

**DALLAS CENTRAL APPRAISAL  
DISTRICT**



**2009/2010**

**Reappraisal Plan**

# **DALLAS CENTRAL APPRAISAL DISTRICT 2009 - 2010 REAPPRAISAL PLAN**

## **INTRODUCTION**

### **General Overview of Tax Code Requirement**

Passage of Senate Bill 1652 in 2005 amended the Property Tax Code to require each Appraisal District to prepare a biennial reappraisal plan. The following details the Tax Code requirements:

### **The Written Plan**

Section 6.05, Property Tax Code, is amended by adding Subsection (i) to read 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 10<sup>th</sup> day before the date of the hearing, the secretary of the board shall deliver to the presiding officer of the governing body of each taxing unit participating in the district a written notice of the date, time and place of the hearing. Not later than September 15 of each even numbered year, the board shall complete its hearing, 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.

### **Plan for Periodic Reappraisal**

Subsections (a) and (b), Section 25.18, Property Tax Code, are amended to read as follows:

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

- (4) Identifying property characteristics that affect property value in each market area, including:
  - (a) The location and market area of the property;
  - (b) Physical attributes of the 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.

### **Scope of Responsibilities**

The Dallas Central Appraisal District has prepared and published this reappraisal plan to provide our Board of Directors, taxing units, citizens and taxpayers with a better understanding of the district's responsibilities and reappraisal activities. This report has several parts: a general introduction and then, several sections describing the proposed 2009-2010 reappraisal effort by the appraisal departments within the Dallas Central Appraisal District.

The Dallas Central Appraisal District (DCAD) is a political subdivision of the State of Texas created effective January 1, 1980. The provisions of the Texas Property Tax Code govern the legal, statutory, and administrative requirements of the appraisal district. A member Board of Directors, appointed by the taxing units within the boundaries of Dallas County, constitutes the district's governing body. The Chief Appraiser, appointed by the Board of Directors, is the Chief Appraiser and Executive Director of the appraisal district.

The Dallas Central Appraisal District is responsible for local property tax appraisal and exemption administration for fifty jurisdictions or taxing units in the county. Each taxing unit, such as the county, a city, school district, municipal utility district, etc., sets its own tax rate to generate revenue to pay for such things as police and fire protection, public schools, road and street maintenance, courts, water and sewer systems, and other public services. Property appraisals are estimated values by the appraisal district and used by the taxing units to distribute the annual tax burden. They are generally based on each property's worth or market value. DCAD also determines eligibility for various types of property tax exemptions such as those for homeowners, the elderly, disabled persons, disabled veterans, and charitable or religious organizations.

The Property Tax Code, except as otherwise provided, states that all taxable property is appraised annually at its “market value” as of January 1<sup>st</sup>. Under the tax code, “market value” means the price at which a property would transfer for cash or its equivalent under prevailing market conditions if:

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

The Code defines special appraisal provisions for the valuation of residential homestead property (Sec. 23.23), productivity (Sec. 23.41 & 23.51), real property inventory (Sec. 23.12), dealer inventory (Sec. 23.121, 23.124, 23.1241 and 23.127), nominal (Sec. 23.18) or restricted use properties (Sec. 23.83) and allocation of interstate property (Sec. 21.03).

The Texas Property Tax Code, under Sec. 25.18, requires each appraisal office to implement a plan to update appraised values for real property at least once every three years. The district’s current policy is to conduct a general reappraisal of real and business personal property value every year, meaning that a property’s appraised value is established and reviewed for equality and uniformity on an annual basis.

The appraised value of real and business personal property is calculated using specific information and data about each property. Using various computer-assisted mass appraisal (CAMA) programs, and generally recognized appraisal methods and techniques, registered and trained appraisers compare the subject property information with the data for similar properties, and with recent market data. The district adheres to the standards of the International Association of Assessing Officers (IAAO) regarding its appraisal practices and procedures, and subscribes to the standards promulgated by the Appraisal Foundation known as the Uniform Standards of Professional Appraisal Practice (USPAP) to the extent they are applicable. Chapter 23 of the Texas Property Tax code contains statutes dealing with appraisal methods and procedures. Section 23.01 of this chapter was amended in 1997 to specify that appraisal districts are required to comply with the mass appraisal standards of USPAP (Standard Six) when the appraised value of a property is established using mass appraisal techniques. In cases where the appraisal district contracts for professional valuation services, the contract that is entered into by each appraisal firm requires adherence to similar professional standards.

## **OVERVIEW OF DISTRICTS OPERATIONS**

**2009 – 2010 Calendar Of Key Events – See Appendix A**

**2009 & 2010 Budget Adopted Annually**

**2009 & 2010 Management Plan Developed Annually**

### **Personnel Resources**

The Office of the Chief Appraiser is primarily responsible for overall planning, organizing, staffing, coordinating, and controlling of district operations. The Administration Department's function is to plan, organize, direct and control the business support functions related to human resources, budget, finance, records management, purchasing, fixed assets, facilities and postal services. The Appraisal Department is responsible for the valuation of all real and personal property accounts. The property types appraised include commercial, residential, and business personal property. The district's appraisers are subject to the provisions of the Property Taxation Professional Certification Act and must be duly registered with The Texas Board of Tax Professional Examiners. Support functions including records maintenance, information and assistance to property owners, and hearings support are coordinated by the Support Services Department.

The appraisal district staff consists of 250 employees with the following classifications:

- 42 - Administrative Services (Executive level administration and customer support functions)
- 173 - Appraisal Services (Appraisal & Property Records/Exemption related functions)
- 4 - Technical Services (Litigation functions)
- 31 – Information Technology (Technology related functions)

### **Staff Education and Training**

All appraisal district employees that perform appraisal work are subject to the provisions of the Property Taxation Professional Certification Act and must be duly registered with The Texas Board of Tax Professional Examiners (BTPE). This board is responsible for ensuring appraisers are professional, knowledgeable, competent and ethical. This is accomplished through a statewide program of registration, education, experience, testing and certification for all property tax professionals for the purpose of promoting an equitable tax system.

Upon registration, appraisers registered with the Board of Tax Professional Examiners have up to five years to take a series of appraisal courses and exams in order to achieve certification as a Registered Professional Appraiser (RPA). During each subsequent five-year period after certification, appraisers must complete an additional 75 hours of continuing education. Failure to meet these minimum standards will result in the removal of the employee from an appraiser position.

Additionally, all appraisal personnel receive extensive training in the data gathering and valuation processes. Standardized manuals are provided to ensure uniform and accurate data collection. Senior

personnel provide on-the-job data collection training in the office and the reappraisal field area. Managers meet regularly with staff to introduce new procedures and regularly monitor appraisal activity to ensure that all personnel are following standardized appraisal methods and techniques.

## **Data**

The district is responsible for establishing and maintaining approximately 798,271 real and business personal property accounts covering 900 square miles within the Dallas Central Appraisal District's territorial boundaries. This data includes property characteristic, ownership, and exemption information. Property characteristic data on new construction is updated through an annual field effort; existing property data is maintained through a field and office review. Sales are routinely validated during an office review and a separate field effort when applicable; however, numerous sales are validated as part of the building permit process and annual reappraisal effort. General trends in employment, interest rates, new construction trends, and cost and market data are acquired through various sources, including internally generated questionnaires to buyer and seller, university research centers, and market data centers and vendors.

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

## **Information Systems**

The Information Technology Division maintains the district's data processing facility, software applications, Internet website, and geographical information system (GIS). The district operates under both DB2 and SQL relational databases. The hardware is Intel Servers, NT Servers host the LAN, Internet, and document imaging; and the user base is served by general-purpose Desktop and Server PC's, along with Fujitsu Pen Devices for field appraisal data collection and valuation. The geographic information system software is an ESRI based product -ArcView/ArcInfo. The District's Mass Appraisal Records System (MARS) is the District's software application that has incorporated our Computer Assisted Mass Appraisal system with Pen Technology, Digital Photography, GIS and Image Workflow/Scanning.

## **Independent Performance Test**

According to Chapter 5 of the TPTC and Section 403.302 of the Texas Government Code, the State Comptroller's Property Tax Division (PTD) conducts an annual property value study (PVS) of each Texas school district and each appraisal district. As a part of this annual 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 (MSP 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). There are 16 independent school districts in Dallas CAD for which appraisal rolls are annually developed. The preliminary results of this study are released in January in the year following the year of 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 the CAD in determining areas of market activity or changing market conditions. The District also contracts with the University of Texas at Dallas to conduct an annual ratio study for Residential neighborhoods.

## **APPRAISAL ACTIVITIES**

### **Appraisal Responsibilities**

The field appraisal staff is responsible for collecting and maintaining property characteristic data for classification, valuation, and other purposes. Accurate valuation of real and personal property by any method requires a physical description of personal property, land and building characteristics. This appraisal activity is responsible for administering, planning and coordinating all activities involving data collection and maintenance of all commercial, residential and personal property types which are located within the boundaries of Dallas CAD. The data collection effort involves the field inspection of real and personal property accounts, as well as data entry of all data collected into the existing information system. The goal is to periodically field inspect residential and commercial properties in Dallas County every six years. In homogeneous areas and areas where there is high degree of confidence with our existing data, a six year inspection cycle may not occur. The use of aerial photography and a periodic digital photography project may also be used in meeting this goal. Ultimately, meeting this goal is dependent on budgetary constraints.

### **Appraisal Resources**

- **Personnel** - The appraisal activities consists of 92 appraisers and 13 appraisal support staff.
- **Data** - The data used by field appraisers includes the existing property characteristic information contained in MARS (Mass Appraisal Records System). The data is collected and inputted using Fujitsu pen devices. Other data used includes maps, sales data, fire and damage reports, building permits, photos and actual cost information.

### **Preliminary Analysis**

#### **Data Collection/Validation**

Data collection of real property involves maintaining data characteristics of the property in MARS

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

The divisional manuals that are utilized by the field appraisers are available in the district offices. Manuals are also located in the customer service area for public inspection. If a property owner/agent want a copy of the divisional manual, customer service will handle this request. Management periodically updates the divisional manuals.

### **Sources of Data**

The sources of data collection are through the new construction field efforts, reappraisal, hearings, sales processing, newspapers and publications, property owner correspondence and inquiries received via the Internet. A principal source of data comes from building permits received from taxing jurisdictions that require property owners to take out a building permit. Where available, permits are received electronically and loaded in MARS. Otherwise, paper permits are received and matched manually with the property's tax account number by the appraisal support staff and then updated and scanned into MARS.

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

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

### **Data Collection Procedures**

Field data collection requires organization, planning and supervision of the field effort. Data collection procedures have been established for residential, commercial, and personal property. The appraisers are

assigned throughout Dallas County to conduct field inspections. Appraisers conduct field inspections and record information in MARS via their pen devices.

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

### **Data Maintenance**

The field appraiser is responsible for the data entry of his/her fieldwork directly into MARS via his/her pen device. This responsibility includes not only data entry, but also quality assurance.

### **Individual Value Review Procedures**

#### **Field Review**

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

#### **Office Review**

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

### **Performance Test**

Supervisors and appraisers are responsible for conducting ratio studies and comparative analysis to insure accurate and equitable appraised values. (Refer to the individual valuation process summary reports).

## **RESIDENTIAL VALUATION PROCESS**

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### **Scope of Responsibility**

The Residential Division is responsible for establishing the fair market value of all residential accounts as of January 1 of every year. There are approximately 642,502 residential properties within the Dallas CAD territorial boundaries.

### **Appraisal Resources**

- **Personnel** - The Residential appraisal staff consists of 39 appraisers and 4 appraisal support staff.
- **Data** - A common set of data characteristics for each residential dwelling in Dallas County is collected in the field and data entered to the computer. The property characteristic data drives the computer-assisted mass appraisal (CAMA) approach to valuation. Property data attribute information is verified and corrected based on on-site inspections as well as office review using digital photographs and aerial photography. The following data attribute information is captured on each appraisal record: Land Value, Zoning, SPTD Code, Building Class, Condition/Desirability/Utility (CDU) rating, Actual Year Built, Effective Year Built, Living Area, Additional Improvements, Total Living Area, Foundation, Basement, Heating, Roof Type, Roofing, Garage, Frame, Exterior Walls, Fireplace, Bedrooms, Wetbars, Kitchens, Full Baths, Half Baths, Remodel Year, Air Conditioning, Level Of Finish-out, Deck, Security, Porch, Spa, Fence, Sprinklers, Landscaping, Wooded Lot, Quiet Street, Special Features, and Percent Complete.

### **Valuation Approach (Model Specification)**

#### **Area Analysis**

Data on regional economic forces such as demographic patterns, regional locational factors, employment and income patterns, general trends in real property prices and rents, interest rate trends, availability of vacant land, and construction trends and costs are collected from private vendors and public sources and provide the field appraiser a current economic outlook on the real estate market. Information is gleaned from real estate publications and sources such as continuing education in the form of IAAO and BTPE classes.

#### **Neighborhood and Market Analysis**

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

The first step in neighborhood analysis is the identification of a group of properties that share certain common traits. A "neighborhood" for analysis purposes is defined as the largest geographic grouping of properties where the property's physical, economic, governmental and social forces are generally similar and uniform. Geographic stratification accommodates the local supply and demand factors that vary across a jurisdiction. Once a neighborhood has been identified, the next step is to define its boundaries.

This process is known as "delineation". Some factors used in neighborhood delineation include location, sales price range, lot size, age of dwelling, quality of construction and condition of dwellings, square footage of living area, and story height. Delineation involves the physical drawing of neighborhood boundary lines on a map. Part of neighborhood analysis is the consideration of discernible patterns of growth that influence a neighborhood's individual market. Few neighborhoods are fixed in character. Each neighborhood may be characterized as being in a stage of growth, stability or decline. The growth period is a time of development and construction. As new neighborhoods in a community are developed, they compete with existing neighborhoods. An added supply of new homes tends to induce population shift from older homes to newer homes. In the period of stability, or equilibrium, the forces of supply and demand are about equal. Generally, in the stage of equilibrium, older neighborhoods can be more desirable due to their stability of residential character and proximity to the workplace and other community facilities. The period of decline reflects diminishing demand or desirability. During decline, general property use may change from residential to a mix of residential and commercial uses. Declining neighborhoods may also experience renewal, reorganization, rebuilding, or restoration, which promotes increased demand and economic desirability.

Neighborhood identification and delineation is the cornerstone of the residential valuation system at the district. All the residential analysis work done in association with the residential valuation process is neighborhood specific. Neighborhoods are field inspected and delineated based on observable aspects of homogeneity. Neighborhood delineation is periodically reviewed to determine if further neighborhood delineation is warranted. Whereas neighborhoods involve similar properties in the same location, a neighborhood group is simply defined as similar properties in similar locations. Each residential neighborhood is assigned to a neighborhood group based on observable aspects of homogeneity between neighborhoods. Neighborhood grouping is highly beneficial in cost-derived areas of limited or no sales, or use in direct sales comparison analysis. Neighborhood groups, or clustered neighborhoods, increase the available market data by linking comparable properties outside a given neighborhood. Sales ratio analysis, discussed below, is performed on a neighborhood basis, and in soft sale areas on a neighborhood group basis. For estate and unique properties, the neighborhood concept may not always be applicable if better comparables reside outside the subject's immediate neighborhood. For truly unique properties a larger sub-market (i.e. ISD) may be appropriate.

### **Highest and Best Use Analysis**

The highest and best use of property is the reasonable and probable use that supports the highest present value as of the date of the appraisal. The highest and best use must be physically possible, legal, financially feasible, and productive to its maximum. The highest and best use of residential property is normally its current use. This is due in part to the fact that residential development, in many areas, through use of deed restrictions and zoning, precludes other land uses. Residential valuation undertakes reassessment of highest and best use in transition areas and areas of mixed residential and commercial use. In transition areas with ongoing gentrification, the appraiser reviews the existing residential property use and makes a determination regarding highest and best use. Once the conclusion is made that the highest and best use remains residential, further highest and best use analysis is done to decide the type of residential use on a neighborhood basis. As an example, it may be determined in a transition area that older, non-remodeled homes are economic misimprovements, and the highest and best use of such property is the construction of new dwellings. In areas of mixed residential and commercial use, the appraiser reviews properties in these areas on a periodic basis to determine if changes in the real estate market require reassessment of the highest and best use of a select population of properties.

## **Valuation and Statistical Analysis (Model Calibration)**

### **Cost Schedules**

Residential parcels in the district are valued from building class cost schedules using a comparative unit method. The District's residential base building class cost schedules have been customized to fit Dallas County's local residential building and labor market. The District calibrates each building class cost table at the neighborhood level during the reappraisal effort to insure equitable and accurate appraised values. An extensive review and revision of the residential base building class cost schedules were performed in tax year 2006. These building class costs were compared against Marshall & Swift, a nationally recognized cost estimator. Mobile Homes cost schedules are derived annually from Marshall & Swift's Cost Handbook.

### **Sales Information**

A sales file for sales data is maintained in MARS as well as in other data files such as Access and Excel. Residential improved and vacant sales are collected from a variety of sources, including: surveys sent to buyer and seller, renditions, protest hearings, MLS, Title companies, builders, fee appraisers and realtors. Sale price, sale date, sale type, and source are recorded. Sales are used for ratio analysis, neighborhood building class model development and will be provided to taxpayers if the sale was used in the valuation of the taxpayer's property.

### **Land Analysis**

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

### **Statistical Analysis**

The residential appraisal staff performs statistical analysis annually to evaluate whether values are equitable and consistent with the market. Ratio studies are conducted on each of the approximately 4800 residential neighborhoods to the level of assessment and whether the neighborhood and associated building classes are in need of reappraisal. The level of appraised values is determined by the weighted mean for individual properties within a neighborhood and also by building class within a neighborhood. Every neighborhood is reviewed annually by the appraisal staff through the sales ratio analysis process. The first phase involves neighborhood ratio studies that compare the recent sales prices of neighborhood properties to the appraised values of these sold properties. This set of ratio studies affords the appraiser an excellent means of judging the present level of appraised value and uniformity of the sales. The University of Texas at Dallas also conducts an annual regression and census ratio analysis by neighborhood and ISD to determine the level of assessment within these market areas. The UTD Study in conjunction with in-house ratio analysis is used to target neighborhoods in need of reappraisal.

## **Market Adjustment or Trending Factors**

Neighborhood, or market adjustment, factors are developed from appraisal statistics provided from ratio studies and are used to ensure that estimated values are consistent with the market. The district's primary approach to the valuation of residential properties uses a hybrid cost-sales comparison approach. This type of approach accounts for neighborhood market influences not specified in the base building class cost tables.

The following equation denotes the hybrid model used:

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

Whereas the market value (MV) equals land value (LV) plus the replacement cost new (RCN) times the neighborhood building class location factor (BCLF) less depreciation (D). As the cost approach separately estimates both land and building values and uses depreciated replacement costs, which reflect only the supply side of the market, it is expected that adjustments to the cost values are needed to bring the level of appraisal to an acceptable standard. Therefore, market, or building class location factors are applied uniformly by building class by neighborhood to insure equitable and accurate market values within these market areas. The MARS Neighborhood Analysis module is where the appraiser undertakes these calculations and documents the neighborhood trends and findings for the given reappraisal effort.

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

## **Treatment of Residence Homesteads**

Beginning in 1998, the State of Texas implemented a constitutional classification scheme concerning the appraisal of residential property that receives a residence homestead exemption. Under the new law, beginning in the second year a property receives a homestead exemption, increases in the value of that

property are "capped." The value for tax purposes (appraised value) of a qualified residence homestead will be the 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.

Values of capped properties must be recomputed annually. If a capped property sells, the cap automatically expires as of January 1<sup>st</sup> of the following year. The MARS Capped Homestead module is where these calculations take place programmatically.

## **Individual Value Review Procedures**

### **Field Review**

The appraiser identifies individual properties in critical need of field review through sales ratio analysis. Sold properties with a high variance in sales ratios are field reviewed to check for accuracy of data characteristics. Additionally, the appraiser frequently field reviews subjective data items such as quality of construction, condition, and physical, functional and economic obsolescence, factors contributing significantly to the market value of the property. After preliminary estimates of value have been determined in targeted areas, the appraiser value reviews the results. During this review, the appraiser is able to physically inspect both sold properties and unsold properties for comparability and consistency of values. GIS, aerial photography, digital photography and other MARS functionality are also used during the value review process.

### **Office Review**

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

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

## **Performance Tests**

### **Sales Ratio Studies**

The primary analytical tool used by the appraisers to measure and improve performance is the ratio study. The district ensures that the appraised values that it produces meet the standards of accuracy in several ways. Overall sales ratios can be generated by building class, by neighborhood, by city, and by 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. These sales ratio statistics are available under the MARS Reappraisal Analysis module and typically cover a 12 month time frame.

### **Management Review Process**

Once the proposed value estimates are finalized by the appraisal staff, the supervisory staff reviews the sales ratios by neighborhood and ISD. Final ISD and taxing jurisdiction ratios are then reviewed by the Division Manager and communicated to the Chief Appraiser for final review and approval. 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 and to insure the overall level of assessment within each taxing jurisdiction is acceptable.

## **RESIDENTIAL DIVISION REAPPRAISAL PLAN OVERVIEW**

The Residential Division's 2009 and 2010 Reappraisal Plan consists of two primary tasks – Fixed Tasks and Variable Tasks. Fixed tasks are those tasks required to be done on an annual basis and are associated with working building permits received on a monthly basis from the thirty one cities within the Dallas Central Appraisal District's jurisdictional boundaries. Variable tasks are those tasks associated with our annual reappraisal effort.

### **Fixed Tasks**

Building permits are received monthly from each city and are then updated to the applicable account so a physical inspection and/or an office review can take place for the current appraisal year. All significant value related building permits issued from January 1, 2008 through December 31, 2008 associated with an account will be inspected and reappraised for the 2009 Appraisal Year. All significant value related building permits issued from January 1, 2009 through December 31, 2009 associated with an account will be inspected and reappraised for the 2010 Appraisal Year. Also, included in these fixed task projections for 2009 and 2010 are those accounts that were partially complete as of January 1, 2008 and January 1, 2009 respectively. Any property that has new construction activity as of January 1 and was not 100% complete will be targeted for reappraisal the next appraisal year. This also includes those properties whereby a building permit was issued prior to January 1 but no new construction activity had taken place as of January 1 of the current appraisal year.

Property data attribute information is verified and corrected based on on-site inspections as well as office review using digital photographs and aerial photography. The following data attribute information is captured on each appraisal record: Land Value, Zoning, SPTD Code, Building Class, Condition/Desirability/Utility (CDU) rating, Actual Year Built, Effective Year Built, Living Area, Additional Improvements, Total Living Area, Foundation, Basement, Heating, Roof Type, Roofing, Garage, Frame, Exterior Walls, Fireplace, Bedrooms, Wetbars, Kitchens, Full Baths, Half Baths, Remodel Year, Air Conditioning, Level Of Finish-out, Deck, Security, Porch, Spa, Fence, Sprinklers, Landscaping, Wooded Lot, Quiet Street, Special Features, and Percent Complete.

### **Variable Tasks**

Variable tasks are those tasks associated with our annual neighborhood reappraisal effort. Neighborhoods targeted for reappraisal are identified through the University of Texas at Dallas (UTD) Ratio Study in conjunction with annual in-house Neighborhood Ratio Studies conducted during October, January, and March of every appraisal year. Also, including in the annual reappraisal effort are:

- All Mobile Home accounts
- New Subdivision accounts
- Properties split by the county line
- Compliance Accounts. Compliance accounts are accounts where our current market values are acceptable however the taxpayer has not received an appraisal notice within the last three years.

Account Review. Account review are those accounts where an inspection and/or office review was undertaken to correct data on an account that wasn't a result of a building permit being issued or wasn't apart of the annual neighborhood reappraisal effort. Account Reviews are typically identified from 3<sup>rd</sup> party inquiries, the sales qualification process, re-inspections initiated during the Appraisal Review Board process and/or a general review of accounts in non-reappraisal neighborhoods.

**RESIDENTIAL DIVISION  
2009 REAPPRAISAL PLAN**

**FIXED TASKS:**

**NEW CONSTRUCTION:**

**ACCOUNTS**

Permit Inspection	28,000
Permit Remeasure	9,000
Permit Remeasure Complex	260
Permit Office Review	3,350
Subtotal	40,610

**VARIABLE TASKS:**

**REAPPRAISAL:**

Reappraisal Office Review	240,000
Reappraisal Inspection	50,000
Reappraisal Remeasure	600
Mobile Home Reappraisal	15,000
Neighborhood Analysis	1,875
Shared CAD Accounts	1,500
Compliance Accounts	29,700
Subtotal	336,800

**ACCOUNT REVIEW:**

Account Office Review	23,000
Account Inspection	10,000
Account Remeasure	200
Subtotal	33,200
Total	412,610

**RESIDENTIAL DIVISION  
2010 REAPPRAISAL PLAN**

**FIXED TASKS:**

**NEW CONSTRUCTION:**

**ACCOUNTS**

Permit Inspection	29,000
Permit Remeasure	11,330
Permit Remeasure Complex	265
Permit Office Review	3,450
Subtotal	44,045

**VARIABLE TASKS:**

**REAPPRAISAL:**

Reappraisal Office Review	245,000
Reappraisal Inspection	50,000
Reappraisal Remeasure	600
Mobile Home Reappraisal	15,000
Neighborhood Analysis	1,875
Shared CAD Accounts	1,500
Compliance Accounts	30,000
Subtotal	342,100

**ACCOUNT REVIEW:**

Account Office Review	24,150
Account Inspection	10,000
Account Remeasure	200
Subtotal	34,350
Total	420,495

**RESIDENTIAL DIVISION FIXED TASKS DEFINITIONS**

Dallas Central Appraisal District

2009/2010 Reappraisal Plan

September 1, 2008

**Permit Office Review:** Reappraising an account that has a building permit issued and the appraiser is working the permit/account in the office and/or is not physically at the site.

**Permit Inspect:** Reappraising an account that has a building permit issued and the appraiser is physically at the site location and a measurement of the structure(s) is not required nor done.

**Permit Remeasure:** Reappraising an account that has a building permit issued and the appraiser is physically at the site and a measurement of the structure(s) is required and done. Total square footage of structure is less than 10,000 square feet.

**Permit Remeasure Complex:** Reappraising an account that has a building permit issued and the appraiser is physically at the site and a measurement of the structure(s) is required and done. Total square footage of structure is greater than 10,000 square feet.

## **RESIDENTIAL DIVISION VARIABLE TASKS DEFINITIONS**

**Reappraisal Office Review:** Reappraising an account during the annual neighborhood reappraisal effort while in the office and/or not physically at the site.

**Reappraisal Inspect:** Reappraising an account during the annual neighborhood reappraisal effort while physically at the site and a measurement is not required nor done.

**Reappraisal Remeasure:** Reappraising an account during the neighborhood reappraisal while physically at the site and a measurement is required and done.

**Mobile Home Reappraisal:** Reappraising a mobile home account.

**Shared CAD Accounts:** Reappraising accounts split by the county line.

**Compliance Accounts:** Reappraising/notifying an account for compliance purposes.

**Reappraisal Neighborhood Analysis:** Updating the Neighborhood Overview and undertaking Location Factor Analysis on a neighborhood targeted for the annual neighborhood reappraisal effort.

**Account Review Office Review:** Reappraising an account in the office and/or not physically at the site which doesn't involve a building permit or isn't associated with the annual neighborhood reappraisal effort.

**Account Review Inspect:** Reappraising an account while physically at the site which doesn't involve a building permit or isn't associated with the annual neighborhood reappraisal effort and a measurement is not required nor done.

**Account Review Remeasure:** Reappraising an account while physically at the site which doesn't involve a building permit or isn't associated with the annual neighborhood reappraisal effort and a measurement is required and done.

## **COMMERCIAL VALUATION PROCESS**

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### **Scope of Responsibility**

The Commercial Division is responsible for establishing the fair market value of all commercial accounts as of January 1 of every year. There are approximately 72,577 commercial properties within the Dallas CAD territorial boundaries.

### **Appraisal Resources**

- **Personnel** - The Commercial appraisal staff consists of 20 appraisers and 3 appraisal support staff.
- **Data** - The data used by the commercial appraiser includes verified sales of vacant land and improved properties and the pertinent data obtained from each (sales price levels, capitalization rates, income multipliers, equity dividend rates, marketing period, etc.). Other data used by the appraiser includes actual income and expense data (typically obtained through the hearings process), 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 informational data bases are also reviewed to provide additional support for market trends.

### **Preliminary Analysis**

#### **Pilot Study**

Pilot studies are utilized to test new or existing procedures or valuation modifications in a limited area (a sample of properties) of the district and are also considered whenever substantial changes are made. These studies, which are inclusive of ratio studies, reveal whether a new system is producing accurate and reliable values or whether procedural modifications are required. The appraiser implements this methodology when developing both the cost approach and income approach models.

Survey of Similar Jurisdictions: Dallas CAD coordinates its discovery and valuation activities with adjoining Appraisal Districts. Numerous field trips, interviews and data exchanges with adjacent appraisal districts have been conducted to ensure compliance with state statutes. In addition, Dallas CAD administration and personnel interact with other assessment officials through professional trade organizations including the International Association of Assessing Officers, Texas Association of Appraisal Districts and its subchapter Texas Metropolitan Association of Appraisal Districts and the Texas Association of Assessing Officers.

### **Valuation Approach (Model Specification)**

#### **Area Analysis**

Data on regional economic forces such as demographic patterns, regional locational factors, employment and income patterns, general trends in real property prices and rents, interest rate trends, availability of vacant land, and construction trends and costs are collected from private vendors and public sources. Continuing education in the form of IAAO, Texas Association of Assessing Officers

(TAAO), Texas Association of Appraisal Districts (TAAD) and Board of Tax Professional Examiners (BTPE) courses.

### **Neighborhood Analysis (Land Market Area & Improved Market Area)**

The neighborhood is comprised of the land area and commercially classed properties located within the boundaries of this taxing jurisdiction. The neighborhood consists of a wide variety of property types including residential, commercial and industrial. Neighborhood analysis involves the examination of how physical, economic, governmental and social forces and other influences affect property values. The effects of these forces are also used to identify, classify, and organize comparable properties into smaller, manageable subsets of the universe of properties known as Land Market Areas and Improved Market Areas. In the mass appraisal of commercial properties these subsets of a universe of properties are generally referred to as land market areas (LMA's) and improved market areas (IMA's).

Economic areas and/or Improved Market Areas (IMA's) are defined by each of the improved property use types (apartment, office, retail, warehouse, industrial and special use) based upon an analysis of similar economic or market forces. These include but are not limited to similarities of rental rates, classification of projects (known as building class by area commercial market experts), date of construction, overall market activity or other pertinent influences. Improved market area identification and delineation by each major property use type is the benchmark of the commercial valuation system. All income model valuation (income approach to value estimates) is improved market area (IMA) specific. Improved market areas are periodically reviewed to determine if re-delineation is required. The geographic boundaries as well as, income, occupancy and expense levels and capitalization rates by age within each economic area for all commercial use types and its corresponding income model may be found in the Commercial Mass Appraisal Records System.

### **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. For improved properties, highest and best use is evaluated as improved and as if the site were still vacant. This assists in determining if the existing improvements have a transitional use, interim use, nonconforming use, multiple uses, speculative use, excess land, or a different optimum use if the site were vacant. For vacant tracts of land within this jurisdiction, the highest and best use is considered speculative based on the surrounding land uses. Improved properties reflect a wide variety of highest and best uses which include, but are not limited to: office, retail, apartment, warehouse, light industrial, special purpose, or interim uses. In many instances, the property's current use is the same as its highest and best use. This analysis insures that an accurate estimate of market value (sometimes referred to as value in exchange) is derived.

On the other hand, value in use represents the value of a property to a specific user for a specific purpose. This is significantly different than market value, which approximates market price under the following assumptions: (i) no coercion of undue influence over the buyer or seller in an attempt to force the purchase or sale, (ii) well-informed buyers and sellers acting in their own best interests, (iii) a reasonable time for the transaction to take place, and (iv) payment in cash or its equivalent.

## **Market Analysis**

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

## **Data Collection / Validation**

### **Data Collection Procedures**

The primary manual pertinent to data collection and documentation is the Commercial Appraisal Manual. This manual is continually updated, providing a uniform system of itemizing the multitude of components comprising improved properties. All properties located in Dallas CAD's inventory are coded according to this manual and the approaches to value are structured and calibrated based on this coding system. The most recent revision of the listing manual was 2004.

Annually, prior to the hearing season and after the sales have been researched, verified, keyed into the database, and quality control has been completed, the sales data are captured in DCAD's sales file data base. The data base is used by the Dallas CAD appraisers during the hearings process.

### **Sources of Data**

In terms of commercial sales data, Dallas CAD receives a copy of the deeds recorded in Dallas County that convey commercially classed properties. Other sources of sale data include the hearings process and local, regional and national real estate and financial publications, MetroTex MLS data base, Real Capital Analytics data base, Loopnet sales data base and the CoStar Comps sales data base.

For those properties involved in a transfer of commercial ownership, a sale file is produced which begins the research and verification process. The initial step in sales verification involves a computer-generated questionnaire, which is mailed to both parties in the transaction (Grantor and Grantee). If a questionnaire is answered and returned, the documented responses are recorded into the computerized

sales database system. If no information is provided, verification is then attempted via phone calls to both parties. If the sales information is still not obtained, other sources are contacted such as the brokers involved in the sale, property managers or commercial vendors. In other instances sales verification is obtained from local appraisers or others that may have the desired information. Finally, closing statements are often provided during the hearings process. The actual closing statement is the most reliable and preferred method of sales verification.

## **Valuation Analysis (Model Calibration)**

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

period of time, with trending factors utilized for updating the data to the current market conditions. However, at some point, if the adjustment process becomes too involved, the model calibration technique can mandate new model specifications or a revised model structure.

## **Cost Schedules**

The cost approach to value is applied to all improved real property utilizing the comparative unit method. This methodology involves the utilization of national cost data reporting services as well as actual cost information on comparable properties whenever possible. Cost models are typically developed based on the Marshall Swift Valuation Service and review of local area trends. Cost models include the derivation of replacement cost new (RCN) of all improvements. These include comparative base rates, per unit adjustments and lump sum adjustments. This approach also employs the sales comparison approach in the valuation of the underlying land value. Time and location modifiers are necessary to adjust cost data to reflect conditions in a specific market and changes in costs over a period of time. Because a national cost service is used as a starting points for the cost models, locational modifiers are necessary to adjust these base costs specifically for Dallas County. The Commercial Cost tables have been updated and/or revised for the 2008 appraisal year.

Depreciation schedules are developed based on what is typical for each property type at that specific age. Depreciation schedules have been implemented for what is typical of each major class of commercial property by economic life categories. Schedules have been developed for improvements with 15, 20, 30, 40, 50 and 60 year expected life. These schedules are then tested to ensure they are reflective of current market conditions. The actual and effective ages of improvements are noted in MARS. Effective age estimates are based on the utility of the improvements relative to where the improvement lies on the scale of its total economic life and its competitive position in the marketplace.

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

## **Income Models**

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

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

and collection loss allowance is subtracted from the potential gross rent estimate to yield an effective gross rent.

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

Allowable expenses and expense ratio estimates are based on a study of the local market, with the assumption of prudent management. An allowance for non-recoverable expenses such as leasing costs and tenant improvements are included in the expenses. A non-recoverable expense represents costs that the owner pays to lease rental space. Different expense ratios are developed for different types of commercial property based on use. For instance, retail properties are most frequently leased on a triple-net basis, whereby the tenant is responsible for his pro-rata share of taxes, insurance and common area maintenance. In comparison, a general office building is most often leased on a base year expense stop. This lease type stipulates that the owner is responsible for all expenses incurred during the first year of the lease. However, any amount in excess of the total per unit expenditure in the first year is the responsibility of the tenant. Under this scenario, if the total operating expense in year one (1) equates to \$8.00 per square foot, any increase in expense over \$8.00 per square foot throughout the remainder of the lease term would be the responsibility of the tenant. As a result, expense ratios are implemented based on the type of commercial property.

Another form of allowable expense is the replacement of short-lived items (such as roof or floor coverings, air conditioning or major mechanical equipment or appliances) requiring expenditures of large lump sums. When these capital expenditures are analyzed for consistency and adjusted, they may be applied on an annualized basis as stabilized expenses. When performed according to local market practices by commercial property type, these expenses when annualized are known as replacement reserves.

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

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

Capitalization analysis is used in the income approach models. This methodology involves the capitalization of net operating income as an indication of market value for a specific property. Capitalization rates, both overall (going-in) cap rates for the direct capitalization method and terminal cap rates for discounted cash flow analyses, can be derived from the market. Sales of improved properties from which actual income and expense data are obtained provide a very good indication of what a specific market participant is requiring from an investment at a specific point in time. In addition, overall capitalization rates can be derived from the built-up method (band-of-investment). This method relates to satisfying the market return requirements of both the debt and equity positions of

a real

estate investment. This information is obtained from real estate and financial publications.

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

### **Sales Comparison (Market) Approach**

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

### **Final Valuation Schedules**

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

### **Statistical and Capitalization Analysis**

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

The appraisers review every commercial property type annually through the sales ratio analysis process. The first phase involves ratio studies that compare the recent sales prices of properties to the appraised values of the sold properties. This set of ratio studies affords the appraiser an excellent means of judging the present level of appraised value and uniformity of the appraised values. The appraiser,

based on the sales ratio statistics and designated parameters for valuation update, makes a preliminary decision as to whether the value level of a particular property type needs to be updated in an upcoming reappraisal, or whether the level of market value is at an acceptable level.

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

## **Individual Review Procedures**

### **Field Review**

The date of last inspection, extent of that inspection, and the Dallas CAD appraiser responsible are listed in the MARS system. If a property owner disputes the District's records concerning this data in a protest hearing, MARS may be altered based on the credibility of the evidence provided. Typically, a new field check is then requested to verify this evidence for the current year's valuation or for the next year's valuation. In addition, if a building permit is filed for a particular property indicating a change in characteristics, that property is added to a work file. Finally, even though every property cannot be inspected each year, each appraiser typically designates certain segments of their area of responsibility to conduct field checks.

Commercial appraisers are somewhat limited in the time available to field review all commercial properties of a specific use type. However, a major effort is made by appraisers to field review as many properties as possible or economic areas experiencing large numbers of remodels, renovations, or retrofits, changes in occupancy levels or rental rates, new leasing activity, new construction, or wide variations in sale prices. Additionally, the appraisers frequently field review subjective data items such as building class, quality of construction (known as cost modifiers), condition, and physical, functional and economic obsolescence factors contributing significantly to the market value of the property. In some cases field reviews are warranted when sharp changes in occupancy or rental rate levels occur between building classes or between economic areas. With preliminary estimates of value in these targeted areas, the appraisers test computer assisted values against their own appraisal judgment. While in the field, the appraisers physically inspect sold and unsold properties for comparability and consistency of values.

### **Office Review**

Office reviews are completed on properties not subject to field inspections and are performed in compliance with the guidelines contained in the Commercial Manual. The Commercial Manual outlines the application of the three approaches to value.

Office reviews are typically limited by the data presented in final value reports. These reports summarize the pertinent data of each property as well as comparing the previous values to the proposed value conclusions of the various approaches to value. These reports show proposed percentage value changes, income model attributes or overrides, economic factor (cost overrides) and special factors

affecting the property valuation such as new construction status, prior year litigation and a sales history.

The appraiser may review methodology for appropriateness to ascertain that it was completed in accordance with USPAP or more stringent statutory and district policies. Each appraiser's review is limited to properties in their area of responsibility by property type (improved) or geographic area (commercial vacant land).

Once the appraiser is satisfied with the level and uniformity of value for each commercial property within their area of responsibility, the estimates of value go to noticing. Each parcel is subjected to the value parameters appropriate for its use type. Therefore, although the value estimates are determined in a computerized mass appraisal environment, value edits enable an individual parcel review of value anomalies before the estimate of value is released for noticing.

### **Performance Tests**

The primary tool used to measure mass appraisal performance is the ratio study. A ratio study compares appraised values to market values. In a ratio study, market values (value in exchange) are typically represented by sales prices (i.e. a sales ratio study). Independent, expert appraisals may also be used to represent market values in a ratio study (i.e. an appraisal ratio study). If there are not enough sales to provide necessary representativeness, independent appraisals can be used as indicators for market value. This can be particularly useful for commercial, warehouse or industrial real property for which sales are limited. In addition, appraisal ratio studies can be used for properties statutorily not appraised at market Value, but reflect the use-value requirement. Examples of these are multi-family housing projects subject to subsidized rent provisions or other governmental guarantees as provided by legislative statutes (affordable housing) and agricultural lands to be appraised on the basis of productivity or use value.

### **Sales Ratio Studies**

Sales ratio studies are an integral part of establishing equitable and accurate market value estimates, and ultimately assessments for this taxing jurisdiction. The primary uses of sale ratio studies include the determination of a need for general reappraisal; prioritizing selected groups of properties types for reappraisal; identification of potential problems with appraisal procedures; assist in market analyses; and, to calibrate models used to derive appraised values during valuation or reappraisal cycles. However, these studies cannot be used exclusively to judge the accuracy of an individual property appraised value. Specifically, sale prices might reflect leased fee interests as opposed to fee simple or current market value conditions. Also, the Dallas County Appraisal Review Board may make individual value adjustments based on unequal appraisal (ratio) protest evidence submitted on a case-by-case basis during the hearing process, which may or may not be justified. Therefore, when analyzing sales ratios these issues must be considered and accounted for accordingly.

Overall sales ratios are generated by use type annually (or more often in specific areas) to allow appraisers to review general market trends in their area of responsibility. The appraisers utilize desktop applications such as MS ACCESS and EXCEL programs to evaluate subsets of data by economic area or a specific and unique data item. On the desktop, this may be customized and performed by building class and age basis. In many cases, field checks may be conducted to insure the ratios produced are

accurate and the appraised values utilized are based on accurate property data characteristics. These ratio studies aid the appraisers by providing an indication of market activity by land market area and improved market area and provide insight into changing market conditions (appreciation or depreciation).

### **Comparative Appraisal Analysis**

The commercial appraiser performs an average unit value comparison in addition to a traditional ratio study. These studies are performed on commercially classed properties by property use type (such as apartment, office, retail and warehouse usage or special use). The objective to this evaluation is to determine appraisal performance of sold and unsold properties. Appraisers average unit prices of sales and average unit appraised values of the same parcels and the comparison of average value changes of sold and unsold properties. These studies are conducted on substrata such as building class and on properties located within various improved market area. In this way, overall appraisal performance is evaluated geographically, by specific property type to discern whether sold parcels have been selectively appraised. When sold parcels and unsold parcels are appraised equally, the average unit values are within a reasonable range.

## COMMERCIAL DIVISION REAPPRAISAL PLAN OVERVIEW

The following pages describe the Commercial Division's Reappraisal Plan. The Commercial Division's 2009 and 2010 Reappraisal Plan consists of two primary tasks – Fixed Tasks and Variable Tasks. Fixed tasks are those tasks required to be done on an annual basis and are associated with working building permits received on a monthly basis from the thirty two cities within the Dallas Central Appraisal District's jurisdictional boundaries. Variable tasks are those tasks associated with our annual reappraisal effort.

The plan calls for completing all required tasks and reappraisal, as mandated by the State Property Tax Code. The required fixed tasks include all new construction permits and other related permit tasks. The State Property Tax Code requires that all properties be reappraised at least once every three years. Commercial Reappraisal: To remain current, the Commercial Division will appraise at least 33% of all improved commercial accounts with a full property inspection, income analysis and appropriate property value adjustment as warranted. In addition, 50% of all land accounts, whether vacant or improved, will be appraised. Vacant land sales and improved property sales data will be reviewed and updated. In addition to the one-third reappraisal area, individual properties will be reviewed for equality. Markets showing significant activity will also be reviewed as time permits.

### Fixed Tasks

Building permits are received monthly from each city and are then updated to the applicable account so a physical inspection and/or an office review can take place for the current appraisal year. All significant value related building permits issued from January 1, 2008 through December 31, 2008 associated with an account will be inspected and reappraised for the 2009 Appraisal Year. All significant value related building permits issued from January 1, 2009 through December 31, 2009 associated with an account will be inspected and reappraised for the 2010 Appraisal Year. Also, included in these fixed task projections for 2009 and 2010 are those accounts that were partially complete as of January 1, 2008 and January 1, 2009 respectively. Any property that has new construction activity as of January 1 and was not 100% complete will be targeted for reappraisal the next appraisal year. This includes those properties whereby a building permit was issued prior to January 1 but no new construction activity had taken place as of January 1 of the current appraisal year.

Property data attribute data information is verified and corrected based on field inspections as well as office review utilizing digital photographs and aerial photography. The following data attribute information is captured on each appraisal record where applicable: Land Value, SPTD Code, Building Class, Construction Type/Quality/Condition Codes, Gross Building Area, Net Leasable Area, Actual Year Built, Effective Age, Remodel Year, Number of Stories, Story Height, Number of Buildings, Foundation Type, Basement, Overhead Doors, Finish-out Quality, Percent Finish-out, Framework, Exterior Walls, Roof Type, Roof Structure, Roofing, Heating, A/C, Interior Walls, Floors, Restrooms, Rail Access, Average Unit Size, and Dock High Construction.

In addition to the physical characteristics noted above, data captured for income producing properties includes: Net Leasable Area, Gross Rent, Rent Adjustments, Adjusted Rent, Plus Electric Charges, Parking Income, Percent Vacancy, Other Income, Cap Rates, Loaded Cap Rates, Lease-up Expenses, Deferred Maintenance Costs and Excess Land Value Contribution.

Major income producing properties such as offices, retail, apartment, warehouse, and industrial are coded with an Improved Market Area (IMA) Code defining the properties located within the same competing market area. There are 25 office IMA's, 36 retail IMA's, 24 industrial IMA's, 26 apartment IMA's and 66 industrial IMA's identified within the appraisal district. Each area is defined physically on a map for each respective market area and each respective property type. Income models are then developed for each class of comparability codes A, B, C, and D for the respective property types. Multiple competing Improved Market Areas are identified for each property type and appropriate adjustments are made to the income models to reflect market influences observed affecting the market values both within and between said Improved Market Areas.

### **Variable Tasks**

Variable tasks are those tasks associated with our annual commercial reappraisal effort. Areas targeted for reappraisal represent one third of the improved accounts on the commercial file in each respective school districts and one half of the land accounts, both improved and vacant, within those same school districts. In addition to the one-third reappraisal area, individual properties will be reviewed for equality. Markets showing significant activity will also be reviewed as time permits.

**COMMERCIAL DIVISION  
2009 REAPPRAISAL PLAN**

**FIXED TASKS:**

**NEW CONSTRUCTION:**

**ACCOUNTS**

Average	500
Major	150
Complex	150
No Starts	350
Miscellaneous Permits	4,000
Partial Completion Permits	850
Permit – Research	7,500
Permit – Preparation	6,000
Permit – Value Review	6,000
Miscellaneous Inspection	300
Subtotal	25,800

**VARIABLE TASKS:**

**LAND REAPPRAISAL:**

Land Pricing – Commercial	38,000
Land Pricing – Residential	2,500
Land Inspections	11,000
Land Market Area Analysis	225
Land Deed Research	2,500
Subtotal	54,225

**COMMERCIAL DIVISION  
2009 REAPPRAISAL PLAN**

<b>IMPROVED REAPPRAISAL:</b>	<b>ACCOUNTS</b>
Improved Inspections	11,000
Improved Value Review	18,000
Re-measure	200
Security	300
Subtotal	29,500
 <b>MISCELLANEOUS:</b>	
Shared CAD Accounts	450
Map Creation	225
Market Area Research/Reports	1,500
Sales Processing	3,000
I&E Processing	2,500
Sold Properties	7,500
Subtotal	15,175
Total	124,800

**COMMERCIAL DIVISION  
2010 REAPPRAISAL PLAN**

**FIXED TASKS:**

**NEW CONSTRUCTION:**

**ACCOUNTS**

Average	700
Major	165
Complex	150
No Starts	400
Miscellaneous Permits	4,000
Partial Completion Permits	875
Permit – Research	7,775
Permit – Preparation	7,775
Permit – Value Review	7,775
Miscellaneous Inspection	330
Subtotal	29,995

**VARIABLE TASKS:**

**LAND REAPPRAISAL:**

Land Pricing – Commercial	38,000
Land Pricing – Residential	2,500
Land Inspections	11,000
Land Market Area Analysis	225
Land Deed Research	2,500
Subtotal	54,225

**COMMERCIAL DIVISION  
2010 REAPPRAISAL PLAN**

IMPROVED REAPPRAISAL:	ACCOUNTS
Improved Inspections	11,000
Improved Value Review	18,000
Re-measure	250
Security	350
Subtotal	29,600
MISCELLANEOUS:	
Shared CAD Accounts	450
Map Creation	225
Market Area Research/Reports	1,500
Sales Processing	3,500
I&E Processing	2,500
Sold Properties	7,500
Subtotal	15,675
Total	129,495

**COMMERCIAL DIVISION  
2009 / 2010 REAPPRAISAL PLAN**

**COMMERCIAL DIVISION FIXED TASKS DEFINITIONS**

**NEW CONSTRUCTION**

**Average:** The actual field inspection and on-site measuring, classification and collection of physical characteristics of improvements with a value range of \$0 to \$2,499,999.

**Major:** The actual field inspection and on-site measuring, classification and collection of physical characteristics of improvements with a value range of \$2,500,000 to \$6,999,999.

**Complex:** The actual field inspection and on-site measuring, classification and collection of physical characteristics of improvements with a value range of \$7,000,000 and greater.

**No Starts:** The actual field inspection of new construction permits where construction has yet to commence. Later inspection will be necessary.

**Miscellaneous Permits:** The actual field inspection of properties that involve remodel, finish-out, repair and demolition permits.

**Partial Completions:** The actual field inspection and on-site measuring, classification and collection of physical characteristics of improvements where construction commenced in a prior year, but had not been completed as of the last assessment date. This would also include the reinspection of properties to determine the percent complete as of the current assessment date where construction was incomplete at the time of the first inspection during the current assessment year.

**Permit Research:** Locating account numbers for permits by owner name, property address, or legal description. May include additional research such as calling contractors or sending research requests to our Property Records Division.

**Permit Preparation:** Preparing permits for field inspection by verifying that the correct permit is appended to the appropriate account. Preparation also includes the assigning, downloading and routing of fieldwork to achieve maximum efficiency while in the field.

**Permit Value Review:** The final review of values based on an analysis of cost, comparable sales and market income/expense data. Actual construction costs would also be analyzed if available.

**Miscellaneous Inspection:** The actual field inspection of properties as needed based upon taxpayer or entity requests, or for various reasons determined by internal needs.

**COMMERCIAL DIVISION  
2009 / 2010 REAPPRAISAL PLAN**

**COMMERCIAL DIVISION VARIABLE TASKS DEFINITIONS**

**LAND REAPPRAISAL**

**Land Pricing - COMMERCIAL:** The determination of land values for all properties on the Commercial file, vacant and improved, within a designated reappraisal area.

**Land Pricing - RESIDENTIAL:** The determination of land values for all properties on the Residential file, vacant and improved, within a designated reappraisal area.

**Land Inspections:** The actual field inspection of vacant land accounts in a designated reappraisal area.

**Land Market Area Analysis:** The delineation of individual land market areas that will comprise an overall reappraisal area. This also includes the development of land pricing schedules that will be applied to the reappraisal area as well as an overall analysis of equity considerations. This task also includes working splits in order to keep the maps current.

**Land Deed Research:** The analysis and posting of land sales to the Land Market Area maps. This will often include the retrieval of deeds for detailed analysis.

**IMPROVED REAPPRAISAL**

**Improved Inspections:** The actual field inspection of improved accounts in a designated reappraisal area. Classification, physical characteristics and sketches are verified.

**Improved Value Review:** The final determination of value for improved accounts in a designated reappraisal area based on an analysis of cost, comparable sales and market income/expense data as well as an analysis of equity considerations.

**Remeasure:** The actual remeasure of improved properties in a designated reappraisal area due to an error in the sketch or net leaseable area, or due to additions/demolitions since the last reappraisal.

**Security:** Fieldwork in high crime areas worked by two appraisers for safety purposes.

**MISCELLANEOUS**

**Shared CAD Accounts:** Appraising accounts split by the county line.

**Map Creation:** The preparation and printing of market area maps for reappraisal purposes.

**Market Area Research/Reports:** Time spent analyzing market information from such sources as publications and real estate professionals. This also includes time spent reviewing various value reports as needed to ensure accuracy and uniformity of work.

**Sales Processing:** The retrieval and classification of sales documentation received during the year and the preparation of those sales in a manner that they may be entered into the Commercial sales file.

**I & E Processing:** The processing of operating statements and rent rolls received during the settlement process in a manner to create an in-house survey of income, occupancy and expense data. This information is categorized by various criteria and then used to develop property value standards for like building classes.

**Sold Properties:** Accounts that are reviewed based on a change in ownership.

### **Scope of Responsibility**

The Business Personal Property Division is responsible for establishing the fair market value of all business personal property accounts as of January 1 of every year. There are approximately 83,192 business personal properties within the Dallas CAD territorial boundaries. There are four different personal property types appraised by the district's personal property section: Business Personal Property accounts; Leased Assets; Vehicles; and Multi-Location Assets.

### **Appraisal Resources**

- **Personnel** - The personal property staff consists of 33 appraisers and 6 appraisal support staff.
- **Data** - A common set of data characteristics for each personal property account in Dallas County is collected and updated in the field by the personal property appraisers using pen devices. The property characteristic data drives the personal property module of MARS.

### **Valuation Approach (Model Specification)**

#### **SIC Code Analysis**

The Dallas Appraisal District uses four digit numeric codes, originally based on the Standard Industrial Classification (SIC) codes. The derivative of the SIC code classification is used by the Dallas CAD as a way to classify similar types of personal property.

SIC code identification and delineation is the cornerstone of the personal property valuation system at the Dallas CAD. All of the personal property analysis work done in association with the personal property valuation process is SIC code specific. There are approximately 402 Dallas CAD personal property SIC codes. SIC codes are delineated based on observable aspects of homogeneity. SIC code delineation is periodically reviewed to determine if further SIC code delineation is warranted.

#### **Highest and Best Use Analysis**

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

### **Data Collection/Validation**

#### **Data Collection Procedures**

Personal property data collection procedures are published and distributed to all appraisers involved in the appraisal and valuation of personal property. The appraisal procedures are reviewed and revised to meet the changing requirements of field data collection. The most recent revision of the personal

property data collection procedures was in 2005.

## **Sources of Data**

### Business Personal Property

The district's property characteristic data was originally received from Dallas County, and various school district records in 1980, and where absent, collected through a massive field data collection effort coordinated by the district over a period of time. Since the initial data collection, the District appraisers have maintained the appraisal roll through annual field drive-outs. This project results in the discovery of new businesses not revealed through other sources. Various published sources such as the Texas Business Report, trade journals, and other publications are also used to discover personal property. Tax assessors, city and local newspapers, and the public often provide the district information regarding new personal property and other useful facts related to property valuation.

### Vehicles

An outside vendor provides the Dallas CAD with a listing of vehicles within the Dallas CAD's jurisdiction. The vendor develops this listing from the Texas Department of Transportation (DOT) Title and Registration Division records. Other sources of data include property owner renditions and field inspections.

### Leased and Multi-Location Assets

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

## **Valuation and Statistical Analysis (Model Calibration)**

### **Cost Schedules**

Cost schedules are developed by SIC code by district personal property valuation appraisers. The cost schedules are developed by analyzing cost data from property owner renditions, hearings, state schedules, and published cost guides. The cost schedules are reviewed as necessary to conform to changing market conditions. The schedules are typically in a price per square foot format, but some exception SIC's are in an alternate price per unit format.

### **Statistical Analysis**

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

### **Depreciation Schedule and Trending Factors**

#### Business Personal Property

The Dallas CAD's primary approach to the valuation of business personal property is the cost approach.

The replacement cost new (RCN) is either developed from property owner reported historical cost or from the Dallas CAD developed valuation models. The trending factors used by the Dallas CAD to develop RCN are based on published valuation guides. The percent good depreciation factors used by Dallas CAD are also based on published valuation guides. The index factors and percent good depreciation factors are used to develop present value factors (PVF), by year of acquisition, as follows:

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

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

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

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

### **Mass Appraisal Records System (MARS)**

The MARS program includes a CAPP module that has two main objectives: 1) Analyze and adjust existing SIC models. 2) Develop new models for business classifications not previously integrated into MARS. The delineated sample is reviewed for accuracy of SIC code, square footage, field data, and original cost information. Models are created and refined using actual original cost data to derive a typical replacement cost new (RCN) per square foot for a specific category of assets. The RCN per square foot is depreciated by the estimated age using the depreciation table adopted for the tax year.

The data sampling process is conducted in the following order: 1) Prioritizing Standard Industrial Classification (SIC) codes for model analysis. 2) Compiling the data and developing the reports. 3) Field checking the selected samples. The models are built and adjusted using internally developed software. The models are then tested against the previous year's data. The typical RCN per square foot (or applicable unit) is determined by a statistical analysis of the available data.

CAPP model values are used in the general business personal property valuation program to estimate the value of new accounts for which no property owner's rendition is filed. Model values are also used to establish tolerance parameters for testing the valuation of property for which prior data years' data exist or for which current year rendered information is available. The calculated current year value or the prior year's value is compared to the indicated model value by the valuation program. If the value being tested is within an established acceptable percentage tolerance range of the model value, the

account passes that range check and moves to the next valuation step. If the account fails the tolerance range check, it is flagged for individual review. Allowable tolerance ranges may be adjusted from year to year depending on the analysis of the results of the prior year.

#### Vehicles

Value estimates for vehicles are provided by an outside vendor and are based on published values. Vehicles that are not valued by the vendor are valued by an appraiser using PVF schedules or published guides.

### Leased and Multi-Location Assets

Leased and multi-location assets are valued using the PVF schedules or published values.

## **Individual Value Review Procedures**

### **Office Review**

#### Business Personal Property

A district valuation computer program (MARS) exists in a client-server environment that identifies accounts in need of review based on a variety of conditions. Property owner renditions, accounts with field or other data changes, accounts with prior hearings, new accounts, and SIC cost table changes are all considered. The accounts are processed by MARS and pass or fail preset tolerance parameters by comparing appraised values to prior year and model values. Accounts that fail the tolerance parameters are reviewed by the appraisers.

#### Vehicles

A vehicle master file is received on tape from an outside vendor and vehicles in the district's system from the prior year are programmatically matched to current DOT records. The vehicles remaining after the matching process are sorted by owner name and the owners are then prioritized by the number of vehicles owned. These vehicles are then matched to existing accounts and new accounts are created as needed. Vehicles that are not valued by the vendor are valued by an appraiser using PVF schedules or published guides.

### Leased and Multi-Location Assets

Leasing and multi-location accounts that have a high volume of vehicles or other assets are loaded programmatically if reported by the property owner electronically. Electronic renditions, usually on CD, often require reformatting before they can be loaded to the account. Accounts that render in a hard copy format are manually entered in a database by the Dallas CAD.

After matching and data entry, reports are generated and reviewed by an appraiser. Corrections are made and the account is noticed after supervisor approval.

## **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 gauge 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 Dallas CAD's personal property values and ratios are formed.

## **Internal Testing**

The Dallas CAD can test new or revised cost and depreciation schedules by running the valuation program in a test mode prior to the valuation cycle. This can give appraisers a chance to make additional refinements to the schedules if necessary.

## **BUSINESS PERSONAL PROPERTY REAPPRAISAL PLAN OVERVIEW**

The Business Personal Property Division 2009 and 2010 Reappraisal Plan is made up of both fixed and variable tasks. The fixed tasks include setting up new business accounts, and the annual field reappraisal of Business Personal Property as well as deleting inactive accounts. Variable tasks are associated with aircraft, special inventory accounts, leased equipment processing and rendition processing.

### **Business Personal Property Routes and Accounts**

The BPP files consists of approximately 83,192 accounts that fall into two general categories. The first category is for all accounts that have a single physical location and the second category is for multiple location accounts and specialty properties.

The single physical location accounts are divided into 31 geographic routes and one appraiser is typically assigned to each one. There are also 7 geographic sub routes with security concerns that are assigned to two person appraisal teams.

The second category of accounts are made up of multiple location accounts and specialty accounts. The multiple location accounts include leased equipment, telecommunications, utilities, pipelines and billboards. The specialty accounts in this group include tenant accounts, and special inventory accounts for auto, boat, heavy equipment, and manufactured housing dealers.

Reappraisal of the BPP accounts is based on several processes that satisfy the Texas Property Tax Code requirement of reappraisal of all properties at least once every three years.

In order to reappraise all properties every three years, a portion of the BPP accounts are slated for reappraisal based on their business ID type. Business ID types sort businesses that have similar assets into categories that can be appraised using comparable price per square foot data. Grouping accounts for reappraisal in this manner assures that the BPP division reviews accounts across its jurisdiction, rather than focusing on certain geographic areas.

The BPP division also reviews accounts that were not rendered in the previous year, or that were rendered, but the rendition was not used to arrive at the appraised value. The accounts are flagged for reappraisal, and price per foot comparables are used to arrive at the appraised value.

The BPP division has developed cost models based on information gleaned from taxpayer renditions and financial records. The models are built for the business ID types. The typical model uses a price per square foot that is comprised of original cost and an averaged depreciation. The list of comparables provides a value range that includes overall depreciation for the subset of assets unique to that business ID type. The model is applied to the subject property by multiplying the square footage of the subject against the selected comparable price per foot to arrive at an estimate. There are separate price per foot comparables for inventory. The model equation is Comparable Price per Foot (CPPF) x Estimated Subject Square Footage (SF).

The third area of reappraisal is based on the information provided on the taxpayer's rendition form. The rendered data typically includes cost and year acquired information for fixed assets and inventory. This

information is used in conjunction with the field appraisal or field confirmation process to reappraise the property. Renditions filed by taxpayers cover approximately 62,500 BPP accounts or approximately 63% of the total account file.

### **Fixed Tasks**

Fixed tasks are used to record the annual BPP reappraisal / field confirmation effort. Due to the dynamic nature of Business Personal Property all businesses are reviewed each year for either reappraisal or field confirmation. The DCAD's jurisdiction is broken down into geographic routes that are worked by an individual appraiser. Sub-routes that cover geographic areas with security concerns are worked by two person appraiser teams. Within the routes and sub-routes, accounts are slated for reappraisal or field confirmation based on the following criteria:

New Business accounts are set up during the August through February field inspection portion of the 2009 and 2010 appraisal years. The appraisers drive or walk all streets that are within their assigned geographic route during these time periods. Various sources such as Certificates of Occupancy, articles in local papers and business journals supplement the physical inspection process used to identify and set up the new Business Personal Property accounts.

Business ID Type: Specific groups of businesses are slated for reappraisal based on timing or analysis that indicates a market value adjustment is needed. This category will also include businesses the have not filed a rendition in the previous year, or the rendition filed was not used to arrive at the appraised value for the BPP account.

The remaining accounts are worked under the field confirmation task, which verifies that these businesses are still in operation. If the appraiser determines that there has been some type of change, a reinspection of the property may be performed at that time.

### **Variable Tasks**

Variable tasks are used to record a portion of our reappraisal effort and tasks that have some planning flexibility from one year to the next. The most significant variable task is the 2009 and 2010 rendition processing period. The BPP division expects to receive in excess of 62,000 renditions each year. Between late March and when notices are mailed in late May of 2009 and 2010, Business Personal Property will receive and data enter the renditions for appraisal review. The Appraisal Staff will review the rendered data and incorporate the inventory and depreciated cost information into the 2009 and 2010 appraisals. Leased Equipment, Telecommunications, and Utilities will be worked when renditions are received. These business types are typically reappraised each year, and processing the accounts is part of the variable task process.

In summary, all Business Personal Property accounts are reappraised and notified annually.

**BUSINESS PERSONAL PROPERTY DIVISION  
2009 REAPPRAISAL PLAN**

<b>FIXED TASKS:</b>	<b>ACCOUNTS</b>
Add / New Accounts	10,525
Business ID Type Reappraisal	24,647
Tenant Account Reappraisal	4,900
Reinspection Accounts Reappraisal	98
Complex Account Reappraisal	250
Subtotal	40,420
 <b>VARIABLE TASKS:</b>	
Aircraft Accounts Reappraisal	115
Rendition Processing / Reappraisal	62,230
Subtotal	62,345
Total	102,765

**BUSINESS PERSONAL PROPERTY DIVISION  
2010 REAPPRAISAL PLAN**

<b>FIXED TASKS:</b>	<b>ACCOUNTS</b>
Add / New Accounts	10,630
Business ID Type Reappraisal	24,893
Tenant Account Reappraisal	4,949
Reinspection Account Reappraisal	99
Complex Account Reappraisal	253
Subtotal	40,824
<b>VARIABLE TASKS:</b>	
Aircraft Account Reappraisal	116
Rendition Processing Reappraisal	62,852
Subtotal	62,968
Total	103,792

## **BUSINESS PERSONAL PROPERTY FIXED TASKS DEFINITIONS**

**Add/New Accounts:** This category captures the time required to tour a new business and set up the add/new account in MARS.

**Business ID Type Reappraisal:** Selection of accounts for reappraisal based on specific business types.

**Tenant Accounts:** The Tenant accounts are furnished by public warehouses, craft malls, storage garages, consignment stores, executive office suites, etc.

**Reinspection:** These are accounts in business types that are not designated for reappraisal, however, due to physical changes such as downsizing, mergers, plant expansion, etc., a complete reappraisal is warranted.

**Complex Accounts:** Accounts with a value of \$10,000,000 or greater.

## **BUSINESS PERSONAL PROPERTY VARIABLE TASK DEFINITIONS**

**Aircraft Appraisal:** Valuing and confirming ownership of aircraft.

**Renditions:** Property owners' statements calculated and data entered by appraisers.

## LIMITING CONDITIONS

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

1. The appraisals are prepared exclusively for ad valorem tax purposes.
2. The property characteristic data upon which the appraisals are based is assumed to be correct. Exterior inspections of the property appraised are performed as staff resources and time allowed. Some interior inspections of property appraised 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 is attempted through questionnaires to buyer and seller, telephone survey and field review. In the absence of such confirmation, sales data obtained from vendors is considered reliable.
4. Appendix B has a list of staff providing significant assistance to the person signing this certification.

### **Certification Statement:**

"I, Kenneth Nolan, Chief Appraiser/Executive Director for Dallas Central Appraisal District, solemnly swear that I have made or caused to be made a reappraisal plan for Dallas Central Appraisal District for the 2009/2010 tax years as required by law."

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Kenneth Nolan  
Chief Appraiser/Executive Director

## Appendix A. 2007-2008 Calendar Of Key Events

July 28, 2008	Appraisal Field Cycle begins
August 1, 2008	Management Plan Year 2008 - 2009 begins
August 21, 2008	ARB full board approves Supplemental #08-2008
August 31, 2008	Fiscal Year 2007 - 2008 ends
September 1, 2008	Fiscal Year 2008 - 2009 begins Statutory appraisal date for certain inventory properties (Sec. 23.12)
September 10, 2008	Deadline for DCAD Board of Directors to approve biennial 2008 - 2010 Reappraisal Plan
September 18, 2008	ARB full board approves Supplemental #09-2008
October 9, 2008	DCAD Management Retreat
October 23, 2008	ARB full board approves Supplemental #10-2008
November 5, 2008	Board of Directors meeting
November 20, 2008	ARB full board approves Supplemental #11-2008
December 3, 2008	Board of Directors meeting
December 11, 2008	ARB full board approves Supplemental #12-2008
January 1, 2009	ASSESSMENT DATE
January 22, 2009	ARB full board approves Supplemental #01-2009
February 2, 2009	Receive preliminary findings of the 2008 Property Value Study from PTD

<b>February 4, 2009</b>	<b>Board of Directors meeting</b>
<b>February 19, 2009</b>	<b>ARB full board approves Supplemental #02-2009</b>
<b>March 4, 2009</b>	<b>Board of Directors meeting</b>
<b>March 17, 2009</b>	<b>Appraisal Level III and RPA exams</b>
<b>March 19, 2009</b>	<b>ARB full board approves Supplemental #03-2009</b>
<b>March 27, 2009</b>	<b>ARB Orientation: DCAD Operations and the ARB Process</b>
<b>April 3, 2009</b>	<b>State training of ARB members</b>
<b>April 7, 2009</b>	<b>ARB orientation for new members</b>
<b>April 8, 2009</b>	<b>Public hearing on Fiscal Year 2009 - 2010 budget</b> <b>Board of Directors meeting</b>
<b>April 15, 2009</b>	<b>Deadline for filing renditions and requests for BPP rendition extensions</b>
<b>April 23, 2009</b>	<b>Real Property Field Cycle ends</b> <b>Data Entry Cut-off for 1st mailing of Appraisal Notices (Real Property)</b> <b>ARB full board approves Supplemental #04-2009</b>
<b>April 27, 2009</b>	<b>ARB cycle for Real Property begins</b> <b>ARB training for Real Property appraisal personnel</b>
<b>April 30, 2009</b>	<b>Deadline for all exemption applications including AG, Freeport and Pollution Control</b>
<b>May 1, 2009</b>	<b>1st mailing of Appraisal Notices (Real Property)</b>
<b>May 4, 2009</b>	<b>ARB cycle begins for DCAD</b>
<b>May 5, 2009</b>	<b>Residential extended hours until 7:00 PM</b>
<b>May 6, 2009</b>	<b>Board of Directors approve the final Fiscal Year 2009 - 2010 budget</b>
<b>May 8, 2009</b>	<b>ARB full board accepts Real Property Appraisal Records (1st mailing of Notices)</b>

<b>May 9, 2009</b>	<b>Residential extended hours until 12:00 PM</b>
<b>May 12, 2009</b>	<b>Residential extended hours until 7:00 PM</b>
<b>May 15, 2009</b>	<b>Deadline for filing BPP renditions with timely extensions Data Entry Cutoff for 2nd mailing of Appraisal Notices (BPP Accts without rendition extensions)</b>
<b>May 16, 2009</b>	<b>Residential extended hours until 12:00 PM</b>
<b>May 18, 2009</b>	<b>ARB hearings begin for Real Property (tentative) BPP ARB cycle begins</b>
<b>May 19, 2009</b>	<b>2nd mailing of Appraisal Notices (BPP accounts without rendition extensions) Residential extended hours until 7:00 PM</b>
<b>May 22, 2009</b>	<b>Data Entry Cut-Off for 3rd mailing of Appraisal Notices (BPP accounts rendered by May 15, Res/Com accounts flagged for notification, railroad corridor accounts, and AG use accounts and denials)  ARB full board approves Supplemental #05-2009 and accepts BPP and Real Property appraisal records (2nd and 3rd mailings)</b>
<b>May 25, 2009</b>	<b>Memorial Day holiday</b>
<b>May 26, 2009</b>	<b>3rd mailing of Appraisal Notices (BPP accounts rendered by May 15, Res/Com accounts flagged for notification, railroad corridor accounts, and AG use accounts and denials)  Residential extended hours until 7:00 PM</b>
<b>May 29, 2009</b>	<b>Preliminary Certification output is available for pickup by the taxing entities</b>
<b>May 30, 2009</b>	<b>Residential extended hours until 12:00 PM</b>
<b>Jun 1, 2009</b>	<b>Protest deadline for 1st mailing (Real Property accounts)</b>
<b>June 5, 2009</b>	<b>Chief Appraiser certifies preliminary estimates to the taxing entities. ARB full board meeting</b>
<b>June 6, 2009</b>	<b>Saturday ARB hearings - Scheduled work day</b>

June 13, 2009	Saturday ARB hearings - Scheduled work day
June 16, 2009	First day of forced ARB hearings for 1st mailing
June 18, 2009	Protest deadline for 2nd mailing (BPP accounts rendered by April 15)
June 19, 2009	ARB full board meeting - Approves Supplemental #06-2009
June 20, 2009	Saturday ARB hearings - Scheduled work day
June 25, 2009	Protest deadline for 3rd mailing
June 26, 2009	ARB full board meeting
June 27, 2009	Saturday ARB hearings - Scheduled work day
July 4, 2009	Independence Day holiday
July 6, 2009	First day of forced ARB hearings for the 2nd mailing
July 7, 2009	Chief Appraiser certifies the 2009 Railroad Rolling Stock Appraisal Roll to the Comptroller of Public Accounts.
July 10, 2009	First day of forced ARB hearings for the 3rd mailing Deadline for late filing of Ag exemption
July 11, 2009	Saturday ARB hearings - Scheduled work day
July 17, 2009	Last Day of Hearings (Tentative) Data Entry Cut-Off For Certification Deadline for Late Freeport Exemption applications ARB full board submits 2009 appraisal records to Chief Appraiser for certification and approves Supplemental #07-2009.
July 20, 2009	District switches back to 4-day work week
July 23, 2009	Chief Appraiser certifies Appraisal Rolls Certified Appraisal Rolls are available to the taxing units

<b>July 27, 2009</b>	<b>Field cycle for Appraisal Year 2010 begins</b>
<b>July 31, 2009</b>	<b>2008 - 2009 Management Plan Year ends</b>
<b>August 1, 2009</b>	<b>Management Plan Year 2009-2010 begins</b>
<b>August 20, 2009</b>	<b>ARB full board approves Supplemental #08-2009</b>
<b>August 31, 2009</b>	<b>Fiscal Year 2008 - 2009 ends</b>
<b>September 1, 2009</b>	<b>Fiscal Year 2009 - 2010 begins</b> <b>Statutory appraisal date for certain inventory properties (Sec. 23.12)</b>
<b>September 17, 2009</b>	<b>ARB full board approves Supplemental #09-2009</b>
<b>October 22, 2009</b>	<b>ARB full board approves Supplemental #10-2009</b>
<b>November 4, 2009</b>	<b>Board of Directors meeting</b>
<b>November 19, 2009</b>	<b>ARB full board approves Supplemental #11-2009</b>
<b>December 2, 2009</b>	<b>Board of Directors meeting</b>
<b>December 10, 2009</b>	<b>ARB full board approves Supplemental #12-2009</b>
<b>January 1, 2010</b>	<b>ASSESSMENT DATE</b>
<b>January 21, 2010</b>	<b>ARB full board approves Supplemental #01-2010</b>
<b>February 3, 2010</b>	<b>Board of Directors meeting</b>
<b>February 18, 2010</b>	<b>ARB full board approves Supplemental #02-2010</b>
<b>March 16, 2010</b>	<b>Appraisal Level III and RPA exams</b>
<b>March 18, 2010</b>	<b>ARB full board approves Supplemental #03-2010</b>
<b>April 2, 2010</b>	<b>State training of ARB members</b>

<b>April 6, 2010</b>	<b>ARB orientation for new members</b>
<b>April 7, 2010</b>	<b>Public hearing on Fiscal Year 2010 - 2011 budget Board of Directors meeting</b>
<b>April 15, 2010</b>	<b>Deadline for filing renditions and requests for BPP rendition extensions</b>
<b>April 22, 2010</b>	<b>Real Property Field Cycle ends Data Entry Cut-off for 1st mailing of Appraisal Notices (Real Property) ARB full board approves Supplemental #04-2010</b>
<b>April 26, 2010</b>	<b>ARB Cycle for Real Property begins ARB training for Real Property appraisal personnel</b>
<b>April 30, 2010</b>	<b>1st mailing of Appraisal Notices (Real Property) Deadline for all exemption applications including AG, Freeport and Pollution Control</b>
<b>May 3, 2010</b>	<b>ARB cycle begins</b>
<b>May 4, 2010</b>	<b>Residential extended hours until 7:00 PM</b>
<b>May 5, 2010</b>	<b>Board of Directors approve the final Fiscal Year 2010 - 2011 budget</b>
<b>May 8, 2010</b>	<b>Residential extended hours until 12:00 PM</b>
<b>May 11, 2010</b>	<b>Residential extended hours until 7:00 PM</b>
<b>May 14, 2010</b>	<b>ARB full board accepts Real Property Appraisal Records (1st mailing of Notices) ARB full board approves Supplemental #05-2010</b>
<b>May 15, 2010</b>	<b>Residential extended hours until 12:00 PM</b>
<b>May 17, 2010</b>	<b>Deadline for filing BPP renditions with timely extensions Data Entry Cutoff for 2nd mailing of Appraisal Notices (BPP Accts without rendition extensions) ARB hearings begin (Tentative) BPP switches to a 4-1/2 day work week</b>
<b>May 18, 2010</b>	<b>2nd mailing of Appraisal Notices (BPP accounts without rendition extensions)</b>

	<b>Residential extended hours until 7:00 PM</b>
<b>May 22, 2010</b>	<b>Residential extended hours until 12:00 PM</b>
<b>May 28, 2010</b>	<b>Data Entry Cut-Off for 3rd mailing of Appraisal Notices (BPP accounts rendered by May 15, Res/Com accounts flagged for notification, railroad corridor accounts, and AG use accounts and denials)</b>  <b>BPP Appraisal Field Cycle Ends</b>
<b>May 31, 2010</b>	<b>Memorial Day holiday</b>
<b>June 1, 2010</b>	<b>3rd mailing of Appraisal Notices (BPP accounts rendered by May 15, Res/Com accounts flagged for notification, railroad corridor accounts, and AG use accounts and denials)</b>  <b>Protest deadline for 1st mailing (Real Property accounts)</b> <b>ARB training for Business Personal Property appraisal personnel</b> <b>Residential extended hours until 7:00 PM</b>
<b>June 4, 2010</b>	<b>Preliminary Appraisal Rolls and Certified Estimates for ISD's are available to the taxing units</b>  <b>ARB full board accepts BPP appraisal records (2nd Mailing of Notices)</b>
<b>June 5, 2010</b>	<b>Saturday ARB hearings - Scheduled work day</b>
<b>June 12, 2010</b>	<b>Saturday ARB hearings - Scheduled work day</b>
<b>June 11, 2010</b>	<b>ARB full board approves Supplemental #06-2008</b>
<b>June 16, 2010</b>	<b>First day of forced ARB hearings for 1st mailing</b>
<b>June 18, 2010</b>	<b>Protest deadline for 2nd mailing (BPP accounts rendered by April 15)</b>
<b>June 19, 2010</b>	<b>Saturday ARB hearings - Scheduled work day</b>
<b>June 26, 2010</b>	<b>Saturday ARB hearings - Scheduled work day</b>
<b>July 1, 2010</b>	<b>Protest deadline for 3rd mailing (BPP accounts rendered by May 15, Res/Com accounts flagged for notification, railroad corridor accounts, and AG use accounts and denials)</b>

<b>July 4, 2010</b>	<b>Independence Day holiday</b>
<b>July 10, 2010</b>	<b>Saturday ARB hearings - Scheduled work day</b>
<b>July 16, 2010</b>	<b>Last Day of Hearings (Tentative) Data Entry Cut-Off For Certification</b>
<b>July 19, 2010</b>	<b>Verification and file clean-up. Preparation for certification. Production online system will be Read Only (No Updates). ARB full board submits 2010 appraisal records to Chief Appraiser for certification.  ARB full board approves Supplemental #07-2010 District switches back to 4-day work week</b>
<b>July 23, 2010</b>	<b>Chief Appraiser certifies Appraisal Rolls Certified Appraisal Rolls are available to the taxing units</b>
<b>July 26, 2010</b>	<b>Field cycle for Appraisal Year 2011 begins</b>
<b>July 31, 2010</b>	<b>2009 - 2010 Management Plan Year ends</b>

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## Appendix B. Key Personnel in Reappraisal Plan Implementation

<u>Department</u>	<u>Employee</u>	<u>Position</u>
Administration	Ken Nolan	Executive Director/Chief Appraiser
	Rick Kuehler	Director Of Administration
	Shane Docherty	Director Of Appraisal
	David Pennington	Director Of Technical Service
Residential	Jimmy Cox	Manager
	Don Estes	Assistant Manager
	Carl Gibson	Supervisor
	Connie Whisenhunt	Supervisor
	Steve Burton	Supervisor
Commercial	John Threadgill	Manager
	Steve Brown	Assistant Manager
	Richard Davis	Supervisor
	James Schnitker	Supervisor
	Mike Robinson	Supervisor
	Joe Flores	Supervisor
BPP	Randy Scott	Manager
	Patricia Nixon	Assistant Manager
	Steve Wise	Supervisor
	Kathy Nora	Supervisor
	Tonya Gee	Supervisor
	Raul Reyes	Supervisor