
LLANO CENTRAL APPRAISAL DISTRICT

2018 MASS
APPRAISAL REPORT

Llano Central Appraisal District

2018 Mass Appraisal Report

INTRODUCTION

Scope of Responsibility

The Llano Central Appraisal District (LCAD) has prepared and published this report to provide our citizens and taxpayers with a better understanding of the District's responsibilities and activities. This report has several parts: a general introduction and then several sections describing the appraisal effort by the appraisal district.

The Llano Central Appraisal District is a political subdivision of the State of Texas created effective January 1, 1980. The provisions of the Texas Property Tax Code (TPTC) govern the legal, statutory, and administrative requirements of the appraisal district. A member board of directors, appointed by the taxing units within boundaries of Llano County, constitutes the LCAD's governing body. The chief appraiser, appointed by the board of directors, is the chief administrator and chief executive officer of the appraisal district.

LCAD is responsible for local property tax appraisal and exemption administration for 16 jurisdictions or taxing units in the county. Each taxing unit, such as the county, a city, school district, special 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. Appraisals established by LCAD allocate the year's tax burden on the basis of each taxable property's January 1st market value. LCAD also determines eligibility for various types of property tax exemptions such as those for homeowners, the elderly, disabled veterans, and charitable and religious organizations.

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 in a position to take advantage of the exigencies of the other.

The Property Tax Code defines special appraisal provisions for the valuation of residential homestead property (Sec.23.23), productivity (Sec. 23.41), real property inventory (Sec. 23.12), dealer inventory (Sec. 23.121, 23.124, 23.1241 and 23.127), nominal (Sec. 23.18) or restricted use properties (Sec. 23.83) and allocation of interstate property (Sec. 23.03). The owner of personal property 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 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. LCAD's current policy is to conduct a general reappraisal of real property at least every three years. However, appraised values are reviewed annually and are subject to change for purposes of equalization and to insure accurate market values. Personal property is reappraised at least every two years.

The appraised value of real estate is calculated using specific information about each property. Using computer-assisted appraisal programs, and recognized appraisal methods and techniques, we compare that information with the data for similar properties, and with recent market data. LCAD follows the standards of the International Association of Assessing Officers (IAAO) regarding its appraisal practices and procedures, and subscribes to the standards promulgated by The Appraisal Foundation known as the Uniform Standards of Professional Appraisal Practice (USPAP) to the extent they are applicable. In cases where an appraisal district contracts for professional valuation services, the contract that is entered into by each appraisal firm requires adherence to similar professional standards.

Personnel Resources

The Chief Appraiser is primarily responsible for overall planning, organizing, staffing, coordinating, and controlling of district operations. The Administration areas 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 area is responsible for the valuation of all real and personal property accounts. The property types appraised include commercial, residential, and business personal property. There are 5 appraisers in the appraisal staff with the following classifications:

- 4 – Real Property Appraisal
- 1 – Business Personal Property Appraisal

Licensing and Education

LCAD's appraisers are subject to the provisions of the Property Taxation Professional Certification Act and must be registered with Texas Department of Licensing and Regulation (TDLR). Education is achieved through courses approved by the State Comptroller Property Tax Assistance Division (PTAD). Most educational courses are sponsored by the International Association of Assessing Officers (IAAO), Texas Association of Assessing Officers (TAAO), and Texas Association of Appraisal Districts (TAAD). Appraisers must receive their Registered Professional Appraisal Designation (RPA) within five years and are required to have thirty hours of continuing education hours during a two year recertification period.

Data

LCAD is responsible for establishing and maintaining approximately 37,588 real and personal property accounts covering 970 square miles within the Llano Central Appraisal District's territorial boundaries. This data includes property characteristic, ownership, and exemption information. Property characteristic data on new construction is updated through an annual field effort; existing property data is maintained through a field and office review. Sales are routinely validated during an office review and a separate field effort when applicable; however, sales are also validated, when available, as part of the building permit process and annual reappraisal effort. General trends in employment, interest rates, new construction trends, and cost and market data are acquired through various sources, including internally generated questionnaires to buyer and seller.

LCAD has a geographic information system (GIS) that maintains maps and various layers of data, including aerial photography. LCAD's website makes a broad range of information available for public access, including detailed information on the appraisal process, property characteristics data, certified values, protests and appeal procedures, frequently ask questions, links to other government agencies, property maps, and a tax calendar. Downloadable files of related tax information and district forms, including exemption applications and business personal property renditions are also available.

Information Systems

The Abstractor/Mapping Section maintains the District's Geographical Information System (GIS) through the District's third party GIS provider. The mass appraisal software and appraisal records incorporated with Harris Governs PACs appraisal software (PACS).

SHARED APPRAISAL DISTRICT BOUNDARIES

LCAD established procedures whereby ownership and property data information are routinely exchanged. Appraisers from adjacent appraisal districts discuss data collection and valuation issues to minimize the possibility of differences in property characteristics, legal descriptions, and other administrative data. Effective January 1, 2008, LCAD will no longer appraise property outside the county; however, LCAD is still responsible for maintaining prior appraisal year records for shared CAD accounts as well as coordinating the proper value allocation of accounts split by the county line.

INDEPENDENT PERFORMANCE TEST

According to Chapter 5 of the TPTC and Section 403.302 of the Texas Government Code, the State Comptroller's Property Tax Assistance Division (PTAD) conducts a bi-annual property value study (PVS) of each Texas school district and each appraisal district. As a part of this bi-annual study, the code also requires the Comptroller to: use sales and recognized auditing and sampling techniques; review each appraisal District's appraisal methods and procedures to determine whether the district used recognized standards and practices (MAP review); test the validity of school district taxable values in each appraisal district and presume the appraisal roll values are correct when values are valid; and, determine the level and uniformity of property tax appraisal in each appraisal district. The methodology used in the property value study includes stratified samples to improve sample representativeness and techniques or procedures of measuring uniformity. This study utilizes statistical analysis of sold properties (sale ratio studies) and appraisals of unsold properties (appraisal ratio studies) as a basis for assessment ratio reporting. For appraisal districts, the reported measures include median level of appraisal, coefficient of dispersion (COD), price-related differential (PRD) for properties overall and by State category (i.e., categories A, B, C, D and F1 are directly applicable to real property).

There are 3 independent school districts in Llano CAD for which appraisal rolls are annually developed. The preliminary results of this study are released in January in the year following the year of study. The final results of this study are certified to the Education Commissioner of the Texas Education Agency (TEA) in the following July of each year for the year of study.

Management and appraisal staff members are also responsible for conducting ratio studies and comparative analysis to insure accurate and equitable appraised values. Performance Testing is performed annually to insure accuracy and uniformity as required by USPAP and State Law.

Appraisal Activities

INTRODUCTION

Appraisal Responsibilities

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 physical description of personal property, 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 which are located within the boundaries of Llano 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 and commercial properties in Llano County every three years. The use of aerial photography and a periodic digital photography project may also be used in meeting this goal. Ultimately, meeting this goal is dependent on budgetary constraints.

Appraisal Resources

- **Personnel** - The appraisal district consists of 5 appraisers.
- **Data** - The data used by field appraisers includes the existing property characteristic information contained in PACS. Other data used includes maps, sales data, fire and damage reports, building permits, photos and actual cost information.

PRELIMINARY ANALYSIS

Data Collection/Valid Action

Data collection of real property involves maintaining data characteristics of the property in PACS. The information contained in PACS includes site characteristics, such as land size and topography, and improvement data, such as square foot of living area, year built, quality of construction, and condition. Field appraisers use appraisal manuals that establish uniform procedures for the correct listing of real property. All properties are coded according to these manuals and the approaches to value are structured and calibrated based on this coding system. The field appraisers use these manuals during their initial training and as a guide in the field inspection of properties. Data collection for personal property involves maintaining information in PACS. The type of information contained in PACS includes personal property such as business inventory, furniture and fixtures, machinery and equipment, cost and location. The field appraisers conducting on-site inspections use a personal property manual during their initial training and as a guide to correctly list all personal property that is taxable. The manuals that are utilized by the field appraisers are available at the LCAD office.

Sources of Data

The sources of data collection are through the new construction field efforts, reappraisal, hearings, sales processing, newspapers and publications, property owner correspondence, and inquiries received via the Internet. A principal source of data comes from cost guides such as Marshall & Swift Valuation Service. Where available, paper permits are received and matched manually with the property's tax account number by the appraisal support staff and then scanned and updated into PACS.

Data review of entire neighborhoods is generally a good source for data collection. Appraisers typically drive entire neighborhoods to review the accuracy of the data and identify properties that need to be updated during the permit and reappraisal effort. During Sales Processing property characteristics are also verified. In residential and commercial, the sales validation effort involves office review and verification and when needed on-site inspection by field appraisers to verify the accuracy of the property characteristics. Sale surveys are also mailed out to the grantee and grantor on all undisclosed Commercial sales and for certain undisclosed Residential sales.

Property owners are one of the best sources for identifying incorrect data that generates a field check. Frequently, the property owner provides sufficient data to allow correction of records without having to send an appraiser on-site. As the district has increased the amount of information available on the Internet, property owner's requests to correct data inconsistencies has also increased. For the property owner without access to the Internet, letters are often submitted notifying the district of inaccurate data. Properties identified in this manner are added to a work file and inspected at the earliest opportunity.

Data Collection Procedures

Field data collection requires organization, planning and supervision of the field effort. Data collection procedures have been established for residential, commercial, and personal property. The appraisers are assigned throughout Llano County to conduct field inspections. Appraisers conduct field inspections and record information that is later entered in PACS by the data entry personnel.

The quality of the data used is extremely important in establishing accurate values of taxable property. While production standards are established and upheld for the various field activities, quality of data is emphasized as the goal and responsibility of each appraiser. New appraisers are trained in the specifics of data collection set forth in their divisional manual. Experienced appraisers are routinely re-trained in listing procedures prior to major field projects such as new construction and reappraisal. A quality control process exists through supervisory review of the work being performed by the field appraisers. Supervisors are charged with the responsibility of ensuring that appraisers follow listing procedures, identify training issues and provide uniform training throughout the field appraisal staff. When applicable, Senior and Territorial Appraisers will also assist with the quality control of the appraisal product.

Data Maintenance

The field appraiser is responsible for the data entry of his/her fieldwork as mentioned earlier, with coordination of the data entry personnel. This responsibility includes not only data entry, but also quality assurance.

INDIVIDUAL VALUE REVIEW PROCEDURES

Field Review

The date of the last inspection, extent of that inspection, and the appraiser responsible are listed on the account record. If a property owner or jurisdiction disputes the District's records concerning this data during a hearing, via a telephone call or correspondence received, the record may be altered based on the evidence provided. When needed, a field inspection is requested to verify this evidence for the current year's valuation or for the next year's valuation known as a "recheck". Every year a field review of certain areas or neighborhoods in the jurisdiction is done during the annual reappraisal effort.

Office Review

Office reviews are completed on properties where information has been received from the owner of the property, taxing jurisdictions, or other sources. Aerial photographs and digital photographs are also used to verify property characteristics. When the property data is verified in this manner, field inspections are not required.

PERFORMANCE TEST

Management and appraisal staff members are also responsible for conducting ratio studies and comparative analysis to insure accurate and equitable appraised values. Performance testing is performed annually to insure accuracy and uniformity as required by USPAP and State Law.

Residential and Commercial Valuation Process

INTRODUCTION

Scope of Responsibility

The appraisers responsible for Residential, Commercial and Business Personal Property Valuations are responsible for developing equal uniform market values for residential and commercial improved and vacant property. There are approximately 12,230 residential improved parcels, 11,957 vacant parcels, 1008 commercial improved parcels and 1,116 business personal property accounts within the Llano CAD territorial boundaries.

Appraisal Resources

- **Personnel** - appraisal staff consists of 5 appraisers. There are 4 appraisers who are responsible for all real property parcels in various geographical areas during the field cycle. There is 1 business personal property appraiser.
- **Data** - A common set of data characteristics for each residential dwelling in Llano County is collected in the field and data entered to the computer. The property characteristic data drives the computer-assisted mass appraisal (CAMA) approach to valuation. Property data attribute information is verified and corrected based on on-site inspections as well as office review using digital photographs and aerial photography. The following data attribute information is captured on each appraisal record: Land Value, Zoning, SPTB Code, Building Class, Condition/Desirability/Utility, Actual Year Built, Effective Year Built, Living Area, Additional Improvements, Total Living Area, Foundation, Basement, Heating, Roof Type, Garage, Frame, Fireplace, Bedrooms, Wet bars, Kitchens, Full Baths, Half Baths, Remodel Year, Air Conditioning, Level Of Finish-out, Deck, Security, Porch, Spa, Fence, Sprinklers, Landscaping, Wooded Lot, Quiet Street, Special Features, and Percent Complete.

Additional sources used both for residential and commercial valuations include Marshall & Swift Valuation Service, NADA and Lexus Nexis. Additionally, for commercial properties parking lots and lighting are a component of value.

VALUATION APPROACH

Area Analysis

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 and provide the field appraiser a current economic outlook on the real estate market. Information is gleaned from real estate publications and other internal and external sources of information.

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 is conducted on specific geographical areas having common characteristics that directly affect market value. These are known as "Neighborhoods"

The first step in neighborhood analysis is the identification of a group of properties that share certain common traits. A market area commonly referred to as 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 involves the physical drawing of neighborhood boundary lines on a map. 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. The majority of 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 or code 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. For unique properties, the neighborhood concept may not always be applicable if better comparable properties are located outside the subject's immediate neighborhood. For truly unique properties a larger sub-market may be appropriate.

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 residential and commercial property is normally its current use. This is due in part to the fact that residential or commercial 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. Transition areas with ongoing gentrification, the appraiser reviews the existing property use and makes a determination regarding highest and best use. Once the conclusion is made, that the highest and best use remains, further highest and best use analysis is done to decide the type of residential use on a neighborhood basis and location of commercial uses. As an example, it may be determined in a transition area that older, non-remodeled homes are economic miss-improvements, and the highest and best use of such property is the construction of new dwellings or commercial development. In areas of mixed residential and commercial use, the appraiser reviews properties in these areas on a periodic basis to determine if changes in the real estate market require reassessment of the highest and best use of a select population of properties. Effective January 1, 2010 House Bill 3613 required the market value of a residential homestead is to be solely determined by its value as a residential homestead regardless of its highest and best use. LCAD will value residential homestead properties based on its current use using residential comparable properties similar to the subject to support a total market value.

VALUATION AND STATISTICAL ANALYSIS

Cost Schedules

Residential parcels in the district are valued from building class cost schedules using a comparative unit method. The District's residential base building class cost schedules have been customized to fit Llano County's local residential building and labor market. The District calibrates each building class cost table at the neighborhood level during the reappraisal effort to insure equitable and accurate appraised values. An extensive review and revision of the residential base building class cost schedules were performed in tax year 2018. These building class costs were compared against PACS Marshall & Swift, a nationally recognized cost estimator. Base building class cost schedules are reviewed annually to insure a reasonable range when compared to Marshall & Swift. Mobile Homes cost schedules are derived annually from Marshall and Swift's Cost Handbook.

The cost approach to value commercial property 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 typically developed based on Marshall & Swift Valuation 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 are occasionally 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, locational modifiers are necessary to adjust these base costs specifically for Llano County. These modifiers are provided by the national cost services.

Market adjustments 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 on the property data characteristics. These adjustments are typically applied to a specific property type or location and can be developed through 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.

Sales Information

A sales file for sales data is maintained in PACS as well as in other data files such as Excel. Residential and commercial improved and vacant sales are collected from a variety of sources, including: surveys sent to the buyer and the seller. Such as sale price, sale date, and sale type. Sales are used for ratio analysis, neighborhood building class model development and will be provided to taxpayers only if the sale was used in the valuation of the taxpayer's property. Otherwise, it is the policy of Llano CAD to treat every sale as confidential and to comply with Section 22.27 of the Texas Property Tax Code.

Land Analysis

Residential and commercial land analysis is conducted by each of the appraisers. The appraisers develop a base lot value and can price land on flat price, square foot, acreage or front foot basis. Land market adjustments may be established for factors as view, shape, size, topography, utility easements, greenbelts, major thoroughfares, among others. In lieu of land sales information appraisers may use abstraction and allocation methods to insure that the land values created best reflect the contributory market value of the land to the overall property value.

Statistical Analysis

The appraisal staff performs statistical analysis annually to evaluate whether values are equitable and consistent with the market. Ratio studies are conducted on each of the residential neighborhoods and commercial developments to the level of assessment and whether the neighborhood and associated building classes are in need of reappraisal. The level of appraised values is determined by the weighted mean for individual properties within a neighborhood and also by building class within a neighborhood. Every neighborhood is reviewed annually by the appraisal staff through the sales ratio analysis process. 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.

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 and commercial properties uses a hybrid cost-sales comparison approach. This type of approach accounts for neighborhood market influences not specified in the base building class cost tables.

The following equation denotes the hybrid model used:

$$MV = LV + ((RCN \times BCLF) - D)$$

Whereas the market value (MV) equals land value (LV) plus the replacement cost new (RCN) times the neighborhood building class location factor (BCLF) less depreciation (D). 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. Therefore, market, or building class location factors are applied uniformly by building class by neighborhood to insure equitable and accurate market values within these market areas.

If a neighborhood is to be updated, the appraiser uses a sale ratio that compares recent sales prices of properties within a delineated neighborhood by building class with the properties actual cost value. The calculated ratio derived from the sum of the sold properties' cost value divided by the sum of the sales prices by building class indicates each neighborhood's building class level of value based on the unadjusted cost value for the sold properties within that building class range. A common building class location factor is then calculated to appraise the sold properties within that building class range at 100% of market value. The calculated building class location factor is then applied to both the sold and unsold properties within that neighborhood to insure equitable and accurate market values. This market adjustment factor or building class location factor is needed to trend the values obtained through the cost approach closer to the actual market evidenced by recent sales prices within a given neighborhood. The sales used to determine the building class location factor will reflect the market influences and conditions only for the specified building class within a neighborhood, thus producing more representative and supportable values. The building class location factor is applied uniformly to all similar class properties within the neighborhood. Once the building class factor(s) are applied for a given neighborhood, the appraiser reviews the final neighborhood's building class ratio and value reviews the neighborhood accounts proposed market values to insure accurate and equitable market values. This value review process may occur in the office or field if needed. GIS, aerial photography, digital photography and other PACS functionalities are used during the neighborhood value review process.

TREATMENT OF RESIDENCE HOMESTEADS

Beginning in 1998, the State of Texas implemented a constitutional classification scheme concerning the appraisal of residential property that receives a residence homestead exemption. Under the new law, beginning in the second year a property receives a homestead exemption; increases in the value of that property are "capped." The value for tax purposes (appraised value) of a qualified residence homestead will be the lessor of:

- The market value; or
- The preceding year's appraised value;

Plus, 10 percent;

Plus, the value of any improvements added since the last re-appraisal.

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. The PACS Capped Homestead module is where these calculations take place.

INDIVIDUAL VALUE REVIEW PROCEDURES

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 to check for accuracy of data characteristics. 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. After preliminary estimates of value have been determined in targeted areas, the appraiser value reviews the results. During this review, the appraiser is able to physically inspect both sold properties and unsold properties for comparability and consistency of values. GIS, aerial photography, digital photography and other PACS functionality are also used during the value review process.

Office Review

Given the many resources and time required to conduct a routine field review of all properties, homogeneous properties consisting of tract housing with a low variance in sales ratios and other properties having a recent field inspection date are value reviewed in the office. Valuation reports comparing previous values against proposed and final values are generated for all residential improved and vacant properties. GIS, aerial photography, digital photography and other PACS functionality are also used during the value review process. The dollar amount and percentage of value difference are noted for each property within a delineated neighborhood allowing the appraiser to identify research and resolve value anomalies before final appraised values are released. Previous values resulting from a hearing protest are individually reviewed to determine if the value remains appropriate for the current year.

Once the appraiser is satisfied with the level and uniformity of value for each neighborhood within his area of responsibility, the estimates of values will be reviewed and approved by a supervisor for notification purposes.

The Residential Appraisal Manual outlines the application of the three approaches to value. This manual is rigorously maintained and updated frequently. The last update of the Residential Appraisal Manual was in 2018.

PERFORMANCE TESTS

Sales Ratio Studies

The primary analytical tool used by the appraisers to measure and improve performance is the ratio study. LCAD ensures that the appraised values that it produces meet the standards of accuracy in several ways. Overall sales ratios can be generated by building class, by neighborhood, by city or other defined area to allow the appraiser to review general market trends within their area of responsibility, and provide an indication of market appreciation over a specified period of time.

Management Review Process

Once the proposed value estimates are finalized by the appraisal staff, the supervisors review the sales ratios by neighborhood and other geographical areas. Final ratios are communicated to the Chief Appraiser for final review and approval. The primary objective of this review is to insure that the proposed values have met preset appraisal guidelines, including the Reappraisal Plan appropriate for the tax year in question and to insure the overall level of assessment within each taxing jurisdiction is acceptable.

Business Personal Property Valuation Process

INTRODUCTION

Appraisal Responsibility

There is one person responsible of the valuation of Business Personal Property (BPP) accounts; Leased Assets; and Vehicles. There are approximately 1,116 business personal property accounts within LCAD's jurisdiction.

Appraisal Resources

- **Personnel** - The BPP appraiser appraisal functions include leased equipment, aircraft, special inventory, utilities/pipelines, telecommunications, and Freeport exemptions. In addition, an outside appraisal firm appraises approximately 137 industrial and utility type properties. All other field appraisers have the responsibility of assisting the BPP appraiser in gathering data.
- **Data** - A common set of data characteristics for each personal property account in Llano County is collected and updated in the field by the personal property appraiser. The property characteristic data drives the personal property module of PACS.

VALUATION APPROACH (Model Specification)

Business Type Code Analysis

LCAD uses four digit numeric codes, originally based on the Standard Industrial Classification (SIC) codes. The derivative of the SIC Code classification are called Business Type Codes that are used by the LCAD as a way to classify similar types of personal property.

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.

DATA COLLECTION VALIDATION

Data Collection Procedures

Personal property data collection procedures are reviewed and revised to meet the changing requirements of field data collection.

Sources of Data

Business Personal Property

LCAD's data sources include Assumed Name filings at the County Clerk, Chamber of Commerce's memberships and visual or physical inspection. Since the initial data collection, the District appraisers have maintained the appraisal roll through annual field drive-outs. Various published sources such as the Texas Business Report, trade journals, and other publications are also used to discover personal property. Tax assessors, city and local newspapers, and the public often provide the district information regarding new personal property and other useful facts related to property valuation.

Vehicles

The Llano County Tax Office provides LCAD with a listing of vehicles within the LCAD's jurisdiction. Other sources of data include property owner renditions and field inspections.

Leased and Multi-location Assets

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

VALUATION AND STATISTICAL ANALYSIS

Cost Schedules

Cost schedules, where applicable, are developed by business type code. 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 business type codes are in an alternate price per unit format.

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 business type code. Review of the standard deviation can discern appraisal uniformity within type codes.

Depreciation Schedule and Trending Factors:

Business Personal Property

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

Mass Appraisal Software (PACS)

The PACS program is utilized to store all individual appraisal data and other related coding and appraisal cost schedules. A review of each rendition is performed to compare the specific type business with others of a similar nature. Following this a review is performed to insure all similar type businesses are within a fairly narrow range of value variance.

PERFORMANCE TESTS

Ratio Studies

Every other year the PTAD of the State Comptroller's office conducts a Property Value Study (PVS). The PVS is a ratio study used to gauge appraisal district performance and appraisal accuracy. Results from the PVS are an integral part of school funding. Rather than a sales ratio study, the personal property PVS is a ratio study using state cost and depreciation schedules to develop comparative personal property values. These values are then compared to LCAD's personal property values and ratios are formed.

LIMITING CONDITIONS

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

- The appraisals were prepared exclusively for ad valorem tax purposes. The assessment date is 1-1-2018.
- 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.
- 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 and the source is held in the strictest of confidence.
- I have attached a list of staff providing significant mass appraisal assistance to the person signing this certificate.

Certification Statement:

"I, Scott Dudley, Chief Appraiser for the Llano Central Appraisal District, certify that, to the best of my knowledge and belief:

- The statements of fact contained in this report are true and correct.
- The reported analyses, opinion, 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 (unless previously disclosed to Llano CAD) present or prospective interest in the property that is the subject of this report, and I have no (unless previously disclosed to Llano CAD) personal interest with respect to the parties involved.
- I have performed no (unless previously disclosed to Llano CAD) services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment.
- I have no bias with respect to any property that is the subject of this report or to the parties involved with this assignment.
- My 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 made a personal inspection of a portion of the properties that are the subject of this report.
- The attached list contains the Llano Central Appraisal District Appraisers and Contract Appraisers who provided significant mass appraisal assistance in appraising the property that is the subject of this report.

Scott Dudley
Chief Appraiser

Providing Significant Mass Appraisal Assistance

Name	Title
Darren Sullivent	Senior Field Appraiser
Lisa Simpson	Business Personal Property Appraiser
Rachel Peyre-Ferry	Field Appraiser
Amanda Pemberton	Field Appraiser
Zach Hilliard	Field Appraiser
Pritchard & Abbott	Contract Appraisal Firm (utilities)