



DENTON CENTRAL APPRAISAL DISTRICT

2023 - 2024

REAPPRAISAL PLAN

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As we progress into the actual reappraisal process, we reserve the right to modify the plan as required in order to meet the requirements for this office as set forth in the Texas Property Tax Code.

EXECUTIVE SUMMARY

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

The Denton Central Appraisal District (DCAD) is a political subdivision of the State of Texas created on January 1, 1980. The provisions of the Texas Property Tax Code govern the legal, statutory, and administrative requirements of the appraisal district. A 6 member Board of Directors constitute the DCAD governing body. The Denton County Assessor/Collector serves as a non-voting member. The Chief Appraiser, appointed by the Board of Directors, is the chief administrator and chief executive officer of the appraisal district. Appendix A contains a list of Board of Directors members.

Denton Central Appraisal District is responsible for local property tax appraisal and exemption administration for the taxing units in Denton county. These jurisdictions are located in Appendix B. Each taxing unit sets its own tax rate to generate revenue to pay for services such as police and fire protection, public schools, road and street maintenance, recreational facilities, water and sewer systems, and other public services. Property appraisals are values established by the appraisal district and used by the taxing units to distribute the annual tax burden. Appraisals are based on each property's market value.

DCAD also administers and determines eligibility for various types of property tax exemptions that are authorized by state and local governments; such as homestead, over-65, disabled persons, disabled veterans, and charitable organizations, and religious exemptions.

A reappraisal plan as required by the Texas Property Tax Code section 6.05(i) and 25.18. A summary of the reappraisal activities which fulfill these requirements is included in this report.

TEXAS PROPERTY TAX CODE REQUIREMENT

The Reappraisal Plan

Section 6.05(i) of the Texas Property Tax Code 2021 Edition, is as follows:

(i) To ensure adherence with generally accepted appraisal practices, the board of directors of an appraisal district shall develop biennially a written plan for the periodic reappraisal of all property within the boundaries of the district according to the requirements of Section 25.18 and shall hold a public hearing to consider the proposed plan. Not later than the 10th day before the date of the hearing, the secretary of the board shall deliver to the presiding officer of the governing body of each taxing unit participating in the district a written notice of the date, time, and place for the hearing. Not later than September 15 of each even-numbered year, the board shall complete its hearings, make any amendments, and by resolution finally approve the plan. Copies of the approved plan shall be distributed to the presiding officer of the governing body of each taxing unit participating in the district and to the comptroller within 60 days of the approval date.

Section 25.18(a) and (b) of the Texas Property Tax Code 2021 Edition, reads as follows:

- (a) Each appraisal office shall implement the plan for periodic reappraisal of property approved by the board of directors under Section 6.05(i).
- (b) The plan shall provide for the following reappraisal activities for all real and personal property in the district at least once every three years:
- (1) identifying properties to be appraised through physical inspection or by other reliable means of identification, including deeds or other legal documentation, aerial photographs, land-based photographs, surveys, maps, and property sketches;
 - (2) identifying and updating relevant characteristics of each property in the appraisal records; (3) defining market areas in the district;
 - (4) identifying property characteristics that affect property value in each market area, including:
 - (A) the location and market area of property;
 - (B) physical attributes of property, such as size, age, and condition;
 - (C) legal and economic attributes; and
 - (D) easements, covenants, leases, reservations, contracts, declarations, special assessments, ordinances, or legal restrictions;
 - (5) developing an appraisal model that reflects the relationship among the property characteristics affecting value in each market area and determines the contribution of individual property characteristics;
 - (6) applying the conclusions reflected in the model to the characteristics of the properties being appraised; and
 - (7) reviewing the appraisal results to determine value.

REAPPRAISAL ACTIVITIES

As required by Section 25.18 of the Texas Property Tax Code, Denton Central Appraisal District performs the following reappraisal activities:

1. Identifying properties to be appraised through physical inspection or by other reliable means of identification.

Accurate ownership and legal description data is maintained by processing recorded deeds and plats that are accessed through the County Clerk's website. The deeds are read and entered onto the computer assisted mass appraisal (CAMA) software system by the Mapping & Ownership Department. Information entered includes the grantor, grantee, date of recording, volume, and page. Property identification numbers are assigned to each parcel of property and remain with the property for its life. Maps have been developed that show ownership lines for all real estate in the county. The maps are stored electronically using ESRI software and are integrated with the CAMA software to provide staff and appraiser significant analysis capabilities. Aerial photography is purchased on a biannual basis and provides mapping staff and appraisal staff additional capability to review and identify property characteristics. Oil and gas wells are discovered using Texas Railroad Commission records. Business personal property is located by using data sources such as sales tax permit holder lists, business listings, commercial publications and by canvassing the county.

2. Identify and update relevant characteristics of each property in the appraisal record.

Real estate is reviewed annually. The property data related to new construction and other building permit activity is collected through an annual field review effort. Cities within DCAD's jurisdiction frequently provide permit information either electronically or in paper form. Comparable sales data is routinely verified as part of the building permit field review and reappraisal activities. Appraisers drive to market areas and gather data on houses, commercial buildings, and vacant land tracts, based on building permit information. Additional information is gathered during protests, from taxpayers, sales activity, and sales ratio analysis. The appraisers review property noting its condition, observing and noting any changes to the property since its last inspection. A picture of the property is taken and a sketch of the improvements is made, if there is none on the records. Characteristics such as bathrooms, fireplaces, air conditioning, type of roof, type of exterior, type of foundation and quality of construction are recorded or validated. All data is stored in the CAMA software and assists the appraiser in making value decisions when they return to the office. Business personal property is inspected and the appraiser makes notations of the type of business and the quality and density of both the inventory and furniture and fixtures.

3. Define market areas in the district.

Market areas are defined by the physical, economic, governmental and social forces that influence property values. A list can be found in Appendix E. The effects of these forces are used to identify, classify, and stratify or delineate similarly situated properties into smaller, more comparable and manageable subsets for mass valuation purposes. Market sales are examined to confirm which areas are similar.

4. Identify property characteristics that affect property value in each market area.

Each parcel of property has detailed information recorded into the CAMA system. Each improvement may show the sketch and dimensions, the quality of construction, the year of construction, the exterior covering, the number of baths, fireplaces, air conditioning type, fences, pools and other attributes, and the overall condition of the

improvement. For land, the legal description, size, and special characteristics are noted and can be used when comparing to other land parcels.

5. Develop an appraisal model that reflects the relationship among the property characteristics affecting value in each market area.

General demographic, economic and financial trends, construction cost, market sales and income data are acquired through various sources. These may include internally generated questionnaires to buyer and seller, public and university research centers, private market data vendors, real estate related publications and telephone contact with buyers, sellers, brokers and fee appraisers, as well as information collected from property owners and agents during the informal protest and Appraisal Review Board process.

Revisions to cost models, income models, and market models are specified, updated and tested each appraisal year. Market area boundaries are reviewed and adjusted as indicated by growth patterns and market preferences and other factors.

The CAMA system begins with the cost approach to value to estimate the original cost of each improvement. That cost is based on local modifiers to information from national publications such as Marshall Valuation Service (Marshall & Swift) and also on local construction surveys. Components measured in the cost include the size of the structure, the exterior covering, the quality of construction, the number of stories, air conditioning and other special amenities.

The market sales are then studied for value contributions in each market area and adjustments to cost are applied to each market area in the form of a market adjustment.

6. Apply the conclusions reflected in the model to the characteristics of the properties being appraised.

By utilizing the age, quality, conditions, construction components and other variables, the model is developed and applied to all parcels within the market area.

7. Review the appraisal results to determine value.

After completing the process of assigning value to all parcels within a market area using the CAMA software, sales ratio reports are run for each market area to determine if the values that have been assigned are within acceptable ranges.

REAPPRAISAL PLAN DEVELOPMENT

Revaluation Policy - The Texas Property Tax code under section 25.18 requires each appraisal district to implement a plan to update the appraised values for real property at least once every three years. DCAD's current policy is to conduct a general reappraisal of real and business personal property value annually.

Performance Analysis - The certified values from the previous tax year will be analyzed with ratio studies to determine the appraisal accuracy and appraisal uniformity overall and by market area within property reporting categories. Ratio studies will be conducted in compliance with current *Standards on Ratio Studies* of the International Association of Assessing Officers.

Analysis of Available Resources – Staffing and budget requirements for tax year 2023 are detailed in the 2023 budget, as adopted by the board of directors and attached to the written biennial plan by reference. Staffing requirements for each operation and production activity will be identified and allocated accordingly to meet mandatory timelines. Aerial and oblique images and map layers will be updated according to available funding and contract specifications. Staffing and budget requirements for the 2024 tax year will be handled in a similar manner and detailed in the 2024 budget, as adopted by the board of directors no later than September 15, 2023.

Planning and Organization – A calendar of key events with critical completion dates is located in Appendix D.

Mass Appraisal System – Computer Assisted Mass Appraisal (CAMA) system revisions required are specified and scheduled with the Information Technology division and the district's software vendor. All computer forms and IT procedures are reviewed and revised as required.

Data Collection – Field and office procedures will be reviewed and revised as required for data collection. Activities scheduled for each tax year include, discovery and listing of new construction, demolition, and remodeling; re-inspection of problematic market areas and the universe of properties on a three year cycle, as feasible; and verification of sales data and property characteristics. Re-inspection of properties will be completed by physical inspection or by other reliable means of identification, including deeds or other legal documentation, aerial and oblique imagery, street-level photographs, surveys, maps, and property sketches.

Analysis- Current market data will provide guidelines for the revision of mass appraisal models. These revised models will be tested using ratio studies conducted by property type and market areas. Ratio studies will be conducted in accordance with IAAO standards. The ratio studies determine the accuracy, uniformity, and reliability of estimated values.

Valuation by tax year – Valuation models are specified and calibrated in compliance with supplemental standards from IAAO and the Uniform Standards of Professional Appraisal Practices (USPAP) using market analysis of comparable sales, comparable income data, and locally tested cost data. Calculated values are tested for accuracy and uniformity using ratio studies.

Mass Appraisal Report - Each tax year the Texas Property Tax Code required mass appraisal report will be prepared and certified by the chief appraiser at the conclusion of the appraisal phase of the ad valorem tax calendar (on or about May 15th) . The mass appraisal report will be completed in compliance with USPAP Standard 6. The signed certification by the chief appraiser is compliant with USPAP Standard Rule 6-3.

Final Performance Analysis – Value defense evidence to be used by the district to meet its burden of proof for market value and appraisal equity in both informal and formal hearings is specified and tested as applicable. In addition, Section 5.10 of the Texas Property Tax code requires the State Comptroller Property Tax Assistance Division to conduct a property value study of each school district within the state at least once every two years. This study utilizes statistical analysis of sold properties and appraisals of unsold properties as a basis for assessment ratio reporting.

PLAN REVIEW, AMENDMENTS and ALTERATIONS

The Board of Directors, acting on a request from the Chief Appraiser, may review, amend or alter this plan, if:

1. The Chief Appraiser's request is made during a public Board of Directors meeting and is properly listed on the agenda for the Board meeting; and
2. The Chief Appraiser identifies the portion of the plan to be altered or amended and substantiates the need to alter or amend the plan.

Calendar Amendments and Alterations – The Chief Appraiser is authorized to administratively amend or alter the 2023-2024 Calendar of key events, shown in Appendix D, as deemed necessary. Calendar changes can be made periodically and will not be considered alterations or amendments to the plan and do not require action by the Board of Directors.

2023-2024 REAPPRAISAL PLAN

SCOPE OF RESPONSIBILITIES

Estimated number of accounts

	2018	2019	2020	2021	2022
MH	5,808	5,775	5,810	5,847	5,870
MN	147,108	152,408	152,586	98,253	96,829
P	20,689	20,282	19,925	22,426	23,135
R	293,712	305,349	313,324	327,879	337,887
Grand Total	467,317	483,814	491,645	454,405	463,721

REVALUATION POLICY

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. Denton Central Appraisal District's current policy is to conduct a general reappraisal of real and business personal property value annually, meaning that a property's appraised value is established and reviewed for equality and uniformity each year. The district conducts an onsite field review of real property in a portion of the county annually as part of a reappraisal cycle. Business personal property is verified on an annual basis through various means, including onsite field review, property owner rendition submissions, and district initiated owner questionnaires.

The Chief Appraiser will provide a notice of appraised value for each property in compliance with Section 25.19, Texas Property Tax Code.

Appraisal Frequency and Method Summary

Land Appraisal - Vacant rural land is valued using comparable sales. Lot values in subdivisions are computed by market sales, or if unavailable, as an allocated percentage.

Residential Appraisal - Residential new construction is physically examined as part of an annual building permit data collection process. Appraisers determine size, class, year built, effective year of construction and other property characteristics and features that are used in the cost and sales comparison valuation methods. Improved residential properties are delineated by market areas as defined later in this document. On an annual basis, the residential department performs statistical analysis to evaluate whether values are equitable and consistent with the market. Based on analysis of the sales activity, market adjustment factors are developed and applied to adjust the appraised values in market areas or specified geographic areas on comparable properties.

Commercial Appraisal - Commercial real estate is verified by attempting to field observe and photograph each property at least once every three years to confirm class, condition and other property data. Properties are also reviewed as part of an annual building permit inspection process. The appraisers determine highest and best use. Economic units are delineated by improved market areas. On an annual basis, commercial market values are established using generally accepted appraisal methods and techniques. Land values are generally determined using comparable sales. For improved properties, appraisers consider the cost, sales comparison and income approaches and then reconcile the final value, based on the quality and availability of the most accurate and credible data for each valuation approach.

Business Personal Property – Business Personal Property is observed annually by appraisers to identify and document business personal property quality and density. A rendition is mailed annually to each business. Comparable businesses are analyzed to determine consistency of appraisal values per square foot or unit. Businesses are categorized using Standard Industrial Codes. Rendition laws provide additional information on which to base values of all business personal property accounts.

PERFORMANCE ANALYSIS

In each appraisal year, the previous appraisal year's equalized values are analyzed with ratio studies to determine appraisal accuracy and appraisal uniformity overall. In its annual procedures, the district tests values by market area within state property reporting categories. Ratio studies are conducted in compliance with the current Standard on Ratio Studies from the IAAO. Mean, median, and weighted mean ratios are calculated as measures of central tendency for properties in each reporting category to measure the level of appraisal (appraisal accuracy). In each reappraisal year this analysis is used to develop the starting point for establishing the level of accuracy of appraisal performance.

ANALYSIS OF AVAILABLE RESOURCES

Staffing and budget requirements for appraisal year 2023 are detailed in the 2023 appraisal district budget, as adopted by the Board of Directors. This reappraisal plan is adjusted to reflect the expected available staffing in appraisal year 2023 and the anticipated staffing for appraisal year 2023. Staffing will impact the cycle of real property re-inspection and personal property on-site review that can be accomplished in this time period. (See Appendix C for listing of key appraisal staff)

Changes in legislation involving appraisal districts may occur in 2023 when the legislature is called into session. These new laws may require adjustments to the budget, staffing, and programming.

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

Information Technology support is detailed with year specific functions identified by management and system upgrades are scheduled with the district's software vendor. Computer generated forms are reviewed for revisions based on year and reappraisal status. Legislative changes are scheduled for completion and also tested through coordination between the district's IT department and its software vendor. Existing maps and data requirements are developed and updates coordinated between the district's GIS and IT departments in order to make the tools available to appraisal staff.

PLANNING AND ORGANIZATION

A calendar of key events with critical completion dates is prepared for the district. This calendar identifies the key events for developing the appraisal roll (See Appendix D for Calendar of Events.) This plan encompasses the normal processes carried out for each year by the district, therefore catastrophic events or significant legislative action may have a detrimental effect to the district's operations and require changes to this plan.

MASS APPRAISAL SYSTEM

Information Technology (IT) maintains Denton Central Appraisal District's information technology infrastructure. The various Management Information Support functions include technical support, computer operations, applications systems development and support, internet support functions, data communications, network and personal computer workstation support, data management, geographic information systems in support of mapping, and multiple layers of GIS related intelligence and digital photography for utilization by all operating departments of the organization. Multiple network servers are in place to support the access through the internal and external networks for use by individuals. The DCAD data structures reside and are supported by multiple database tables accessible through the PC workstation and network structure. These systems provide direct support for all operating departments involved in appraisal functions, customer service, exemption administration and the Appraisal Review Board support activities. The server data is also utilized to fulfill all the reporting requirements for the taxing units and the State Comptroller's Property Tax Assistance Division.

Computer Assisted Mass Appraisal (CAMA) system revisions are specified by the district management team and scheduled with IT and the district's software vendor. Legislative mandates will be addressed and implemented into the necessary systems applications. All computer generated forms, letters, notices and orders will be reviewed annually and revised as necessary. The following details how they relate to the 2023 and 2024 appraisal years:

The district's website makes a range of information available for public access, including information on appraisal district operations. The site also provides links to connect users to related websites for taxing units, other appraisal districts and state government resources. Property owners can access additional online information from Denton CAD's website (www.dentoncad.com) that includes property characteristics, preliminary and certified values, protests and appeal procedures, and property maps.

Real Property Valuation

Revisions to cost models, income models, and market models are specified, updated and tested each appraisal year. Market area boundaries are reviewed and adjusted as indicated by growth patterns and market preferences and other factors. Deeds are processed on an ongoing basis to transfer ownership, establish the basis for land size, and assign account numbers to newly platted lots as an addition to the appraisal roll. The district will also update and process exemptions and special use appraisal applications as necessary and applicable.

Cost schedules are tested with market data (sales) to insure that the appraisal district is in compliance with Texas Property Tax Code, Section 23.011. Replacement cost new tables as well as depreciation tables are based on cost data from national publications such as Marshall Valuation Service (Marshall & Swift) and from local market data. The resulting schedules are tested for accuracy and uniformity using ratio studies.

Land tables are updated using current market data (sales) and then tested with a ratio study.

Income Schedules are tested to insure that the appraisal district is in compliance with Texas Property Tax Code, Section 23.012. Income, expense, and occupancy data is updated in the income models for each property use category and market area. Property categories are reviewed to ensure their continued applicability. Capitalization rate studies are completed using current sales data when available, and published sources are also utilized. The resulting models are tested using ratio study tools.

Market Models are tested to ensure that the appraisal district is in compliance with Texas Property Tax Code, Section 23.01. Market data such as sales are gathered, entered into the system, and analyzed. They are then tested with sales ratio reports.

Personal Property Valuation

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

Appraisal Notices

Appraisal Notices will be sent in accordance with Texas Property Tax Code, Section 25.19. Appraisal notices will be reviewed for legal sufficiency and correctness. Enclosures will be updated, including the latest version of the comptroller's *Property Taxpayer's Remedies*. Real property notices will generally be mailed in early April and personal property notices will be mailed in mid-May for each year covered by the plan.

Hearing Process

Appraisal managers & supervisors will conduct training for staff in early April of each appraisal year to ensure preparedness for informal and formal hearings, which will generally begin in mid-April of each year covered by the plan. Logistical staff will attend the stated mandated training for ARB members typically held in March.

Revisions and enhancements to existing hearing scheduling procedures for informal and formal appraisal review board hearings will be reviewed and updated to ensure efficiency and timely certification of the appraisal roll. Standards of documentation and the appraisal districts hearing evidence will be reviewed and updated to reflect the

current valuation methods and practices. Production of evidence will be tested and compliance with Tax Code requirements will be ensured.

PILOT STUDY

New or revised mass appraisal models will be tested on randomly selected market areas. Sales ratio studies will be used to test the models. Actual test results will be compared against anticipated results and those models not performing satisfactorily will be refined and retested. The procedures used for model specification and model calibration will comply with USPAP Standard 5 ,Mass Appraisal Development.

DATA COLLECTION

IDENTIFYING PROPERTY

The Mapping department will gather information from deeds, plats, replats, and other documents filed of record at the Denton County Courthouse. The department will input & update information into the CAMA system.

IDENTIFYING & UPDATING PROPERTY CHARACTERISTICS

Field appraisers are currently provided with standardized field collection devices in order to verify existing property characteristics or record new property data. The work assignments are based on the geographic area that is delineated for reappraisal. Existing appraisal data is displayed on a field device used by the appraiser to record new or modified data during an on-site inspection. Each parcel of property has detailed information recorded into the CAMA system. Each improvement shows the sketch and dimensions, the quality of construction, the year of construction, the exterior covering, then number of baths, fireplaces, air conditioning type, fences, pools and other attributes, and the overall condition of the improvement. For land the legal description, size, and special characteristics are noted and can be used when comparing to other land parcels.

Other field inspection resources for all departments may include a MAPSCO street directory, sales and income data, fire damage reports, building permits, certificates of occupancy, building plans, site plans, recorded deeds and plats, photos, published articles and actual cost information.

Field and office procedures are reviewed and revised as required for the data collection process. Activities scheduled for each appraisal year include market area delineation, new construction and demolitions, remodeling, re-inspection of problematic areas, re-inspection of the universe of properties, verification of sales data, and quality control.

Residential	Commercial	Personal Property
2023	2023	2023
Review residential cost schedules & consider available vendors	Review commercial cost Schedules & consider available vendors	Procedure manual update and review
Procedure manual update and review	Procedure manual update and review	BPP network drive cleanup and archiving
Residential network drive cleanup and archiving	Commercial network drive cleanup and archiving	Review and remove unused & obsolete codes
Review and remove unused & obsolete codes	Review and remove unused & obsolete codes	Inspections for tagged properties
Inspections for tagged properties	Inspections for tagged properties	Drive all areas annually for new or adjusted BPP accounts and business closures.
Land Schedule Review & Evaluation	Consider creating an income model for all commercial property types	Properties that were not rendered in the last two years will be reviewed with an onsite field inspection.
Improvement Schedule Review & Evaluation	Review land adjustments	Continue audit of exemptions
Neighborhood Code Review & Evaluation	Review Economic unit groups	
2024	2024	2024
Consider reassigning appraiser regions to maximize productivity, staff knowledge, and continued development.	Consider reassigning appraiser regions & property types to maximize productivity, staff knowledge, and continued development.	Consider reassigning appraiser regions to maximize productivity, staff knowledge, and continued development.
Inspections for tagged properties	Inspections for tagged properties	Inspections for required tagged properties
	Review and automate commercial equity and sales grids	Drive all area for new, existing, moved, and/or closed accounts
	Collect financing data to calculate a “typical” loan to value ratio	Inspection of non-rendered accounts that have not rendered in the past two years.
	Review all commercial property values	Review the possibility of the CAMA system to direct by situs in the field for each area.
	Review and cleanup market area codes for uniformity	Software system to develop Online rendition submission

Market Area Delineation

Market areas are defined by the physical, economic, governmental and social forces that influence property values. The effects of these forces are used to identify, classify, and stratify or delineate similarly situated properties into smaller, more comparable and manageable subsets for valuation purposes. Delineation can involve the physical drawing or the market area boundary lines on a map or, it can also involve statistical separation or stratification based on attribute analysis. These homogeneous properties have been delineated into valuation market areas for residential & commercial property, as well as property use & submarket for commercial property, but because there are discernible patterns of growth that characterize a market area, analyst staff will annually evaluate the market area boundaries or market segments to ensure homogeneity of property characteristics.

New Construction/Demolition

Field and office review procedures for inspection of new construction will be reviewed and revised as required in order to complete the data collection phase. Field production standards are established and procedures for monitoring tested to meet field review deadlines. Sources of building permit data is confirmed and system input procedures are identified in the procedures adopted by the department.

Remodeling

Market areas with extensive remodeling will be identified through permits and on-site inspections will be planned to verify property characteristic data. Reappraisal of significantly changed properties will take place and values will be tested with ratio studies before they are finalized.

Re-Inspection of Problematic Market Areas

Real property market areas, stratified by property classification, will be tested for low or high protest volumes; low or high sales ratios; and high coefficients of dispersion. Market areas that fail any or all of these tests will be determined to be problematic. Field reviews will be scheduled to verify and correct property characteristics data. Additional sales data will be researched and verified in order to assess whether the market area is correctly stratified. In the absence of adequate market data, market area boundary lines may need to be redrawn and clustered for a representation of the overall market area will be established.

Re-Inspection of the Universe of Properties

Texas Property Tax Code, Section 25.18(b) requires the re-inspection of the universe of properties at least once every three years. The district's re-inspection activity is dictated by availability of staff, which is dependent on the completion of current year protests and certification. Re-inspection of properties will be completed using a combination of field inspections and office review. Office review of property for the 2023-2024 years will include the examination of aerial photography using the DCAD's most recently flown oblique and orthographic imagery provided by Pictometry Inc., property sketches, existing property characteristics, and existing street-view images captured by district staff.

Gathering & Verification of Sales Data and Property Characteristics

Sales information will be gathered by the Mapping department & inputted into the CAMA system. Sales information will be reviewed & verified by the appraisers. Property characteristics data contemporaneous with the date of sale will be captured. Since Texas does not require full sales disclosure of sales transactions, the district will obtain sales prices through deeds, voluntarily disclosed closing statements or fee appraisals (usually submitted as evidence in a protest hearing) buyer and seller mail questionnaires, or third party sources such as, real estate agents and market data vendors.

Quality Control

Appraisal department managers and data management employees conduct on-going quality control of the entire data entry process. Supervisors and managers verify the accuracy of collected data with periodic on-site field reviews. The review process may pinpoint areas where additional appraiser training is required.

VALUATION METHODS BY PROPERTY TYPE

RESIDENTIAL PROPERTY VALUATION

Scope of Responsibility

The Residential Appraisal staff is responsible for developing equal and uniform market values for residential properties. There were approximately 326,844 residential improved parcels in Denton County in 2022.

Residential assignments are delineated from commercial assignments on the basis of property use type codes. Generally, the staff values residential single family, all multifamily housing other than apartments, and mobile homes. The Residential Division is responsible for appraising vacant residential lots and tracts in neighborhoods.

State Code	codeDescription	
A020	BUILDER HOME PLANS - REFERENCE ONLY	Residential
A021	Builder Home Plans - Reference Only	Residential
A1	REAL, RESIDENTIAL, SINGLE-FAMILY	Residential
A2	REAL, RESIDENTIAL, MOBILE HOME	Residential
A3	REAL, RESIDENTIAL, WATERFRONT	Residential
A4	REAL, RESIDENTIAL, CONDOS	Residential
A5	REAL, RESIDENTIAL, TOWNHOMES	Residential
A6	REAL, RESIDENTIAL, GOLF COURSE	Residential
B020	BUILDER HOME PLANS - REFERENCE ONLY	Residential
B021	Builder Home Plans - Reference Only	Residential
B2	REAL, RESIDENTIAL, DUPLEXES	Residential
C1	VACANT PLATTED RESIDENTIAL LOT	Residential
C3	VACANT LOT OUTSIDE CITY	Residential
C5	VACANT LOT WATERFRONT	Residential
M1	MOBILE HOME	Residential
E1	LAND AND IMPROVEMENTS (NON AG QUALIFIED)	Land/Res/Ag
E3	MOBILE HOMES ON NON AG QUALIFIED LAND	Land/Res/Ag
E4	VACANT NON QUALIFIED NON HOMESITE LAND	Land/Res/Ag
D1	QUALIFIED AG LAND	Land/Ag
D2	FARM AND RANCH IMPSS ON QUALIFIED OPEN-SPACE	Land/Ag

Appraisal Resources

Personnel - The Residential Appraisal staff currently consists of 22 staff members, including one manager, two supervisors. A detailed count may be found in the adopted budget.

Data gathering - A common set of data characteristics for each residential dwelling in Denton County is collected in the field and data entered to the CAMA System. Land data resources include property-specific (view attributes, topography, site plan approvals, sales, listings, and zoning, *e.g.*) and general (neighborhood trends, investment criteria, *e.g.*) data, acquired from field inspection, aerial imagery, public records, owner survey, as well as contract services that report sale and listing information, general market trend and investment criteria, *etc.* Denton CAD uses personal field devices to make data entry more efficient in the field work. These PFD's will enable the appraiser to enter data as it is gathered, thus limiting errors and saving time due to not re-writing the gathered data and another employee interpreting the data. This property-specific data drives the DCAD computer-assisted mass appraisal (CAMA) approaches to valuation. Residential appraisal also requires verified sales data, actual construction cost data, and other real estate sources and data. Appraisers also review various real estate related publications to determine patterns and trends in the market data.

Specific Valuation Objectives

Each year, new land accounts created by subdivision, condominium declaration, or by split/merge activity. Field inspections ascertain land characteristics for these new accounts, for the development status of subdivision / condominium developments that were partially complete in the previous year, and for existing individual properties or land market areas targeted for review. On an annual basis, in cooperation with Residential and Commercial real property appraisal divisions, existing land values are compared with recent market data within designated land market areas. All qualifying D1 properties are reappraised annually as to their productivity values, as are qualifying O property inventory values.

In addition to properties identified by building permits, sales, protests, and administrative review, Denton Central Appraisal District proposes to review:

1. Review residential cost schedules & consider available vendors
2. Procedure manual update and review
3. Residential network drive cleanup and archiving
4. Review and remove unused & obsolete codes
5. Inspections for tagged properties
6. Land Schedule Review & Evaluation
7. Improvement Schedule Review & Evaluation
8. Neighborhood Code Review & Evaluation
9. Consider reassigning appraiser regions to maximize productivity, staff knowledge, and continued development.
10. Inspections for tagged properties

New construction/demolition - New construction and office review procedures are identified and revised as needed. Building permits provided by the cities are a main source of discovering construction or demolition properties. This data is acquired periodically from the cities and used in identifying properties for annual inspection.

Sales data is researched and verified – Sales with a sales ratio of 75% below or 25% above the Denton CAD market value must be verified and property characteristics data gathered with the date of sale captured. The sales ratio formula is Denton CAD appraisal of the property divided by the sales price.

Highest and Best Use Analysis – Highest and best use of property is the reasonable and probable use that supports the highest present value as of the appraisal date. The highest and best use of residential property is normally its current use. This being due to the fact that residential development, in most areas, through deed restrictions and zoning preclude other land uses. Residential valuation reassessment is used in transition areas and areas of mixed residential and commercial use. In transition areas with ongoing renovations of neighborhoods no longer prosperous, the appraiser would review the residential property use and determine the 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. As an example, it may be determined in a transition area that older, non-remodeled homes are not the most productive or profitable use, and the highest and best use of such property is to demolish the old homes and construct new dwellings. In areas of mixed residential and commercial use, the appraiser reviews properties on a periodic basis to determine if changes in the real estate market require reassignment of the highest and best use of a select category of properties. DCAD also complies with the Texas Property Tax Code Section 23.01(d) regarding a property's value for a residence homestead.

VALUATION AND STATISTICAL ANALYSIS (Model Calibration)

Cost Schedules

Geographically adjusted, from national publications such as Marshall Valuation Service (Marshall & Swift) cost schedules utilized are reviewed and adjusted periodically in order to consistently reflect market costs or any changing economic trends. These are costs compared with sales of new improvements and evaluated from year to year and indexed to reflect the local residential building and labor market. Costs may also be adjusted for market area factors and influences that affect the total replacement cost of the improvements in a smaller market area based on evidence taken from a sample of market sales. The cost schedules are reviewed regularly and any variation greater than a range of plus or minus 10% from nationally recognized cost schedules is documented.

Tables are also produced in order to uniformly apply value for added amenities as determined by the marketplace. Examples may include pools, bathhouses, outbuildings, boathouses, tennis courts, and other market driven value items.

The District considers all three approaches to value and recognizes the cost approach as an acceptable approach. Generally for residential property the district considers the market approach a more viable and accurate indicator due to it's being more sensitive to economic, social and physical characteristics of a given property.

Income Models

The income approach to value may be useful to those real properties that are typically viewed as "income producing" when sufficient income data is available and where comparable sales are not present. In the current residential market, the income approach is not generally used.

Sales Information

A sales file for the storage of "snapshot" sales data for vacant and improved properties at the time of sale is maintained for residential real property. Residential improved and vacant sales are collected from a variety of sources, including: district survey letters sent to buyers and sellers, field discovery, protest hearings, sales vendors, builders, realtors and brokers.

A system of type, source, validity and verification codes has been established to define salient facts related to a property's purchase or transfer and to help determine relevant market sale price information. The effect of time as an influence on price can be considered by paired sales analysis and applied in the ratio study to the sales as indicated within each market area. Market area sales reports are generated as an analytical tool for the appraisers in the development and estimation of market price ranges and property component value estimates. Abstraction and allocation of property components based on sales of similar property is an important analytical tool to interpret market sales under the cost and market approaches to value. These analysis tools help determine and estimate the effects of change, with regard to price, as indicated by sale prices for similar property within the current market.

Statistical Analysis

The residential appraisal staff performs statistical analysis annually to evaluate whether values are equitable and consistent with the market. Ratio studies are conducted on residential market areas in the district to judge the two primary aspects of mass appraisal: accuracy and uniformity of value. Appraisal statistics of central tendency and dispersion generated from sales ratios are available for each market area and are summarized by year. These summary statistics including, but not limited to, the weighted mean, median, standard deviation, coefficient of variation, and coefficient of dispersion provide the managers a tool by which to determine both the level and uniformity of appraised value on a market area basis. The level of appraised value is determined by the weighted mean for individual properties within a market area, and a comparison of market area weighted means reflect the general level of appraised value between comparable market areas. Review of the standard deviation, coefficient of variation, and coefficient of dispersion discerns appraisal uniformity within and between market areas.

The appraisers, through the sales ratio analysis process, review market areas annually. The first phase involves market area ratio studies that compare the recent sales prices of market area 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. Based on the sales ratio statistics and designated parameters for a valuation update, a preliminary decision is made as to whether the value level in a market area needs to be updated in an upcoming reappraisal, or whether the level of appraised value is acceptable. The residential appraisers perform statistical analysis annually to evaluate whether estimated values are equitable and consistent with the market.

Market Area and Market Analysis

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

The following equation denotes the hybrid model used:

$$MV = LV + ((CN - D) MA)$$

Market Value = Land Value + ((Cost New – Depreciation) Market Adjustment)

In accordance with the cost approach, the estimated market value (MV) of the property equals the land value (LV) plus the replacement cost new of property improvements (CN) less depreciation (D) times the market adjustment factor (MA). The MA is only applied to the improvement value, not the land value. As the cost approach separately estimates both land and building contributory values and uses depreciated replacement costs, which reflect only the supply side of the market, it is expected that adjustments to the cost values may be needed to bring the level of appraisal to an acceptable standard as indicated by market sales. Thus, demand side economic factors and influences may be observed and considered. These market, or location adjustments, may be abstracted and applied uniformly within market areas to account for location variances between market areas or across a jurisdiction.

Market Adjustment

Market Area 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 is the market or sales comparison approach.

Statistical analysis of present appraised value as compared with recent sales determines the appropriate market adjustment for a market area. Statistical programs developed by the DCAD Residential Department staff are used to study market trends and to develop appropriate market adjustments.

Special Appraisal Provisions

Appraisal of Residential Homesteads

Article VIII, Sec. 1(i) of the Texas constitution allows the legislature to limit the annual percentage increase in the appraised value of residence homestead to 10% under certain conditions. This limitation is commonly referred to as a Homestead "Capped Value". Sec.23.23 of the Tax Code implements the cap on increases in value. The limited value begins in the second year the property owner qualifies for a residential homestead exemption. The 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 re-appraisal.

The appraised value of a homestead increases 10% annually or until the appraised value is equal to the market value. If a limited homestead property sells, the cap automatically expires as of January 1st of the year following the sale of the property and the property is appraised at its market value. The market value of a limited homestead is maintained, as well as the limited appraised value.

DCAD also complies with the Texas Property Tax Code Section 23.01(d) regarding a property's value for a residence homestead.

INDIVIDUAL VALUE REVIEW PROCEDURES

Field Review

The appraiser identifies individual properties in need of field review through examples such as: sales ratio analysis, ARB hearings, building permits, property owner's requests, aerial photography and other sources.

Sold properties are reviewed on a regular basis to check for accuracy of data characteristics before they are used in reappraisal analysis.

Increased sales activity can result in a more substantial field effort on the part of the appraisers to review and resolve sales that fall outside acceptable ranges. Additionally, the appraisers frequently field review 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.

Office Review

Office reviews are performed in compliance with the International Association of Assessing Officer standards, and with the guidelines required by the existing classification system. The appraiser may utilize aerial photography as a means to verify building characteristics and location without an on-site inspection.

Appraisers conduct a routine valuation review of all properties as outlined in the discussion of ratio studies and market analysis. Previous values resulting from protest hearings, informal negotiation, or litigation are individually reviewed to determine if the value remains appropriate for the current year.

Once an appraisal manager is satisfied with the level and uniformity of value for each area, the estimates of value are prepared for a notice of proposed value.

PERFORMANCE TESTS

Sales Ratio Studies

The primary analytical tool used by the appraisal manager to measure and improve performance is the ratio study. The district ensures that the appraised values produced meet the standards of accuracy in several ways. Overall sales ratios are generated for each ISD 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. In addition to the sales ratios by school district and market area, sales ratios statistics are also generated.

Management Review Process

Once the proposed value estimates are finalized, the appraisal supervisors review the sales ratios by market area and present pertinent valuation data, such as weighted sales ratio and pricing trends to the Residential Manager. This review includes comparison of level of value between related market areas within and across jurisdiction lines. The primary objective of this review is to ensure that the proposed values have met preset appraisal guidelines appropriate for the tax year in question.

COMMERCIAL PROPERTY VALUATION

Appraisal Responsibility

Commercial Appraisal operates within the Commercial Department of Denton Central Appraisal District which is responsible for the valuation of all commercial real property, including land and improvements, located within the boundaries of Denton Central Appraisal District's jurisdiction. Commercial real property types generally include multi-family, office, retail, warehouse/manufacturing and various other categories of business related facilities. In general terms, the commercial appraisal staff is responsible for establishing market value on any real property for which the highest and best use is determined to be non-residential. There are approximately 16,467 improved commercial properties.

Commercial appraisal assignments are delineated from residential assignments on the basis of state use code guidelines established by the State Comptroller. Generally the commercial staff values all commercially improved properties including apartments, retail, office and industrial. Non-Homestead residential properties located in areas of transition to commercial, known as interim-use properties, are also valued by the commercial division. Property data and valuation models for commercial accounts are stored in the CAMA System.

State Code	codeDescription	
B1	REAL, RESIDENTIAL, APARTMENTS	Commercial
C2	VACANT LOT COMMERCIAL	Commercial
F010	COMMERCIAL BUILDER PLANS - REFERENCE ONLY	Commercial
F1	REAL, COMMERCIAL	Commercial
F2	REAL, INDUSTRIAL	Commercial
F3	REAL - COMMERCIAL MH PARKS	Commercial
F4	REAL - COMMERCIAL OFFICE CONDO'S	Commercial
OC2	INVENTORY, VACANT COMMERCIAL LOTS	Commercial
OA1	INVENTORY, RESIDENTIAL SINGLE FAMILY UNDER 5	Land
OA2	INVENTORY, RESIDENTIAL	Land
OA3	INVENTORY, WATERFRONT	Land
OA4	INVENTORY, CONDOS	Land
OA5	INVENTORY TOWNHOMES	Land
OB2	INVENTORY, DUPLEX	Land
OC1	INVENTORY, VACANT PLATTED LOTS/TRACTS	Land
OC3	INVENTORY, VACANT LOTS, OUTSIDE CITY	Land
OC5	INVENTORY - WATERFRONT VACANT LOT	Land
OD1	INVENTORY, AG PROPERTY	Land
D1	QUALIFIED AG LAND	Land/Ag
D2	FARM AND RANCH IMPSS ON QUALIFIED OPEN-SPACE	Land/Ag
E1	LAND AND IMPROVEMENTS (NON AG QUALIFIED)	Land/Res/Ag
E3	MOBILE HOMES ON NON AG QUALIFIED LAND	Land/Res/Ag
E4	VACANT NON QUALIFIED NON HOMESITE LAND	Land/Res/Ag

Appraisal Resources

Personnel – The Commercial Appraisal Section is staffed with 14 staff members including the Commercial Manager and the Commercial Supervisors. Appraisal duties and responsibilities are divided by commercial property type and include Multi-family, Industrial, Office and Retail.

Commercial Appraisal - The Commercial Appraisal Division is responsible for valuing all commercial improved real property within Denton Central Appraisal District. Appraisers are responsible for all aspects of data collection, valuation, and valuation appeal (protests).

The assignment of the exact area of responsibility is reviewed and assigned each appraisal year by the Commercial Manager. Appraisers are also given the task of completing field reviews for all permits issued in their designated appraisal areas. Appraisers are consistently cross trained so they are knowledgeable and competent to appraise any/all commercial property types within DCAD's jurisdiction, even when those properties fall outside of their assigned area or property type.

Research - Appraisers are responsible for collecting, processing, and maintaining income information that is used in the valuation process. After the information is processed and verified, the information is entered into the database. Income information may also be maintained in databases outside of the CAMA system for use during the appeals season. Sales are collected and processed by the Mapping department.

The commercial appraisal staff is responsible for updating and maintaining the commercial data. This includes the periodic review and calibration of various cost and depreciation tables.

Data - A standardized set of data characteristics for each commercial property in Denton County is collected and data entered by the commercial appraisal staff into the CAMA system. This property-specific data drives the three valuation models. Additional required data includes verified sales of vacant land and improved properties and the pertinent data obtained from each (sales price levels, capitalization rates, income multipliers, equity dividend rates, marketing period, etc.). Other data used by the appraisers includes sale listings, fee appraisals, actual income and expense data (typically obtained through the appeals process), 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 and published market surveys are also reviewed to provide additional support for market trends.

Specific Valuation Objectives

Each year, new land accounts created by subdivision, condominium declaration, or by split/merge activity are appraised based on recent market data. Field inspections ascertain land characteristics for these new accounts, for the development status of subdivision/condominium developments that were partially complete in the prior year, and for existing individual properties or land market areas targeted for review. On an annual basis, in cooperation with Residential and Commercial real property appraisal divisions, existing land values are compared with recent market data within designated land market areas.

Residential Inventory

Section 23.12 of the Texas Property Tax Code provides the definition of market value for inventory. Inventory includes residential real property that has never been occupied as a residence and is held for sale in the ordinary course of business, if the property is unoccupied, is not leased or rented, and produces no revenue.

Residential inventory is appraised at market value. The market value of residential inventory is the price at which it would sell as a unit to a purchaser who would continue the business. The land appraisal staff applies the same generally accepted appraisal techniques to determine the market value of residential real property inventory.

In addition to properties identified by building permits, sales, protests, and administrative review, Denton Central Appraisal District proposes to:

1. Review commercial cost Schedules & consider available vendors
2. Procedure manual update and review
3. Commercial network drive cleanup and archiving
4. Review and remove unused & obsolete codes
5. Inspections for tagged properties
6. Consider creating an income model for all commercial property types
7. Review land adjustments
8. Review Economic unit groups
9. Consider reassigning appraiser regions & property types to maximize productivity, staff knowledge, and continued development.
10. Review and automate commercial equity and sales grids
11. Collect financing data to calculate a "typical" loan to value ratio
12. Review all commercial property values
13. Review and cleanup market area codes for uniformity

PRELIMINARY ANALYSIS & DATA COLLECTION

Prior to beginning the valuation activities for an appraisal year, the appraisal department management team completes a review of the results of the preceding year. Budget, calendar issues, and resource availability are all considered. Appraisal activities must be coordinated between DCAD departments to avoid conflicts and ensure availability of personnel. Appraisal Review Board activity and value changes during the appeals process are analyzed. DCAD takes a proactive approach to create organizational efficiencies by reviewing prior year activities and refining internal processes.

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 rates, discount rates, and financing trends, availability of vacant land, and construction trends and costs are collected from private vendors and public sources. More detailed analysis is then completed to determine what appraisal area market changes will need to occur during the upcoming valuation cycle.

Market Area Analysis

A commercial market area, submarket or economic area consists of land and the commercial properties located within the boundaries of a specifically defined area. A market area consists of a wide variety of both competing and complementary property types including residential, commercial, industrial and governmental. Market area delineations can be based on man-made, political, or natural boundaries.

The effects of these forces are used to determine the highest and best use for a property, and to select the appropriate sale, income, and cost data in the valuation process.

Area identification and delineation by major property use type is a key component in a mass- appraisal, commercial valuation system. Areas are periodically reviewed to determine if a revised delineation is required.

Highest and Best Use Analysis

The highest and best use is the most reasonable and probable use that generates the highest present value of the real estate, as of the date of valuation. The highest and best use of any given property must be physically possible, legally permissible, financially feasible, and maximally productive. It is that use that will generate the highest net return to the property over a period of time. For vacant tracts of land within a jurisdiction, the highest and best use is considered speculative but market- oriented, and is based on the surrounding land uses in a competing land market area. The appraiser must consider the most probable use that is permitted under local administrative regulations and ordinances. While its current zoning regulation may restrict a property's use, the appraiser may also consider the probability that the zoning could be changed, based on activity in the area and a city's propensity for approving zoning change requests.

For improved properties, highest and best use is evaluated as currently improved and as if the site were still vacant. In many instances, the property's current use is the same as its highest and best use. However, the appraiser may determine that 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. Improved properties reflect a wide variety of highest and best uses which include, but are not limited to: office, retail, apartment, warehouse, light industrial, special purpose, or interim uses. Proper highest and best use analysis ensures that the most accurate estimate of market value can be derived.

Market Analysis

A mass-appraisal market analysis relates directly to economic market forces affecting supply and demand that affect a group of similar or "like" properties. This study involves the relationships between social, economic, environmental, governmental, and site conditions. Appraisers consider such general market data as submarket supply and demand, zoning and code restrictions, municipal services, school district characteristics, job growth patterns, population trends, transportation issues, investment patterns and a myriad of other factors that influence the local real estate market. Specific market data is gathered and analyzed including sales of commercial properties, new construction and other building permit activity, new leases, lease rates, absorption rates, vacancies, typical property expenses (inclusive of replacement reserves, if recognized by the market), expense ratio trends, and capitalization rate indicators. This data is used to determine market ranges in price, operating costs and investment return expectations.

DATA COLLECTION VALIDATION

Data Collection Procedures/Field Inspections

Data collection of commercial real property involves maintaining data characteristics of the property into the CAMA system. The information contained for each property includes site characteristics, such as land size and topography, and improvement data such as square footage of the building, actual and effective years of construction, quality of construction, condition and all of the miscellaneous details. The appraisers are required to use a property classification system that established uniform procedures for the correct listing of real property. All properties are coded according to a classification system. The appraisers use property classification references during training and as a guide in the field inspection of property and when adding new properties to the appraisal roll.

When the appraisers are doing field inspections, they review all characteristics of the property and make changes where there are discrepancies. They review items such as building class, quality of construction, condition, and physical, functional and economic obsolescence factors contributing to the market value of the property. All comments, changes, date of inspection are added to the property records.

Commercial Building Permits

Cities within DCAD's jurisdiction have a system of issuing building permits to property owners in order to ensure that building code standards are followed for all new construction or major remodeling projects. Permits may also be issued for repair or replacement of plumbing, electrical, HVAC, roofing, foundations, canopies, interior or exterior finish, parking lots, and ancillary structures. On a regular basis, copies of those permits are either forwarded to DCAD or downloaded by a DCAD employee from various city websites. Permits are matched to a corresponding commercial account and pertinent permit data is entered into the CAMA system.

Comparable Sales Data

Commercial sales data is collected and processed by the Mapping department. The sale data is reviewed and verified by appraisers to determine reliability of the content and the source. Sale details are compiled to create a "snapshot" of the sold parcels as of the time of sale. A commercial appraiser may conduct a field inspection to verify the accuracy of the existing property characteristics data.

Income and Expense Data

Income and expense data consists of property rent rolls and income statements and is generally provided by property owners during the appeals process. The appraisal staff scans the information into the CAMA system or forwards the data to the support section where it is immediately scanned into the property. The data can be retrieved by appraisers and processed into the CAMA system income and expense tables. The district also subscribes to several real estate publications, such as CoStar, Real Capital Analytics and Axiometrics that provide individual summarized income data within each specified submarket or improved market area. Pertinent income data includes contract and market rental rates, asking rental rates, physical and economic vacancies, tenant reimbursements, operating expenses, capitalization rates, discount rates, lease up projections, and finish out costs.

Sources of Commercial Data

Property specific data is gathered as part of an on-site field inspection. The majority of cost related data is compiled by subscribing to national publications such as Marshall Valuation Service (Marshall & Swift) and from local market data. Closing statements, actual cost documents, rent rolls and income statements provided by owners or agents during the protest and ARB process are considered the most reliable sources of property data. DCAD should receive all copies of the deeds recorded in Denton County that convey commercially classed properties located within the DCAD jurisdiction. When a deed involving a change in commercial property ownership is entered into the DCAD system, data mining techniques are employed to gather as much sale and sale related appraisal information as possible. Denton Central Appraisal District subscribes to CoStar, a vendor of commercial sale and property data, and other subscription based data sources. Other sales sources are contacted such as the brokers involved in the sale, property managers, commercial real estate vendors, Fannie Mae, the Texas State Comptroller's Property Tax Division and other knowledgeable parties. The commercial appraisal staff attempts to confirm and verify data from secondary sources. Unlike the majority of states, Texas laws do not require mandatory disclosure of

sale prices. DCAD Commercial sales data is provided by voluntary disclosure or purchased from third party vendors.

VALUATION APPROACH

The commercial appraisal system, developed and maintained in the CAMA system, consists of mass appraisal applications of the sales comparison, cost, and income approaches to value. Each approach to value represents a specific model or formula that defines property characteristics and their relationships in an effort to arrive at an indication of market value for a given property.

Cost Approach

The very basic valuation model is:

$$V = LV + (RCN - D)$$

(Value = Land Value + (Replacement Cost New – Depreciation))

This model represents the formula for the cost approach to value. The formula for a cost driven valuation model begins with an estimate of replacement cost new (RCN) for all improvements (buildings, fencing, paving etc.) on a parcel of land. Three forms of depreciation are considered and subtracted from the RCN to result in an estimate of value for the improved portion of the real estate. The sales comparison approach is typically the most reliable method to value the underlying land. An overall value is then computed by adding the depreciated value of the improvements to the value of the land.

Improvement Valuation

Cost model specification involves categorizing or grouping commercial improvements by construction type or use. The Commercial Department uses a numerical coding system of building classes that represent commercial property construction. For each building class, key characteristics are used to describe a typical or benchmark property. The characteristics may include construction quality, plumbing, interior, flooring, roof type, roof materials, heating/cooling, exterior, foundation, story height, and number of stories. The Appraisal Manual contains a description and a list of these specific characteristics for each property class. Additional site improvements for each building class, such as concrete paving, canopies, garages, and storage buildings are also specified and valued using the cost approach.

Other key data necessary for cost valuation includes gross building area, year built and effective year of construction, percent and quality of finish-out, percent of completion, and property condition. A base cost rate is associated with each commercial building class. An improvement value or replacement cost is then computed by multiplying the base rate times the structure's gross building area. An improvement can have more than one building class.

The total improvement value for an account represents the sum of the depreciated improvement value of all taxable improvements plus any value for the additional site improvements associated with the account.

Depreciation

Accrued depreciation is the sum of all forms of loss affecting the contributory value of the improvements. It is the measured loss against replacement cost new taken from all forms of physical deterioration, functional and economic obsolescence. Accrued depreciation is estimated and developed based on losses typical for each property type at that specific age. Physical depreciation is expressed as a percentage that is computed and subtracted from estimated replacement cost value. This percentage rate is extracted from depreciation tables and is dependent on the class, condition, effective age and economic life of each improvement. Individual determinations are made for functional and economic depreciation rates based on property specific conditions. The sum of the three rates is utilized in the CAMA application to compute a depreciated improvement value.

Land Valuation

On an annual basis, commercial land values are analyzed by the Commercial Department. The Commercial Department will review, update and adjust any land parcels.

Sales Comparison 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 for estimating land value and also in comparing sales of similarly improved properties to parcels on the appraisal roll. Sales of similarly improved properties can also 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.

The formula for the sales comparison approach is:

Market Value = Sale Price of Comparable Properties adjusted for differences between the comparables and the subject.

In this model, market value is a total amount without a separation for improvement and land values. The sales comparison approach requires an adequate amount of sales data to be accurate. Some commercial property categories cannot be valued with this technique because of a limited amount of verifiable sales data.

Commercial mass appraisal using sales is specified or defined based on several standardized property characteristics or comparison fields. Sales within market areas are used to more accurately define market value for that specific type of property. For commercial properties valued using the Market or Sales method a sales ratio report is conducted by the market area. The sales ratio report allows the commercial appraiser to determine the market adjustment necessary by calculating the mean for sales during a given time frame.

Before the market adjustments are defined, the appraisers study and analyze the sales in each market segment. This market analysis aids in revealing patterns in value that vary due to location, size, age, etc. The appraiser then determines what market areas have enough credible sales data to make market adjustments based on sales.

Income Approach

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 basic formula for the income approach is:

Market Value = Net Operating Income Divided By Overall Cap Rate.

This is also known as "Direct Capitalization", which is a generally accepted appraisal technique used to convert one year's stabilized income into an indication of market value. The income approach module provides the mechanism to capture and specify a property's income characteristics for levels or variable situations known as "Pro Forma", "Direct Cap" (actual) and "Schedule" (market). These income calculations are under Income Value in separate tabs in the CAMA income module. A thorough analysis of actual market data is performed by the commercial appraisal team. The "Direct Cap" allows the appraiser to use actual income characteristics that are property specific to create an income model individual to the property.

The income approach formula includes gross potential income, economic vacancy, secondary income, total operating expenses, net operating income and capitalization rate.

The income approach formula is generally expressed the following way. A brief definition of each component of the formula is listed below.

Gross Potential Rent
Plus
Secondary Income
Minus
Vacancy & Collection Loss
Equals
Effective Gross Income
Minus
Operating Expenses
Equals
Net Operating Income
Then
Net Operating Income/Overall Cap Rate = Value

Gross Potential Rent (GPR) - Total economic or market rent at 100% occupancy; usually expressed as an annual amount on a per square foot or per unit basis.

Secondary or Other Income - Income, other than rent, such as; laundry rooms, parking, storage area rental, electronic communication roof space rental, and other sources related to ordinary operation of a property. Can be expressed as a percentage of GPR or EGR or dollar amount per unit of measure.

Vacancy and Collection (V&C) - Loss in rental income because of economic vacancy, bad debt or economic rental concessions; often expressed as a percent of GPR; based on market cycles and trends.

Effective Gross Rent (EGR) - Rental Income after subtracting vacancy & rental loss from gross potential rent.

Effective Gross Income - Amount of actual income received from rent and secondary sources.

Operating Expenses - Expenses necessary to maintain a cash flow from the real property (not from the business). Typical expenses include management, utilities, property insurance, property taxes, repairs and maintenance, etc. This dollar amount can also be expressed as a percentage or ratio that represents total expenses divided by effective gross income.

Net Operating Income (NOI) - Income remaining after subtracting operating expenses from Effective Gross Income. This amount is income before debt service, property depreciation, personal income taxes, amortization, or interest payments.

Overall Capitalization Rate (OAR) - Rate used to convert income into value. An overall rate represents the requirements of discount (return), recapture and effective tax rates for the whole property. This is expressed as cap rate plus tax rate. If the tax rate is "loaded" into the cap rate, then the amount of real estate taxes is removed as an expense item.

VALUATION PROCESS

Valuation involves the process of estimating and periodically adjusting the mass appraisal formulas, tables, and schedules to reflect current local market conditions. Three valuation models are utilized in the mass appraisal process; cost, income and sales comparison models. These are represented as separate options for commercial valuation in the CAMA system. The CAMA software is developed to create valuation models specified according to appropriate Uniform Standards of Professional Appraisal Practices and International Association of Assessing Officers mass appraisal standards and techniques.

Cost & Depreciation Schedules

The cost approach to value is applied to all improved real property utilizing the comparative unit or square foot method to determine replacement cost new. Replacement cost new should include all direct and indirect costs, including materials, labor, supervision, architect and legal fees, overhead and a reasonable profit. Development of a comparative cost unit for each building class involves the utilization of national cost data reporting services as well as consideration of actual cost information on comparable properties. A base cost rate has been developed for each building class and represents the replacement cost per unit for a benchmark property for each class.

Accrued depreciation is estimated and developed based on losses typical for each property type at that specific age. Physical depreciation is the loss in value due to wear and tear and exposure to natural forces. For each major class of commercial property, standardized physical depreciation tables have been developed based on physical condition and the building life expectancy. 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.

A depreciation calculation override can be used if the condition or effective age of a property varies from the standard. These adjustments are typically applied to a specific property in the form of physical adjustment, economic adjustment or functional adjustment.

Final Valuation Summary and Reconciliation

Based on the market data analysis and the methodology described in the cost, income and sales approaches values are determined by the appraiser for each commercial property. The cost approach mass appraisal model is applied to

every improved property. The final valuation is applied using the cost, sales comparison, or income approach, depending on the property type and availability of data.

Statistical and Capitalization Analysis

The Commercial Appraisers perform statistical analysis annually to evaluate whether estimated values are equitable and consistent with the market. Appraisers review every commercial property type annually through the sales ratio analysis process. Ratio studies are conducted on commercial properties to judge the two primary aspects of mass appraisal accuracy – level and uniformity of value. Appraisal statistics of central tendency generated from sales ratios are evaluated and analyzed for the market areas. The level of appraised values is determined by the weighted mean ratio for sales of individual properties, and a comparison of weighted means reflect the general level of appraised values.

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. Income model estimates and conclusions are compared to actual information obtained on individual commercial properties during the appeal and protest hearings process, as well as with information received from published sources and area property managers and owners.

INDIVIDUAL VALUE REVIEW PROCEDURES

Field Review

The appraiser identifies individual properties in critical need of field review through sales ratio analysis. All properties are periodically reviewed to check for accuracy of property characteristics. Field Reviews of selected market areas are conducted on an annual basis.

Office Review

Office reviews are conducted on all properties. As authorized by the International Association of Assessing Officer standards, on properties subject to field inspection and are performed in compliance with the guidelines required by the existing classification system. The appraiser may utilize aerial photography as a means to verify building characteristics and location without an on-site inspection.

Valuation reports comparing the previous year's values against proposed and final values are generated for all commercial properties. Previous values from protest hearings are reviewed to determine if the value remains the same for the current year based on sales and market conditions. The percentage of value differences are noted for each property within a delineated market segment allowing the appraiser to identify, research and resolve value anomalies before final appraised values are determined. Each appraiser's review is limited to properties in their area of responsibility or by property type.

Once the appraiser and manager are satisfied with the level and uniformity of value for each commercial property within the appraiser's area of responsibility, the estimates of value are prepared to send a notice of proposed appraised value.

PERFORMANCE TESTS

Sales Ratio Studies

The primary tool to measure appraisal performance is a ratio study. A ratio study compares appraised values to market values. Sales ratio studies are an integral part of estimating equitable and accurate market values, and ultimately property assessments for the taxing jurisdictions.

Ratio studies generally have six basic steps: (1) determination of the purpose and objectives, (2) data collection and preparation, (3) comparing appraisal and market data, (4) stratification, (5) statistical analysis, and (6) evaluation and application of the results.

BUSINESS PERSONAL PROPERTY VALUATION

General Overview

Business Personal Property Appraisal of Denton Central Appraisal District is responsible for developing fair and uniform market value appraisal procedures for business personal property (BPP) located within the district. BPP account categories: standard business personal property consisting of merchandise, supplies, furniture, fixtures machinery, equipment and vehicles; leased assets; commercial aircraft and boats; utilities; special inventory for dealers selling autos, boats and boat trailers, manufactured homes, and heavy equipment; and mineral properties. There are approximately 19,536 BPP accounts and 105,949 utility and mineral accounts.

State Code	codeDescription	
L1	BPP TANGIBLE COMMERCIAL PROPERTY	BPP
L1M	Commercial Personal - Vehicles Under 1 Ton	BPP
L2	BPP TANGIBLE INDUSTRIAL PROPERTY	BPP
L2A	Industrial Personal - Vehicle 1 Ton and Over	BPP
L2D	Conversion	BPP
L2E	Conversion	BPP
L2F	Industrial Personal Drilling Rigs	BPP
L2G	Industrial Personal - Machinery and Equipment	BPP
L2H	Industrial Personal - Leased Equipment	BPP
L2J	Wardlaw Appraised Utility/Industrial	BPP
L2M	Industrial Personal - Vehicles Under 1 Ton	BPP
L2N	Industrial Personal - Underground Stored LPG	BPP
L2O	Industrial Personal - Computers	BPP
L2P	Industrial Personal - Radio Towers	BPP
L2Q	Industrial Personal - Radio Tower Equipment	BPP
L3	BPP TANGIBLE COMMERCIAL LEASED EQUIPMENT	BPP
L5	AIRCRAFT	BPP
M2	NON INCOME PRODUCING - AIRCRAFT/BOATS	BPP
M3	NON INCOME PRODUCING PERSONAL PROPERTY (BOAT)	BPP
N1	INTANGIBLES	BPP
S	SPECIAL INVENTORY	BPP

State Code	codeDescription	
G1	OIL AND GAS	Wardlaw
G2	MINERALS	Wardlaw
G3	OTHER SUBSURFACE INTEREST IN LAND	Wardlaw
J1	REAL & TANGIBLE PERSONAL, UTILITIES, WATER SY	Wardlaw
J2	REAL & TANGIBLE PERSONAL, UTILITIES, GAS COMP	Wardlaw
J3	REAL & TANGIBLE PERSONAL, UTILITIES, ELECTRIC	Wardlaw
J3A	Electric Other Personal	Wardlaw
J4	REAL & TANGIBLE PERSONAL, UTILITIES, TELEPHONE	Wardlaw
J4A	Telephone Other Personal	Wardlaw
J5	REAL & TANGIBLE PERSONAL, UTILITIES, RAILROAD	Wardlaw
J6	REAL & TANGIBLE PERSONAL, UTILITIES, PIPELINE	Wardlaw
J6A	Conversion	Wardlaw
J7	REAL & TANGIBLE PERSONAL, UTILITIES, CABLE TV	Wardlaw
J8	REAL & TANGIBLE PERSONAL, UTILITIES, OTHER	Wardlaw
J8B	Conversion	Wardlaw
J9	UTILITIES, RAILROAD ROLLING STOCK	Wardlaw / Texas Comptroller

Appraisal Resources

Personnel –BPP staff consists of 10 staff members, including one manager and one supervisor..

Data – A common set of data characteristics for each account in the district are collected by appraisers in the field, by phone, and other pertinent sources and are entered into the DCAD computer files by both the appraisal and support staff. These assigned property characteristics produce a computer-assisted personal property appraisal (CAPPA) used for comparison purposes when working renditions to determine whether an account’s rendered value or CAPPA value will be selected by the category appraiser. The category appraisers also utilize the CAPPA system during the review of their SIC code assignments to value accounts that fail to render.

Specific Valuation Objectives

For the 2023 tax year, Denton Central Appraisal District proposes to:

1. Procedure manual update and review
2. BPP network drive cleanup and archiving
3. Review and remove unused & obsolete codes
4. Inspections for tagged properties
5. Drive all areas annually for new or adjusted BPP accounts and business closures.
6. Properties that were not rendered in the last two years will be reviewed with an onsite field inspection.
7. Continue audit of exemptions

Identify all new businesses needing set up for appraisal year, track all existing business closures and business relocations within Denton County. Staff will utilize all available resources to research whether identified businesses have opened, closed or moved to a new location within Denton County. Staff will re- drive roads to review and update, close and/or pick up new accounts not currently on the appraisal roll.

BPP utilizes indicators to highlight account questions or reasons of concern. All such indicators require specific actions by the appraisers to be notated on the field card.

Criteria for upcoming year’s field inspections and/or indicators requiring action by the appraisers:

1. All new BPP setups.
2. Unrendered properties > \$20,000.
3. Relocations/Ownership changes

For the 2024 tax year, Denton Central Appraisal District proposes to:

Follow the same guidelines as outlined below and described above.

1. Consider reassigning appraiser regions to maximize productivity, staff knowledge, and continued development.
2. Inspections for required tagged properties
3. Drive all area for new, existing, moved, and/or closed accounts
4. Inspection of non-rendered accounts that have not rendered in the past two years.
5. Review the possibility of the CAMA system to direct by situs in the field for each area.
6. Software system to develop Online rendition submission

Review building permits and certificate of occupancy issuances prior to field work to assist field appraisers in flagging new accounts. The BPP support staff will also assist the field appraisers with researching whether the businesses have closed or moved to a new location within Denton County.

Adjustment of Criteria for upcoming year's field inspections and/or indicators requiring action by the appraisers will vary depending on what results are found from the prior year field work results.

VALUATION APPROACH

SIC Code Analysis

Standard Industrial Classification (SIC) codes were created in the 1930s to develop a plan of business classification by the Federal Government. These four digit numeric codes are used as the basis for classifying and valuing business personal property accounts. The North American Classification System (NAICS) was released in 1998 to replace SIC codes, but the software system used by DCAD has not yet been converted to accept the six digit NAICS code. Until that conversion is made, SIC codes will continue to be utilized.

SIC code identification and delineation is the cornerstone of the business personal property valuation system in the district. All of the analysis work done in association with the valuation process is SIC code specific. DCAD uses SIC codes to classify local business categories. SIC code delineation is periodically reviewed to determine if further refinements are necessary.

Highest and Best Use Analysis

The highest and best use of property is the most 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 permissible, financially feasible, and maximally productive. The highest and best use of business personal property is normally its current use.

DATA COLLECTION/VALIDATION

Data Collection Procedures

Appraisal and data collection procedures are maintained in the Business Personal Property Manual and supplemented with departmental memorandums as needed. Procedures are reviewed and revised to meet the changing requirements of field data collection. Business personal property appraisers reappraise all businesses each year through various discovery means and resources.

Sources of Data

Standard Business Personal Property Accounts

Before the field appraisers begin their new-year field work in August/September, a comparison is done between DCAD active field accounts, internally created reports and third party data providers to assist the appraisal staff with identifying accounts that are given priority for inspection/re-inspection.

Various discovery publications are utilized which include, but are not limited to, the Texas Department of Motor Vehicles website, Comptroller's sales tax permits listings, Texas Secretary of State business organizations website for corporations, and the County Clerk's assumed name filings records. This data may be accessed by the field appraisers during the discovery period from various external and internal databases, and printed data may be filed with the appropriate field card.

Leased Asset/Special Property at Multiple Locations Accounts

The primary source of discovery for these accounts is the owner renditions submitted in either hard copy or electronic format by the lessors, or lease companies. BPP renditions have a section requesting information on leased assets from the lessee. This data is reviewed by the staff to verify the lessor is on the appraisal roll.

Commercial and Business Aircraft & Boat Accounts

The Federal Aviation Administration's (FAA) website provides DCAD with the commercial aircraft registered in Denton County. In addition, local airport/airfield management submit listings of commercial and business aircraft having situs in this district. Commercial boats are identified via renditions.

Special Inventory Accounts

Monthly statements and annual declaration dealer forms for motor vehicles, boats outboard motors and boat trailers, heavy equipment, and manufactured homes (as defined by Section 23 of the Texas Property Tax Code) are used for the discovery and valuation of special inventory accounts. To verify all special inventory dealers are on the appraisal roll, BPP staff checks with the state agencies responsible for licensing these dealers: Texas Department of Transportation for motor vehicle dealers, Texas Parks and Wildlife for boat dealers, and the Texas Department of Housing and Community Affairs for manufactured home dealers. Heavy equipment dealers are not licensed.

Utility, Pipeline and Mineral Accounts

Denton Central Appraisal District contracts with a third party appraisal firm, Wardlaw Appraisal Group, L.C. (WAG) for the appraisal of the categories identified with G, J, and some L2 State Codes. Uniform Standards of Professional Appraisal Practices, or USPAP, certification and reappraisal plan information on these properties are maintained at Wardlaw Appraisal Group offices.

VALUATION AND STATISTICAL ANALYSIS (model calibration)

Cost Schedules

The BPP staff develops the cost schedules (CAPP grids) specific to the related SIC codes. Cost data is analyzed from property owner renditions, Settlement and Waiver of Protest documentation, and Appraisal Review Board (ARB) hearing evidence to produce SIC grids specifically from these sources only when the value data has been accepted by the appraisal staff. The computation of the SIC grids involves using min, max, mean and percentile functions on the population of accepted accounts. Schedules are reviewed as necessary to reflect changing market conditions and are presented exclusively in a reproduction-cost new (RCN) per square foot format.

Statistical Analysis

Summary statistics such as the median, weighted mean, and standard deviation provide appraisers analytical tools by which to determine both the level and uniformity of appraised value by SIC code. Review of standard deviation can distinguish appraisal uniformity within SIC codes.

Depreciation Schedule and Other Factors

Although all three approaches to value are considered, Denton Central Appraisal District's primary approach to the valuation of business personal property is the cost approach. Factors used by DCAD in the development of the depreciation schedule are based on IAAO standards. Price Indexes and Utilization factors from the Bureau of Labor and Statistics, and other local factors are used to calculate the current present value factors (PFV) that are applied to the rendered cost data to calculate the fair market value (FMV) of the fixed assets.

Depreciation and schedules are reviewed and adjusted as needed. Studies of rendered fixed assets provide guidance for establishing conventions related to specific SIC codes. Any revisions are then adopted and their use is reflected in all of the calculations for that SIC coded business category. Consistent application of this schedule ensures that market values are uniform and equal. All rendered assets are initially valued using rendered costs calculated by the adopted PVF tables, or rendered good faith estimates.

Computer Assisted Personal Property Appraisal (CAPP) Valuations

The two main objectives of the CAPP valuation process are to: (1) analyze and adjust existing SIC models and (2) develop new models for business classifications not previously integrated into CAPP. 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 per square foot value for a specific category of assets.

The data sampling process is conducted in the following order: 1) Prioritizing SIC codes for model analysis. 2) Compiling the data and developing the reports. 3) Field inspecting the selected samples. The models are built and adjusted using internally developed software. The models are then tested against the previous year's data. The typical cost per square foot is determined by a statistical analysis of the available data using the percentile function of the population of rendered indexed costs per square foot.

Standard Business Personal Property Account

CAPP model values are used in the general business personal property valuation program to estimate the value of new and/or existing accounts for which a property owner's rendition has either not been received or not used to estimate a value based on comparable properties. The calculated current year value is compared to the indicated CAPP model value by the category appraiser. All rendered accounts are analyzed and the rendition's appraised value is selected by the assigned category appraiser.

Exemption Application Processing

Freeport Goods (Sec. 11.251) and Goods-In-Transit (Sec. 11.253) annual exemption applications are reviewed by the BPP Department and either approved, disallowed, or denied as per Section 11.43. The review consists of an audit of supporting worksheet documents and an analysis of the exemption applications to verify the form's accuracy. If no supporting worksheet documents are provided, the application is disallowed and written requests for omitted documentation are made. Upon the receipt of the worksheet documents, the exemptions are either approved, modified and approved, disapproved with a written request for additional documentation to support the application's

claim, or denied with a written letter detailing the status of the application. The BPP department also reviews Pollution Control exemptions (Sec. 11.31) and abatements.

Certain vehicles specified under Sec. 11.254 that are used for both the production of income and personal use may receive an exemption for a single vehicle. The exemption applications are reviewed by the appraisal staff and use the same approval or denial procedures as stated for freeport goods and goods- in-traffic above. A vehicle that has been granted this exemption is not required to file an annual exemption application unless requested by the chief appraiser or in cases where there is a vehicle replacement or an ownership change.

Leased Asset/Special Property at Multiple Locations Account

Leased and multi-location assets are valued using the depreciation schedules mentioned earlier. If the asset to be valued in this category is a vehicle, either the NADA published “trade-in” values or a DCAD depreciation schedule developed for motor vehicles is used.

Commercial and Business Aircraft

Valuation for commercial aircraft designated as a certified air carrier, and business aircraft used for business purposes is processed through the utilization of pricing guides as the Aircraft Blue Book Price Guide. The Texas Property Tax Code has specific methodology for the valuation and/or allocation of all aircraft used both inside and outside this state; Sec. 21.05 states the method for valuing commercial aircraft and Sec. 21.055 refers to the valuation of business aircraft.

Special Inventory

The Texas Property Tax Code provides special valuation procedures for the appraisal of this category of property consisting of dealer motor vehicles, boats outboard motors and boat trailers, manufactured homes, and heavy equipment. Annual Dealer Inventory Declaration forms filed by the property owner on or before February 1st are the basis for the appraisal of special inventory. The declaration form details the dealer’s previous year’s Texas sales (used as the numerator) and divided by either a factor of 12 or the number of months the dealer was open the prior year (the denominator). This establishes a monthly basis consistent with the owner's tax payment requirements. In the absence of an annual declaration, comparable dealers that have filed declarations are identified and adjusted to the subject property to establish an estimated market value.

Dealer's Inventory Tax Statement forms that are filed monthly beginning February 10th and ending January 10th of the following year detail the current year sales for the previous month. Dealers file these forms with both the appraisal district and the assessor-collector’s office and make monthly property tax payments to the assessor-collector based on the prior month’s sales.

INDIVIDUAL VALUE REVIEW PROCEDURES

Rendered BPP Accounts Review

Standard Business Personal Property Account

A BPP smartlist reporting rendered accounts that have been imaged into the system identifies accounts ready to be processed by the support staff, and after their entry of the rendered information, an additional query alerts the

category appraiser of the rendered accounts ready for their review and value selection. This report also flags accounts that require special review procedures: accounts that have either increased or decreased their total area from the prior year; accounts that had a prior year ARB decision thereby compelling the appraiser to analyze that decision to determine if DCAD has substantial evidence to alter the prior year's ARB determination for the current year's appraisal per Sec. 23.01(c); newly established business accounts; and revisions to SIC cost tables.

Leased Assets

Leased Asset/Special Property accounts that have a high volume of assets and/or vehicles have the highest percentage of rendered accounts of any BPP category. These renditions are commonly filed by the property owner in an Excel compatible format via email or CD. The property owner's spreadsheet is copied over to a template that also contains a present value factor lookup table. The appraiser assigns taxing entities based on asset/vehicle situs, the life class is assigned by asset description, and the value is then calculated. After sorting assets by common taxing entities, a property ID number is assigned to each entity set of assets and the appraiser assigns the value for that account onto the system. Accounts that render by hardcopy must be manually entered into the template by support staff or the appraiser.

Commercial and Business Aircraft

The commercial and business aircraft account's renditions are simultaneously reviewed and valued utilizing a third party market value appraisal guide.

Special Inventory

Special inventory dealers with a current declaration on file are reviewed by the assigned appraiser to assess their validity and value based on the prior year's sales divided by 12 or the total number of months doing business in the prior year.

Un-Rendered BPP Accounts Review

Standard Business Personal Property Account

BPP accounts that fail to render are scrutinized by the field appraiser during their field work and the category appraiser prior to 25.19 Notice of Appraised Values are mailed to the property owner. The field appraiser is responsible for assigning the business category SIC code, the total area of the business, the Quality/Density grid factors and any comments detailing specific information picked up during field reviews. The category appraiser will review all un-rendered accounts by SIC code to determine the value in comparison with rendered properties.

Leased Assets

The appraiser responsible for processing the leased asset accounts will contact properties that have failed to render to determine the reason why a rendition was not received.

Commercial and Business Aircraft

Un-rendered commercial and business aircraft accounts are valued the same as rendered properties of the same category, through the utilization of pricing guides such as the Aircraft Blue Book Price Guide with year and model numbers identified based on the aircraft's N number.

Special Inventory

Special inventory dealers that fail to render are reported to the State licensing agency responsible for issuing licenses, in accordance with the State Property Tax Code. The appraiser will compare un-rendered special inventory accounts with comparable sized dealers of the same category and value the property based on that comparison.

PERFORMANCE TESTS

Ratio Studies

Each year the Property Tax Division of the State Comptroller's Office conducts a Property Value Study (PVS). The PVS is a ratio study used to measure appraisal district performance. Results from the PVS play a part in 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 DCAD's personal property values and ratios are determined.

MASS APPRAISAL REPORT

Each tax year the Texas Property Tax Code required mass appraisal report will be prepared and certified by the chief appraiser at the conclusion of the appraisal phase of the ad valorem tax calendar . The mass appraisal report will be completed in compliance with USPAP Standard Rule 6. The signed certification by the chief appraiser is compliant with USPAP Standard Rule 6-3.

FINAL PERFORMANCE ANALYSIS

Value Defense

Evidence to be used by the appraisal district to meet its burden of proof for market value and equity in both informal and formal appraisal review board hearing is specified and tested annually.

A variety of evidence is utilized by the district depending on the property type of the subject of the protest. In addition, the district updates the evidence supplied to an owner, an agent, or the Appraisal Review Board to be contemporaneous with the valuation procedures utilized. Some examples of evidence that may be used include, but are not limited to:

1. Property sales information
2. Property sales adjustment grids
3. Property equity adjustment grids
4. Gross rent/ income multiplier data
5. Proforma and actual income data
6. Property characteristics data including photos, as applicable
7. Aerial photography
8. Cost approach reports, as applicable
9. Property renditions, as applicable
10. Published reports regarding cost, market or income data
11. Schedules and or models utilized
12. Any other information collected by the district

Independent Performance Test

According to Chapter 5 of the Texas Property Tax Code and Section 403.302 of the Texas Government Code, the State Comptroller's Property Tax Division (PTD) conducts a property value study (PVS) of each Texas school district within each appraisal district at least once every two years. As a part of this study, the Code also requires the Comptroller to: use sales and recognized auditing and sampling techniques; review each appraisal district's appraisal methods, standards 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), the percentage of properties within 10% of the median, the percentage of properties

within 25% of the median, and 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).

The preliminary results of this study are released in January of the year following the year of appraisal. 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 appraisal.

This outside (third party) ratio study provides additional assistance to Denton Central Appraisal District in determining areas of market activity or changing market conditions. Results from Property Value Studies will be reviewed and analyzed by appraisal managers. Areas or property categories with unsatisfactory ratio results will be added to the next work plan and next reappraisal cycles.

LIMITING CONDITIONS

The appraised value estimates provided by Denton Central Appraisal District are subject to the following conditions:

1. The appraisals were prepared exclusively for ad valorem tax purposes.
2. The property characteristic data upon which the appraisals are based is assumed to be correct. Exterior inspections of the property are performed as staff resources and time allows. Some interior inspections of properties are performed at the request of the property owner and required by the district for clarification purposes and to correct property descriptions.
3. Validation of sales transactions was made using sales letters, telephone calls to buyer, seller or realtor, and field review. Sales data obtained from vendors is also considered to be a reliable source.
4. Our analyses, opinions, and conclusions were developed in conformity with the Uniform Standards of Professional Appraisal Practices (USPAP) of the Appraisal Foundation, Code of Professional Ethics, as well as the requirements of the state of Texas.
5. Appendix B has a list of staff providing significant assistance to the person signing this certification.
6. The goal of the Appraisal District is to analyze and estimate market value of each property located in Denton County and in no way were the results or conclusions predetermined or biased.

Certification Statement:

“I, Hope McClure, Chief Appraiser for the Denton Central Appraisal District, solemnly swear that I have made or caused to be made a reappraisal plan for Denton Central Appraisal District as required by law.”



Hope McClure, RPA, RTA, CTA, CCA
Chief Appraiser

Appendix A -Board of Directors

Denton Central Appraisal District Board of Directors

Roy Atwood	Chairman
Charles Stafford	Vice Chairman
Ann Pomykal	Secretary
David Terre	Member
Alex Buck	Member
Michelle French	Ex Officio Member

Appendix B - Entities

Entities

June 2022

Schools

Taxing Unit	Type	Taxing Unit Name
S01	S	ARGYLE ISD
S02	S	AUBREY ISD
S03	S	CARROLLTON-FB ISD
S04	S	CELINA ISD
S05	S	DENTON ISD
S06	S	FRISCO ISD
S07	S	KRUM ISD
S08	S	LAKE DALLAS ISD
S09	S	LEWISVILLE ISD
S10	S	LITTLE ELM ISD
S11	S	NORTHWEST ISD
S12	S	PILOT POINT ISD
S13	S	PONDER ISD
S14	S	SANGER ISD
S15	S	ERA ISD
S16	S	SLIDELL ISD
S17	S	PROSPER ISD
S18	S	COPPELL ISD
S19	S	GRAPEVINE- COLLEYVILLE ISD
S20	S	CARROLL ISD

Cities

Taxing Unit	Type	Taxing Unit Name	Taxing Unit	Type	Taxing Unit Name
C01	C	AUBREY CITY OF	C26	C	ARGYLE TOWN OF
C02	C	CARROLLTON CITY OF	C27	C	COPPER CANYON TOWN OF
C03	C	THE COLONY CITY OF	C28	C	TROPHY CLUB TOWN OF
C04	C	CORINTH CITY OF	C29	C	PLANO CITY OF
C05	C	DENTON CITY OF	C30	C	DOUBLE OAK TOWN OF
C07	C	FLOWER MOUND TOWN OF	C31	C	BARTONVILLE TOWN OF
C08	C	HIGHLAND VILLAGE CITY OF	C32	C	FRISCO CITY OF
C09	C	JUSTIN CITY OF	C33	C	NORTHLAKE TOWN OF
C10	C	KRUM CITY OF	C34	C	SHADY SHORES TOWN OF
C11	C	LAKE DALLAS CITY OF	C35	C	CROSS ROADS TOWN OF
C12	C	LEWISVILLE CITY OF	C36	C	FORT WORTH CITY OF
C13	C	LITTLE ELM TOWN OF	C37	C	SOUTHLAKE CITY OF
C14	C	PILOT POINT CITY OF	C38	C	HASLET CITY OF
C15	C	PONDER TOWN OF	C39	C	GRAPEVINE CITY OF
C16	C	SANGER CITY OF	C40	C	NEWARK CITY OF
C17	C	ROANOKE CITY OF	C42	C	DISH TOWN OF
C18	C	KRUGERVILLE CITY OF	C43	C	KELLER CITY OF
C19	C	HICKORY CREEK TOWN OF	C44	C	WESTLAKE TOWN OF
C20	C	DALLAS CITY OF	C45	C	NEW FAIRVIEW CITY OF
C21	C	COPPELL CITY OF	C46	C	AURORA CITY OF
C22	C	HACKBERRY CITY OF	C47	C	CORRAL CITY
C24	C	OAK POINT CITY OF	C48	C	PROSPER TOWN OF
C25	C	LAKESWOOD VILLAGE TOWN	C49	C	CELINA CITY OF
			C50	C	HEBRON CITY OF
			C51	C	PROVIDENCE VILLAGE TOWN

Special Districts

Taxing Unit	Type	Taxing Unit Name
ESD1	E	DENTON CO EMERGENCY SERVICE DIST NO 1
ESD2	E	TROPHY CLUB PID NO 1 EMERGENCY SERVICE
G01	G	DENTON COUNTY
L01	M	DENTON CO LEVY IMP DIST
W43	M	OAK POINT WCID NO 4
W44	M	CANYON FALLS MUD NO 1
W47	M	DENTON CO MUD NO 6
W48	M	FAR NORTH FORT WORTH MUD NO. 1 (DENTON CNTY PT)
W49	M	DENTON CO MUD NO 9
W50	M	DENTON CO MUD NO 7
W54	M	DENTON CO MUD NO 10
W55	M	BIG SKY MUD
W56	M	RANCH AT FM 1385 MUD
W57	M	DENTON CO MUD NO 8
W58	M	TRADITION MUD OF DENTON COUNTY NO. 2A
W59	M	TRADITION MUD OF DENTON COUNTY NO. 2B
W60	M	LA LA RANCH MUD
W61	M	DECHERD RANCH MUD NO 1
W62	M	CIRCLE "T" MUD NO 3
W63	M	CLEAR SKY MUD
W64	M	STONEHILL RANCH MUD 1 OF DENTON COUNTY
W65	M	NORTHWEST DENTON COUNTY MUD 1
W67	M	PRAIRIE OAKS MUD OF DENTON COUNTY
Taxing Unit	Type	Taxing Unit Name
MMD1	O	HIGHWAY 380 MUNICIPAL MANAGEMENT DISTRICT NO 1
MMD3	O	NORTHLAKE MUNICIPAL MANAGEMENT DISTRICT NO 1
MMD4	O	NORTHLAKE MUNICIPAL MANAGEMENT DISTRICT NO 2
PID1	O	LEWISVILLE PUBLIC IMPROVEMENT DISTRICT NO 1
PID10	O	VALENCIA ON THE LAKE PID
PID11	O	RAYZOR RANCH PID NO1
PID13	O	THE HIGHLANDS PUBLIC IMPROVEMENT DISTRICT
PID14	O	RIVENDALE BY THE LAKE PID NO 1
PID15	O	THE CREEKS OF LEGACY PID
PID16	O	RIVERWALK PUBLIC IMPROVEMENT DISTRICT NO 1
PID19	O	HACKBERRY PUBLIC IMPROVEMENT DISTRICT NO 3
PID2	O	CROSS ROADS PID NO 1
PID20	O	JOSEY LANE PID
PID22	O	THE COLONY PID NO 1
PID23	O	RIVENDALE BY THE LAKE PID NO 2
PID24	O	JACKSON RIDGE PID
PID26	O	PONDER PID NO 1
PID27	O	CARROLLTON CASTLE HILLS PID NO 1
PID28	O	SHAHAN PRAIRIE ROAD PUBLIC IMPROVEMENT DISTRICT NO 1

PID29	O	LAKESIDE ESTATES PID NO 2 (FKA LAKESIDE ESTATES PID)
PID30	O	RUDMAN TRACT PID
PID31	O	HILLSTONE POINTE PID NO.2
PID32	O	WATERBROOK OF ARGYLE PID
PID33	O	WINN RIDGE SOUTH PID
PID35	O	CARROLLTON CASTLE HILLS PID NO 2
PID36	O	THE HIGHLANDS OF ARGYLE PID 1
PID37	O	SUTTON FIELDS II PID
PID38	O	RIVENDALE BY THE LAKE PID NO 3
PID4	O	TROPHY CLUB PID NO 1
PID40	O	OAK POINT PID NO 2
PID41	O	WILDRIDGE PID IA NO 2
PID42	O	WILDRIDGE PID NO 1 O&M
PID43	O	SHAHAN PRAIRIE RD PID NO 1 O&M
PID44	O	TIMBERBROOK PID IA NO 1
PID45	O	TIMBERBROOK PID NO 1 MIA
PID46	O	PRAIRIE OAKS PID NO 1 - O&M
PID48	O	PRAIRIE OAKS PID NO 1 - PHASE 1
PID49	O	PRAIRIE OAKS PID NO 1 - MIA
PID5	O	BRIARWYCK PUBLIC IMPROVEMENT DISTRICT
PID50	O	RIVENDALE POINTE PID
PID51	O	WILDRIDGE PID MIA
PID52	O	WILDRIDGE PID IA NO 1
PID53	O	PRAIRIE OAKS PID NO.1 - PHASE 1C & PHASE 2
PID54	O	HICKORY FARMS PID
PID6	O	HACKBERRY HIDDEN COVE PUBLIC IMPROVEMENT DISTRICT NO.2
PID61	O	EDGEWOOD CREEK PID
PID62	O	SPIRITAS RANCH PID
PID63	O	WILDRIDGE PID IA NO 4
PID64	O	TIMBERBROOK PID IA NO 2A
PID65	O	TIMBERBROOK PID IA NO 2B
PID66	O	SUTTON FIELDS EAST PID
PID67	O	SPIRITAS EAST PID
PID68	O	MOSAIC PID
PID69	O	RESERVE AT HICKORY CREEK PID
PID7	O	NORTHLAKE PID NO 1
PID70	O	MOBBERLY PID
PID8	O	HICKORY CREEK PID 1
PID9	O	HICKORY CREEK PID 2
T01	O	SPEEDWAY TIF NUMBER 1
T02	O	SPEEDWAY TIF NUMBER 2
T03	O	FLOWER MOUND TIRZ NO 1
TIF1	O	LEWISVILLE CITY TIRZ NO 1
TIF10	O	VALENCIA ON THE LAKE TIRZ NO 4
TIF11	O	CORINTH TIRZ NO 14-1
TIF12	O	LITTLE ELM TIRZ NO 5
TIF13	O	NORTHLAKE TIRZ NO 1
TIF15	O	NORTHLAKE TIRZ NO 2

TIF16	O	NORTHLAKE TIRZ NO 3
TIF17	O	LITTLE ELM TIRZ NO 6
TIF18	O	WATERBROOK OF ARGYLE TIRZ NO 1
TIF19	O	JACKSON RIDGE TIRZ NO 1 - CITY OF AUBREY
TIF2	O	LEWISVILLE CITY TIRZ NO 2
TIF20	O	LEWISVILLE CITY TIRZ NO 3
TIF21	O	PILOT POINT TIRZ NO 1
TIF22	O	CORINTH TIRZ NO 1
TIF23	O	LEWISVILLE CITY TIRZ NO 4
TIF24	O	CORINTH TIRZ NO 2
TIF25	O	CORINTH TIRZ NO 3
TIF26	O	FRISCO TIRZ NO 1
TIF27	O	FRISCO TIRZ NO 7
TIF3	O	LITTLE ELM TIRZ NO 3
TIF6	O	DENTON CITY DOWNTOWN TIRZ NO 1
TIF8	O	THE COLONY TIRZ NO 1
TIF9	O	DENTON CITY TIRZ NO 2 (Westpark)
X01	O	TRIBUTE AT THE COLONY - PD18
X02	O	TRIBUTE AT THE COLONY - PD23
PID71	P	CREEKVIEW PID
PID72	P	AUBREY PID NO 2
R01	R	DENTON CO RECLAMATION, RD & UTL DIST

Taxing Unit	Type	Taxing Unit Name
W02	W	LAKE CITIES MUA
W03	W	TROPHY CLUB MUD NO 1
W04	W	CLEARCREEK WATERSHED AUTHORITY
W13	W	DENTON CO FWSD 6
W17	W	DENTON CO FWSD 10
W18	W	DENTON CO FWSD 8-A
W19	W	DENTON CO FWSD 8-B
W20	W	DENTON CO FWSD 11-A
W21	W	DENTON CO FWSD 7
W22	W	DENTON CO MUD NO 4
W23	W	DENTON CO MUD NO 5
W24	W	FRISCO WEST WCID OF DENTON COUNTY
W25	W	DENTON CO FWSD 11-B
W26	W	DENTON CO FWSD 4-A
W27	W	OAK POINT WCID NO 1
W28	W	OAK POINT WCID NO 2
W29	W	OAK POINT WCID NO 3
W30	W	SMILEY ROAD WCID NO 1
W32	W	DENTON CO FWSD 11-C
W33	W	NORTH FORT WORTH WCID NO 1
W35	W	VALENCIA ON THE LAKE WCID NO 1
W37	W	BROOKFIELD WCID OF DENTON COUNTY
W38	W	ALPHA RANCH FRESH WATER SUPPLY DISTRICT NO. 1
W39	W	BELMONT FWSD NO 1
W41	W	THE LAKES FWSD
W42	W	CANYON FALLS WCID NO 2
W45	W	BELMONT FWSD NO 2
W51	W	SMILEY ROAD WCID NO 2
W52	W	DENTON CO FWSD 12
W53	W	DENTON CO FWSD 13
W66	W	TALLEY RANCH WCID NO 1
TIF28	T	AUBREY TIRZ NO 2
TIF29	T	AUBREY TIRZ NO 3

Appendix C - Key Personnel

Denton Central Appraisal District

List of Key Personnel

Name	Title
Hope McClure	Chief Appraiser
Don Spencer	Deputy Chief Appraiser
Kim Collins	HR Finance Manager
Rebecca Townsend	Customer Service Manager
Chuck Saling	Commercial Manager
Jake Clerihew	Business Personal Property Supervisor
Jenna Simek	Residential Manager
David Steele	IT Manager
Jon Martin	Mapping Manager

Appendix D- Calendar of Events

2023 CALENDAR OF EVENTS

January 2023	Appraisal Date (except for properties appraised under Sec 23.12(f)) BPP renditions and exempt property applications mailed
March 2023	Field work for real property to be completed PTAD ARB Training for new members Oil & Gas Orientation PTAD ARB Training for existing members
April 2023	Estimates of taxable value sent to entities (sent weekly until certification) BPP Rendition deadline (without extension request) Deadline for appraisers to turn work in for data entry Process real property appraisal notices Deadline for exemption applications including Ag, Freeport and Pollution Mail real property appraisal notices
May 2023	Meeting with the City Managers of Denton County Turn records over to the ARB ARB hearings begin Mineral notices mailed Meeting with the Superintendents and Denton County Judge BPP rendition deadline (with extension) Process BPP appraisal notices Mail BPP appraisal notices Protest deadline for real property
June 2023	Protest deadline for BPP Mineral hearings
July 2023	ARB approves records Chief Appraiser certifies roll
August 2023	EPTS & EARS reports submitted to PTAD Field work begins for next appraisal year
September 2023	Appraisal date for Sec 23.12(f) properties

**Actual day is tentative.

2024 CALENDAR OF EVENTS

January 2024	Appraisal Date (except for properties appraised under Sec 23.12(f)) BPP renditions and exempt property applications mailed
March 2024	Field work for real property to be completed PTAD ARB Training for new members Oil & Gas Orientation PTAD ARB Training for existing members
April 2024	Estimates of taxable value sent to entities (sent weekly until certification) BPP Rendition deadline (without extension request) Deadline for appraisers to turn work in for data entry Process real property appraisal notices Deadline for exemption applications including Ag, Freeport and Pollution Mail real property appraisal notices
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June 2024	Protest deadline for BPP Mineral hearings
July 2024	ARB approves records Chief Appraiser certifies roll
August 2024	EPTS & EARS reports submitted to PTAD Field work begins for next appraisal year
September 2024	Appraisal date for Sec 23.12(f) properties

**Actual day is tentative.

Appendix E - Neighborhood Codes

06/2022

0	DC02028	DC02098	DC02159	DC03043	DC04024	DC04084
100	DC02029	DC02098TH	DC02159PH	DC03043T	DC04025	DC04085
AA001HS	DC02031	DC02099	DC02159TH	DC03044	DC04026	DC04352
AA01%	DC02033	DC02100	DC02160	DC03044L	DC04027	DC04800
AA01G01	DC02035	DC02101	DC02160A	DC03046	DC04027W	DC04911
AA01LAND	DC02040	DC02102	DC02160PH	DC03047	DC04028	DC05001
AA01PAVING	DC02042	DC02103	DC02160T	DC03049	DC04029	DC05001A
C02	DC02044	DC02104	DC02161	DC03049G	DC04031	DC05001B2
C03	DC02045	DC02105	DC02161A	DC03052	DC04032	DC05001C
CAD	DC02046	DC02106	DC02162	DC03054	DC04033	DC05002
cFV	DC02046G	DC02107	DC02163	DC03055	DC04035	DC05003
COMN-AREAS	DC02047	DC02108	DC02164	DC03056	DC04036	DC05003B2
CORP	DC02049	DC02109	DC02165	DC03057	DC04037	DC05004
DC0035	DC02050	DC02110	DC02166	DC03060	DC04038	DC05004B
DC01001	DC02050L	DC02111	DC02167	DC03065	DC04039	DC05005
DC01005	DC02051	DC02112	DC02170	DC03066	DC04040	DC05005TH
DC01006	DC02052	DC02113	DC02314	DC03067	DC04041	DC05006
DC01007	DC02054	DC02114	DC02316	DC03068GH	DC04042	DC05006B2
DC01008	DC02055	DC02115	DC02320	DC03068TH	DC04043	DC05007
DC01009	DC02056	DC02116	DC02800	DC03070	DC04044	DC05007B2
DC01010	DC02057	DC02117	DC02801	DC03070LF	DC04045	DC05008
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DC01012	DC02059HB2	DC02121	DC02802TH	DC03071T	DC04047	DC05010
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DC01013	DC02062	DC02124	DC02804TH	DC03074	DC04050	DC05013
DC01018	DC02062TH	DC02125	DC03001	DC03075	DC04051	DC05014
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DC01020F	DC02064	DC02128	DC03003A	DC03077	DC04053	DC05017
DC01021	DC02065	DC02129	DC03003B	DC03078	DC04054	DC05018
DC01022	DC02067	DC02130	DC03004	DC03079	DC04055	DC05019
DC01022B2	DC02068	DC02131	DC03004B	DC03080	DC04056	DC05020
DC01023	DC02069	DC02132	DC03005	DC03081	DC04057	DC05021
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DC02002	DC02071	DC02134	DC03010	DC03160	DC04059	DC05023
DC02003	DC02072	DC02135	DC03014	DC04001	DC04060	DC05024
DC02004	DC02073	DC02136	DC03017	DC04002	DC04061	DC05025
DC02005	DC02074	DC02137	DC03018	DC04003	DC04062	DC05026
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DC02017	DC02084	DC02150V	DC03030	DC04014	DC04072	DC05035
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DC02021	DC02089	DC02154	DC03034	DC04017	DC04076	DC05037GC
DC02022	DC02090	DC02155	DC03034A	DC04018	DC04077	DC05038
DC02023	DC02092	DC02155A	DC03034MH	DC04019	DC04078	DC05039
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DC02027	DC02097	DC02158A	DC03042	DC04023	DC04082	DC05043

DC05044	DC05101	DC05156	DC05213	DC05270	DC05317CNG	DC05377
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DC05047	DC05104	DC05158GC	DC05216	DC05272	DC05317GC	DC05384
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DC05049	DC05105B2	DC05160	DC05218	DC05274	DC05317INV	DC05388
DC05050	DC05106	DC05160B2	DC05219	DC05275	DC05317P	DC05390
DC05051	DC05107	DC05161	DC05220	DC05276	DC05317PG	DC05440PT1
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DC05053	DC05109	DC05164	DC05222	DC05278	DC05317PNG	DC05451
DC05054	DC05110	DC05165	DC05223	DC05278B	DC05318	DC05452
DC05055	DC05111	DC05166	DC05224	DC05278B2	DC05320	DC05455
DC05056	DC05112	DC05167	DC05225	DC05278TH	DC05321	DC05456
DC05057	DC05113	DC05168	DC05226	DC05279	DC05322	DC05456N
DC05058	DC05114	DC05169	DC05227	DC05280	DC05323	DC055000
DC05058TH	DC05115	DC05170	DC05228	DC05280A	DC05324	DC0551B2
DC05059CO	DC05116	DC05170LG	DC05228B2	DC05280B	DC05325	DC05534
DC05060	DC05117	DC05171	DC05229	DC05280B2	DC05326	DC05535
DC05060CO	DC05117B2	DC05172	DC05230	DC05280BC	DC05327	DC05536
DC05061	DC05117B2C	DC05173	DC05231	DC05280C	DC05328	DC05537
DC05062	DC05118	DC05174	DC05232	DC05280F	DC05329	DC05537A
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DC05075B	DC05132	DC05187	DC05247	DC05291	DC05339	DC05548
DC05076	DC05133	DC05188	DC05249	DC05292	DC05339B2	DC05549CO
DC05077	DC05133DP	DC05190	DC05249DP	DC05293	DC05341	DC05550B2
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DC05950	DC07047	DC07117	DC07207	DC07304	DC08009L	DC08105
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DC05952	DC07049	DC07119	DC07209	DC07306	DC08011	DC08206
DC05953	DC07050	DC07123	DC07212	DC07307	DC08012	DC08207
DC05954	DC07051	DC07124	DC07217	DC07308	DC08013	DC08287
DC05955	DC07052	DC07125	DC07218	DC07309	DC08014	DC08288
DC05956	DC07053	DC07128	DC07220	DC07310	DC08015	DC08289
DC05957	DC07054	DC07129	DC07222	DC07311	DC08016	DC09001
DC05958	DC07055	DC07130	DC07224	DC07399A	DC08017	DC09002
DC05959	DC07056	DC07131	DC07225	DC07401	DC08018	DC09003
DC05CD06B	DC07057	DC07134	DC07226	DC07402	DC08019	DC09004
DC05CD06F	DC07058	DC07136	DC07227	DC07403	DC08023	DC09005
DC05CD07B	DC07059	DC07137	DC07230	DC07404	DC08024	DC09005A
DC05CD07F	DC07060	DC07138	DC07232	DC07405	DC08026L	DC09005N
DC07001	DC07062	DC07139	DC07233	DC07406	DC08029	DC09005R
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DC07003	DC07064	DC07143	DC07235	DC07836F	DC08031L	DC09006
DC07004	DC07065	DC07145	DC07237	DC07837	DC08032	DC09006B
DC07005	DC07066	DC07146	DC07238	DC07838	DC08033	DC09006F
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DC07022	DC07091	DC07170	DC07266	DC07933	DC08060	DC09022

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DC16027	DC19010	DC22004	DC26019	DC27015	DC28024G	DC30003
DC16028	DC19010RV	DC22005	DC26019N	DC27016	DC28025	DC30004
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DC16069	DC19014	DC23001F	DC26023	DC27020	DC28027	DC30008
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DC16073	DC19018	DC24001	DC26028	DC27025	DC28030	DC30013
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DC16075	DC19020	DC2400295	DC26031	DC27028	DC28034	DC30016
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DC17011A2	DC20001	DC24010H	DC26044	DC28004	DC28041N	DC31003H
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DC17012B	DC20002B2	DC24012	DC26046	DC28006	DC28044	DC31004
DC17012F	DC20003	DC24013	DC26047	DC28006A	DC28045	DC31005
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DC18006	DC20025	DC26005	DC26063	DC28016G	DC29017	DC31043
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DC31048	DC32055	DC32101LC	DC34003	DC36004NU	DC41001	DG02011
DC31049	DC32055A	DC32101P	DC34004	DC36004S	DC41002	DG02012
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DC31051	DC32057	DC32101S	DC34006	DC36005A	DC41003	DG02014
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DC32003GC	DC32060V	DC32102N	DC34010	DC36006NGC	DC41009	DG02019
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DC32019	DC32077CL	DC32119	DC34032	DC36014H	DC44001	DG04017
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DC32042	DC32081	DC33003	DC36001A	DC38001	DC48006	DG04029
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DC32053B	DC32100	DC33020TH	DC36004DEL	DC40003MH	DG02001	DG04046
DC32053C	DC32101	DC33021	DC36004G	DC40009	DG02004	DG04047

DG04048	DR07KR01B	DS01006	DS02012	DS04CE01MH	DS051901G	DS05600T
DG04049	DR07KR01F	DS01006B	DS02012A	DS04PASTUR	DS051902	DS05602
DG04050	DR07KR01MH	DS01006F	DS02013	DS05001	DS051902L	DS05603
DG04051	DR07KR02	DS01007	DS02013A	DS05002	DS051903	DS05903
DG04052	DR07KR02B	DS01008M	DS02014	DS05003	DS051903B	DS05917
DG04052C	DR07KR02F	DS01009	DS02014A	DS05004	DS051904	DS05918
DG04052S	DR07KR02MH	DS01009M	DS02015	DS05005	DS051905	DS05919
DG04053	DR07KR03	DS01010	DS02016	DS05006	DS051906	DS05920
DG04053MH	DR07KR03B	DS01011	DS02017	DS05006MH	DS052902L	DS05920P1
DG04054MH	DR07KR03F	DS01012	DS02018	DS05007	DS05293N	DS05920P2
DG04055	DR07KR03MH	DS0101355	DS02019	DS05008	DS05303	DS05920P3
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DG04058	DR07KR04F	DS01015	DS02030	DS05011	DS05315GC	DS05922
DG05001	DR07KR04MH	DS01015A	DS02031	DS05012	DS05316	DS05923
DG05002	DR07KR05	DS01015MH	DS02032	DS05013	DS05316GC	DS05923N
DG05003	DR07KR05B	DS01015N	DS02033	DS05013GC	DS05317	DS05924
DG05004	DR07KR05F	DS01015T	DS02034	DS05014	DS05318	DS05924P
DG05005	DR07KR05MH	DS01015TH	DS02035	DS05015	DS05319	DS05925
DG05006	DR14KS01	DS01016	DS02036	DS05016	DS05321	DS05926
DG05007	DR14KS01B	DS01017	DS02037	DS05017	DS05322	DS05927
DG05008	DR14KS01F	DS01018	DS02038	DS05018	DS05322GC	DS05928
DG05009	DR14KS01MH	DS01019	DS02039	DS05019	DS05323	DS05929
DG05010	DR14KS02	DS01020	DS02040	DS05020	DS05325	DS05930
DG05010GC	DR14KS02B	DS01021	DS02041	DS05021	DS05326	DS05930CO
DG05011	DR14KS02F	DS01022	DS02042	DS05031	DS05327	DS05931
DG05011C	DR14KS02MH	DS01024	DS02043	DS05032	DS05328	DS05933
DG05011D	DR14KS03	DS01025	DS02043A	DS05033	DS05328GC	DS05934
DG05011H	DR14KS03B	DS01026	DS02043MH	DS05033MH	DS05329	DS05935
DG05011KB	DR14KS03F	DS01027	DS02044	DS05034	DS05329GC	DS05936
DG05012	DR14KS03MH	DS01028	DS02045	DS05035	DS05329N	DS05937
DG05013	DR14SA01	DS01029	DS02045A	DS05035GC	DS05330	DS05938
DG05013P	DR14SA01B	DS01029MH	DS02046	DS05036	DS05330GC	DS05939
DG05013SP	DR14SA01F	DS01030	DS02046A	DS05036GC	DS05331B	DS05940
DG05014	DR14SA01MH	DS01031	DS02047	DS05037	DS05331F	DS05940S03
DG05030	DR14SA02	DS01032	DS02048	DS05037GC	DS05332	DS05PASTUR
DG05031	DR14SA02B	DS01033	DS02049	DS05038	DS05333	DS05W1900
DG05032	DR14SA02F	DS01034	DS02051	DS05038GC	DS05334	DS06003
DG05033	DR14SA02MH	DS01035	DS02053	DS05039	DS05335	DS06005
DG05034	DR14SA03	DS01MH	DS02400	DS05040	DS05335GC	DS06010
DG05034DR	DR14SA03B	DS01PASTUR	DS02500	DS05040F	DS05337	DS06010MH
DG05034S	DR14SA03F	DS02001	DS02555	DS05040MH	DS05340	DS06PASTUR
DG05035	DR14SA03MH	DS02002	DS02800	DS05041	DS05343	DS07001
DG05100	DR14SA04	DS02002(MH)	DS02900	DS05041F	DS05531B	DS07002
DG05101	DR14SA04B	DS02002B	DS02910	DS05041MH	DS05531F	DS07003
DG05102	DR14SA04F	DS02002MH	DS02PASTUR	DS05042B	DS05532B	DS07004
DG05200	DR14SA04MH	DS02003	DS03PASTUR	DS05043	DS05532F	DS07005
DG05300	DR14SA05	DS020038	DS04001	DS05044	DS05533MH	DS07006
DG05301	DR14SA05B	DS02003A	DS04001MH	DS05044GC	DS05535	DS07009
DG05302	DR14SA05C	DS02004	DS04002	DS05050	DS05536	DS07010
DG05302C	DR14SA05F	DS02005	DS04003	DS0510B	DS05537	DS07011
DG05302DR	DR14SA05MH	DS02006	DS04004	DS0510F	DS05538	DS07012
DG05302H	DS01	DS02006G	DS04004B	DS05110	DS05538MH	DS07013
DG05303	DS01001	DS02007	DS04004F	DS0511MH	DS05555	DS07013MH
DG05304	DS01001A	DS02008	DS04004MH	DS0512MH	DS05556	DS07014
DG05308	DS01002	DS02008MH	DS04005L	DS0514F	DS05557	DS07015
DR05DS03B	DS01003MH	DS02009	DS04007	DS0514MH	DS05557B	DS07016
DR05DS03F	DS01004	DS02010	DS04CE01	DS05155	DS05557L	DS07017
DR05DS03MH	DS01004GC	DS02011	DS04CE01B	DS051900	DS05558	DS07018
DR07KR01	DS01005	DS02011MH	DS04CE01F	DS051901	DS05600	DS07019

DS07019MH	DS09012	DS10051	DS11049	DS11PAST05	DS12037MH	DS13045
DS07020	DS09013	DS1009	DS11049-MH	DS11PAST06	DS12038	DS13046
DS07021	DS09014	DS1016	DS11049MH	DS11PAST07	DS12039A	DS13047
DS07022	DS09015	DS1017	DS11050	DS11PASTUR	DS12039B	DS13047A
DS07023	DS09015G	DS105000	DS11051	DS12001	DS12039F	DS13047B
DS07024	DS09016	DS10601	DS11053	DS12002	DS12039L	DS13047MH
DS07025	DS09016MH	DS10602	DS11054	DS12003	DS12040	DS13048
DS07025MH	DS09017	DS10603	DS11055	DS12004	DS12040A	DS13050
DS07026	DS09018	DS10604	DS11055MH	DS12004MH	DS12041	DS13PASTUR
DS07027	DS09019	DS10605	DS11056	DS12006	DS12041A	DS14001
DS07028	DS09020	DS10606	DS11056MH	DS12007	DS12042	DS14002
DS07029	DS09021	DS10PASTUR	DS11057	DS12008	DS12045	DS14003
DS07030	DS09022	DS11001	DS11060	DS12009	DS12900	DS14004
DS07031	DS09023	DS11002	DS11061	DS12010	DS12900MH	DS14005
DS07032	DS09023TH	DS11003	DS11061-MH	DS12011	DS12PASTUR	DS14005B
DS07033	DS09024	DS11004	DS11062	DS12011A	DS13001	DS14005MH
DS07034	DS09025	DS11005	DS11064MH	DS12012	DS13003	DS14006
DS07035	DS09026	DS11005H	DS11065	DS12012A	DS13003N	DS14007
DS07036	DS09398A	DS11006	DS11065MH	DS12013	DS130047A	DS14009
DS07037MH	DS09PASTUR	DS11007	DS11066	DS12014	DS13006	DS14010
DS07038	DS10001	DS11008	DS11067MH	DS12014A	DS13006MH	DS14011
DS07039	DS10001L	DS11008N	DS11068MH	DS12015MH	DS13007	DS14012
DS07040	DS10001LV	DS11009	DS11069	DS12016	DS13008	DS14013
DS07041	DS10002	DS11010	DS11070	DS12016B	DS13009	DS14014
DS07042	DS10002L	DS11011	DS11070B	DS12016F	DS13011	DS14015
DS07043	DS10003	DS11012	DS11070F	DS12016MH	DS13012	DS14016
DS07044	DS10003B2	DS11013	DS11070MH	DS12017	DS13012A2	DS14017
DS07044MH	DS10003MH	DS11014	DS11071B	DS12018	DS13013	DS14018
DS07045	DS10004	DS11014MH	DS11072	DS12019	DS13014	DS14019
DS07046	DS10004A2	DS11015	DS11073	DS12019A	DS13015	DS14020
DS07047	DS10004B	DS11016	DS11073MH	DS12020A	DS13016MH	DS14020MH
DS07048	DS10004F	DS11017	DS11074	DS12020B	DS13017	DS14021
DS07049	DS10004MH	DS11018	DS11074MH	DS12020F	DS13018	DS14022
DS07050	DS10005	DS11020	DS11075	DS12020L	DS13018MH	DS14023
DS07051	DS10005B	DS11022	DS11076	DS12021	DS13019	DS14024
DS07052	DS10005F	DS11022MH	DS11076G	DS12022A	DS13019H	DS14025
DS07052MH	DS10005L	DS11024	DS11078G01	DS12022B	DS13020	DS14026
DS07055	DS10006	DS11025	DS11079	DS12022F	DS13020MH	DS14027
DS07056	DS10006L	DS11025N	DS11080	DS12023	DS13021	DS14027B
DS07057	DS10007	DS11027H	DS11081	DS12023A	DS13021MH	DS14027F
DS07059	DS10008	DS11028	DS11082	DS12023B	DS13022	DS14027MH
DS07060	DS10008B	DS11028H	DS11082A	DS12023F	DS13023	DS14028
DS07PASTUR	DS10008F	DS11029	DS11082B	DS12024	DS13024	DS14029
DS08001	DS10008MH	DS11030	DS11082C	DS12024F	DS13026	DS14030
DS08002	DS10009	DS11031	DS11082MH	DS12025	DS13028	DS14031
DS08003	DS10010	DS11033	DS11083	DS12025A	DS13030	DS14032
DS08004	DS10011	DS11034	DS11085	DS12025B	DS13031	DS14033
DS08004MH	DS10012	DS11035	DS11090	DS12025F	DS13032	DS14034
DS08PASTUR	DS10012MH	DS11036	DS11091	DS12026	DS13033	DS14035
DS09	DS10013MH	DS11037	DS11900	DS12027	DS13034	DS14035B
DS09001	DS10014	DS11038	DS11900MH	DS12028	DS13034H	DS14035F
DS09001C	DS10015	DS11039	DS11901	DS12029	DS13034N	DS14035MH
DS09002	DS10016	DS11040	DS11901C	DS12030	DS13035	DS14036
DS09003	DS10020	DS11041	DS11901N	DS12031	DS13036	DS14036B
DS09004	DS10021	DS11042	DS11902	DS12032	DS13040	DS14036F
DS09005	DS10030	DS11043	DS11903	DS12033	DS13040MH	DS14036MH
DS09007	DS10030MH	DS11044	DS11PAST01	DS12034	DS13041	DS14037
DS09008	DS10031	DS11046	DS11PAST02	DS12035	DS13042	DS14037B
DS09009	DS10031MH	DS11047	DS11PAST03	DS12036	DS13043	DS14037F
DS09011	DS10050	DS11048	DS11PAST04	DS12037	DS13044	DS14037MH

DS14038	DS16002MH	EXEMPTC11	HC20G01	MF01B21S05	MF01S05C1U	MF06C3U
DS14039	DS16PASTUR	EXEMPTC12	HC25G01	MF01B21S08	MF01S09A1	MF06C4U
DS14040	DS17001	EXEMPTC14	HC25G01O	MF01B21S09	MF01S09B1	MF06G01A1
DS14042	DS17001MH	EXEMPTC15	HC30G01A	MF01B21S10	MF01S09B2	MF06G01B1
DS14042MH	DS17002	EXEMPTC16	HC30G01B	MF01B21S11	MF01S09C1	MF06G01C1
DS14043	DS17002MH	EXEMPTC17	HC30G01C	MF01B21S14	MF01S10A1	MF06S05A1U
DS14044	DS17003	EXEMPTC18	HC35G01	MF01B22C02	MF01S14A1	MF06S09C1
DS14045	DS17004	EXEMPTC19	MF01A1C02	MF01B22C03	MF01S14B1	MF07G01
DS14046	DS17005	EXEMPTC21	MF01A1C03	MF01B22S05	MF02AA001	MF10G01A
DS14047	DS17006	EXEMPTC24	MF01A1S05	MF01B22S08	MF02B1S05T	MF10G01B
DS14048	DS17007	EXEMPTC26	MF01A1S08	MF01B22S09	MF02B1S05U	MF10G01C
DS14050	DS17010	EXEMPTC27	MF01A1S09	MF01B22S10	MF02B2S05T	MF15G01A1
DS14051	DS17010C	EXEMPTC28	MF01A1S10	MF01B22S11	MF02B2S05U	MF15G01A2
DS14051MH	DS17010N	EXEMPTC31	MF01A1S11	MF01B22S14	MF02B3S05T	MF15G01B1
DS14052	DS17011	EXEMPTC32	MF01A1S14	MF01B23C02	MF02B3S05U	MF15G01B2
DS14053	DS17012	EXEMPTC33	MF01A2C02	MF01B23C03	MF02B4S05T	MF15G01C1
DS14054	DS17013	EXEMPTC34	MF01A2C03	MF01B23S05	MF02B4S05U	MF15G01C2
DS14056	DS17013B	EXEMPTC35	MF01A2S05	MF01B23S08	MF02B5S05T	MF15USDA
DS14056N	DS17013F	EXEMPTC36	MF01A2S08	MF01B23S09	MF02B5S05U	MF16G01A1
DS14057	DS17013L	EXEMPTC37	MF01A2S09	MF01B23S10	MF02C1S05T	MF20G01
DS14057B	DS17013MH	EXEMPTC48	MF01A2S10	MF01B23S11	MF02C1S05U	MF20G01M
DS14057M	DS17014	EXEMPTDC03	MF01A2S11	MF01B23S14	MF02C2S05T	MF20G01P
DS14060	DS17PASTUR	EXEMPTDC13	MF01A2S14	MF01B24C02	MF02C2S05U	MF20G01RV
DS14061	DS19020L	EXEMPTDC22	MF01A3C02	MF01B24S09	MF02C3S05T	MF25A1S05
DS14062B-9	DS32101N	EXEMPTDC25	MF01A3C03	MF01C02A1	MF02C3S05U	MF25A2S05
DS14062B6-	DS75011	EXEMPTDC29	MF01A3S05	MF01C02B1C	MF02C4S05T	MF25A3S05
DS14062F	ESMT	EXEMPTDS06	MF01A3S08	MF01C02B1D	MF02C4S05U	MF25A4S05
DS14062MH	EX11.11CNY	EXEMPTDS10	MF01A3S09	MF01C02B2C	MF02C5S05T	MF25A5S05
DS14063B	EX11.11CTY	EXEMPTS01	MF01A3S10	MF01C02B2D	MF02C5S05U	MF25AA001
DS14063F	EX11.11FWD	EXEMPTS02	MF01A3S11	MF01C03B1	MF02G01CO	MF25B1S05
DS14063MH	EX11.11ISD	EXEMPTS05	MF01A3S14	MF01C1C02	MF02S05A1	MF25B2S05
DS14064	EX11.11STT	EXEMPTS06	MF01AA01	MF01C1C03	MF02S05B1	MF25B3S05
DS14065	EX11.11UNV	EXEMPTS07	MF01B11C02	MF01C1S05	MF02S05B1N	MF25B4S05
DS14066	EX11.12FED	EXEMPTS09	MF01B11C03	MF01C1S08	MF02S05B2N	MF25B5S05
DS14067B	EX11.17CEM	EXEMPTS11	MF01B11S05	MF01C1S09	MF02S05B2S	MF25C1S05
DS14067F	EX11.18	EXEMPTS12	MF01B11S08	MF01C1S10	MF02S05B2T	MF25C2S05
DS14067MH	EX11.181	EXEMPTS13	MF01B11S09	MF01C1S11	MF02S05B2U	MF25C3S05
DS14068	EX11.184	EXEMPTS14	MF01B11S10	MF01C1S14	MF02S05C1N	MF25C4S05
DS14069	EX11.184ML	EXHB366	MF01B11S11	MF01C2C02	MF02S05C1S	MF25C5S05
DS14070L	EX11.19YSM	EXPPV	MF01B11S14	MF01C2C03	MF02S05C1T	MF25S05A1
DS14071	EX11.20REL	FL00G01	MF01B12C02	MF01C2S05	MF02S05C1U	MF25S05B1
DS14072MH	EX11.20REO	FL01G01D	MF01B12C03	MF01C2S08	MF02S09B2	MF25S05B2
DS14073	EX11.21	FL020G01B	MF01B12S05	MF01C2S09	MF02S09C1	MF25S05B3W
DS14074	EX11.23	FL025G01	MF01B12S08	MF01C2S10	MF02S14A1	MF25S05C1
DS14074MH	EX11.231ED	FL15S05LGT	MF01B12S09	MF01C2S11	MF02S14B1	MF25S05H
DS14075	EX11.23MIS	FL15S09PP	MF01B12S10	MF01C2S14	MF02S14B2	MF25S09H
DS14076	EX11.27	FL15S10BC	MF01B12S11	MF01C3C02	MF02S14C1	MF25S11H
DS14077	EX11.30WTR	FL15S10RL	MF01B12S14	MF01C3C03	MF05G01A1	MF25S14H
DS14078	EX11.31PC	FL15S11GT	MF01B13C02	MF01C3S05	MF05G01B1	MHPARKS
DS14079	EX23.18	FL15S11UG	MF01B13C03	MF01C3S08	MF05G01B2	NEW COMM
DS14080	EX23.93	FL20G01A	MF01B13S05	MF01C3S09	MF05G01C1	OF01A1C02H
DS14081	EXEMPT	FL20G01C	MF01B13S08	MF01C3S10	MF06A1U	OF01A1C02W
DS14082	EXEMPTC01	G01	MF01B13S09	MF01C3S11	MF06A2U	OF01A1C03P
DS14084	EXEMPTC02	HC01G01A	MF01B13S10	MF01C3S14	MF06B1U	OF01A1S05A
DS14200R	EXEMPTC04	HC01G01B	MF01B13S11	MF01C4S05	MF06B2U	OF01A1S05C
DS14900	EXEMPTC05	HC01G01C	MF01B13S14	MF01G01CO	MF06B3U	OF01A1S05G
DS14PASTUR	EXEMPTC07	HC05G01C	MF01B14C02	MF01S05A1	MF06B4U	OF01A1S06K
DS15001	EXEMPTC08	HC05G01E	MF01B14S09	MF01S05B1	MF06B5U	OF01A1S06S
DS16001	EXEMPTC09	HC10G01	MF01B21C02	MF01S05B2	MF06C1U	OF01A1S09M
DS16002	EXEMPTC10	HC15G01	MF01B21C03	MF01S05C1D	MF06C2U	OF01A1S09R

OF01A1S10	OF02S11	OFM3S05	RE30BS141	SC05G01C	WH05G01
OF01A1S10E	OF02S14	OFS08	RE30G01	SC10G011	WH10G01
OF01A1S10L	OF05G01	OFS09	RE30S11C	SC10G012	WH15A1C02
OF01A1S10W	OFA1C02	RE01G01AA	RE35G01	SC10G013A	WH15A1C05
OF01A1S11I	OFA1C03	RE01G01AB	RE40AA01	SC10G013B	WH15A1C07
OF01A1S11T	OFA1C07	RE01G01AC	RE40C02	SC10G013B1	WH15A1C12
OF01A2C02D	OFA1C07F	RE01G01SP	RE40C03	SC15G01A1	WH15A1C36
OF01A2C02G	OFA1C16	RE02G01	RE40G01S	SC15G01B1	WH15B1C02
OF01A2C02H	OFA1S05	RE055G01	RE400T	SC20G01A_A	WH15BS05
OF01A2C02J	OFA1S09	RE05AA01	RE40S05	SC20G01A1	WH15G01
OF01A2C02M	OFA1S10	RE05AS05	RE40S08	SC20G01A2	WH25G01
OF01A2C02P	OFA1S11	RE05AS09	RE40S09	SC20G01A3	WH25G01F
OF01A2S05P	OFA1S14	RE05AS10	RE40S10	SC20G01B	WH35G01
OF01A2S05U	OFA2C07	RE05AS11	RE40S11	SC20G01B_A	WH40G01A
OF01A2S09C	OFA2C07C	RE05BS05	RE40S14	SC20G01B1	WH40G01B
OF01A2S09L	OFA2C07W	RE05BS09	RE45G01	SC20G01B2	WH40G01C
OF01A2S09M	OFA2C08	RE05BS10	RE50G01	SC20G01C_A	WH50G01
OF01A2S09P	OFA2S05	RE05BS11	RE55G01	SC20G01C1	WH55G01
OF01A2S09V	OFA2S05P	RE05CS05	RE55G01A	SC20G01C2	WH55G01L
OF01A2S10C	OFA2S05PW	RE05CS09	RE55G01D	SC25G01A	WH60C02C
OF01A2S10E	OFA2S09	RE05G01A	RE55G01DC	SC30G01A1	WH60C02S
OF01A2S10L	OFA2S091	RE05G01B	RE55G01H	SC30G01A2	WH60C03C
OF01A2S10O	OFA2S09C	RE05G01C	RE55G01L	SC30G01A3	WH60C03S
OF01A2S10P	OFA2S09W	RE06G01	RE55S05A	SC30G01B1	WH60G01
OF01A2S10R	OFA2S10	RE100G01	RE55S05B	SC30G01B2	WH60S05C
OF01A2S10S	OFA3S09	RE100G01K	RE55S05C	SC30G01BSM	WH60S05M
OF01A2S10T	OFB1C03	RE100G01L	RE55S05C1	SC35G01	WH60S05S
OF01A2S10V	OFB1C2	RE10AA001	RE55S05C2	SC45G01A1	WH60S05SL
OF01A2S10W	OFB1S05	RE10G01	RE55S09	SC45G01A2	WH60S08S
OF01AA001	OFB1S05S	RE10G01B	RE70G01	SC45G01A3	WH60S09C
OF01B1C02F	OFB1S09	RE10G01BL	RE70G01A	SC45G01A4	WH60S09M
OF01B1C03E	OFB1S09OT	RE10G01D	RE70G01B	SC45G01A5	WH60S09S
OF01B1S05N	OFB1S11	RE10G01R	RE70G01C	SC45G01A6	WH60S10A
OF01B1S05R	OFB1S14	RE20C01S5	RE75G01	SC45G01ACS	WH60S10M
OF01B1S05S	OFB2C07	RE20G01S5	RE80G01	SC45G01AR	WH60S10S
OF01B1S09L	OFB2C07A	RE20G01TL	RE85S05	SC45G01B1	WH60S11M
OF01B1S09R	OFB2C07F	RE20G01T	RE85S09	SC45G01B2	WH60S11S
OF01B1S09T	OFB2C07T	RE25AA001	RE85S11J	SC45G01B3	WH60S14A
OF01B1S14R	OFB2C08	RE25G01	RE85S11P	SC45G01B4	WH60S14S
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OF01B2C02J	OFB2S09	RE25G01G2	RE85S14A	SC45G01C1	
OF01B2S05F	OFB2S09F	RE25G01G3	RE85S14K	SC45G01C2	
OF01B2S09L	OFB4S09	RE25G01G4	RE85S14P	SC45G01C3	
OF01B2S10S	OFBS10	RE25G01G5	RE85S14S	SC45G01CCS	
OF01C1S05G	OFC1C02	RE25G01K	RE90G0120	SC55G01	
OF01C1S05O	OFC1C03	RE30A1G01	RE90G0180	SC55G01A	
OF01C1S09A	OFC1S05	RE30AC02	RE90G0190	SC55G01B	
OF01C1S09E	OFC1S09	RE30AC03	RE90G01S	SE035G01	
OF01C1S09M	OFC1S11	RE30AS05	ROW	SE10G01	
OF01G01	OFC1S14	RE30AS09	S05	SE20G01	
OF01S09A1C	OFC2C08	RE30AS10	S08	SE30G01	
OF01S09A1H	OFC2S05	RE30AS11	S09	SE36G01	
OF02C02B	OFC2S09	RE30BC02	S10	SE40G01	
OF02S05B1	OFC3S05	RE30BC03	S11	SE50G01	
OF02S05B2	OFC3S09	RE30BS05	S14	SP05G01	
OF02S05B3	OFC4S05	RE30BS051	SC01G01A1	SP20G01	
OF02S05M	OFM1C02	RE30BS09	SC01G01B1	WH01G01M	
OF02S05S	OFM1S05	RE30BS091	SC01G01C1	WH01S05M	
OF02S09B1	OFM1S09	RE30BS11	SC05G01A	WH01S11NW	
OF02S09B2	OFM2S05	RE30BS14	SC05G01B	WH01S11TH	

Appendix F - Wardlaw Reappraisal Plan 2023-2024

06/2022

WARDLAW APPRAISAL GROUP CLIENT APPRAISAL DISTRICT

Reappraisal Plan 2023 – 2024

Contract Valuation Support

Appraisal Responsibility

Wardlaw Appraisal Group, LC (Wardlaw) provides complex property appraisal support services for client County and Central Appraisal Districts (CAD). Client CADs contract with Wardlaw because we have specialized expertise which the CADs may not have in appraising these complex properties. The complex properties Wardlaw appraises are generally referred to as mineral, utility, industrial, commercial and real properties and fall under the Texas Property Tax Classification Categories F, G, J, and L.

The specific contract between Wardlaw and each client CAD specifies appraisal responsibilities. Generally, those responsibilities include discovering, inspecting, appraising, maintaining and providing ownership and valuation records for the specific properties that are the subject of the contract. The contracts establish that Wardlaw acts as an agent of the CAD to provide many of the appraisal and support services required under the Texas Property Tax Code and the Uniform Standard of Professional Appraisal Practices (USPAP). This document details the reappraisal practices that Wardlaw performs on behalf of CADs and is intended to be incorporated by CADs into their own Reappraisal Plan.

Appraisal Calendar & Timetable

Wardlaw adheres to the property tax calendar as established by the State of Texas Property Tax Code. The Wardlaw appraisal calendar generally follows this schedule:

<u>Convert to New Year Database:</u>	~ October 1
<u>October – March:</u>	Field Inspections of Properties for upcoming tax year
<u>January 1:</u>	Beginning of the Tax Year
<u>Prior to January 31:</u>	Mail Rendition Request Letters & Operator Data Requests
<u>January 31:</u>	Last day for receipt of 25.25 protests from prior year
<u>April 15th-to May 15th:</u>	Renditions due (dates dependent property type)
<u>Around April 15:</u>	Send out Preliminary Mineral Appraisals
<u>Around May 1:</u>	Mail Initial Notices of Appraised Value
<u>May 1:</u>	Begin Equalization Process. Work with property owners to settle formal and informal protests
<u>By June 1:</u>	Mail Remaining Notices of Appraised Value
<u>Late June – Early July:</u>	Informal and Formal ARB Hearings
<u>Mid-July:</u>	Deliver Totals and Certified Rolls & Export to CADs
<u>August – November:</u>	Process Property Supplements, Additions & Deletions
<u>Ongoing:</u>	New Property Discover

Equalization Period

Preliminary values established by the 25.19 Notices of Appraised Value are subject to change during the equalization period. These changes can be initiated by property owner formal or informal protests. The changes can also be initiated by Wardlaw if new information regarding a property becomes available. Formal and informal protests on the mineral, utility, industrial, commercial and real properties are handled directly by Wardlaw, within the appropriate timetables established by the Property Tax Code. Wardlaw attempts to contact protesting taxpayers so that we can;

- 1) Provide the taxpayer an opportunity to explain the reason for their protest,*
- 2) Explain the appraisal methodology and appraisal parameters used on each protested property,*
- 3) Consider whether the preliminary appraisal should be adjusted considering taxpayer evidence,
- 4) Provide settlement and withdrawal paperwork to the taxpayer if appropriate.

Wardlaw directly responds to taxpayer requests for appraisal information and supporting appraisal documentation by providing the requested information in a timely manner. Wardlaw then goes on to represent the CAD before the Appraisal Review Board (ARB) to justify appraised values for all protested properties that fall under the mineral, utility, industrial, commercial and real contract.

Documentary evidence of formal and informal changes is then provided to the CAD and ARB in the form of Withdrawal of Protest Settlement waivers on formally protested accounts. The final values are then delivered for certification.

Appraisal Responsibility

Minerals-in-place (oil and gas reserves) are real property classified as Category G property under the Texas Property Tax Code. As a commodity, minerals-in-place are part of a national market so there is no local market area to consider. Wardlaw performs an appraisal as of January 1 each year on every producing mineral property in the CAD to determine the market value of the oil and gas mineral reserves for ad valorem tax purposes.

DCF analysis is the primary method used for appraising mineral properties. The Market Data Comparison Method of Appraisal (Section 23.013) and the Cost Method of Appraisal (Section 23.011) can be used when appropriate and when the necessary data is available. However, because the sales and purchase prices of oil and gas properties are not generally disclosed, the Market Data Comparison method is seldom used, and the Cost Method of Appraisal does not estimate the market value as defined in Section 1.04 of the Texas Property Tax Code.

Discounted Cash Flow (DCF) analysis is the Income Method of Appraisal (Section 23.012 of the Texas Property Tax Code) and is used as the most appropriate technique for determining the market value of mineral properties. WAG uses DCF analysis to appraise every producing lease in the appraisal districts we support. The appraised value of each lease is distributed to each working interest, royalty interest, and overriding royalty interest owner based upon their decimal interest in the lease.

Mineral interests are commonly divided into property ownership interests known as working interests, overriding interest, and royalty interests. The valuation of each type of interest begins with the valuation of the producing well on the mineral lease. That value is then allocated to the property ownership interests based on the decimal ownership value identified in the division orders for each lease. It is the goal and purpose of the CAD to identify every producing mineral property within the district and estimate the market value of each property listed on the roll.

Appraisal Resources

Personnel – Wardlaw provides adequate personnel to meet all contract appraisal requirements.

Data - A common set of production data for each mineral property account in each CAD is collected from the Texas Railroad Commission Records and data entered to the appraisal firm's computer. The property characteristic data is gleaned from the production data and drives the computer-assisted mineral property appraisal system. Railroad Commission records are searched to discover new leases as of January 1 of each year and descriptive information is gathered to determine the location of the lease within the CAD jurisdictional boundaries. Records are also reviewed for changes in production for existing wells, for abandoned wells, and for non-producing wells with salvage value for the equipment, tanks, and tubular goods. Production history for each mineral lease is gathered from HPDI, Drilling Info, Petroleum Information, and from the Texas Railroad Commission. Division Orders on each lease are requested annually from lease operators and checked against the existing division orders for changes as well as for accuracy of owner name, address, and ownership percentage interest. To help determine operating expense information on each active lease, lease-specific operating expenses are requested annually. A Confidential Lease Operating Expense Detail request letter is e-mailed or mailed, to the operators or agents representing operators requesting lease-specific operating expenses.

To assist with the economic parameters influencing these properties, general economic data is gathered for the valuation process. The method of appraisal for minerals-in-place is the discounted cash flow analysis which looks at the net present value of the future income that is

derived from operating the lease. Current interest rates, market rates of return and levels of discounting the investment are factors to consider when evaluating the returns necessary to attract investment capital for this type property. The annual capitalization rates are calculated using the “Manual for Discounting Oil and Gas Income” as developed by the Texas Comptroller’s Office. Data is obtained from Ibbotson’s SBBI Valuation Edition, Wall Street Journal, Standard & Poor’s Bond Guide, and Value Line Investment Survey “Ratings and Reports”.

VALUATION AND STATISTICAL ANALYSIS (model calibration)

Pricing, Operating Expenses and Reserve Analysis

Crude oil and natural gas prices are required information in the valuation of mineral property because these prices are necessary to determine income to the lease and the economic life of the production from the lease. The crude oil sales price and natural gas sales price used for the first year of the appraisal analysis is based on the previous year’s average price multiplied by the Price Adjustment Factor (PAF). The prices are then escalated or de-escalated for five (5) years according to the Texas Property Tax Code Sec. 23.175 Section (a). Lease operating expenses are estimated based on rendered information, actual operating cost and expenses, and from surveys of lease operators in the CAD. The January 1 production starting rate is based on the actual production rate or upon a projection of past average production. The past oil and gas production history of the lease is analyzed to estimate the future rate of production decline of the lease. Other considerations include past lease expenses and recent operating parameters such as water production, workover operations, and secondary recovery efforts. Current operating income and expenses for the lease are calculated in a discounted cash flow model used by the appraiser to evaluate and estimate the net present value of producing oil and gas income from the lease. Discount rates established for each lease based upon the particular risks inherent with production of oil and gas from that property. The discounted cash flow model allows the appraiser to establish current market value of the lease based on the discounted value of the future estimated recoverable reserves. This methodology is approved and recommended by the Property Tax Division of the Comptroller’s Office and is a recognized method of appraisal by industry standards. The appraisal firm has utilized the discounted cash flow model to estimate the market value of each lease located in each CAD.

Value Review Procedures

The method of value review for this type of property is based on the review of the factors estimated within the discounted cash flow analysis methodology such as the discount rate, product prices, and operating expenses. Evaluation and verification of these economic factors as to their validity within current economic times and based on current capital requirements for investment in this type property is re-confirmed and reviewed for reasonableness. Sales of mineral properties are considered but adequate sale data is usually not available due to difficulty in confirming sales. The market for this type of property is neither an active nor an efficient market, there are very few participants and pricing information is mostly confidential. There is no source for tracking these transactions and property owners are reluctant to reveal market information concerning prices paid or terms of the transaction. Because of a lack of market sales on mineral property, appraised values are regularly compared to similar properties within the same production field, field of exploration, strata of formation, or production history and expense level.

Ratio studies are a source of comparison to evaluation level and uniformity of appraisal. When market sales are available the ratio study is based on a comparison of the appraised value to the sale price. For mineral property, which lacks available market sales, a ratio study is a comparison of another appraisal

opinion with the opinion of the district to determine level and uniformity of appraisal. The Property Tax Assistance Division of the Comptroller's Office conducts biennial ratio studies of selected mineral properties to gauge the districts appraisal performance. The PTAD utilizes the same valuation methodology as the CAD to appraise individual mineral properties. This opinion of value is then utilized as market evidence with the same significance as if the property sold for that value. The estimated value of the property in each CAD is compared to the appraisal by the PTAD to calculate the ratio and the indicated level of appraisal. This study indicates the median and mean levels of appraisal for mineral property and is considered reliable as a review and evaluation tool.

Appraisal Responsibility

Utility, Industrial and Commercial properties are the tangible assets of various businesses including electric production, transmission, and distribution companies, railroads, petroleum product gathering and delivery pipelines, telephone and communication providers and others. Utility properties are identified in the Texas Property Tax Code as Category J property. Industrial properties are identified under the Texas Property Tax Codes as categories L2 (Industrial, Personal), F2 (Industrial, Real) and L1 (Commercial). The valuation of these properties is considered to be complex due to the involvement of both tangible and intangible property elements that comprise these businesses and due to the size of some of the utilities that are regional and national companies. The appraisal of these companies becomes complex when considering the valuation of the property as a unit in place, evaluating the property by the approaches to value at the company level. The appraisal district does not have personnel qualified to perform this type of appraisal. An appraisal firm is employed to provide the expertise to perform this type of appraisal. Once the estimated value of the unit is determined by the appraisal firm, that estimated market value is allocated based on the tangible property assets that are located within each CAD.

Appraisal Resources

Personnel – Wardlaw provides adequate personnel to meet all contract appraisal requirements.

Data - A common set of data characteristics for each utility, industrial and commercial property account in each CAD is collected from the various government regulatory agency records, field inspections, data resources, and property owner renditions. This data is entered to the appraisal firm's computer. Individual company financial information is gathered through industry specific governmental filings such as Federal Energy Regulatory Commission Reports, Securities and Exchange Commission 10-k filings, Railroad Commission and Public Utility Commission publications. Other company information is gathered from annual reports, internal appraisals, and other in-house and industry publications. Property owner renditions are requested in order to document and list property owned and located in our particular jurisdictions (ie: track mileage, number of meters, pipeline size and mileage, substation and transmission capacity, etc.). The property characteristic data drives the computer-assisted appraisal of the property.

The appraisal of utility and industrial property utilizes three-approach analysis to form an opinion of value for the property. Financial and capital market information is pertinent to understanding factors affecting valuation of complex property. It is necessary to gather financial data to attempt understanding investor and corporate attitudes for capital return expectations and to give consideration to return components such as current interest rates, capital debt structure, bond market rates, and capital supply and demand trends. These financial factors result in overall return rates and capital structure for these companies and affects capitalization rates. The weighted average cost of capital is the most commonly used method of estimating capitalization rates for utility properties. Capitalization rates are estimated using capital return expectations from various publications: Duff & Phelps Valuation Handbook, Wall Street Journal, Emergent Bond Record, Moody's Corporate Bond Yield Averages, Standard & Poor's Capital IQ. Industry specific information is also gathered from web sites, publications, periodicals, and reference manuals. Wardlaw then estimates the capitalization rate for utility appraisal under the income approach.

VALUATION AND STATISTICAL ANALYSIS (model calibration)

Approaches to Valuation, Reconciliation

Valuation of tangible assets for utility and industrial companies relies primarily on indications of value based on the cost and income approaches to value under the unit value approach. This methodology involves developing and estimating market value considering the entirety of the company's tangible assets and resolving an allocated value for that portion of specific tangible assets located in particular tax jurisdictions. The valuation opinion is based on three approach analysis utilized for the indicated unit appraisal of all company tangible assets, then an estimated allocation of unit value for only assets located in the district and particular jurisdictions. This methodology is approved and recommended by the Property Tax Assistance Division of the Comptroller's Office and is an accepted standard within the industry and appraisal community.

Value Review Procedures

Review of the valuation of utility property is based on verifying economic and financial factors utilized in the methodology as relevant to current capital markets and that these factors reflect current return expectations. Market sales of utility properties do occur and are a good source for comparison and review when the price of the tangible assets can be abstracted or allocated from the selling price. Typically, the sale of utility companies involve significant intangible property assets such as customer base, goodwill, favorable contracts, name recognition, etc. and the contributory value and allocation of these assets is subjective and unknown. In Texas, intangible property assets are exempt from taxation and must not be included on the appraisal roll as taxable property. Therefore, because of the lack of specific market information on sales of utility properties, appraised value is regularly compared to the valuation of similar property within the same set of property characteristics, business type and size. More of comparison for equity concerns on valuation rather than the full recognition of a market level certainty about appraisal level. Of course, the estimated value is based on recognized methodology for considering the valuation of these tangible assets, but true market confirmation of these factors may not be possible due to minimal market knowledge and experience.

Ratio studies are also a method of review for relevance of appraisal valuation to market value. Again, in the absence of full disclosure of prices paid and without the abstraction of prices paid for the tangible asset components from recent utility property acquisitions or sales, market based analysis and review is not possible. Ratio studies for utility property must rely on a comparison of one appraisal opinion as the basis for the reasonable property valuation with the district's appraised value to determine the ratio for level and uniformity of appraisal. The PTAD conducts the annual ratio study of selected utility properties to gauge the appraisal district's performance. The PTAD utilizes the same valuation methodology to estimate appraisal valuations of utility properties and the results, when compared to the appraisal valuation estimated by the appraisal firm for these properties yield ratios. This ratio study of certain utility properties indicates the level and uniformity of appraisal for this category of property.

**STAFF PROVIDING SIGNIFICANT
MASS APPRAISAL ASSISTANCE**

PROPERTY TAX APPRAISER CERTIFICATION		
<i>TDLR #</i>	<i>NAME</i>	<i>TYPE</i>
74200	CRAIN, MALLORY M.	APPRAISER, RPA
74717	SHERWIN, PROCTOR	APPRAISER, RPA
66026	WARDLAW, MARGARET A.	APPRAISER, RPA
73672	WILLIAMS, NOAH	APPRAISER, Level 3
70182	WILLIAMS, CHARLES R.	APPRAISER, RPA
71700	WILLIAMS, HAZIEL M.	APPRAISER, RPA
	VILLARREAL, MARTIN	APPRAISER, RPA
PROFESSIONAL ENGINEERING CERTIFICATION		
<i>PE#</i>	<i>NAME</i>	<i>BRANCH</i>
76914	WARDLAW, MARGARET PEGGY A.	PETROLEUM
77254	WILLIAMS, CHARLES R.	PETROLEUM
PROFESSIONAL ENGINEERING FIRM CERTIFICATION		
<i>FIRM #</i>	<i>FIRM NAME</i>	
5194	WARDLAW APPRAISAL GROUP LC	

Appendix G - Special Appraisal Procedures

06/2022

SPECIAL APPRAISALS

TYPES OF SPECIAL APPRAISALS

Agricultural Use (Section 1-d)

Eligibility

To qualify for an agricultural use (1-d) designation, the land must have been devoted exclusively to or developed continuously for agriculture for the three years proceeding the current year. The property owner must be using and intends to use the land for agriculture as an occupation or a business venture for profit during the current year. Further, agriculture must be the primary occupation and source of income for the property owner.

PTC Sec 23.42(a)

Open-Space Land (Section 1-d-1) and Timber Land

Eligibility

To qualify for an open-space (1-d-1) or timber land designation, the land must be currently devoted principally to agriculture use or the production of timber or forest products to the degree of intensity generally accepted in the area and must have been devoted principally to agriculture use or to production of timber or forest products for five of the preceding seven years. An open-space land designation includes all appurtenances to the land.

PTC Sec 23.51(1)

PTC Sec 23.72

Land Ineligible for Qualification as Open-Space or Timber

Land that is located inside the city limits is ineligible for qualification as open-space or timber land unless the land has been devoted principally to agriculture or timber use for the preceding five years.

Further, land that is owned by a nonresident alien, foreign government, corporation, partnership, trust, or other legal entity is ineligible for qualification as open-space or timber land unless the treaty between the United States and a foreign government includes a non-discrimination clause.

PTC Sec 23.56

PTC Sec 23.77

Restricted-Use Timber Land Eligibility

To qualify for restricted-use timber land, the land must be in an aesthetic management zone, critical wildlife habitat zone, or streamside management zone.

PTC Sec 23.9802(a)

In addition, the land qualifies under this section if timber was harvested from the land in a year which the land was appraised as timber land in accordance with Section 23, Subchapter E of the Property Tax Code, and the land has been regenerated for timber production to the degree of intensity generally accepted in the area for commercial timber land and with intent to produce income. However, land ceases to qualify for special appraisal under this circumstance on the 10th anniversary of the date the timber was harvested. This does not disqualify the land from qualifying for appraisal under Chapter 23 of the Property Tax Code in a tax year following that anniversary based on the circumstances existing in that subsequent tax year.

PTC Sec 23.9802(b, c)

APPLICATION PROCEDURES

Publicizing Requirements

General Provisions

Each year the chief appraiser shall publicize, in a manner reasonably designed to notify residents of the district, the guidelines and requirements and availability of application forms.

The publication is requested in an area OTHER than the legal section of the publication, approximately 6” x 8” in size, in bold frame. (sample attached)

Denton County publications generally run during the months of Feb-April (in the center of the filing period, we have found this to be more effective) and include the following sources of publication:

1. Denton Record Chronicle

PTC Sec 23.43(f)

PTC Sec 23.54(g)

PTC Sec 23.75(g)

PTC Sec 23.9804(h)

Documents Required

Application

In order to qualify for a special appraisal, a property owner must file an application using the appropriate form with the Appraisal District.

(State Model Forms 50-165 for 1-d, 50-129 for 1-d-1, 50-167 for timber)

PTC Sec 23.43(a)

PTC Sec 23.54(a)

PTC Sec 23.75(a)

PTC Sec 23.9804(a)

Supporting Documentation

Every property owner filing an application for special appraisal of agricultural land is also requested to file a lease report form to gather lease/use/cost data used to develop agricultural appraisal schedules (sample attached).

Failure to file these forms will not result in an automatic denial of an application; however, if the information provided in the application is not sufficient for the appraiser to make a determination as to eligibility, the property owner will then be required to submit other necessary forms such as receipts for feed, chemicals, sales of products, stock sales or purchase records, income/expense evidence, etc.

Filing Deadline

Deadline Date

A property owner must file an application for special appraisal before May 1st. For good cause shown, the Chief Appraiser may extend the deadline by written order for a single period not to exceed 60 days (a 15 day extension is allowed for restricted-use timber land).

PTC Sec 23.43(b)

Sec 23.54(d)

Sec 23.75(d)

Sec 23.9804(e)

Late Application Allowed

If a property owner files an application after the deadline for filing but prior to the date the Appraisal Review Board approves the appraisal records, the application shall be accepted, approved, modified or denied (This section does not apply to restricted-used timber land.)

PTC Sec 23.431(a)

Sec 23.541(a)

Sec 23.751(a)

Late Application Penalty

If an application that has been filed late is approved, the property owner is liable for a penalty of 10 percent of the difference between the amount of tax imposed on the property under the special appraisal and the amount of tax that would have been imposed if the property were taxed at market value. (This section does not apply to restricted-use timber land.)

PTC Sec 23.431(b)
Sec 23.541(b)
Sec 23.751(b)

An entry is made on the appraisal records to indicate a property owner's liability for any penalties imposed, and the property owner is notified in writing of the penalty.

PTC Sec 23.431(c)
Sec 23.541(c)
Sec 23.751(c)

Late Application Disallowed

If a property owner files an application after the date the ARB approves the appraisal records, the land is ineligible for special appraisal in that year. (This section does not apply to restricted-use timber land.)

PTC Sec 23.43(c)
Sec 23.54(e)
Sec 23.75(e)

Late Application Disallowed – Restricted-Use Timber Land

If a property owner fails to file a valid application for restricted-use timber land on time, the land is ineligible for special appraisal for that year.

PTC Sec 23.9804(f)

Application Renewal Procedures

Annual Application - 1-d

A property owner claiming an agriculture-use designation (1-d) on his property must apply for the designation on an annual basis.

PTC Sec 23.43(a)

Before February 1 of each year, an application form as well as any other documents required by this section must be mailed to each property owner whose land was designated for agriculture-use (Section 1-d) in the preceding year. A brief explanation of the requirements for obtaining the agriculture-use designation must also be mailed.

PTC Sec 23.43(e)

One-Time Application - 1-d-1, Timber Land, and Restricted-Use Timber land

Once property has been designated as open-space (1-d-1) or timber land, the property shall continue to be eligible for special appraisal. A new application is not required unless the ownership of the land changes or its eligibility ends.

PTC Sec 23.54(e)

PTC Sec 23.75(e)

Once property has been designated as restricted-use timber land, the property shall continue to be eligible for special appraisal. A new application is not required unless the ownership of the land changes, the standing timber is harvested, or the land's eligibility ends.

Currently, Denton County does not have any qualifying timber use land, conducting regular timber harvest, milling, plantation operation, thinning, selection of specialty woods, pest control, replenishment schedules, etc. Most timber production land is found in east Texas where hardwoods thrive. Information may be obtained from the National Forestry Service.

PTC Sec 23.9804(f)

Verification of Eligibility

If the Chief Appraiser has good cause to believe that the land currently receiving an open-space (1-d-1) or timber appraisal is no longer eligible, a new application is mailed to a property owner in order to confirm the land's eligibility.

PTC Sec 23.54(e)

Sec 23.75(e)

Sec 23.9804(f)

Periodic Inspections

Periodically, the District may inspect properties currently receiving a special appraisal to determine their continuing eligibility.

Applications Reviewed and Confirmed

Field Inspection Made

If an application is being filed for a special appraisal for the first time or if a re-inspection is necessary to determine continuing eligibility, the appraiser inspects the property to determine if the land is currently devoted to agriculture use, if the required past history exists, and if the land has been properly managed. The condition of fences, barns, corrals, etc. is also noted. As well as the type of crop, type and number of livestock, orchard, hay production, etc.

Land for which a timber use designation is applied for is inspected to determine if marketable timber exists on the land and if a proper management program has been implemented and adhered to.

Test of Eligibility Worksheet Completed

Once the appraiser has completed the inspection of the land, the field inspection for agricultural use form is completed.

Action on Applications

Action on the application is taken as follows:

1. The application is approved and the land is granted the special appraisal
2. The application is denied, or
3. The application is denied and additional information is requested from the property owner in support of the claim.

If additional information is requested, the property owner must furnish it within 30 days after the date of the request or the application is denied.

PTC Sec 23.44(a ,b)

Sec 23.57(a, b)

Sec 23.79(a, b)

Sec 23.9805(a, b)

Notification Requirements on Denials

If an application is denied, the property owner must be mailed a written notice of the denial by certified mail within five days after the date of denial. The notice must include a brief explanation of the procedures for protesting the denial and full explanation of reasons for denial of application.

PTC Sec 23.44(d)

Sec 23.57(d)

Sec 23.9805(d)

Protest Procedures

In order to file a protest on a denial of an application for special appraisal, a property owner must file a written protest within 30 days of the date the notice of the denial was mailed.

PTC Sec 41.44(1)

Application Confidential
Agriculture-Use (1-d) Application

An application for agriculture-use designation (1-d) is confidential and not open to public inspection. The application and the information it contains about a specific property or a specific property owner may not be disclosed to anyone other than an employee of the Appraisal District who appraises property.

PTC Sec 23.45

Supporting Documentation

The Real Property Report Confidential Ag-Use Questionnaire and Lease Verification Affidavit report form discussed in this manual are confidential and not open to public inspection.

PTC Sec 22.27(a)

APPRAISAL PROCEDURES

Compilation of Appraisal Schedules

Information Gathered

Information concerning price data is obtained from the Agricultural Stabilization Conservation Service, State Crop Reporting Service, and the Production Credit Union to determine the values for agriculture lands.

Information concerning price data is obtained from Timber Mart-South to determine the values of timber lands.

Values Computed

Based on the information gathered when compiling the appraisal schedules, the values for agriculture lands are computed based on the five-year average net-to-land values for the following categories of property:

1. Irrigated Cropland
2. Dryland Cropland
3. Orchard
4. Improved Pasture
5. Native Pasture
6. Minimal Use Land
7. Wasteland

The values for timber lands are computed based on the five-year average net-to-land values.

Field Work Completed

Ag-Use Field Record Maintained

The appraiser updates the Ag-Use Field Record for all accounts receiving the special appraisal designation. The Ag-Use Field Record is maintained. The account is updated for the following Information:

1. Current year valuation information
2. Lease information
3. Last year valuation information

Tax Master Maintained

The appraiser makes a printout of the Ag-Use Field Records and submits a copy to the Data Department. Using this report, the data entry operator updates the appraisal record with the special appraisal information, date stamps the copy of the report with the identification number of the data entry operator, and files it.

Applications Filed

Once the necessary action on the application has been taken, the application is scanned into the appraisal record, filed in a central location by year/alphabetical and stored for retention.

CHANGE IN USE PROCEDURES

Agriculture-Use Land (1-d)

Change in Use Occurs

If land that has been designated for agriculture use in any year is sold or diverted to a non-agriculture use, the total amount of rollback taxes for the preceding three years plus interest at the rate provided for delinquent taxes becomes due.

PTC Sec 23.46(c)

Notice to Property Owner

A notice of the determination of change in use is mailed by certified mail to the property owner as soon as possible after making the determination. The notice includes an explanation of the owner's right to protest the determination.

PTC Sec 23.46(c)

Protest Procedures

A property owner may protest the determination of change in use not later than the 30th day after the date the notice of determination is mailed to the property owner.

Open-Space (1-d-1) and Timber Land

Change in Use Occurs

If the land receiving the open-space (1-d-1) or timber designation changes to a non-qualifying use, a rollback tax is imposed covering the preceding five years in which the land received special appraisal. The rollback tax is the difference between the taxes paid based on the special appraisal and the taxes that would have been paid if the land had been taxed on its higher market value, plus interest at an annual rate of seven percent (7%) charged from the dates the taxes would have been due.

PTC Sec 23.55

General Provisions

The same provisions for protest, notification to the property owner, and notification to the taxing entities are followed as provided by sections one (1) and two(2) of this manual.

Restricted-Use Timber Land

Change in Use to Other Qualifying Special Appraisal

If the land receiving the restricted-use timber designation changes to a use that qualifies the land for any other special appraisal outlined in Chapter 23 of the Property Tax Code, an additional tax is imposed on the land equal to the difference between the taxes imposed on the land for each of the five (5) years preceding the year in which the change of use occurs and the taxes that would have been imposed had the land been appraised under any other special appraisal allowed under this section. Interest at an annual rate of seven percent (7%) is also added, calculated from the dates on which the differences would have become due. If the use of the land changes to a use that qualifies under subchapter C, D, or H of this chapter, then the rollback tax does not Apply.

PTC Sec. 23.76(g)

Change in Use to Non-Qualifying Use

If the land receiving the restricted-use timber designation changes to a non-qualifying use, an additional tax is imposed on the land equal to the sum of the taxes imposed on the land for each of the five years preceding the year in which the change of use occurs and the taxes that would have been imposed had the land been taxed on the basis of market value in each of those years. Interest at an annual rate of seven percent (7%) is also added, calculated from the dates on which the differences would have become due.

General Provisions

The same provisions for protest, notification to the property owner, and notification to the taxing entities are followed as provided by this manual.

AGRICULTURAL ADVISORY BOARD

Appointment Procedures

Board Appointed

The Chief Appraiser, with the approval of the Board of Directors, appoints the Agricultural Advisory Board.

PTC Sec 6.12(a)

Membership Size

The Board must have at least three members; however, with the approval of the Board of Directors, the Chief Appraiser may appoint more than three members.

PTC Sec 6.12(a)

Eligibility Requirements

Two members of the Board must be owners of qualified agriculture or timber land and must have resided in the District for at least five years. One member must be a representative of the Agricultural Stabilization and Conservation Service in the District.

PTC Sec 6.12(b)

Members of the Appraisal District staff and Board of Directors are ineligible to serve on the Board

PTC Sec 6.12(e)

Terms of Office and Compensation

Board members serve two-year, staggered terms of office.

PTC Sec 6.12(c)

Members do not receive compensation for service on the Board.

PTC Sec 6.12(f)

Duties of the Board

Duties Outlined

The Board's function is to advise the Chief Appraiser on major issues dealing with the valuation and use of land that may be designated for agricultural use, open space use, or timber land within the district. Such as; net to land, degree of intensity standards, and other agricultural use and appraisal issues.

PTC Sec 6.12(g)

Authority Limited

The Board has no decision-making authority or responsibility. The Board shall not become involved in matters dealing with individual properties or in approving applications for agricultural appraisal.

Meetings of the Board

Meetings Called

The Board shall meet at the call of the Chief Appraiser at least three times a year or as deemed Necessary.

PTC Sec 6.12(d)

Conduct of Business

Since the composition of this Board does not fall under the constraints of the Open Meetings Act, it is not required to post agendas and keep formal minutes. If requested by the Board, committee minutes will be maintained.

The Board shall conduct its business in an informal fashion, with a majority of the Board present.

MISCELLANEOUS SPECIAL APPRAISALS

Types of Miscellaneous Special Appraisals

Recreational, Park, and Scenic Land

Recreational, park, and scenic land is described as land used for individual or group sporting activities; park or camping activities; development of historical, archaeological, or scientific sites; or the conservation and preservation of scenic areas.

PTC Sec 23.81

Public Access Airport Property

Public access airport property is described as privately owned land that is regularly used by the public for or regularly provides service to the public in connection with airport purposes, including the landing, parking, shelter, or takeoff of aircraft and the accommodation of individuals engaged in the operation, maintenance, or navigation of aircraft or of aircraft passengers in connection with their use of aircraft or of airport property.

PTC Sec 23.91

Wildlife Management Use

Wildlife management means actively using land that at the time the wildlife-management use began was appraised as qualified open-space land in at least three of the following ways to propagate a sustaining breeding, migrating, or wintering population of indigenous wild animals for human use, including food, medicine, or recreation:

1. habitat control
2. erosion control
3. predator control
4. providing supplemental supplies of water
5. providing supplemental supplies of food
6. providing shelter
7. making of census counts to determine population

Wildlife Management Plan

Any property owner seeking a special appraisal under Property Tax Code, Chapter 23, Subchapter D, based on wildlife management use must meet the following minimum standards for qualification effective January 1, 2002:

- Stand Alone Properties: 92% of land must be devoted to wildlife use.
- Properties within Wildlife Management Property Association: 91% land must be devoted to wildlife use.
- Properties designated as Habitat for Species of Concern: 91% of land must be devoted to wildlife use.

Wildlife management property associations are defined by State Comptroller Rule 9.4003(b)(6). Species of Concern as defined by State Comptroller Rule 9.4003(f)(3).

Properties that qualified for special appraisal as wildlife management prior to January 1, 2002 are not required to meet these minimum standards providing the tract contains the same or a greater amount of qualifying acreage as contained in the tract prior to January 1, 2002 and continues to satisfy all other qualification requirements.

A property owner who demonstrates by clear and convincing evidence that the unique characteristics of their habitat and/or management species makes it possible to effectively manage for wildlife at a ratio less than the minimum standards shall receive the special appraisal providing the property meets all other standards outlined in Property Tax Code Chapter 23, Subchapter D and State Comptroller Rule 9.4003.

PTC Chap 23, Sub D
Comptroller Rule 9.4003

Eligibility

Deed Restriction Requirements

To qualify for either special appraisal, the land must contain a minimum of five acres and must be restricted for the intended purpose by filing a deed restriction with a minimum period of 10 years with the County Clerk.

PTC Sec 23.82

PTC Sec 23.92

Intended Use Requirements

The land must also have been devoted exclusively to its intended use for the preceding year, and there must be intent to use the land exclusively for this same use in the current year.

PTC Sec 23.83(a)

PTC Sec 23.93(a)

Miscellaneous

Further, in order to qualify for the recreational, park, and scenic special appraisal, the land must also be used in a way that does not result in accrual of distributable profits, realization of private gain resulting from payment of compensation in excess of a reasonable allowance for salary or other compensation for services rendered, or realization of any other form of private gain.

PTC Sec 23.83(a)

Application Procedures

Application

In order to qualify for either special appraisal, a property owner must file an application form before May 1 in the first year the property would qualify. For good cause shown, the Chief Appraiser may extend the deadline by written order for a single period not to exceed 60 days.

PTC Sec 23.84(a, b)

PTC Sec 23.94(a, b)

The Chief Appraiser must take action on the application in the same manner as outlined in section two (2) of this manual.

PTC Sec 23.85

PTC Sec 23.95

Late Application

If a property owner fails to timely file an application, the land is ineligible for special appraisal.

PTC Sec 23.84(c)

PTC Sec 23.94(c)

Application Renewal Procedures

Once property has been designated for a special appraisal, the property shall continue to be eligible for special appraisal without a new application being filed for the duration of the deed restriction unless the ownership of the land changes or its eligibility ends.

If the Chief Appraiser has good cause to believe that the land is ineligible, a new application may be mailed to a property owner in order to confirm the land's eligibility.

PTC Sec 23.84(c)

PTC Sec 23.94(c)

Additional Taxes Imposed

Land Not Principally Devoted to Intended Use

If land receives a special appraisal in any given year, at the end of that year the Chief Appraiser must determine if the land was devoted principally to its intended use.

If it is determined that the land was not used exclusively for its intended use, an additional tax equal to the difference in the amount of tax actually imposed with benefit of the special appraisal and the amount of tax that would have been imposed without benefit of the special appraisal is charged. This amount of additional tax plus interest is included on the next tax statement sent on this property by the tax assessor-collector.

PTC Sec 23.83(d)

PTC Sec 23.93(d)

Special Appraisal Applied Erroneously

If it is discovered that the special appraisal was granted in error in any one of the five (5) preceding years, the difference between the appraised value of the land with benefit of the special appraisal and the market value of the land without benefit of the special appraisal will be added to the appraisal roll.

PTC Sec 23.84(e)

PTC Sec 23.94(e)

Change in Use Occurs or Deed Restriction Not Applicable

If it is discovered that the land receiving a special appraisal is no longer subject to a deed restriction or is diverted to a use other than its intended purpose, an additional tax is imposed equal to the difference between the actual taxes imposed with benefit of the special appraisal for each of the five preceding years and the tax that would have been imposed without benefit of the special appraisal, plus interest at an annual rate of seven percent calculated from the dates on which the differences would have become due for each year.

PTC Sec 23.86(a)

PTC Sec 23.96(a)

Penalty for Violating Deed Restriction

If land designated for special appraisal is used for a purpose other than the intended purpose before the term of the deed restriction expires, a penalty is imposed on the land equal to the difference between the taxes actually imposed with benefit of the special appraisal for the year in which the violation occurred and the amount of taxes that would have been imposed without benefit of the special appraisal.

An entry must be made in the appraisal records indicating the amount of penalty and written notification of the imposition of the penalty must be delivered to the property owner along with a brief explanation of the procedures for protesting the penalty.

PTC Sec 23.87

PTC Sec 23.97

Taxing Authority Notified

The Chief Appraiser notifies the taxing authority of any additional taxes or penalties that are to be imposed in order that they may issue tax statements to the property owner.