



2023 Mass Appraisal Report

INTRODUCTION

The Brazos Central Appraisal District has prepared and published this report to provide our citizens and taxpayers with an explanation of the district's responsibilities and activities, and to comply with the Uniform Standards of Appraisal Practice (USPAP). This report has several parts: a general introduction and then several sections describing the appraisal activities of the appraisal district.

The Brazos Central Appraisal District (BCAD) is a political subdivision of the State of Texas created effective January 1, 1980. The Texas Property Tax Code governs the legal, statutory, and administrative requirements of the appraisal district. A board of directors, appointed by the taxing units that participate in BCAD, constitutes the district's governing body. The chief appraiser, who is appointed by the board of directors, acts as the chief executive officer of the appraisal district.

The appraisal district is responsible for all or part of local property tax appraisal and exemption administration for 15 taxing entities in the county. Each taxing entity, such as a county, city, school district, sets its own tax rate to generate revenue to pay for police and fire protection, public schools, road and street maintenance, courts, water and sewer systems, and other public services. Appraisals established by the appraisal district allocate the year's property tax burden based on each taxable property's January 1st market value. BCAD also administers various types of property tax exemptions such as those for homeowners, elderly residents, disabled veterans, and charitable and religious organizations.

The Texas Property Tax Code, Chapter 23 outlines appraisal methods and procedures that must be adhered to. It also defines special appraisal provisions for the valuation of residential homestead property, productivity value, also commonly referred to as agricultural value, real property inventory, dealer inventory, nominal value or restricted use properties and allocation of interstate property.

The owner of an inventory, other than a dealer's inventory, may elect to have the inventory appraised at its market value as of September 1st of the year proceeding the tax year to which the appraisal applies by filing an application with the chief appraiser requesting that the inventory be appraised as of September 1st.

The code also 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 all real property annually based on current market conditions with a physical inspection performed in three-year cycles. Business Personal Property is reviewed annually.

Appraisals are calculated using specific information about each property, using computer-assisted appraisal programs, and recognized appraisal methods and techniques. Analysis of data of similar properties with recent market data is typically utilized. 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 USPAP. In cases where the appraisal district contracts professional valuation services, the contract that is entered into by each appraisal firm requires adherence to the same professional standards.

Scope of Appraisal

The scope of the appraisal relates to the nature of the appraisal assignment and the extent of collecting, confirming, and reporting the data which provides the basis for the estimate of value.

The three generally accepted approaches to value are considered in estimating the market value of each property, with the most appropriate method given the greatest emphasis.

A market-based cost approach is considered the most appropriate for single family residential, owner-occupied commercial and manufactured housing since this method reflects the actions of buyers and sellers in the market. This approach is based on the principle that a buyer will not pay more for a property than the cost of acquiring a vacant site and constructing a substitute structure of comparable utility, assuming no costly delays in construction.

The sales comparison method is used for vacant lots and land because it reflects the actions of the marketplace. Since these properties typically do not produce an income the income approach to value is given minimal emphasis.

The income approach to value is heavily emphasized in revenue producing properties such as multifamily housing and tenant occupied commercial properties. The valuation of business personal property is done primarily by the cost approach, as there is limited market sales and income information available.

All appraisal estimates are made in compliance with requirements as provided in the Texas Property Tax Code. Additionally, appraisals are conducted utilizing the Brazos Central Appraisal District's internal appraisal policy and procedures manual.

This report is applicable to the following property types: single family residential, multifamily residential, vacant lots, vacant land, farm and ranch properties, commercial properties, industrial property, business personal property and manufactured housing. Complex properties such as oil and gas properties, utilities, and certain industrial properties are appraised by Capitol Appraisal Group, Inc.

The Assistant Chief Appraiser over value and litigation is responsible for overall planning, organizing, staffing, coordinating, and supervising appraisal activities. The appraisal staff is responsible for the data collections and valuation of all real and business personal property. Support staff functions include network support, record maintenance, and data entry, assisting property owners, as well as the administrative and appraisal staff as required.

Definition of Market Value

Except as otherwise provided by the Property Tax Code, all taxable property is appraised at its “market value” as of January 1st. Under the tax code, “market value” means 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 able to take advantage of the other.

In regard to inventory, held as a part of a business, Section 23.12(a) TPTC further provides, in part: “...the market value of an inventory is the price for which it would sell as a unit to a purchaser who would continue the business.”

Area Analysis

The subject properties are in Brazos County. Brazos County is situated in central Texas in a wedge created by the joining of the Brazos River and the Navasota River. The 2023 population for Brazos County is estimated to be 244,700. In 2020 the county population was 233,849 according to the census, indicating an approximate 4.5% growth in three years. The county contains two major cities, Bryan and College Station, often called the “Twin Cities”, are centrally located between Houston, Austin and Dallas. Texas A&M University, with a student body of 69,598 students, is in College Station and is a major influence on the entire area. In addition, Bryan is home to a regional campus for Blinn College, which serves an additional 6,100 students.

The area is characterized by gently rolling hills with a large amount of vegetation and trees with an average elevation of 200 - 350 feet above sea level and an average rainfall total of 39 inches per year. Following a brief recession period in the late 1980’s and early 1990’s, the area has experienced steady economic growth. There are ample cultural, musical and historical attractions in the area including the George Bush Presidential Library. With three major hospitals and the Scott and White Clinic located in Bryan/College Station the area is considered as a regional health center. Adequate ingress and egress to the area is provided by north-south running State Highway 6 and east-west running State Highway 21 as well as numerous secondary roads and highways. Transportation is additionally enhanced by Easterwood Airport, which offers commuter flights connecting to Houston, Austin and Dallas area airports. Additionally, the rail service provides for the transportation of goods to and from the area.

In general, the area is best described as urban and presents a healthy economy with a steady growth pattern.

Identification of Subject

All real property and all tangible personal property, unless specifically exempted, located within the boundaries of Brazos County.

Purpose and Intended Use of Appraisal

The purpose of this mass appraisal is to estimate the market value of all taxable property in an equitable and efficient manner for ad valorem tax purposes in accordance with law.

Legal Requirements

This mass appraisal is made within the provisions of the Texas Property Tax Code.

Personnel Resources

The Chief Appraiser is responsible for overall planning, organizing, staffing, coordinating, and controlling 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 business personal property accounts. The property types appraised include commercial, residential, business personal, land and agricultural use properties. The district's appraisers are subject to the provisions of the Property Taxation Professional Certification Act and must be registered with The Texas Department of Licensing and Regulation. Support functions including records maintenance, information and assistance to property owners, and hearings support are coordinated by the Tax Identification Department.

The appraisal district staff is identified in the current operating budget.

Identification of Properties

The descriptions of the properties included in this appraisal are included in detail within the appraisal records of the Brazos Central Appraisal District. These descriptions include, but are not limited to the legal description, situs location, ownership and detailed listing of the characteristics of the properties.

Property Rights to be Valued

The properties are appraised in fee simple interest. However, restrictions, easements, encumbrances, etc., are considered on an individual basis. Fractional interest or partial holdings are appraised in fee simple for the total property and divided proportionately based on the pro-rated interests.

Data Collection and Verification Resources

The Brazos Central Appraisal District is responsible for approximately 147,759 real property, personal property and mineral accounts covering approximately 591 square miles of within Brazos County. There are fifteen (15) taxing jurisdictions for which the BCAD provides property values. The appraisal records are maintained in an automated appraisal system. Property characteristic data is recorded for each property to be appraised. Resources for the

discovery, describing, and listing of property include, but are not limited to the following: field inspections by the appraisal staff, renditions, the deed records and assumed name certificates filed for record with the Brazos County Clerk's office, permit and plat records of the City of Bryan, the City of College Station and Brazos County, local fee appraisers, builders and realtors, and the maps, plats and other appraisal records of the BCAD.

Construction costs are gathered from all available sources including but not limited to the Marshall and Swift Valuation Service and local builders and developers for use in the cost approach to value.

Information for the sales comparison approach is gathered from properties within the appraisal district through the mailing of questionnaires to both the buyer and the seller of properties, by utilizing the local multiple listing services and all other available sources deemed reliable. Sales data is entered into the "Sales Module" of the appraisal software making it available for use by the appraisal staff and the administrative staff. The assistant chief appraiser reviews incoming sales data to identify and code non-market value transactions.

Rental rates, expenses and occupancy rates are gathered on income producing properties for use in the income approach to value through questionnaire mailings, owner filed property reports, and through contracted third-party resources. Income and expense information is entered into a spreadsheet database for each property and each property type for analysis and use by the commercial appraisers.

Information relating to business personal property is collected during the normal inspection process and through owner/agent supplied renditions and property reports.

General trends in new construction techniques, construction costs, interest rates and other pertinent data are gathered from various sources such as trade journals, Marshall and Swift valuation services, university real estate research centers and any other sources deemed appropriate and reliable.

Preliminary Analysis

Studies are conducted to determine the accuracy of schedules and procedures by comparing a sample group of properties to their appraised values prior to applying the schedules to all properties. Properties within the three-year cycle reappraisal area as well as properties undergoing physical changes were identified for physical inspection.

Neighborhood Analysis

Neighborhood analysis examines how economic, social, physical and governmental forces affect property values. The effects of these factors are used to identify neighborhoods. Properties whose values are influenced by the same economic, social, physical and governmental forces are grouped as neighborhoods. Included in neighborhood analysis is the consideration of patterns of

development and property use. Neighborhoods typically experience a three-stage cycle, with the first being the development stage, this is followed by a period of stability and eventually the neighborhood shifts to a stage of decline or transition.

Highest and Best Use

Highest and best use is the reasonably probable and legal use of vacant land or an improved property, which is physically possible, financially feasible, appropriately supported and results in the highest value for the property. In improved properties, the highest and best use determination of a site is made both as if the site is vacant and as is improved.

Analysis of the highest and best use of the subject properties typically indicates that the current use is the highest and best use. Demolition of an existing structure is typically not considered to be feasible as the return on the existing structure and land is usually greater than the return on the site as if vacant.

Data Collection/Validation

Properties are physically inspected on a three-year cycle. Appraisers perform visual reviews in a drive-by setting to confirm the characteristics of each property in the reappraisal area. If records indicate a physical change, such as an addition or remodeling, has been made to a property that is not in the reappraisal area an on-site inspection is made. In properties where physical data has been questioned or requires reviewing, the inspection may include confirming the dimensions of the structures and/or a complete interior and exterior inspection. The field appraiser determines the extent of the inspection. A walk-through inspection is made on all new construction if possible. Physical characteristics such as size, quality of construction, extent of detail and amenities are determined during these inspections. Additionally, size is confirmed through sources such as building permits, construction plans and realtor information. All available reliable resources are used in the pursuit of accurate characteristic data for each property.

In-house reviews of properties are made to ensure appropriate and equitable classification of properties. Further reviews are made to identify atypical properties in neighborhoods to ensure appropriate evaluations for each property. Values are reviewed for uniformity within neighborhoods.

Recently sold properties, with high variances from typical neighborhood sales ratios are site inspected to ensure proper classification and accurate characteristic descriptions prior to being used in ratio studies or being used to develop market value adjustment factors.

Office Review

Office reviews are completed on property where information has been received from the owner of the property. Data mailers, sent in mass, or telephone surveys, frequently verify information about groups of properties, including characteristics or current condition of the property. When the property data is verified in this manner, field inspections are not required.

PERFORMANCE TEST

The Assistant Chief Appraiser of Value, the land appraiser, and the lead appraisers are responsible for conducting ratio studies and comparative analysis. In many cases, appraisers may conduct field inspections to ensure the ratios produced are accurate and the appraised values utilized are based on accurate property data characteristics.

Depreciation

Depreciation is the loss in value from replacement cost new of an improvement or personal property item due to physical deterioration, functional obsolescence and/or economic obsolescence. Each property, during the on-site review process, is assigned a depreciation factor based on the physical condition of the property. Additional adjustments may be made to the property for functional or economic obsolescence if conditions so warrant. Personal property is depreciated using the age-life method based on typical economic life for each personal property component type.

Testing

Sales ratio studies are conducted to determine the accuracy of values in the reappraisal area. Further, additional studies are conducted for properties outside of the general reappraisal area to ensure that all property is taxed at its market value in accordance with requirements by the Texas Property Tax Code. Adjustments, if required, in non-reappraisal areas are typically made by market adjustment factors. Following adjustments, additional ratio studies are conducted to test the accuracy of the values. Ratio studies are conducted under IAAO standards, with key elements being median level of appraisal, the mean and weighted mean average level of appraisal, the coefficient of dispersion and the price related differential. Additional confirmation of schedules is obtained by comparison of values with valid fee appraisals submitted by property owners during the review process.

Residential Property

Residential Appraisal Resources

Scope of Responsibility

The Residential Appraisal Department is responsible for the discovery and valuation of residential improvements located in Brazos County in a fair and equitable manner. The department staffing levels are reflected in the current operating budget.

Land Appraisal Resources

Scope of Responsibility

The Land Appraisal Department is responsible for the valuation of all residential and commercial land located in Brazos County in a fair and equitable manner.

VALUATION APPROACH (Model Specification)

Area Analysis

Data on regional economic forces such as demographic patterns, regional 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 and provide the field appraiser a current economic outlook on the real estate market.

Neighborhood and Market Analysis

Neighborhood analysis involves the examination of how physical, economic, governmental and social forces, and other influences affect property values. The effects of these forces are also used to identify, classify, and stratify comparable properties into smaller, manageable subsets of the universe of properties known as neighborhoods. Residential valuation and neighborhood analysis are conducted on each of the political entities known as Independent School Districts (ISD).

The first step in neighborhood analysis is the identification of a group of properties that share certain common traits. A "neighborhood" for analysis purposes is defined as the largest geographic grouping of properties where the property's physical, economic, governmental and social forces are generally similar and uniform. Geographic stratification accommodates the local supply and demand factors that vary across a jurisdiction. Once a neighborhood has been identified, the next step is to define its boundaries. This process is known as "delineation." Some factors used in neighborhood delineation include location, sales price range, lot size, age of dwelling, quality of construction and condition of dwellings, square footage of living area, and story height. Delineation can involve the physical drawing of neighborhood boundary lines on a map, but it can also involve statistical separation or stratification based on attribute analysis. Part of neighborhood analysis is the consideration of discernible patterns of growth that influence a neighborhood's individual market. Few neighborhoods are fixed in character. Each neighborhood may be characterized as being in a stage of growth, stability or decline. The growth period is a time of development and construction. As new neighborhoods in a community are developed, they compete with existing neighborhoods. An added supply of new homes tends to induce population shift from older homes to newer homes. In the period of stability, or equilibrium, the forces of supply and demand are about equal. Generally, in the stage of equilibrium, older neighborhoods can be more desirable due to their stability of residential character and proximity to the workplace and other community facilities. The period of decline reflects diminishing demand or desirability. During decline, general property use may change from residential to a mix of residential and commercial uses. Declining neighborhoods may also experience renewal, reorganization, rebuilding, or restoration, which promotes increased demand and economic desirability.

Neighborhood identification and delineation is the cornerstone of the residential valuation system at the district. All the residential analysis work done in association with the residential valuation process is neighborhood specific. Neighborhoods are field inspected and delineated based on observable aspects of homogeneity. Neighborhood delineation is periodically reviewed to determine if further neighborhood delineation is warranted. Whereas neighborhoods involve similar properties in the same location, a neighborhood group is simply defined as similar neighborhoods in similar locations. Each residential neighborhood is assigned to a neighborhood group based on observable aspects of homogeneity between neighborhoods. Neighborhood grouping is highly beneficial in cost-derived areas of limited or no sales, or use in direct sales comparison analysis. Neighborhood groups, or clustered neighborhoods, increase the available market data by linking comparable properties outside a given neighborhood. Sales ratio analysis, discussed below, is performed on a neighborhood basis, and in soft sale areas on a neighborhood group basis.

Highest and Best Use Analysis

The highest and best use of property is the reasonable and probable use that supports the highest present value as of the date of the appraisal. The highest and best use must be physically possible, legally permitted, financially feasible, and productive to its maximum. The highest and best use of residential property is normally its current use. This is due in part to the fact that residential development, in many areas, through use of deed restrictions and zoning, precludes other land uses. Residential valuation undertakes reassessment of highest and best use in transition areas and areas of mixed residential and commercial use. In transition areas with ongoing gentrification, the appraiser reviews the existing residential property use and makes a determination regarding highest and best use. Once the conclusion is made that the highest and best use remains residential, further highest and best use analysis is done to decide the type of residential use on a neighborhood basis. In areas of mixed residential and commercial use, HJR 36 passed during the 2009 legislative session and the enabling constitutional amendment limits the appraisal of a residence homestead to its value as a residence homestead rather than at its highest and best use as commercial property.

VALUATION AND STATISTICAL ANALYSIS (Model Calibration)

Unit Price Schedules

All residential parcels in the district are valued from unit price schedules using a comparative unit method. The district's residential unit price schedules, originally adopted by Marshall Swift mass appraisal firm, have been customized by local market data to fit Brazos County's local residential building and labor market. The unit price schedules are reviewed periodically and adjusted to reflect the basic relationships between various qualities of improvements.

Sales Information

A sales file for the storage of “snapshot” sales data at the time of sale is maintained. Residential vacant land sales, along with commercial improved and vacant land sales are maintained in a sales information system in the districts software. Residential improved and vacant sales are collected from a variety of sources, including: field discovery, protest hearings, various sale vendors, builders, local MAI appraisers and real estate professionals. A system of validity and verification codes was established to define salient facts related to a property’s purchase or transfer. School district or neighborhood sales reports are generated as an analysis tool for the appraiser in the development of value estimates.

Land Analysis

Residential, transitional and commercial land analysis is conducted by the Land Appraisal Department each year. Computerized land table files store the land information required to consistently value individual parcels within neighborhoods. Transitional land includes various types of land (residential, commercial, subdivision and abstract). Specific land influences are used, where necessary, to adjust parcels outside the neighborhood norm for such factors as view, shape, size, location, utilities, and topography, among others. In addition to the market approach to value, the appraisers use abstraction and allocation methods to ensure that the land values created best reflect the contributory market value of the land to the overall property value.

Statistical Analysis

Statistical analyses are performed annually to evaluate whether values are equitable and consistent with the market. Ratio studies are conducted on each neighborhood in the district to judge the two primary aspects of mass appraisal accuracy--level and uniformity of value. Appraisal statistics of central tendency and dispersion generated from sales ratios are available for each stratified neighborhood within an ISD. These summary statistics including, but not limited to, the weighted mean, median and coefficient of dispersion provide the appraisers with a tool by which to determine both the level and uniformity of appraised value on a stratified neighborhood basis. The level of appraised values is determined by the median for individual properties within a neighborhood. Review of the standard deviation, coefficient of variation, and coefficient of dispersion discerns appraisal uniformity within and between stratified neighborhoods.

The appraisers, through the sales ratio analysis process, review 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 in an upcoming reappraisal, or whether the level of market value in a neighborhood is at an acceptable level.

Market Adjustment or Trending Factors

Neighborhood or market adjustment factors are developed from appraisal statistics provided from ratio studies and are used to ensure that estimated values are consistent with the market. 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 specified in the cost model.

The following equation denotes the hybrid model used:

$$MV = MA [(RCN - D)] + LV$$

Whereas the market value equals the market adjustment factor times the replacement cost new less depreciation plus the land value. As the cost approach separately estimates both land and building values and uses depreciated replacement costs, which reflect only the supply side of the market, it is expected that adjustments to the cost values are needed to bring the level of appraisal to an acceptable standard. Market multipliers, or neighborhood factors, are applied uniformly within neighborhoods to account for location variances between market areas or across a jurisdiction.

SPECIAL VALUATION – AGRICULTURAL

Scope of Responsibility

The special use appraiser is responsible for developing Agricultural schedules and field inspections of special use properties.

Qualification for special use valuation

- The property must be used for timber, agricultural production or wildlife management,
- The property must meet the history requirements of use in five of the previous seven years, and
- The property must be used at the intensity level that is typical in the area.

Brazos Central Appraisal District uses three main types of agricultural production – Native Pasture, Improved Pasture, and Dry Crop (Cropland). The Native Pasture designation is for properties covered with native or natural grasses that are grazed by livestock. Improved Pasture is also grazing land, but the land has been improved by the planting of non-native grasses to increase grazing production. Cropland is any land that produces a harvested crop on an annual basis.

Valuation

On a yearly basis, the district collects data from several sources to establish the average net income from agriculture use. Sources may include Texas A&M, its Extension Service, the USDA, and the Agricultural Advisory Board. The district also periodically sends questionnaires to farmers and ranchers that own agricultural land in the district. The data from the questionnaires in conjunction with the data from the other sources is compiled to establish the

net income of each classification of agricultural production. The average net income of the preceding five years is used and is capitalized using the capitalization rate established by law to produce the agricultural value for each classification of property. These values are applied in mass to all qualified land by classification.

Residential Homesteads

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

the market value or the preceding year's appraised value plus 10 percent, plus the value of any improvements added since the last tax year.

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

When residences have not been occupied, and are not being rented out, and the owner applies for inventory valuation, they are appraised as part of an inventory value. Once they are sold or occupied, they no longer qualify for inventory valuation.

Field Review

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

As the district's parcel count has increased through new home construction, and the homes constructed in the boom years of the late 70's and early 80's experience remodeling, the appraisers are required to perform the field activity associated with transitioning and high demand neighborhoods. Increased sales activity has also resulted in a more substantial field effort on the part of the appraisers to review and resolve sales outliers. Additionally, the appraiser frequently field reviews subjective data items such as quality of construction, condition, and physical, functional and economic obsolescence, factors contributing significantly to the market value of the property.

PERFORMANCE TESTS

Sales Ratio Studies

The primary analytical tool used by the appraisers to measure and improve performance is ratio study. The district ensures that the appraised values meet the standards of accuracy in several ways. The neighborhood factors are reviewed for each neighborhood for the current tax year.

The primary objective of this review is to ensure that the proposed values have met preset appraisal guidelines appropriate for the current tax year.

Commercial Property

Scope of Responsibility

The Commercial Appraisal Department is responsible for developing equal and uniform market values for commercial improved property located in Brazos County. Commercial appraisers appraise the fee simple interest of properties according to statute. However, the effect of easements, restrictions, encumbrances, leases, contracts or special assessments are considered on an individual basis, as is the appraisal of any non-exempt taxable fractional interests in real property (i.e., certain multi-family housing projects). Fractional interests or partial holdings of real property are appraised in fee simple for the whole property and divided systematically based on their prorated interests.

Commercial Appraisal Resources

The department staffing levels are reflected in the current operating budget.

Data - The data used by the commercial appraiser includes verified sales of vacant land and improved properties and the pertinent data obtained from each (sales price levels, capitalization rates, income multipliers, equity dividend rates, marketing period, etc.). Other data used by the appraiser includes actual income and expense data (typically obtained through the hearings process or surveys), 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 APPROACH (Model Specification)

Area Analysis

Data on regional economic forces such as demographic patterns, regional locational 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

Highest and Best Use Analysis

The highest and best use is the most reasonable and probable use that generates the highest present value of 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, the highest and best use is evaluated as improved and as if the site were still vacant. This assists in determining if the existing improvements have a transitional use, interim use, nonconforming use, multiple uses, speculative use, excess land, or a different optimum use if the site were vacant. For vacant tracts of land within this jurisdiction, the highest and best use is considered speculative based on the zoning and 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, 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 that an accurate estimate of market value (sometimes referred to as value in exchange) is derived.

On the other hand, value in use represents the value of a property to a specific user for a specific purpose. This is significantly different than the market value, which approximates market price under the following assumptions:

payment in cash or its equivalent,
no coercion of undue influence over the buyer or seller,
well-informed buyers and sellers acting in their own best interests, and
a reasonable time for the transaction to take place.

Market Analysis

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

DATA COLLECTION / VALIDATION

Sources of Data

In terms of commercial sales data, BCAD receives copies of the deeds recorded in Brazos County that convey commercially classed properties. The 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 hearings process, real estate professionals, and local, regional and national real estate and financial publications.

The initial step in sales verification involves a computer-generated questionnaire, which is mailed to both the buyer and seller in the transaction. If a questionnaire is answered and returned, the documented responses are recorded into the computerized sales database systems. For questionnaires with no response, other sources are contacted such as the brokers involved in the sale, property managers or commercial vendors. In other instances, sales verification is obtained from local appraisers or others that may have the desired information. Finally, settlement statements are often provided during the hearings process. The actual settlement statement is the most reliable and preferred method of sales verification.

Value Analysis (Model Calibration)

Model calibration involves the process of periodically adjusting the mass appraisal formulas, tables and schedules to reflect current local market conditions. Once the models have undergone the specification process, adjustments can be made to reflect new construction procedures, materials and/or costs, which can vary from year to year. The basic structure of a mass appraisal model can be valid over an extended period of time, with trending factors utilized for updating the data to the current market conditions.

Cost Schedules

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

Depreciation schedules are developed based on what is typical for each property type at that specific age. Depreciation schedules have been implemented for what is typical of each major class of commercial property by economic life categories. Effective age estimates are based on the utility of the improvements relative to where the improvement lies on the scale of its total economic life and its competitive position in the marketplace.

Market adjustment factors such as external and/or functional obsolescence can be applied if warranted. A depreciation calculation override can be used if the condition or effective age of a property varies from the norm by appropriately noting the physical condition and functional utility ratings in the property data characteristics. These adjustments are typically applied to a specific property type or location and can be developed via ratio studies or other market analyses. Accuracy in the development of the cost schedules, condition ratings and depreciation schedules will usually minimize the necessity of this type of an adjustment factor.

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 study publications. This per unit rental rate multiplied by the number of units results in the estimate of potential gross rent.

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

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

Allowable expenses and expense ratio estimates are based on a study of the local market, with the assumption of prudent management. An allowance for non-recoverable expenses such as leasing costs and tenant improvements are included in the expenses. A non-recoverable expense represents costs that the owner pays to lease rental space. Different expenses are developed for different types of commercial property based on use. Another form of allowable expense is the replacement of short-lived items (such as roof or floor coverings, air conditioning or major mechanical equipment or appliances) requiring expenditures of large lump sums. When these capital expenditures are analyzed for consistency and adjusted, they may be applied on an annualized basis as stabilized expenses. When performed according to local market practices by commercial property type, these expenses when annualized are known as replacement reserves.

Allowable expenses (inclusive of non-recoverable expenses and replacement reserves) are subtracted from the effective gross income to yield an estimate of net operating income.

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

Capitalization analysis is used in the income approach models. This methodology involves the capitalization of net operating income as an indication of market value for a specific property. Capitalization rates, both overall (going-in) cap rates for the direct capitalization method and terminal cap rates for discounted cash flow analyses, can be derived from the market. Sales of

improved properties from which actual income and expense data are obtained provide a very good indication of what a specific market participant is requiring from an investment at a specific point in time. In addition, overall capitalization rates can be derived from the built-up method (band-of-investment). This method relates to satisfying the market return requirements of both the debt and equity positions of a real estate investment. This information is obtained from real estate and financial publications.

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

Sales Comparison (Market) Approach

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

Final Valuation Schedules

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

Statistical and Capitalization Analysis

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

Appraisal statistics of central tendency and dispersion generated from sales ratios are available for each property type. These summary statistics including, but not limited to, the weighted mean, standard deviation and coefficient of variation, provide the appraisers an analytical tool by which to determine both the level and uniformity of the 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. Review of the standard deviation and the coefficient of variation can discern appraisal uniformity within a specific property type.

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

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

PERFORMANCE TESTS

The primary tool used to measure mass appraisal performance is the ratio study. A ratio study compares appraised values to market values. In a ratio study, market values are typically represented by sales prices. Independent, expert appraisals may also be used to represent market values in a ratio study. If there are not enough sales, 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.

Sales Ratio Studies

Sales ratio studies are an integral part of establishing equitable and accurate market value estimates and, ultimately, assessments for this taxing jurisdiction. 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 derive appraised values during valuation or reappraisal cycles.

In many cases, field checks may be conducted to ensure the ratios produced are accurate and the appraised values utilized are based on accurate property data characteristics. These ratio studies aid the appraisers by providing an indication of market activity by economic area or changing market conditions (appreciation or depreciation).

Business Personal Property/Manufactured Homes

Appraisal Responsibility

There are three different personal property types appraised by the district's personal property appraisers: business personal property accounts, leased assets and vehicles. In addition to business personal property, they are also responsible for valuing manufactured homes located in the county.

Appraisal Resources

The personal property staffing levels are reflected in the operating budget.

Data - A common set of data characteristics for each personal property account in Brazos County is collected in the field and data entered to the district's computer. The property characteristic data drives the computer-assisted personal property appraisal system. Manufactured homes are valued using a standard set of depreciation schedules embedded in our appraisal software. The personal property appraisers collect the field data.

VALUATION APPROACH (Model Specification)

SIC Code Analysis

BCAD uses four-digit numeric codes, called Standard Industrial Classification (SIC) codes that were developed by the federal government. BCAD uses these codes to classify personal property by business type.

SIC 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 SIC code specific. SIC codes are delineated based on observable aspects of homogeneity. SIC code delineation is periodically reviewed to determine if further SIC code delineation is warranted.

Highest and Best Use Analysis

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

SOURCES OF DATA

The district's property characteristic data is collected and updated each year by the appraisal staff. During the discovery phase of personal property appraisal, the district appraisers collect new data via an annual field drive-out. This project results in the discovery of new businesses not revealed through other sources. Various discovery publications such as County Assumed Name Certificates, County court reports, area newspapers, Internet, TX Comptroller Sales Tax Listing, are also used to discover personal property.

Vehicles

An outside vendor, InfoNation, provides BCAD with a listing of vehicles within Brazos County. The vendor develops this listing from the Texas Department of Transportation (DOT) Title and Registration Division records. Other sources of data include property owner renditions and field inspections.

Leased Assets

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

Manufactured Homes

The primary source of manufactured housing is Texas Department of Motor Vehicles, Texas Department of Housing and Community Affairs, property owner's renditions and field inspections.

Valuation and Statistical Analysis (model calibration)

Cost Schedules

Cost schedules are developed by SIC code by district personal property valuation appraisers. 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.

Statistical Analysis

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

DEPRECIATION SCHEDULE AND TRENDING FACTORS

BCAD'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 BCAD developed valuation models. The trending factors used by BCAD to develop RCN are based on published valuation guides. The percent good depreciation factors used by BCAD are also based on published valuation guides. The index factors and percent good depreciation factors are used to develop present value factors (PVF), by year of acquisition, as follows:

$$\text{PVF} = \text{INDEX FACTOR} \times \text{PERCENT GOOD FACTOR}$$

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

$$\text{MARKET VALUE ESTIMATE} = \text{PVF} \times \text{HISTORICAL COST}$$

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

MODEL BUILDING FOR PERSONAL PROPERTY APPRAISAL

The Model Building valuation process has two main objectives:

Analyze and adjust existing SIC models.

Develop new models for business classifications. The delineated sample is reviewed for accuracy of SIC code, square footage, field data, and original cost information. Models are created and refined using actual original cost data to derive a typical replacement cost new (RCN) per square foot for a specific category of assets. The RCN per square foot is depreciated by the estimated age using the depreciation table adopted for the tax year.

The data sampling process is conducted in the following order:

- 1) Prioritizing Standard Industrial Classification (SIC) codes for model analysis.
- 2) Compiling the data and developing the reports.
- 3) Field checking the selected samples.

The models are built and adjusted manually, by the appraiser pulling the data from the prior and/or current year renditions for original costs. The models are then tested against the previous year's data. The typical RCN per square foot (or applicable unit) is determined by a statistical analysis of the available data.

Model values are used in the general business personal property valuation program to estimate the value of new accounts for which no property owner's rendition is filed. Model values are also used to establish tolerance parameters for testing the valuation of property for which prior data year's data exist or for which current year rendered information is available. The calculated current year value or the prior year's value is compared to the indicated model value by the valuation program. If the value being tested is within an established acceptable percentage tolerance range of the model value, the account passes that range check and moves to the next valuation step. If the account fails the tolerance range check, it is flagged for individual review. Allowable tolerance ranges may be adjusted from year to year depending on the analysis of the results of the prior year.

Vehicles

Value estimates for vehicles are provided by an outside vendor and are based on NADA published book values. Vehicles that are not valued by the vendor are valued by an appraiser using the vehicle depreciation schedule or published guides.

Leased and Multi-Location Assets

Leased and multi-location assets are valued using the PVF schedules mentioned above. If the asset to be valued in this category is a vehicle, then NADA published book values or if original cost is available, the vehicle depreciation schedule is used. Assets that are not valued by the vendor are valued by an appraiser using PVF schedules or published guides.

Manufactured Homes

Assets are valued using Depreciation schedules imbedded in the appraisal software.

INDIVIDUAL VALUE REVIEW PROCEDURES

Business Personal Property

A district valuation computer program identifies accounts in need of review based on a variety of conditions. Property owner renditions, accounts with field or other data changes, accounts with prior hearings, new accounts, and SIC cost table changes are all considered. The accounts are processed by the valuation program and pass or fail predetermined tolerance parameters by comparing appraised values to prior year and model values. The appraisers review accounts that fail the tolerance parameters and make additional refinements to the models as necessary.

Leased and Multi-Location Assets

Leasing and multi-location accounts that have a high volume of vehicles or other assets are loaded to a Microsoft Excel spreadsheet if reported by the property owner electronically. These electronic renditions are usually rendered on diskette or CD-ROM. Accounts that render by hard

copy are transferred to Microsoft Excel spreadsheet, calculated, totaled and summarized electronically.

After matching and data entry, reports are generated and reviewed by an appraiser. When proofed, the report is mailed to the property owner for review. Corrections are made and the account is noticed after manager or director approval.

PERFORMANCE TESTS

Ratio Studies

Every other year the Property Tax Assistance Division of the state comptroller's office conducts a school district property value study (SDPVS). The SDPVS is a ratio study used to gauge appraisal district performance. Rather than a sales ratio study, PVS is a ratio study using state cost and depreciation schedules to develop comparative personal property values. These values are then compared to BCAD's personal property values and ratios are formed.

INDUSTRIAL / Mineral VALUATION

Appraisal Responsibility

Brazos Central Appraisal District contracts with Capitol Appraisal Group, Inc. for the appraisal of industrial and mineral properties. The firm is responsible for developing fair and uniform market values. Further, the firm is responsible for the collection of data, maintenance of data collection manuals, highest and best use analysis, market analysis, development and implementation of data collection procedures, valuation schedules, field review, office review, performance tests, sales ratio studies, and comparative appraisal analysis. Capitol Appraisal Group, Inc, may provide additional information for this Mass Appraisal Report. If provided, it is attached by reference.

LIMITING CONDITIONS

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

The statements of fact contained in this report are true and correct.

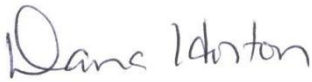
- The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are my personal, impartial, and unbiased professional analyses, opinions, and conclusions.
- I have no present or prospective interest in the property(s) that is the subject of this report, and I have no personal interest with respect to the parties involved.
- I have no bias with respect to any property that is the subject of this report, or the parties involved with this assignment.
- My engagement in this assignment was not contingent upon developing or reporting

predetermined results.

- My compensation for completing this assignment is not contingent upon the reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
- My analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Uniform Standards of Professional Appraisal Practice.
- I have not made a personal inspection of the properties that are the subject of this report.
- I have listed below the individuals who have provided significant mass appraisal assistance to the person signing this certification.

Certification Statement:

"I, Dana Horton, Chief Appraiser for the Brazos Central Appraisal District, solemnly swear all property in the district subject to appraisal by me was appraised as required by law to the best of my knowledge and belief."

A handwritten signature in blue ink that reads "Dana Horton". The signature is written in a cursive, flowing style.

Dana Horton, RPA, CCA
Chief Appraiser
Brazos Central Appraisal District

Individuals providing significant mass appraisal assistance in the certification:

| | |
|--------------------|--|
| David Kehlenbrink | Assistant Chief Appraiser |
| Scott Warren | Assistant Chief Appraiser |
| Don Barnett | Director of Appraisal |
| Rachel Earnest | Litigation/Commercial Appraiser |
| Dawn Hart | Commercial Appraiser |
| Jamie McCarver | Business Personal Property/Mfg Housing |
| Delvin Twitty | Business Personal Property/Commercial |
| Kristina Hernandez | Business Personal Property |
| Angela Jessie | Land Appraiser |
| Ric Brown | Senior Residential Appraiser |
| John Ponzio | Residential Appraiser |
| Julie Brod | Residential Appraiser |
| Zach Dennis | Residential Appraiser |
| Earl Moore | Residential Appraiser |
| Stephen Blair | Residential Appraiser |
| Amanda Meyer | Residential Appraiser |
| Mickey Davis | Capitol Appraisal Group Inc - Mineral |
| Trent Johnson | Capitol Appraisal Group Inc - Industrial |