, by property classification, are tested for: low or high protest volumes; low or high sales ratios; or high coefficient of dispersion. Market areas that fail any or all of these tests are determined to need reappraisal. Field reviews are scheduled to verify and/or correct property characteristic data. Additional sales data is researched and verified. In the absence of adequate market data, neighborhood delineation is verified and neighborhood clusters are identified.

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 captured. The sales ratio tools require that the property that sold must equal the property appraised in order that statistical analysis results will be valid.

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

VALUATION BY PROPERTY TYPE

The district is required to categorize property according to the Comptroller's rules on property classification. The following table is a summary of the district's property types at 2018 Certification.

Category	Description	No. of Accts / Units	Market Value
A	Residential Real, Single Family	6,925	\$ 1,772,402,257
B	Residential Real, Multi Family	91	\$ 39,222,944
C	Real, Vacant Platted Lots	1,021	\$ 92,147,452
D1	Qualified Ag Land	638,976.753 acres	\$ 4,053,726,613
D2	Improvements on Qualified Agriculture Land	3,349	\$ 46,676,046
E	Rural, Non-Qualified Open Space Land	16,389.109 acres	\$ 1,561,195,893
F	Real, Commercial and Industrial	1,726	\$ 813,031,117
G	Real, Oil, Gas, and Minerals	4	\$ 0
J	Real and Personal Utilities	183	\$ 78,218,210
L	Business Personal Property	3,148	\$ 186,043,120
M	Personal Other	348	\$ 16,083,990
O	Real, Inventory	114	\$ 7,658,290
S	Special Inventory	16	\$ 5,102,600
X	Exempt	1,360	\$ 277,104,950
Total			\$ 8,948,613,482

Residential Real, Improved and Vacant (Cat A, B, C, D, E)

Cost Schedules

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

A review of the residential cost schedule is performed annually. As part of this review and evaluation process of the estimated replacement cost, newly constructed sold properties representing various levels of quality of construction in district are considered. The property data characteristics of these

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

Sales Information

A sales file for the storage of sales data at the time of sale is maintained for real property. Residential improved and vacant land sales, along with commercial improved and vacant land sales are maintained in a sales information system. Residential improved and vacant sales are collected from a variety of sources including CAD questionnaires sent to buyer and seller, field discovery, protest hearings, builders, and real estate professionals. A system of type, source, validity and verification codes has been established to define salient facts related to a property's purchase or transfer and to help determine relevant market sale prices. Neighborhood sales ratio reports are generated as an analysis tool for the appraiser in the development and estimation of market price ranges and property component value estimates. Abstraction and allocation of property components based on sales of similar property is an important analysis tool to interpret market sales under the cost and market approaches to value. These analysis tools help determine and estimate the effects of change, with regard to price, as indicated by sale prices for similar property within the current market.

The effect of time as an influence on price is considered by paired comparison and applied in the ratio study to the sales as indicated within each neighborhood area. When the sales market is strong the district might need to use monthly time adjustments. Adjustments are estimated based on comparative analysis using paired comparison of sold property. Sales of the same property were considered and analyzed for any indication of price change attributed to a time change or influence. Property characteristics, financing, and conditions of sale were compared for each property sold in the pairing of property to isolate only the time factor as an influence on price.

Statistical Analysis

The chief appraiser performs statistical analysis annually to evaluate whether estimated values are equitable and consistent with the market. Ratio studies are conducted on each of the residential valuation neighborhoods in the district to judge the two primary aspects of mass appraisal accuracy--level and uniformity of value. Appraisal statistics of central tendency generated from sales ratios are evaluated and analyzed for each neighborhood. The level of appraised values is determined by the weighted mean ratio for sales of individual properties within a neighborhood, and a comparison of neighborhood weighted means reflect the general level of appraised value between comparable neighborhoods.

The chief appraiser, through the sales ratio analysis process, reviews every neighborhood annually. The first phase involves neighborhood ratio studies that compare the recent sales prices of neighborhood properties to the appraised values of these sold properties. This set of ratio studies affords the appraiser an excellent means of judging the present level of appraised value and uniformity of the sales. The appraiser, based on the sales ratio statistics and designated parameters for valuation update, makes

a preliminary decision as to whether the value level in a neighborhood needs to be updated or whether the level of market value in a neighborhood is at an acceptable level.

Market and Cost Reconciliation and Valuation

Neighborhood analysis of market sales to achieve an acceptable sale ratio or level of appraisal is also the reconciliation of the market and cost approaches to valuation. Market factors are developed from appraisal statistics provided from market analyses and ratio studies and are used to ensure that estimated values are consistent with the market and to reconcile cost indicators. The district's primary approach to the valuation of residential properties uses a hybrid cost-sales comparison approach. This type of approach accounts for neighborhood market influences not particularly specified in a purely cost model.

When the appraiser analyzes a neighborhood, the appraiser reviews and evaluates a ratio study that compares recent sales prices of properties, appropriately adjusted for the effects of time, within a delineated neighborhood, with the value of the properties based on the estimated depreciated replacement cost of improvements plus land value. The calculated ratio derived from the sum of the sold properties' estimated value divided by the sum of the time adjusted sales prices indicates the neighborhood level of appraisal based on sold properties. This ratio is compared to the acceptable appraisal ratio, 95% to 105%, to determine the level of appraisal for each neighborhood. If the level of appraisal for the neighborhood is outside the acceptable range of ratios, adjustments to the neighborhood are made.

Commercial and Industrial Real Property (Cat F)

This mass appraisal assignment includes all of the commercially described real property which falls within the responsibility of the GCAD and is located within the boundaries of the district's jurisdiction. Appraisers appraise properties at market value according to statute. However, appraisers take in to consideration the effect of easements, restrictions, encumbrances, leases, contracts or special assessments that may affect value. These are considered on an individual basis, as is the appraisal of any non-exempt taxable fractional interests in real property (i.e. certain multi-family housing projects). Fractional interests or partial holdings of real property are appraised in fee simple for the entire property as a whole and divided programmatically based on their prorated interests.

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

PRELIMINARY ANALYSES

Market Study

Market studies are utilized to test new or existing procedures or valuation modifications in a limited sample of properties located in the district and are also considered and become the basis of updating whenever substantial changes in valuation are made. These studies target certain types of improved property to evaluate current market prices for rents and for sales of commercial and industrial real property. These comparable sale studies and ratio studies reveal whether the valuation system is

producing accurate and reliable value estimates or whether procedural and economic modifications are required. The appraiser implements this methodology when developing cost approach, market approach, and income approach models.

The GCAD coordinates its discovery and valuation activities with adjoining appraisal districts. Field trips, interviews and data exchanges with adjacent appraisal districts have been conducted to ensure compliance with state statutes. In addition, Gillespie CAD administration and personnel interact with other assessment officials through professional trade organizations including the International Association of Assessing Officers (IAAO), Texas Association of Appraisal Districts (TAAD), the Texas Association of Assessing Officers (TAAO), and the Texas Rural Chiefs Appraisers, Inc (TRCA). District staff strives to maintain appraisal skills and professionalism by continuing education in the form of courses that are offered by several professional associations such as IAAO, TAAO, and TAAD. District staff also attends seminars and webinars conducted by the Texas Comptroller's Property Tax Assistance Division.

Land Value

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

Area Analysis

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

Neighborhood Analysis

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

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

and capitalization rates by age within each economic area for all commercial use types and its corresponding income model have been estimated for these properties.

Highest and Best Use Analysis

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

Market Analysis

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

DATA COLLECTION / VALIDATION

Sources of Data

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

Cost Schedules

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

Evaluating market sales of newly developed improved property is an important part of understanding total replacement cost of improvements. What total costs may be involved in the development of the property, as well as any portion of cost attributed to entrepreneurial profit can only be revealed by market analysis of pricing acceptance levels. In addition, market related land valuation for the underlying land value is important in understanding and analyzing improved sales for all development

costs and for the abstraction of improvement costs for construction and development. Time and location modifiers are necessary to adjust cost data to reflect conditions in a specific market and changes in costs over a period of time. Because a national cost service is used as a basis for the cost models, location modifiers and estimates of soft cost factors are necessary to adjust these base costs specifically for various types of improvements located in Gillespie County. Thusly, local modifiers are additional cost factors applied to replacement cost estimated by the national cost service. Estimated replacement cost new will reflect all costs of construction and development for various improvements located in Gillespie CAD as of the date of appraisal.

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

Additional forms of depreciation such as external and/or functional obsolescence can be applied if observed. A depreciation calculation override can be used if the condition or effective age of a property varies from the norm by appropriately noting the physical condition and functional utility ratings on the property data characteristics. These adjustments are typically applied to a specific condition adequacy or deficiency, property type or location and can be developed via ratio studies or other market analyses. The result of estimating accrued depreciation and deducting that from the estimated replacement cost new of improvements indicates the estimated contributory value of the improvements. By adding the estimated land value, as if vacant, to the contributory value of the improvements indicates a property value by the cost approach. Given relevant cost estimates and market related measures of accrued depreciation, the indicated value of the property by the cost approach becomes a very reliable valuation technique.

Income Models

The income approach to value is applied to those real properties which are typically viewed by market participants as “income producing” and for which the income methodology is considered a leading value indicator. The first step in the income approach pertains to the estimation of market rent on a per unit basis. This is derived primarily from actual rent data furnished by property owners and from local market surveys conducted by the district and by information from area rent study reviews. This per unit rental rate multiplied by the number of units results in the estimate of potential gross rent.

A vacancy and collection loss allowance is the next item to consider in the income approach. The projected vacancy and collection loss allowance is established from actual data furnished by property owners and local market survey trends. This allowance accounts for periodic fluctuations in occupancy, both above and below an estimated stabilized level. This feature may also provide for a reasonable lease-up period for multi-tenant properties, where applicable. The market derived stabilized vacancy

and collection loss allowance is subtracted from the potential gross rent estimate to yield an indication of estimated annual effective gross rent to the property.

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

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

Another form of allowable expense is the replacement of short-lived items (such as roof or floor coverings, air conditioning or major mechanical equipment or appliances) requiring expenditures of lump sum costs. When these capital expenditures are analyzed for consistency and adjusted, they may be applied on an annualized basis as stabilized expenses. When performed according to local market practices by commercial property type these expenses, when annualized, are known as replacement reserves. For some types of property typical management does not reflect expensing reserves and is dependent on local and industry practices.

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

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

Capitalization analysis is used in the income approach models to form an indication of value. This methodology involves the direct capitalization of net operating income as an indication of market value for a specific property. Capitalization rates applicable for direct capitalization method and yield rates for estimating terminal cap rates for discounted cash flow analysis are derived from the market. Sales of improved properties from which actual income and expense data are obtained provide a very good

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

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

Sales Comparison (Market) Approach

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

Final Valuation Schedules

Based on the market data analysis and review discussed previously in the cost, income and sales approaches, the cost and income models are calibrated and finalized. The calibration results are keyed to the schedules and models in the PACS system for utilization on all commercial properties in the district. Market factors reflected within the cost and income approaches are evaluated and confirmed based on market sales of commercial and industrial properties. The appraisers review the cost, income, and sales comparison approaches to value for each of the types of properties with available sales information. The final valuation of a property is estimated based on reconciling these indications of value considering the weight of the market information available for evaluation and analysis in these approaches to value.

Statistical and Capitalization Analysis

Statistical analysis of final values is an essential component of quality control. This methodology represents a comparison of the final value against the standard and provides a concise measurement of the appraisal performance. Statistical comparisons of many different standards are used including sales

of similar properties, the previous year's appraised value, audit trails, value change analysis and sales ratio analysis.

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

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

Potential gross rent estimates, occupancy levels, secondary income, allowable expenses, net operating income and capitalization rate and multipliers are continuously reviewed. Income model estimates and conclusions are compared to actual information obtained on individual commercial and industrial income properties during the protest hearings process, as well as with information from published sources and area property managers and owners.

INDIVIDUAL VALUE REVIEW PROCEDURES

Field Review

The date of last inspection, extent of that inspection, and the Gillespie CAD appraiser responsible are listed in the CAMA system. If a property owner disputes the GCAD's records concerning this data in a protest hearing, PACS data and values may be altered based on the credibility of the evidence provided. Normally, a new field check is then requested to verify this information for the current year's valuation or for the next year's valuation. In addition, if a building permit is filed for a particular property indicating a change in characteristics, that property is added to a work file for review.

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

Office Review

Office reviews are completed on properties subject to field inspections and are performed in compliance with the guidelines required by the existing classification system. The appraiser may review methodology for appropriateness to ascertain that it was completed in accordance with USPAP or more stringent statutory and district policies. This review is performed after preliminary ratio statistics have been applied. If the ratio statistics are generally acceptable overall the review process is focused primarily on locating skewed results on an individual basis. Previous values resulting from protest hearings are individually reviewed to determine if the value remains appropriate for the current year based on market conditions. Once the appraiser is satisfied with the level and uniformity of value for each commercial property within their area of responsibility the estimates of value are considered finished and are ready to be sent in the Notice of Appraised Value. Each parcel is subjected to the value parameters appropriate for its use type.

Performance Tests

The primary tool used to measure mass appraisal performance is the ratio study. A ratio study compares appraised values to market prices. In a ratio study, market values (value in exchange) are typically represented with the range of sale prices, i.e. a sales ratio study. Independent, expert appraisals may also be used to represent market values in a ratio study, i.e. an appraisal ratio study. If there are not enough examples of market price to provide necessary representativeness, independent appraisals can be used as indicators for market value. This can be particularly useful for commercial or industrial real property for which sales are limited. In addition, appraisal ratio studies can be used for properties statutorily not appraised at market value, but reflect the use-value requirement.

Sales Ratio Studies

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

Comparative Appraisal Analysis

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

VALUATION BY PROPERTY TYPE (NON-RESIDENTIAL, NON-COMMERCIAL)

Mineral Properties (Cat G) and Utilities (Cat J)

Gillespie CAD has a minimal number of mineral properties. Minerals and utilities will be contacted out to an outside appraisal firm to appraise these properties for 2019 and 2020.

Business Personal Property (Cat L)

NAICS Code Analysis

Business personal property is classified by numeric codes called the North American Industry Classification System (NAICS, pronounced Nakes) codes that were developed by the federal government to describe property. These classifications are used by Gillespie CAD to classify personal property by business type. NAICS code identification and delineation is the cornerstone of the personal property valuation system at the district. All of the personal property analysis work done in association with the personal property valuation process is NAICS code specific. NAICS codes are delineated based on observable aspects of homogeneity and business use.

Sources of Data

The district's property characteristic data was collected through a field collection effort coordinated by the district over the recent past and from property owner renditions. Annual reevaluation activities permit district appraisers to collect new data via field and/or office field inspections. This project results in the discovery of new businesses, changes in ownership, relocation of businesses, and closures of businesses not revealed through other sources. County Clerk records, state sales tax lists, local advertisements, internet searches, and the public often provide the district information regarding new personal property and other useful facts related to property valuation.

Vehicles

The Texas Department of Transportation (TxDOT) Title and Registration Division records provide Gillespie CAD with a listing of vehicles registered within the jurisdiction.

Leased and Multi-Location Assets

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

Cost Schedules

Cost schedules are developed based on the NAICS code by the Property Tax Assistance Division of the Comptroller's Office and by the district's personal property appraiser. The cost schedules are developed by analyzing cost data from property owner renditions, hearings, state schedules, and published cost guides. The cost schedules are reviewed as necessary to conform to changing market conditions. The schedules are typically in a price per square foot format, but some exception NAICS codes are in an alternate price per unit format, such as per room for hotels.

Statistical Analysis

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

Depreciation Schedule and Trending Factors

Gillespie CAD's primary approach to the valuation of business personal property is the cost approach. The replacement cost new (RCN) is either developed from property owner reported historical cost or from CAD developed valuation models. The trending factors used by the CAD to develop RCN are based on published valuation guides. The percent good depreciation factors used by Gillespie CAD are also based on published valuation guides.

Real Property Inventory (Cat O)

Certain residential property that is being held for resale can qualify for a special valuation. This property is typically vacant residential lots that are held by a developer for sale. However, a speculative home being held by a homebuilder can also qualify under certain restrictions. An example of this discount might be a builder purchasing several lots within a subdivision could expect a "bulk discount" from the developer for purchasing several lots.

In arriving at a value for special inventory, a discounted cash flow analysis utilizing actual comparable lot sales, and projected holding periods, is prepared by the chief appraiser.

Special Inventory (Cat S)

The property tax code has a provision for special valuation of vehicle, trailer, and manufactured housing dealer inventory. The district utilizes the formula as set forth in the Property Tax Code for qualified properties.

PLANNING AND ORGANIZATION

Target Dates for 2019 and 2020

Mail Agricultural – Use Application resets	January 31
Mail Homestead and Exemption resets	January 31
Appraisal Field work completed	March 31
Generate Notices for Printing	May 1
Mail Notices of Appraisal Value	May 15
Appraisal Review Board Begins	June 18
Appraisal Review Board approve records	July 17
Chief Appraiser certify Appraisal Roll	July 24
Begin Next Year's Field work	August 1
Mail Wildlife Management Annual Reports (for current year)	December 1
Mail BPP Renditions (for following year)	December 31

Calendar of Appraisal Events for 2019 Tax Year

	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19
Update GIS Map														
Discover and Enter Sales Information														
Update Ownership Due to Sale or Transfer of Properties														
Mail Sales Letters to Grantors and Grantees														
New Subdivisions - Account Creation and Valuation														
Account Splits and Merges														
Research Income and Expense Data for Commercial Income Approach														
Land Analysis and Valuation														
Correction Hearings with ARB														
Notices of Appraised Value Mailed														
Taxing Unit Estimates of Value Delivered														
Current Year Staff Review/Informal Reviews														
Current Year ARB Hearings														
Entity Values Certified														
Discovery of New Construction														
Inspections for New Construction/Value Review														
Inspections for City and Septic Permits														
Inspections/Reinspections for All Other Reasons														
Inspection/Reinspection for Sales Validation														
Inspections for Areas from Ratio Studies/Value Review at Neighborhood Level														
P.P. Inspection and Discovery														
P.P. Discover/Research New Businesses and Assumed Names														
Mail PP Renditions														
Mail PP Vendor and Tenant Letters														
PP Rendition Review/Finalize Values														
Mail PP Penalty Letters														
Open-space appraisal field review														
Wildlife management annual reports reviewed														
Open-space appraisal reapplication letters mailed														
Open-space appraisal applications inspected														

Calendar of Appraisal Events for 2020 Tax Year

	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20
Update GIS Map	Blue													
Discover and Enter Sales information	Blue													
Update Ownership Due to Sale or Transfer of Properties	Blue													
Mail Sales Letters to Grantors and Grantees	Blue													
New Subdivisions - Account Creation and Valuation														
Account Splits and Merges	Blue													
Research Income and Expense Data for Commercial Income Approach														
Land Analysis and Valuation														
Property Value Study Appeal, if necessary														
Prior Year Correction Hearings with ARB														
Notices of Appraised Value Mailed														
Taxing Units Value Estimates Distributed														
Current Year Staff Review/Informal Reviews														
Current Year ARB Hearings														
Entity Values Certified														
Discovery of New Construction	Red													
Review of Pictometry Changefinder														
Inspections Determined by Pictometry														
Inspections for New Construction/Value Review														
Inspections for City and Septic Permits														
Inspections/Reinspections for All Other Reasons														
Inspection/Reinspection for Sales Validation														
Inspections for Areas from Ratio Studies/Value Review at Neighborhood Level														
PP Inspection and Discovery														
PP Discover/Research New Businesses and Assumed Names														
Mail PP Renditions														
Mail PP Vendor and Tenant Letters														
PP Rendition Review/Finalize Values														
Mail PP Penalty Letters														
Open-space appraisal field review														
Wildlife management annual reports reviewed														
Open-space appraisal reapplication letters mailed														
Open-space appraisal applications inspected														

LIMITING CONDITIONS

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

1. The appraisals were prepared exclusively for ad valorem tax purposes.
2. The property characteristic data upon which the appraisals are based is assumed to be correct. Exterior inspections of the property appraised were performed as staff resources and time allowed. Some interior inspections of property appraised were performed at the request of the property owner and required by the district for clarification purposes and to correct property descriptions.
3. Validation of sales transactions was attempted through questionnaires to buyer and seller, telephone survey and field review. In the absence of such confirmation, residential sales data obtained from vendors was considered reliable.
4. I have attached a list of staff providing significant mass appraisal assistance to the person signing this certification.

CERTIFICATION STATEMENT

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



Scott Fair, RPA
Chief Appraiser

August 21, 2018

Date

Resolution 2018 - 4

The undersigned, being the Chairman and the Secretary of the Board of Directors of the Gillespie Central Appraisal District, certify that the foregoing is a true and correct record of a resolution passed by the Board of Directors of the Gillespie Central Appraisal District at a duly noticed and called meeting of the Board of Directors of the Gillespie Central Appraisal District on August 21, 2018.

APPROVAL OF THE 2019-2020 REAPPRAISAL PLAN

WHEREAS, Section 6.05 (i) of the Texas Property Tax Code requires that the Board of Directors of and appraisal district biennially approve a written plan for periodic reappraisal of all property within the boundaries of the district, according to Section 25.18 of the Texas Property Tax Code, and

WHEREAS, the Gillespie Central Appraisal District Board of Directors (GCAD BOD) has notified the presiding officer of the governing body of each taxing unit participating in the DISTRICT a written notice of the time, date, and place of the public hearing, and

WHEREAS, the GCAD BOD has held a public hearing on to consider any amendments to the written plan, and there were no amendments made to the written plan, and

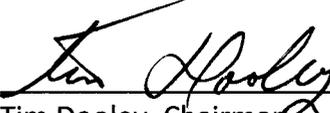
NOW THEREFORE, be it RESOLVED that the GCAD BOD adopts the written reappraisal plan.

RESOLVED FURTHER, that the CHIEF APPRAISER of the DISTRICT is authorized and directed to deliver copies of the approved written reappraisal plan in compliance with the remainder of Section 6.05(i) to the presiding officer of the governing body of each taxing unit participating in the DISTRICT and to the state comptroller of public accounts within 60 days of the approval date.

IN WITNESS WHEREOF, we have executed this Resolution this 21st day of August, 2018, in Fredericksburg, Texas.



Tony Klein, Secretary



Tim Dooley, Chairman