

Bandera Central Appraisal District



Reappraisal Plan

2021-2022

*Approved by the Bandera BOD
August 21, 2020*

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Addendum:

Hugh Landrum & Associates, Inc. 2021-2022 Mass Appraisal Methodology Manual & Reappraisal Plan

INTRODUCTION

Scope of Responsibility

The Bandera Central Appraisal District (Bandera CAD) has prepared and published this reappraisal plan as required under Section 6.05 (i) and Section 25.18 of the Texas Property Tax Code (Tax Code). This report is intended to provide our Board of Directors, property owners and taxing entities with a complete understanding of the district's responsibilities and activities.

The Bandera CAD is a political subdivision of the State of Texas, created effective January 1, 1980. The provisions of the Texas Property Tax Code govern the legal, statutory, and administrative requirements of the appraisal district. A seven-member Board of Directors, appointed by the taxing units within the boundaries of Bandera County, constitutes the district's governing body. This board is comprised of six members elected by the taxing entities it serves and the County Tax Assessor/Collector as a non-voting member. The Board of Directors appoints the Chief Appraiser, who serves as the chief administrator and executive officer of the appraisal district.

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

- Bandera County
- City of Bandera
- Bandera ISD
- Medina ISD
- Utopia ISD
- Northside ISD
- Bandera County Rivera Authority & Groundwater District
- Flying L Public Utility District
- ESD #1

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 based on 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.

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

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

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 (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 Sep 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. Appraised values are reviewed annually and are subject to change for purposes of equalization and maintaining market value. Business personal properties, minerals and utility properties are appraised every year.

Tax Code Requirement

The written biennial reappraisal plan is required by Texas Property Tax Code Section 6.05 (i) and it reads as follows:

- (i) To ensure adherence with generally accepted appraisal practices, the Board of Directors of an Appraisal District shall develop biennially a written plan for the periodic reappraisal of all property within the boundaries of the district according to the requirements of Section 25.18 and shall hold a public hearing to consider the proposed plan. Not later than the 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 of the hearing. Not later than September 15 of each even numbered year, the board shall complete its hearings, make any amendments, and by resolution finally approve the plan. Copies of the approved plan shall be distributed to the presiding officer of the governing body of each taxing unit participating in the district and to the comptroller within 60 days of the approval date.

The plan for periodic reappraisal is outlined in the Texas Property Tax Code Section 25.18 (a) and (b), and reads as follows:

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

PRELIMINARY ANALYSIS

Market Study

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

Bandera CAD 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, Bandera 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.

REAPPRAISAL DECISION

Pursuant to Sec. 25.18 of the Property Tax Code, the Appraisal District has established a reappraisal plan to provide for the reappraisal of all properties within the district at least once every three years. Ratio studies are performed annually to determine areas or categories of properties within the county that need to be reappraised within the current year based on sales ratios. Any area or category whose ratios are below statutory requirements shall be reappraised in the current year, regardless of the inspection area in which they are located.

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 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 Bandera CAD. 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 9 employees with the following classifications:

- 1 - Official/Administrator (executive level administration)
 - Chief Appraiser
- 2- Professional (supervisory and management)
 - Office Manager
 - Customer Service Manager/Exemption Specialist
- 4 - Technicians (appraisers)
- 2 - Administrative Support (professional, customer service, clerical and other)
 - Deed Abstractor/Exemption Specialist
 - Customer Service

CONTRACTED APPRAISAL FIRMS PROVIDING MASS APPRAISAL ASSISTANCE:

HUGH L. LANDRUM & ASSOCIATES, INC.
1110 NASA Parkway, Suite 400
Houston, Texas 77058

EAGLE PROPERTY TAX APPRAISAL & CONSULTING, INC.
PO Box 833 / 220 S Main
Jacksboro, Texas, 76458

Staff Education and Training

All personnel that are performing appraisal work are registered with Texas Department of Licensing and Regulation and are required to take appraisal courses to achieve the status of Registered Professional Appraiser within five years of employment as an appraiser. After they are awarded their certificate, appraisers must comply with continuing education rules as set out in the Texas Administrative Code Rule 94.25. Failure to meet these standards may result in progressive disciplinary action as outlined in Bandera CAD's Personnel Policy Manual and by the Texas Department of Licensing and Regulation.

Information System and Technology

The Bandera Central Appraisal District houses a secure server containing the appraisal records for the district. Multiple PC's in the appraisal office access this information. The District utilizes Harris Govern's PACS (Property Appraisal and Collection System) software application, which is accessed via Harris Govern through the Internet for software updates and modifications. This is a shared system with the Bandera County Tax Office. The server is located at the Appraisal District office and accessed by the tax office via wireless connection.

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.

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 (2020) for Bandera CAD is \$1,226,499.00 or \$34.81 per parcel. The 2021 and 2022 budgets have not been adopted as of the date this Reappraisal Plan was composed. The proposed 2021 budget is \$1,157,985.00 or \$32.87 per parcel.

Data Resources

The Appraisal District employs several methods of identifying properties that require inspection for the purpose of listing and appraising new improvements and updating relevant property characteristics. The primary sources of information used to identify those properties are as follows:

Building Permits

Building permits issued by the City of Bandera, electrical connection requests through the Bandera Electric Cooperative and well/septic permits issued by Bandera County. Copies of these permits are collected monthly and the applicable accounts are coded for inspection by an appraiser in PACS.

State & County Records

Ownership information, copies of plats and surveys, and DBA filings are obtained from deed records maintained in the Bandera County Clerk's office. Reports of mobile home movement information, ownership transfers and installation records are collected from the Texas Department of Housing and Community Affairs (TDHCA). Reports of recently assigned 911 addresses are collected from the Bandera County Rural Addressing Department. Certificates of Occupancy are collected from the City of Bandera. Sales Tax Permit reports and local hotel/motel occupancy tax reports are requested from the Texas Comptroller.

Renditions

Real Property Renditions, Business Personal Property Renditions, and Real Property Inventory Renditions are filed by property owners and reviewed annually. Monthly and annual vehicle declarations are submitted by local motor vehicle and equipment dealers. Unrecorded Contracts for Deed are provided by grantors and grantees of the transactions.

Sales

Property owner (buyer & seller) surveys, online sales listings, realtor reports, fee appraisals and MLS data provided by property owners are collected and processed as they are submitted.

Publications

The district subscribes to multiple resources for appraisal information. The following is a list of frequently used materials: Texas Hotel Performance Fact Book, Marshall Valuation Service, and the Motor Vehicle Registration by Just Texas.

PLANNING AND ORGANIZATION

Areas of Focused Reappraisal

The International Association of Assessing Officers, Standard on Mass Appraisal of Real Property, 4.8 - Frequency of Reappraisals, 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 and that current market value implies annual assessment of all property. Annual assessment does not necessarily mean that each property must be inspected each year. Physical reviews to correct data errors and property characteristics should be updated at least every 3 years. 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 2021 and 2022 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 2021 and begin field work for the identified properties in the fall of 2021. It is expected that the field work for this will continue into 2022.

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 2020 targeting properties for inspection. The listing will be generated by neighborhood. Inspections of these properties will begin in the fall of 2020 and it is anticipated that these inspections will continue through 2021.

The third area of targeted properties are properties that have been flagged for reinspection. Reasons for being flagged include 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 Frequency and Methodology

Residential Property

a. Single-Family Residences

Appraisals for single-family residences are derived by using the market sales approach as the model for valuation. The master residential valuation schedule is annually updated by collecting sales of residential properties for the prior 12 months. These confirmed sales are reviewed for validity and any sales that are considered non-market transactions are removed from the study. Examples of non-market transactions are foreclosure sales and transactions between friends and relatives.

All sales that have been evaluated and determined to be indicative of true market value transactions are then grouped according to the quality class that has been assigned to the residence. Once all sales are grouped, a sales ratio study is conducted for each quality group of sales. The sales ratio study is a simple and straightforward exercise in mathematics: the prior year appraisal for each individual property included in the study is divided by the sales price of that property. The result is a ratio expressed as a percentage. If the prior year appraisal is less than the sales price, then the result will be a percentage less than 100%. If the prior year appraisal is greater than the sale price, then the result will be a percentage greater than 100%. The purpose of the sales ratio study is to determine how accurately prior year appraisals reflect market values of the properties within the study.

Once all the ratios have been determined, an average and median ratio is calculated for each quality class. In addition, a weighted mean is calculated for each quality class as well as for the entire study. The weighted mean for a quality class is calculated by summing the appraisals for each property within each quality class, then summing the sales prices for the same properties and then dividing the first result by the second. The weighted mean for the entire study is calculated by summing the appraisals of all properties (regardless of class), then summing the sales price for all properties and then dividing the first result by the second.

The resulting statistics of average ratio, median ratio, and weighted mean ratios are then used to conclude the amount (on a percentage basis) that the master residential valuation schedule will be adjusted. The primary statistic that is used when arriving at this conclusion is the weighted mean for the entire study. If this weighted mean is less than 100%, then it can be concluded that market values are increasing, therefore, it is necessary to adjust the master residential valuation schedule upward in order to satisfy the statutory obligation to appraise properties at 100% of market value. If the weighted mean is greater than 100%, then it can be concluded that market values are decreasing, and it will be necessary to adjust the master residential valuation schedule downward. The master residential schedule is compared to the national pricing guide Marshall & Swift. Bandera CAD's pricing schedules must be within 10% of the indicated Marshall & Swift values.

Once the master residential valuation schedule is updated within the appraisal software, appraisals of single-family residences are updated based on the updated residential schedule values. Further appraisal analysis is then performed by neighborhood. This analysis is performed to “fine tune” the appraisals and to determine if properties within certain neighborhoods are selling at a premium or a discount when compared to the market as a whole. Neighborhood analysis is performed by conducting ratio studies within individual, predetermined neighborhoods. The results of the neighborhood ratio studies will aid in determining if the appraisals within the neighborhood need to be adjusted downward or upward. Whichever the conclusion, all appraisals within a neighborhood will receive a “mass adjustment” to increase or decrease the appraisal as deemed necessary from the results of the neighborhood ratio study.

b. Multi-Family Residential

For multi-family properties such as duplexes, fourplexes, and apartment complexes, the sales comparison appraisal model is used to arrive at an estimate of market value. However, when adequate sales are not available to derive reliable appraisals, additional appraisal models will be implemented. Since these types of properties are primarily owned for the purpose of income generation, the net income that a property produces is an indication of its value, therefore, the valuation methods within the income approach to value is often times used to determine the appraisal of the property. Lastly, if adequate sales or income information is not available, the cost approach to value will be implemented to arrive at an indication of property value.

Rural, Commercial & Platted Residential Land

Residential land is appraised as though vacant using the market sales approach as the appraisal model for valuation. The value of the land component of the total property appraisal is estimated based on available market sales for comparable and competing land under similar usage. A comparison and analysis of comparable land sales is conducted based on a comparison of land characteristics found to influence the market value of land located in the area or neighborhood. When necessary, the land appraisal is adjusted for specific factors and conditions that influence the value of the land. These factors include access, view, shape, size, topography, and the propensity to flood. When necessary, abstraction and allocation methods will be used to ensure that estimated land values reflect the contributory market value of the land to the overall property value.

According to accepted appraisal theory, only the income and sales comparison model are acceptable in determining market value of land. The cost approach is not appropriate and therefore is never used. The sales comparison approach is the most widely used method in determining market value, thus is the method that will be implemented to derive appraisals of all types of land. In instances where the sales comparison and income approach can be implemented, both methods will be used and the final assigned value will be determined by which value best describes the market value of the land considering the particular characteristics of the subject property.

Business Personal Property (non-industrial)

Several methods may be used in appraising market value for business personal property. Generally, the cost approach is used due to the availability of information. Available cost schedules and depreciation schedules will be used when appropriate by district appraisal staff to aid in developing valuations. These schedules are normally in a cost per square foot format; however, some industry schedules are in an alternate per unit format. The replacement cost new less depreciation (R.C.N.L.D.) can be developed from property owners reporting of historical acquisition cost or from a schedule developed by appraisal staff. As well, national valuation guides and actual sales information may be considered in the valuation process. The method used for this type of valuation is often determined by which method considers the most information for the property being appraised.

Commercial Real Property

Among the three approaches to value (cost, income, and market), industrial properties are most commonly appraised using replacement/reproduction cost new less depreciation models because of readily available cost information. If sufficient income or market data are available, those appraisal models may also be used.

Industrial, Utility, and Mineral Property (real and personal property)

An appraisal firm, contracted by Bandera CAD, is responsible for identifying property and updating information relating to existing accounts. Resources available for this process include those employed by Appraisal District personnel and as discussed in sections A-C. Additional resources include information and reports provided by various State and Federal regulatory agencies such as the Texas Railroad Commission, Texas Public Utility Commission and the Federal Communications Commission.

Target Dates for 2021 and 2022

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 01
Mail Notices of Appraisal Value	May 07
Appraisal Review Board Begins	June 07
Appraisal Review Board approve records	July 18
Chief Appraiser certify Appraisal Roll	July 24
Begin Next Year’s Field work	August 01
Mail Wildlife Management Annual Reports (for current year)	December 01
Mail BPP Renditions (for following year)	January 04

MASS APPRAISAL SYSTEM

The district has been operating True Automation’s PACS appraisal software previously mentioned since 2006. 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 2021 and 2022 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 PROCEDURES

Residential & Commercial Property

Identifying and updating relevant characteristics of a property will be accomplished primarily through a physical inspection of the property. The inspecting appraiser will visit the property to collect relevant data about the property such as measurements of structures, construction type, quality of construction, completion of construction and physical deterioration, among other characteristics. The collection and recording of this data are done using standardized procedures outlined in Bandera CAD field appraisal manuals. The collected data is gathered by the inspecting appraiser, noted on field inspection sheets, or by using electronic field devices. This information is then entered or downloaded into the CAMA system.

In addition, a GIS system equipped with aerial photography encompassing all properties within the district is used as a tool in identifying improvements that are not currently accounted for in the appraisals of properties.

Rural, Commercial & Platted Residential Land

Physical characteristics that influence land value include size, shape, soil type and topographic features (including floodplain). Resources such as aerial photography, ownership maps, subdivision plats, surveys, NRCS soils maps, USGS topographic maps, and FEMA flood maps are referenced to obtain or verify information relating to these characteristics for specific properties.

Other conditions that influence value include location, access, frontage, and legal limitations such as zoning and easements. The resources listed above, along with street maps, zoning maps and ordinances, utility maps, deeds and other legal filings are used to identify and verify these conditions. In the appraisal process, appraisers, through sales analysis determine proper adjustments for the presence of such characteristics and conditions. The mapping resources discussed are integrated in the CAD's Geographic Information System (GIS). Identification of specific characteristics will be done through review of relevant documents (see Section I) or through field inspections. Updating this information is done using standardized procedures outlined in Bandera CAD appraisal manuals. The reviewing appraiser will document necessary information and either update or submit the changes to data entry personnel to update the electronic record of the subject property.

Business Personal Property

Field staff inspect assigned areas to identify new businesses or changes in the size and scope of existing businesses. Appraisal District personnel review local publications for advertisements and notices of grand openings or closures.

Which businesses or specific types of businesses that will be designated for inspection will be set out during development of the annual work plan for each year and will be determined using information obtained in the discovery process.

Identifying and updating relevant characteristics of the subject property is accomplished through the discovery (see Section I) and inspection processes. Information the appraiser must identify and verify include: the type of property; the category (i.e. inventory, furniture, fixtures, machinery, or equipment); quality; density; original costs; year acquired; age; condition; and life expectancy. The appraiser identifies any property located at the

business that does not belong to the business owner. If this property is taxable (reference sec. 11.01 & 11.14 PTC) the appraiser collects the pertinent information noted above, including the name and address of the owner of the property. The collection and recording of this data are done using standardized procedures outlined in Bandera CAD's Business Personal Property Manual.

Industrial, Utility, and Mineral Property (real and personal property)

The Industrial, Utility and Mineral appraisal firm contracted by Bandera CAD is responsible for updating and identifying relevant characteristics for this property type. Identifying and updating relevant characteristics of the subject property is accomplished through the discovery (see Section 1) and inspection processes. After the discovery, field and appraisal work is completed; the firm then manually enters the data into Bandera CAD's PACS database following procedures outlined in PACS and Bandera CAD manuals. Appraisal District personnel also randomly verify the contracted appraisal firm's work to verify accuracy as outlined in the utility contract.

PRODUCTION OF VALUES

Sources of Data

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

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 employ 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 Bandera 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 Bandera 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 are the next item to consider in the income approach. The projected vacancy and collection loss allowance is established from actual data furnished by property owners and 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 Bandera CAD appraiser responsible are listed in the CAMA system. If a property owner disputes the Bandera CAD'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.

PERFORMANCE TEST

Statistical Analysis

Appraisal District staff will perform statistical analysis annually to evaluate whether estimated values are equitable and consistent with the market. Sales ratio studies are conducted on each of the defined residential neighborhoods 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.

Through the sales ratio analysis process, appraisers will review neighborhoods 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, 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.

Review by Inspecting Appraiser

In addition to the above described process, appraisers will review when time permits, the results of any fieldwork that they had performed to determine if the resulting appraisal accurately describes the value of the property and make any necessary adjustments if deemed necessary.

In cases when multiple appraisal models are implemented, the appraiser considers the results that best address the individual characteristics of the subject property. Once the best result is determined, it is then entered as the appraisal for the given year.

Rural, Commercial & Platted Residential Land:

The appraiser considers results that best address the individual characteristics of the subject property when multiple appraisal models are used. Also, statistical analysis is performed when changes are made to the rural land schedules, the primary analysis tool being the ratio study.

Business Personal Property (non-industrial):

Appraisal District staff will perform analysis annually to determine if the estimated market values are equitable in the district. The Appraisal District staff will annually review SIC codes to determine equitable valuation of business personal property with similar business groupings. District staff will perform an office review, and accounts that fail tolerance parameters (which could include accounts with current rendition filings), accounts with field or data changes, accounts with hearings, new accounts, and cost schedule changes, will be the subject of this review.

DATA MAINTENANCE

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 (3 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 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

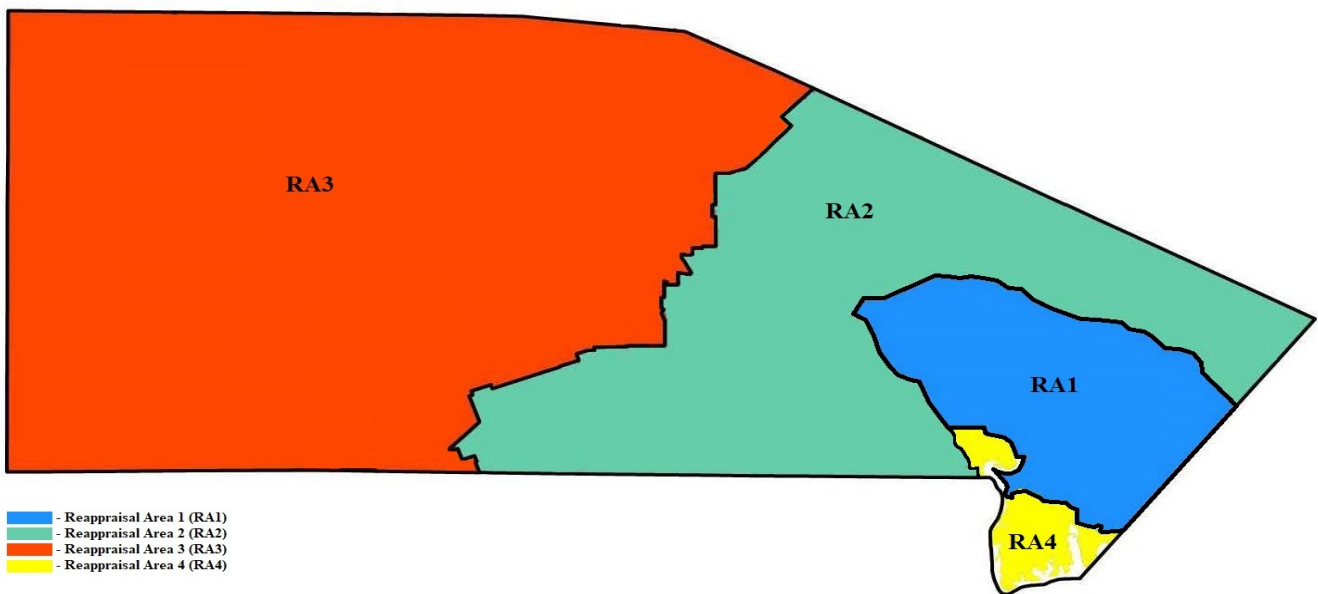
Sales information must be verified and property characteristic data contemporaneous with the date of sale captured. The sales ratio tools require that the property that sold must equal the property appraised in order that statistical analysis results will be valid.

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.

District Market Areas

Bandera CAD is divided into four inspection areas based on sales trends and defined market areas. Each area is assigned to an appraiser and that appraiser is responsible for appraising all real residential and commercial property. These Market Areas are identified as follows:

**Bandera Central Appraisal District
2021 - 2022 Reappraisal Area**



a. Reappraisal Area 1 (RA1): Estimated Parcel count: 7,953. Northside ISD (overlap) and Bandera ISD. Highway 16 and FM 1283 Commuter area – This is most of the area within Rural Land Area 4 and is comprised of the unincorporated area of Pipe Creek. It consists of small residential parcels scattered among larger parcel platted and un-un-platted subdivisions and rural land areas; this is a short commuting distance to and from the cities of San Antonio and Boerne. Land values are the highest in the county due to the easy commute distances, its views, and proximity to Medina Lake.

b. Reappraisal Area 2 (RA2): Estimated Parcel count: 9,654. Bandera ISD and County Seat. This is a portion of the Rural Land Areas 3 and 4. It is comprised of the incorporated City of Bandera. It consists of smaller city lots, rural plateau land, spring fed creeks, and the Medina River. This market area is active with residential properties selling at a steady pace along with larger ranches. Properties selling in this area indicate that properties with water influence sell for a much higher premium than properties which do not have water influence.

c. Reappraisal Area 3 (RA3): Estimated Parcel count: 6,675. Medina ISD and Utopia ISD (overlap). Typical Texas Hill Country – This is a portion of Rural Land Areas 1 and 3. It consists of hill country plateaus and higher elevations. Land in this area sells for less per acre; however, more acres are purchased at one time for a higher overall total. A portion of the unincorporated areas of Medina, Utopia and Tarpley are located within this area, as well as the headwaters of the Medina and Sabinal rivers and numerous spring fed creeks, which contribute to higher sales prices. Improvements are ranch-style older homes intermingled with new ranch-style, large square footage homes. Properties selling in this area are identified as larger ranches all with water influence. Properties that include the Medina River or Sabinal River are typically larger land sales.

d. Reappraisal Area 4 (RA4): Estimated Parcel count: 9,830. Includes Bandera ISD. Medina Lake area and FM 1283/FM 37 – This area is comprised of the unincorporated area of Lakehills, and Wharton’s Dock. It consists of small parcel lakefront lots, larger parcel subdivisions and rural land areas. Land values are the highest in the county due to the easy commute distances, its views, and proximity to Medina Lake and the Medina River. This market area has seen an increase in sales movement due to increased water levels during 2016-2017 at Medina Lake. As of June 2018, Medina Lake water levels have diminished to 54% full. Although the water levels are down properties continue to sell at increased asking prices.

Residential Property

When defining a market area for residential properties, the total boundaries of the Appraisal District can be considered one market. Further analysis will reveal that within the total market, submarkets exist as well. These submarkets can be defined as any group of properties that share common traits such as physical, economic, governmental, and social forces, all of which equally and consistently influence the value of each property within a given area. Generally speaking, these submarkets are more easily identified within the more densely populated areas of the district and are often referred to as neighborhoods. Identifying submarkets in the less densely populated areas of the district is not as easily accomplished.

In the more recently developed areas of the district, a neighborhood is defined as the boundary of a developed subdivision. Mass adjustments made to the appraisal of properties within a defined neighborhood are consistently and equally applied to each property within the defined neighborhood.

Rural, Commercial & Platted Residential Land

Market areas for land are defined by the highest and best use of the land. IAAO defines highest and best use as the use which will generate the highest net return to the property over a reasonable period of time. Some areas in the district are undergoing a change in the highest and best use of the land, particularly rural land that is in close proximity to the city of Bandera, Medina Lake, or areas within a close commute to San Antonio, Boerne, and Kerrville. In these areas, the highest and best use of land is changing from an agricultural or recreational use to residential and commercial use. The most rural areas of the County that historically have been strictly agricultural

use are changing to recreational uses. The presence of “live water” in the form of rivers and streams has the greatest influence on market value. Appraisers collect and analyze market data to detect changes in highest and best use and to define market areas.

As with residential properties, when defining a market area for rural, commercial, and platted residential lots, the total boundaries of the Appraisal District are normally considered as the larger market area. Again, with further analysis, submarkets will be apparent. Submarkets will be defined as any grouping of properties that have common identified characteristics which consistently influence the value of each property within a given area. Market areas for commercial properties are identified in the more densely populated areas and/or locations usually identified by locations on major thoroughfares which are considered strategic for commerce decisions. Market areas for platted residential land normally take on the boundaries of the platted subdivision. In some instances, similarly, situated subdivisions may be used as comparable market areas.

Business Personal Property

When defining a market area for business personal property, the boundary of the Appraisal District may be considered one market. When unique situations arise, widening the market area to the regional or state level can be justified. The market for business personal property is determined by the design and use of the property in question, thus the type of business for which the property can be utilized will determine the buyers and sellers of the property.

Industrial, Utility, and Mineral Property (real and personal property)

Market areas for utility and pipeline tend to be regional or national in scope. Financial analyst and investor services reports are used to help define market areas.

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 2020 Certification.

Category	Description	No. of Accts / Units	Market Value
A	Residential Real, Single Family	7,787	\$ 928,336,535
B	Residential Real, Multi Family	20	\$ 4,818,586
C	Real, Vacant Platted Lots	10,673	\$ 120,945,792
D1	Qualified Ag Land	6,687 – 430,043.354 acres	\$ 1,754,120,801
D2	Improvements on Qualified Agriculture Land	574	\$ 13,764,402
E	Rural, Non-Qualified Open Space Land	7,078 – 44,132.305 acres	\$ 1,100,242,341
F	Real, Commercial, and Industrial	611	\$ 146,328,507
G	Real, Oil, Gas, and Minerals	65	\$ 91,520
J	Real and Personal Utilities	165	\$ 37,971,740
L	Business Personal Property	1,241	\$ 31,007,710
M	Personal Other	964	\$ 33,641,515
O	Real, Inventory	146	\$ 1,531,332
S	Special Inventory	17	\$ 348,550
X	Exempt	866	\$ 219,770,947
Total		35,232	\$ 4,393,445,088

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. Bandera 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 Bandera 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, regarding 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 the commercially described real property which falls within the responsibility of the Bandera CAD and is located within the boundaries of the district's jurisdiction. Appraisers appraise properties at market value according to statute. However, appraisers take into 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.

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

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

Bandera CAD has a minimal number of mineral properties. Minerals and utilities will be contracted out to an outside appraisal firm to appraise these properties for 2021 and 2022.

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 Bandera CAD to classify personal property by business type. NAICS code identification and delineation are the cornerstone of the personal property valuation system at the district. All the

personal property analysis work done in association with the personal property valuation process is 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 Bandera 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

Bandera 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 Bandera 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.

Calendar of Appraisal Events for 2021 Tax Year

	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21
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														
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														

Calendar of Appraisal Events for 2022 Tax Year

	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22
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														
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														
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, Shawn Davis, chief appraiser for the Bandera 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."


Shawn Davis, RPA, CCA
Chief Appraiser

August 21, 2020
Date

Resolution 2020 - 4

The undersigned, being the Chairman and the Secretary of the Board of Directors of the Bandera Central Appraisal District, certify that the foregoing is a true and correct record of a resolution passed by the Board of Directors of the Bandera Central Appraisal District at a duly noticed and called meeting of the Board of Directors of the Bandera Central Appraisal District on August 21, 2020.

APPROVAL OF THE 2021-2022 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 Bandera Central Appraisal District Board of Directors (Bandera CAD 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 Bandera CAD 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 Bandera CAD 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 2020, in Bandera, Texas.



Bo Mansfield, Chairman



George Sharman, Secretary