



HAMILTON COUNTY APPRAISAL DISTRICT

2018

MASS APPRAISAL REPORT

WEBSITE HOMEPAGE

<http://www.hamiltoncad.org/>

ORGANIZATION

<http://www.hamiltoncad.org>

MISSION STATEMENT

"To provide market value appraisals of all taxable property in Hamilton County in a fair and equitable, and cost-effective manner, and to provide services and assistance to the public and taxing jurisdictions."

Hamilton CAD Responsibilities

The Appraisal District's primary responsibility is to develop an annual appraisal roll for use by taxing units by imposing ad valorem taxes on property in the district. Hamilton CAD is governed by the Board of Directors, who is primarily responsible for the hiring of the Chief Appraiser as well as approving the annual budget.

Scope of Responsibility

The Hamilton Central Appraisal District (HCAD) has prepared and published this report to provide our Board of Director's, citizens and taxpayers with a better understanding of the district's responsibilities and activities. This mass appraisal report was written in compliance with Standards Rule 6-7 of the Uniform Standards of Professional Appraisal Practice (USPAP) as promulgated by the Appraisal Standards Board of The Appraisal Foundation. This report has several parts: a general introduction and then several sections describing information specific to particular appraisal divisions.

The 2019 mass appraisal was prepared under the provisions of the Texas Property Tax Code (hereafter "Tax Code"). The 12 taxing jurisdictions that participate in the district must use the appraisals as the basis for imposition of property taxes. The State of Texas allocates state funds to school districts based upon the district's appraisals, as tested and modified by the state comptroller of public accounts.

The 2019 mass appraisal results are an estimate of the market value of each taxable property within the district's boundaries. Where required by law, the district also estimates value on several bases other than market value. These are described where applicable later in this report.

Definition of Value

Except as otherwise provided by the Tax Code, all taxable property is appraised at its "market value" as of January 1. 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 purchaser 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 purchaser seek to maximize their gains and neither is in a position to take advantage of the exigencies of the other.

The Tax Code defines special appraisal provisions for the valuation of several different categories of property. Specially appraised property is taxed on a basis other than market value as defined above. These categories include residential homestead property (Sec. 23.23, Tax Code), agricultural and timber property (Chapter 23, Subchapters C, D and E, Tax Code), real and personal property inventory (Sec. 23.12, Tax Code), certain types of dealer inventory (Sec. 23.121, 23.124, 23.1241 and 23.127), and nominal (Sec. 23.18) or restricted use properties (Sec. 23.83).

Properties Appraised

This mass appraisal appraised all taxable real and personal property known to the district as of the date of this report, with the exception of certain properties on which valuation was not complete as of the date of this report. These, by law, will be appraised and supplemented to the jurisdictions after equalization. The property rights appraised were fee simple interests, with the exception of leasehold interests in property exempt to the holder of the property's title. The latter are appraised under a statutory formula described in Sec. 25.07, Tax Code. The description and identification of each property appraised is included in the appraisal records submitted to the Hamilton County Appraisal Review Board (ARB) on May 17, 2019.

Supporting information relied on for this report, such as individual property records, sales ratio reports, market studies, appraisal manuals and procedures, regulations and statutes is voluminous and is generally kept in electronic format and is available to the general public at the appraisal district, except where protected by statute by confidentiality regulations.

GENERAL ASSUMPTIONS AND LIMITING CONDITIONS

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

The appraisals were prepared exclusively for ad valorem tax purposes and the property characteristics upon which the appraisals are based are assumed to be correct.

Validation of sales transactions occurred through questionnaires to buyers and sellers, and other local credible sources. As such, these transactions were considered reliable.

- ❖ No responsibility is assumed for the legal description or for matters including legal or title considerations. Title to any property is assumed to be good and marketable, unless otherwise stated.
- ❖ All property is appraised as if free and clear of any and all liens or encumbrances, unless otherwise stated. All taxes are assumed to be current.
- ❖ All property is appraised as though under responsible, adequately capitalized ownership and competent property management.
- ❖ All engineering is assumed to be correct. Any plot plans and /or illustrative material contained with the appraisal records are included only to assist in visualizing the property.
- ❖ It is assumed that there is full compliance with all applicable federal, state and local environmental regulations and laws unless noncompliance is stated, defined and considered in this mass appraisal report.

- ❖ It is assumed that all applicable zoning and use regulations and restrictions have been complied with unless nonconformity has been stated, defined and considered in this mass appraisal report.
- ❖ It is assumed that all required licenses, certificates of occupancy, consents or other legislative or administrative authority from any local, state or national government or private entity or organization have been or can be obtained or renewed for any use on which the value estimate contained in this report is based.
- ❖ It is assumed that the utilization of the land and improvements of the properties described are within the boundaries or property lines, and that there are no encroachments or trespasses unless noted on the appraisal record.

Unless otherwise stated in this report or noted on the appraisal record, the appraiser is not aware of the existence of hazardous substances or other environmental conditions. The value estimates are predicated on the assumption that there is no such condition on or in the property or in such proximity thereto that it would cause a loss in value. No responsibility is assumed for any such conditions, or for any expertise or engineering knowledge required to discover them.

Texas is a non-disclosure state in which buyers and sellers are not required to report sales transactions, therefore, Hamilton Central Appraisal District uses great diligence in attempting to acquire sales data, but is limited in its ability to gather sales data by current legislation.

EFFECTIVE DATE OF APPRAISAL & REPORT DATE

With the exception of certain inventories for which the property owner has elected a valuation date of September 1, 2015; all appraisals are as of January 1, 2018. The date of this report is October 31, 2018.

Determination of Highest and Best Use for Real Property

The district's market value appraisals are performed pursuant to Article VIII, Sec. 1., Texas Constitution, which provides that property must be taxed in proportion to its value as determined by law. Sec. 23.01, Tax Code implements this provision as follows:

§ 23.01. Appraisals Generally

- a) Except as otherwise provided by this chapter, all taxable property is appraised at its market value as of January 1.
- b) The market value of property shall be determined by the application of generally accepted appraisal methods and techniques. If the appraisal district determines the appraised value of a property using mass appraisal standards, the mass appraisal standards must comply with the Uniform Standards of Professional Appraisal Practice. The same or similar appraisal methods and techniques shall be used in appraising the same or similar kinds of property. However, each property shall be appraised based upon the individual characteristics that affect the property's market value, and all available evidence that is specific to the value of the property shall be taken into account in determining the property's market value.

- c) Notwithstanding Section 1.04(7)(C), in determining the market value of a residence homestead, the chief appraiser may not exclude from consideration the value of other residential property that is in the same neighborhood as the residence homestead being appraised and would otherwise be considered in appraising the residence homestead because the other residential property:
- (1) was sold at a foreclosure sale conducted in any of the three years preceding the tax year in which the residence homestead is being appraised and was comparable at the time of sale based on relevant characteristics with other residence homesteads in the same neighborhood; or
 - (2) has a market value that has declined because of a declining economy.
- (d) The market value of a residence homestead shall be determined solely on the basis of the property's value as a residence homestead, regardless of whether the residential use of the property by the owner is considered to be the highest and best use of the property.
- (e) Notwithstanding any provision of this subchapter to the contrary, if the appraised value of property in a tax year is lowered under Subtitle F, the appraised value of the property as finally determined under that subtitle is considered to be the appraised value of the property for that tax year. In the following tax year, the chief appraiser may not increase the appraised value of the property unless the increase by the chief appraiser is reasonably supported by substantial evidence when all of the reliable and probative evidence in the record is considered as a whole. If the appraised value is finally determined in a protest under Section 41.41(a)(2) or an appeal under Section 42.26, the chief appraiser may satisfy the requirement to reasonably support by substantial evidence an increase in the appraised value of the property in the following tax year by presenting evidence showing that the inequality in the appraisal of property has been corrected with regard to the properties that were considered in determining the value of the subject property. The burden of proof is on the chief appraiser to support an increase in the appraised value of property under the circumstances described by this subsection.

Previous to the addition of 23.01(d) concerning residential homesteads, there was no specific statute defining highest and best use as it applies in appraisals conducted under the Tax Code. However, Texas courts have acknowledged that highest and best use is a factor that must be considered in determining market value. *King v. Real 466 S.W.2d 1 TEX.Civ.App., 1971, Exxon Pipeline Co. v. Zwahr 2002 WL 1027003 Tex., 2002*. In an unpublished opinion, the Houston Court of Appeals approved the following definition of highest and best use:

"Highest and best use" is the reasonably probable and legal use of vacant land or an improved property, which is physically possible, appropriately supported, financially feasible, and results in the highest value. The four criteria the highest and best use must meet are legal permissibility, physical possibility, financial feasibility, and maximum profitability. *Clear Creek Drainage Dist. of Galveston County v. Manison Not Reported in S.W.3d Tex.App.-Houston [14 Dist.], 1997*. With the exception of residence homesteads, this definition of highest and best use still applies to appraisals conducted under the Tax Code.

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 discovery, listing, and valuation of all real and personal property accounts. HCAD also uses Lisco Appraisal Services for the appraising of property and implementing schedules along with any other appraisal help that is needed. The property types appraised include commercial, residential, business personal, mineral, utilities, and industrial. The district's appraisers are subject to the provisions of the Property Taxation Professional Certification Act and must be duly registered with the Texas Department of Licensing and Regulation whose website can be viewed at <http://www.tdlr.texas.gov/>

Support functions including records maintenance, information and assistance to property owners, and the conducting of ARB hearings are coordinated by CAD personnel, Lisco Appraisal, and Capitol Appraisal.

The appraisal district staff consists of 5 full-time employees:

TITLE	NAME	TDLR #	APPRAISE
CHIEF APPRAISER	DOYLE ROBERTS	980	REAL, COMMERCIAL, PERSONAL
DEPUTY CHIEF APPRAISER	PATSY MELDE	68850	COLLECTIONS
APPRAISER	HEATHER DONAHO	75794/75795	REAL, COMMERCIAL, PERSONAL
GIS ANALYST	JOHN RATLIFF	74615	MAPPING
COLLECTIONS CLERK	DENISE HERNANDEZ	74616	COLLECTIONS
COLLECTIONS CLERK	ANA VESTLE	-	COLLECTION

Capitol Appraisal Staff:

	NAME	TDLR #	APPRAISE
	MICKEY DAVIS		MINERALS
	MIKE WALIOR		INDUSTRIAL

LISCO APPRASIAL SERVICES

TITLE	NAME	TDLR #	APPRAISE
OWNER/APPAISER	DARRELL LIENBE		COMMERICAL/REAL
APPAISER	STARKEY WINNETT		COMMERICAL/REAL

Appraisal Divisions

The district allocates the work of mass appraisal among several divisions. The appraisal divisions consist of the Residential Property Division and the Business/Commercial Property Division for in house appraisal and the Industrial/Mineral Property Division is appraised by Capitol Appraisal. Each division's appraisal staff is responsible for maintaining property characteristics data and discovering and listing new construction annually and, to develop, calibrate, and apply the various mass appraisal models for their respective property types.

Data

The district is responsible for establishing and maintaining approximately 12,397 real and personal property accounts covering 844 square miles within Hamilton County. Data collected includes property characteristics, ownership, and exemption information. Property characteristic data on new construction and existing property data is maintained through field review. Numerous sales are validated as part of the field inspections.

The district has a geographic information system (GIS) that maintains cadastral maps, various layers of data and aerial photography. The district's website makes a broad range of information available for public access, including information on the appraisal process, property characteristic data, certified values, and protest and appeal procedures. Downloadable files of related tax information and district forms, including exemption applications are also available.

Information Systems

The GIS Analyst maintains the district's data processing facility, software applications, Internet website, and geographical information system. True Automation provides software services for appraisal applications.

Appraisal District Boundaries

The appraisal district's boundaries are the same as the county's boundaries.

Independent Performance Test

According to Chapter 5 of the Texas Property Tax Code and Section 403.302 of the Texas Government Code, the State Comptroller's Property Tax Division (PTD) conducts a property value study (PVS) of each Texas school district and each appraisal district every other year. As part of this study, the code requires the Comptroller to: use sales and recognized auditing and sampling techniques; review each appraisal district's appraisal methods, standards and procedures to determine whether the district used recognized standards and practices (MAP review); tests the validity of school district taxable values in each appraisal district and presumes the appraisal roll values are correct when values are valid; and, determines 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 analyses 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.

There are 6 school districts that have property in Hamilton CAD for which appraisal rolls are annually developed. The preliminary results of this study are released February 1 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 July of each year. This outside (third party) ratio study provides additional assistance to the CAD in determining areas of market activity or changing market conditions. The final results of the 2013 Hamilton County Value Study can be viewed at:

<http://comptroller.texas.gov/propertytax/administration/pvs/findings/2013p/097index.html>

APPRAISAL ACTIVITIES

INTRODUCTION

Appraisal Responsibilities

The field appraisal staff is responsible for collecting and maintaining property characteristic data for classification, valuation, and other purposes. Accurate valuation of real and personal property by any method requires a comprehensive physical description of the 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 located within the boundaries of Hamilton County

Appraisal District jurisdiction. 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 inspect residential, commercial, and personal properties in the district every other year. The appraisal opinion of value for all property located in the district is reviewed and evaluated each year.

Appraisal Resources

Personnel - The appraisal activities are conducted by Lisco Appraisal with one appraiser from Hamilton County helping.

Data - The data, gathered by field devices that are used by field appraisers, includes the existing property characteristic information contained in Computer Assisted Mass Appraisal System (CAMA) from the district's computer system. The data is printed on a field appraisal card. Other data used includes maps, sales data, newspaper articles, building permits, photos and actual cost and market information. Sources of information are gathered using excellent reciprocal relationships with other participants in the real estate market place. The district cultivates sources and gathers information from both buyers and sellers.

Data Collection/Validation

Data collection of real property involves maintaining data characteristics of the property on the CAMA software. The information contained in the CAMA includes site characteristics, such as land size, and improvement data, such as square footage of living area and other details of the improvement, year built, quality of construction, and condition. Field appraisers are required to use a property classification system that establishes uniform procedures for the correct listing of real property. All properties are coded according to a classification system. The approaches to value are structured and calibrated based on this coding system and property description and characteristics. The field appraisers use property classification references during their initial training and as a guide in the field inspection of properties. Data collection for personal property involves maintaining information on the software. The type of information contained in the BPP file includes the type of personal property such as business inventory, furniture and fixtures, machinery and equipment, with details such as cost and location. The field appraisers conducting on-site inspections use a personal property classification system during their initial training and as a guide to correctly list all personal property that is taxable.

The listing procedure utilized by the field appraisers is available in the district offices.

Appraisers periodically update the classification system with input from the valuation group.

Sources of Data

The sources of data collection are through property inspection, new construction field effort, data review/relist field effort, data mailer questionnaires, hearings, sales validation, sales verification, newspapers and publications, and property owner correspondence by mail or 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. Paper permits are received and matched manually with the property's tax account number and loaded to the Building Permit section of the CAMA. Data surveys from buyers and sellers requesting market information and property description information are also valuable data. Soil surveys and agricultural surveys of farming and ranching property owners and industry professionals are helpful for productivity value calibration. The Texas Railroad Commission is the source for mineral production data and leasing information. Capital market information is available from Ibbotson's SBBI Valuation Edition and Wall Street Journal, Value Line Investment Survey, and the Oil and Gas Journal. Crude and gas pricing is taken from Plains Marketing and Sunoco Logistics, regional product gathering and marketing companies and the primary buyers for oil and gas produced in the area. Improvement cost information is gathered from local building contractors and Marshall and Swift Valuation Service. Income and rental surveys are performed by mailing survey to property managers and operators to determine operating income and expenses for investment and income producing real property.

The sales validation effort in real property pertains to the collection of market data for properties that have sold. In residential and commercial, the sales validation effort may involve an on-site inspection by field appraisers to verify the accuracy of the property characteristics, confirmation of the sales price and any other pertinent data. Property owners are one of the best sources for identifying incorrect data that may generate a field check. Frequently, the property owner provides reliable 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 owners have the opportunity to review information on their property and forward corrections via e-mail. For the property owner without access to the Internet, letters are sometimes submitted notifying the district of inaccurate data. Properties identified in this manner are added to the 1-1 work file and inspected. Accuracy and validity in property descriptions and characteristics data is the highest goal and is stressed throughout the appraisal process from year to year.

Data Collection Procedures

The appraisers are assigned 1/2 of the county each year to conduct field inspections. Appraisers conduct field inspections and record information on the field review card of all changes, corrections and additions that the appraiser may find in his or her field inspection to be entered into the CAMA. The quality of the data used is extremely important in estimating market values of taxable property. While work performance 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 and the classification system set forth and recognized as "rules" to follow. Experienced appraisers are routinely re-trained in listing procedures prior to major field projects such as new construction, sales validation or data review. A quality assurance process exists through review of the work being performed by the field appraisers and charged with the responsibility of ensuring that appraisers

follow listing procedures, identify training issues and provide uniform training throughout the field appraisal staff.

Data Maintenance

The appraiser begins an area by printing field review cards of the area that they plan to work. Lisco field appraisers turn in the work and the appraiser for HCAD is responsible for the data entry of their fieldwork into the CAMA. The HCAD appraiser enters the information and does quality assurance tests on the work turned in. If questions arise or something is not understood the appraiser confers with Lisco to determine the answers.

INDIVIDUAL VALUE REVIEW PROCEDURES

Field Review

The date of last inspection and the appraiser responsible are listed on the CAMA record and property card. If a property owner or jurisdiction disputes the district's records concerning this data during a hearing, via a telephone call or other correspondence received, the record may be corrected based on the evidence provided or an on-site inspection may be conducted. Typically, a field inspection is requested to verify this information for the current year's valuation or for the next year's valuation. Every other year a field review of real property and all personal property accounts, with an available situs, located in the jurisdiction is done.

Office Review

Office reviews are completed on properties where updated information has been received from the owner of the property and is considered accurate and correct. When the property data is verified in this manner, and considered accurate and correct, field inspections may not be required. The personal property department mails property rendition forms in December of each year to assist in the annual review of the property.

Performance Test

The Chief appraiser is responsible for conducting ratio studies and comparative analysis. Ratio studies are conducted on all property located within the Appraisal District's jurisdiction. The sale ratio and comparative analysis of sale property to appraised value, forms the basis for determining the level of appraisal and market influences and factors for the neighborhood. This information is the basis for updating property valuation for the entire area of property. Field appraisers, in many cases, may conduct field inspections to insure the accuracy of the property descriptions at the time of sale for this study. This inspection is to ensure that the ratios produced are accurate for the property sold and that appraised values utilized in the study are based on accurate property data characteristics observed at the time of sale. Also, property inspections are performed to discover if property characteristics have changed as of the sale date or subsequent to the sale date. Sale ratios should be based on the value of the property as of the date of sale, not

after a subsequent or substantial change was made to the property. Properly performed ratio studies are a good reflection of the level of appraisal for the district.

RESIDENTIAL

Residential Real Property represents approximately 18% of the total market value in Hamilton County.



RESIDENTIAL VALUATION PROCESS

INTRODUCTION

Scope of Responsibility

The residential appraiser is responsible for estimating equal and uniform market values for residential improved and vacant property. There are approximately 5278 residential improved single/multi-family improvements and residential lots in Hamilton County.

Appraisal Resources

Personnel - The following appraisers are responsible for estimating the market value of residential property:

TITLE	NAME	TDLR #	APPRAISE
CHIEF APPRAISER	DOYLE ROBERTS	980	REAL, COMMERCIAL, PERSONAL
APPRAISER	DEDE SMITH	73063	REAL, COMMERCIAL, PERSONAL
LISCO APPRAISAL	DARRELL LIENBE		REAL, COMMERCIAL, PERSONAL

Data

An individualized set of characteristics for each property in the CAD that is collected in the field and data entered into the computer. The property characteristic data drives the application of computer-assisted mass appraisal (CAMA) under the Cost, Market, and Income Approaches to property valuation.

Data Resources

The sources of data collection and verification include, but are not limited to, building permits, TDHCA mobile home ownership records, data mailers, informal meetings and formal hearings, information collected in the field, newspapers, publications, and property owner correspondence by letter and via the internet. Building permit data attained triggers field inspections on property experiencing significant characteristic changes due to new construction or remodeling. Property owners contact the CAD to report data inaccuracies that initiate a field inspection or office correction of the data.

VALUATION APPROACH

Land Analysis

Residential land valuation analysis is conducted prior to neighborhood sales analysis. The value of the land component to the property is estimated based on available market sales for comparable and competing land under similar usage. A comparison and analysis of comparable land sales is conducted based on a comparison of land characteristics found to influence the market price of land located in the neighborhood. Specific land influences are considered, where necessary, and depending on neighborhood and individual lot or tract characteristics, to adjust parcels outside the neighborhood norm for such factors as access, view, shape, size, and topography. The appraisers use abstraction and allocation methods to ensure that estimated land values best reflect the contributory market value of the land to the overall property value.

Area Analysis

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

Neighborhood and Market Analysis

A neighborhood is typically a distinct group of properties that is often identified by a geographic (physical) boundary, or a group of properties that reacts in a similar manner to market influences. Neighborhood analysis involves the examination of how physical, economic, governmental and social forces and other influences affect property values. Residential valuation and neighborhood analysis is conducted on various market areas within each of the political entities known as independent school districts. Analysis of comparable market sales forms the basis of estimating market activity and the level of supply and demand affecting market prices for any given market area, neighborhood or district. Market sales indicate

the effects of these market forces and are interpreted by the appraiser into an indication of market price ranges and indications of property component change considering a given time period relative to the date of appraisal. Cost and market approaches to estimate value are the basic techniques utilized to interpret these sales. For multi-family properties the income approach to value is also utilized to estimate an opinion of value for investment level residential property.

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 with similar characteristics has been identified, the next step is to define its boundaries. This process is known as "delineation". Some factors used in neighborhood delineation include location, sales price range, lot size, age of dwelling, quality of construction and condition of dwellings, square footage of living area, and story height.

Delineation can involve the physical drawing of neighborhood boundary lines on a map, but it can also involve statistical separation or stratification based on attribute analysis. Part of neighborhood analysis is the consideration of discernible patterns of growth that influence a neighborhood's individual market. Few neighborhoods are fixed in character. Each neighborhood may be characterized as being in a stage of growth, stability or decline. The growth period is a time of development and construction. As new neighborhoods in a community are developed, they compete with existing neighborhoods. An added supply of new homes tends to induce population shift from older homes to newer homes. In the period of stability, or equilibrium, the forces of supply and demand are about equal. Generally, in the stage of equilibrium, older neighborhoods can be more desirable due to their stability of residential character and proximity to the workplace and other community facilities. The period of decline reflects diminishing demand or desirability. During decline, general property use may change from residential to a mix of residential and commercial uses. Declining neighborhoods may also experience renewal, reorganization, rebuilding, or restoration, which promotes increased demand and economic desirability. Neighborhoods undergo review during field inspection, and are delineated based on observable aspects of homogeneity.

Four rural land regions are analyzed each year in order to develop a base acreage price. Rural farm and ranch sales are grouped by property characteristics, location similarities and development potential. These sales are analyzed on a price per acre basis with regression analysis utilized as a means of analyzing the effects of size, or the economy of scale, within specific markets where there is typically a wide variety of sizes within a specific location. Specific land influences are used, where necessary, to adjust parcels outside the neighborhood norm for such factors as view, shape, size, and topography, among others.

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, unless the property is appraised under a JURISDICTIONAL EXCEPTION. The highest and best use must be physically possible, legally permissible, financially feasible, and most productive to the maximum allowed usage of the property. 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. In areas of mixed residential and commercial use, the appraiser reviews properties in these areas on a periodic basis to determine the individual property that qualifies for an appraisal under JURISDICTIONAL EXCEPTION.

VALUATION AND STATISTICAL ANALYSIS (Model Calibration)

Cost Schedules

All residential parcels in the district are valued with a replacement cost estimated from cost schedules based on the improvement classification system using a comparative unit method. The district's residential cost schedules are estimated from Marshall and Swift, a nationally recognized cost estimator service. These cost estimates are compared with sales of new improvements and evaluated from year to year and indexed to reflect the local residential building and labor market. Costs may also be indexed for neighborhood factors and influences that affect the total replacement cost of the improvements in a smaller market area based on evidence taken from a sample of market sales.

A review of the residential cost schedule is performed annually. As part of this review and evaluation process of the estimated replacement cost, newly

constructed properties representing various levels of quality of construction in the district are considered. The property data characteristics of these properties are verified and photographs are taken of the samples. The results of this comparison are analyzed using statistical measures, including stratification by quality and reviewing of estimated building costs plus land.

Sales Information

A sales file for the storage of sales data at the time of sale is maintained for real property. Residential vacant land sales, along with commercial improved and vacant land sales are maintained. Residential improved and vacant sales are collected from a variety of sources, including: district questionnaires sent to the buyer, field discovery, protest hearings, fee appraisals, various sale vendors, builders, and realtors. A system of type, source, validity and verification codes has been established to define facts related to a property's purchase or transfer and to help determine relevant market sale prices. The effect of time as an influence on price was considered by paired comparison and applied in the ratio study to the sales as indicated within each neighborhood area. Neighborhood sales reports are generated as an analysis tool for the Chief appraiser in the development and estimation of market price ranges and property component value estimates. Abstraction and allocation of property components based on sales of similar property is an important analysis tool to interpret market sales under the cost and market approaches to value. These analytical tools help determine and estimate the effects of change, with regard to price, as indicated by sale prices for similar property within the current market.

Sales of the same property were considered and analyzed for any indication of price change attributed to a time change or influence. Property characteristics, financing, and conditions of sale were compared for each property sold in the pairing of property to isolate only the time factor as an influence on price.

Statistical Analysis

The Chief appraiser performs statistical analysis annually to evaluate whether estimated values are equitable and consistent with the market. Ratio studies are conducted on all of the neighborhoods in the district to judge the two primary

aspects of mass appraisal accuracy--level and uniformity of value. Appraisal statistics of central tendency generated from sales ratios are evaluated and analyzed for all neighborhoods. The levels of appraised value are determined by the weighted mean ratio for sales of individual properties within a neighborhood, and a comparison of neighborhood weighted means reflect the general level of appraised value between comparable neighborhoods.

The appraiser, through the sales ratio analysis process, reviews every neighborhood annually. The first phase involves neighborhood ratio studies that compare the recent sales prices of neighborhood properties to the appraised values of these sold properties. This set of ratio studies affords the appraiser an excellent means of judging the present level of appraised value and uniformity of the sales. The appraiser, based on the sales ratio statistics and designated parameters for valuation update, makes a preliminary decision as to whether the value level in a neighborhood needs to be updated or whether the level of market value in a neighborhood is at an acceptable level. The excellent condition homes depreciate slower than the fair condition homes thus yielding a higher percent good, which calculates a higher price per square foot.

Market and Cost Reconciliation and Valuation

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

The following equation denotes the model used:

$$MV = LV + (RCN - AD)$$

In accordance with the cost approach, the estimated market value (MV) of the property equals the land value (LV) plus the replacement cost new of property improvements (RCN) less accrued depreciation (AD).

As the cost approach separately estimates both land and building contributory values and uses depreciated replacement costs, which reflect only the supply side of the market, it is expected that adjustments to the cost values may be needed to

bring the level of appraisal to an acceptable standard as indicated by market sales. Thus, demand side economic factors and influences may be observed and considered. These market, or location adjustments, may be abstracted and applied uniformly within neighborhoods to account for locational variances between market areas or across a jurisdiction. For residential property, the unit of comparison is typically the price per square foot of living area or the price indicated for the improvement contribution. The model is based on both the cost and market approaches as a correlation of indications of property valuation. A significant unknown for these two indications of value is determined to be the rate of change for the improvement contribution to total property value. The measure of change for this property component can best be reflected and based in the annualized accrued depreciation rate. This cost related factor is most appropriately measured by sales of similar property. The market approach, when improvements are abstracted from the sale price, indicates the depreciated value of the improvement component, and in effect, measures changes in accrued depreciation. The level of improvement contribution to the property is measured by abstraction of comparable market sales, which is the property sale price less land value. The primary unknown for the cost approach is to accurately measure accrued depreciation affecting the amount of loss attributed to the improvements as age increases and condition changes. This evaluation of cost results in the depreciated value of the improvement component based on age and condition. The evaluation of this market and cost information is the basis of reconciliation and indication of property valuation under this model.

When the appraiser reviews a neighborhood, the appraiser reviews and evaluates a ratio study that compares recent sales prices of properties, appropriately adjusted for the effects of time, within a neighborhood, with the value of the properties based on the estimated depreciated replacement cost of improvements plus land value. The calculated ratio is compared to the acceptable appraisal ratio, 96% to 104%, to determine the level of appraisal for each neighborhood. If the level of appraisal for the neighborhood is outside the acceptable range of ratios, adjustments to the neighborhood are made. Sold properties with a large variance in sales ratio are field reviewed for accuracy of data characteristics.

Treatment of Residential 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 that law, beginning in the year after a property receives a homestead exemption, increases in the assessed value of that property are capped or limited to not more than 10% annual increase. The assessed value for tax purposes of a qualified residence homestead will be the LESSER of:

- the market value; or
- the preceding year's appraised value plus 10 percent for each year since the property was re-appraised plus the value of any new improvements added since the last re-appraisal.

Assessed values of capped properties must be recomputed annually. If a capped property sells, the cap automatically expires as of January 1st of the year following sale of the property and the property is appraised at its market value. A similar provision applies to new homes. While a developer owns them, unoccupied residences may be partially complete and appraised as part of an inventory. This valuation is estimated using the district's land value and the percentage of completion for the improvement contribution that usually is similar to the developer's construction costs as a basis of completion on the valuation date. However, in the year following changes in completion or sale, they are appraised at market value.

INDIVIDUAL VALUE REVIEW PROCEDURES

Field Review

The appraiser identifies individual properties in critical need of field review through sales ratio analysis. Sold properties are field reviewed on a periodic basis to check for accuracy of property characteristics, and when able, validate the sales information with the property owner.

As the district's parcel count has increased through new home construction, and the homes constructed in the boom years of the late 70's and early 80's experience remodeling, the appraisers are required to perform field activity associated with building permits and record property characteristic changes such as new construction, additions, remodels, pools, yard improvements, demolition or disaster damage and repairs. Sales activity results in field activity to review and resolve sales outliers. Additionally, the appraiser frequently field reviews subjective data items such as quality of construction, condition, and physical, functional and

economic obsolescence, factors contributing significantly to the market value of the property. During the routine drive out the appraiser is able to physically inspect both sold properties and unsold properties for comparability and consistency of values.

Office Review

When field review is completed, the appraiser conducts a routine valuation review of all properties as outlined in the discussion of ratio studies and market analysis. Previous values resulting from a hearing protest are individually reviewed to determine if the value remains appropriate for the current year.

When the appraiser is satisfied with the level and uniformity of value for each neighborhood the estimates of value go to noticing.

Re-inspection

Both field and office re-inspection was conducted for tax year 2018. Appraisers are responsible for verifying the characteristics of each property visited. If changes are identified, they are keyed to the database. During the field effort, we also incorporated confirmation of sales data and verification of characteristics of sold property. During office re-inspection, properties are reviewed using current aerial photos provided by our software vendor. If the improvements are not visible due to tree cover a field visit is performed. Our goal is to comply with generally recognized guidelines that recommend re-inspection of property every three years.

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 are generated for each school district by quarter to allow the appraiser to review general market trends within the CAD, and provide an indication of market appreciation over a specified period of time. Several sets of sales ratios are produced prior to settling preliminary values. These ratio studies are designed to emulate the findings of the state comptroller's property value study for category "A" (single family residence) property.

Texas does not have mandatory sales disclosure; therefore, the district does not have access to all property transactions, which limits sales analysis to only those

sales acquired by the district through a commercial vendor or submitted voluntarily by the property owner. Available sales are screened to ensure, to the extent possible, that only valid indicators of market value are included. Sales identified as invalid transactions due to atypical financing, sales between relatives, corporate affiliates and estate sales, and sales with partially complete new construction are excluded from the ratio study. It is common to expect residential foreclosure sales in any given real estate market.

Management Review Process

When the proposed value estimates are finalized, the Chief Appraiser reviews the sales ratios by neighborhood and pertinent valuation data, such as weighted sales ratio and pricing trends for final review and approval. This review includes comparison of level of value between related neighborhoods within and across jurisdiction lines. The primary objective of this review is to ensure that the proposed values have met preset appraisal guidelines appropriate for the tax year in question.

COMMERCIAL

Commercial Real Property represents approximately 4% of the total market value in Hamilton County.



COMMERCIAL PROPERTY VALUATION PROCESS

INTRODUCTION

Scope of Responsibility

This mass appraisal assignment includes all of the commercially described real property which falls within the responsibility of Lisco appraisers, contractors of the Hamilton Central Appraisal District and located within the boundaries of this taxing jurisdiction. All 3 approaches to value are considered in estimating market value for each property, the most applicable of which is given primary emphasis. Commercial appraisers appraise the fee simple interest of properties according to statute. However, the effect of easements, restrictions, encumbrances, leases, contracts or special assessments are considered on an individual basis, as is the appraisal of any non-exempt taxable fractional interests in real property (i.e. certain multi-family housing projects). Fractional interests or partial holdings of real property are appraised in fee simple for the whole property and divided programmatically based on their prorated interests.

The function of this mass appraisal is to provide an equitable and efficient market valuation of all property in this appraisal district for ad valorem taxation.

Appraisal Resources

Data - The data used by the commercial appraisers includes verified sales of vacant land and improved properties and the pertinent data obtained from each (sales price levels, capitalization rates, income multipliers, equity dividend rates, marketing period, etc.). Other data used by the appraisers includes actual income and expense data (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 are also reviewed to provide additional support for market trends.

The County Clerk provides the district a copy of the deeds recorded that convey commercial properties. 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 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 in the sales database system. If the sales information is not obtained sales verification may be obtained from local appraisers, MLS or closing statements are often provided during the hearings process. The actual closing statement is the most reliable and preferred method of sales verification. After the sales data has been keyed into the database, the data is reviewed to maintain quality control. Other sources of sales data include fee appraisals acquired through the hearings process and local, regional and national real estate and financial publications. The data used for commercial valuation 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 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 are also reviewed to provide additional support for market trends on apartments and the State Comptroller Hotel/Motel Report is review for motels. A variety of real estate data is also available via the internet that is helpful in the establishment of market values. This information is often incorporated into market analysis and includes market trends, labor statistics, sales information, development areas, economic indicators, and financial data to name a few.

Data Maintenance

Information on building permits is collected and these permits are matched to the district's existing property records. Accounts that have building permits are coded 1/1 for appraisal inspection. The field appraisers list new construction, note demolition, and record any changes in physical characteristics for properties.

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 assessment date. 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, non-conforming use, multiple uses, speculative use, excess land, or a different optimum use if the site were vacant. For vacant tracts, the highest and best use is considered speculative based on the surrounding land uses. Improved properties reflect a wide variety of highest and best uses which include, but are not limited to, office, retail, apartment, warehouse, light industrial, special purpose, or interim uses. In many instances, the property's current use is the same as its highest and best use. This analysis ensures that an accurate estimate of market value (sometimes referred to as value in exchange) is derived. Conversely, 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:

- 1) No coercion of undue influence over the buyer or seller in an attempt to force the purchase or sale,
- 2) Well-informed buyers and sellers acting in their own best interests,
- 3) A reasonable time for the transaction to take place, and
- 4) Payment in cash or its equivalent.

PRELIMINARY ANALYSIS

Market Study

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

Hamilton CAD coordinates its discovery and valuation activities with adjoining appraisal district. Interviews and data exchanges with adjacent appraisal districts have been conducted to ensure compliance with state statutes. In addition, Hamilton 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. District staff strive to maintain appraisal skills and professionalism by continuing education in the form of courses that are offered by several professional associations such as International Association of Assessing Officers (IAAO), Texas Association of Assessing Officers (TAAO), Texas Association of Appraisal Districts (TAAD) and Texas Department of Licensing and Regulation (TDLR) courses.

VALUATION APPROACH

Land Value

Commercial land is analyzed annually to compare appraised values with recent sales of land in the market area. If appraised values differ from sales prices being paid, adjustments are made to all land in that region. Generally, commercial property is appraised on a price per square foot basis. Factors may be placed on individual properties based on corner influence, depth of site, shape of site, easements across site, and other factors that may influence value. The land is valued as though vacant at the highest and best use.

Area Analysis

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

Neighborhood Analysis

The neighborhood and market areas are comprised of the land area and commercially classed properties located within the boundaries of this appraisal jurisdiction. These areas consist of a wide variety of property types. Neighborhood and area analysis involve the examination of how physical, economic, governmental and social forces and other influences may affect property values within subgroups of property locations. The effects of these forces are also used to identify, classify, and organize comparable properties into smaller, manageable subsets of the universe of properties known as neighborhoods. In the mass

appraisal of commercial properties these subsets of a universe of properties are generally referred to as market areas, neighborhoods, or economic areas. Economic areas are defined by each of the improved property use types (apartment, office, retail, warehouse and special use) based upon an analysis of similar economic or market forces, date of construction, overall market activity or other pertinent influences. Economic area identification and delineation by each major property use type is the benchmark of the commercial valuation system. The geographic boundaries as well as income, occupancy and expense levels and capitalization rates by age within each economic area for all commercial use types and its corresponding income model have been estimated for these properties.

Market Analysis

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

DATA COLLECTION / VALIDATION

Data Collection Manuals

Data collection and documentation for commercial property is continually updated, providing a uniform system of itemizing the multitude of components comprising improved properties. All properties located in Hamilton CAD's inventory are coded according to a specific classification system. Annually, after the sales of property has been researched, verified, keyed into the database, and quality control has been completed, the sales data is summarized into list form and analyzed. The confirmed sales reports categorize the sales by property classification. These sales are used by the Hamilton CAD appraisers during the hearings process.

VALUATION ANALYSIS

Cost Approach

The cost approach to value is applied to improved real property utilizing the comparative unit method. This methodology involves the utilization of national cost data reporting services as well as actual cost information on local comparable properties whenever possible. Cost models are typically developed based on the Marshall Swift Valuation Service which indicates estimated hard or direct costs of various improvement types. Cost models include the derivation of replacement cost new (RCN) of all improvements represented within the district. These include comparative base rates, per unit adjustments and lump sum adjustments for variations in property description, design, and types of improvement construction. This approach and analysis also employ the sales comparison approach in the evaluation of soft or indirect costs of construction, and in the valuation of the underlying land value. Evaluating market sales of newly developed improved property is an important part of understanding total replacement cost of improvements. What total costs may be involved in the development of the property and as well as any portion of cost attributed to entrepreneurial profit can only be revealed by market analysis of pricing acceptance levels. In addition, market related land valuation for the underlying land value is important in understanding and analyzing improved sales for all development costs and for the abstraction of improvement costs for construction and development. Because a national cost service is used as a basis for the cost models, location modifiers may be necessary to adjust these base costs specifically for various types of improvements located in Hamilton County. Thus, local modifiers are additional cost factors applied to replacement cost estimated by the national cost service. Estimated replacement cost new will reflect all costs of construction and development for various improvements located in Hamilton CAD as of the date of appraisal.

Accrued depreciation is the sum of all forms of loss affecting the contributory value of the improvements, a function of estimated replacement cost new. It is the measured loss against replacement cost new taken from all forms of physical deterioration, functional and economic obsolescence. Accrued depreciation is estimated and developed based on losses typical for each property at that specific age. The actual and effective ages of improvements are noted in CAMA.

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. Additional forms of depreciation such as external and/or functional obsolescence can be applied if observed and a depreciation calculation override can be used if necessary, by appropriately noting the physical condition and functional utility ratings on the property data characteristics.

The result of estimating accrued depreciation and deducting that from the estimated replacement cost new of improvements indicates the estimated contributory value of the improvements. By adding the estimated land value, as if vacant, to the contributory value of the improvements indicates a property value by the cost approach. Given relevant cost estimates and market related measures of accrued depreciation, the indicated value of the property by the cost approach becomes a very reliable valuation technique.

Income Approach

The income approach to value is applied to those real properties which are typically viewed by market participants as “income producing”, and for which the income methodology is considered a leading value indicator. The first step in the income approach pertains to the estimation of market rent on a per unit basis. This is derived primarily from actual rent data furnished by property owners and from local market surveys conducted by the district.

A vacancy and collection loss allowance are the next item to consider in the income approach. The projected vacancy and collection loss allowance is established from actual data furnished by property owners and on local market survey trends. 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 indication of estimated annual effective gross rent to the property.

Next a secondary income or service income is considered. 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, when applicable.

Allowable expenses and expense ratio estimates are based on a study of the local market, with the assumption of prudent management. An allowance for non-recoverable expenses such as leasing costs and tenant improvements may be included in the expenses. Relevant expense ratios are developed for different types of commercial property based on use and market experience. For instance, retail properties are most frequently leased on a triple-net basis, whereby the tenant is responsible for all operating expenses such as, ad valorem taxes, insurance, and common area and property maintenance. In comparison, a general office building is most often leased on a base year expense stop. This lease type stipulates that the owner is responsible for all expenses incurred during the first year of the lease. As a result, expense ratios are implemented and estimated based on observed market experience in operating various types of commercial property.

Another form of allowable expense is the replacement of short-lived items (such as roof or floor coverings, air conditioning or major mechanical equipment or appliances) requiring expenditures of lump sum costs. When these capital expenditures are analyzed for consistency and adjusted, they may be applied on an annualized basis as stabilized expenses. When performed according to local market practices by commercial property type, these expenses when annualized are known as reserve for replacement. For some types of property, typical management does not reflect expensing reserves and is dependent on local and industry practices.

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

Return Rates and income multipliers may be used to convert operating income expectations into an estimate of market value for the property under the income approach. These include income multipliers, overall capitalization rates, and discount rates. Each of these multipliers or return rates are considered and used in specific applications. Rates and multipliers may vary between property types, as well as by location, quality, condition, design, age, and other factors. Therefore,

application of the various rates and multipliers must be based on a thorough analysis of the market for individual income property types and uses. These procedures are supported and documented based on analysis of market sales for these property types.

Capitalization analysis is used in the income approach models to form an indication of value. This methodology involves the direct capitalization of net operating income as an indication of market value for a specific property. This information is obtained from available sales of property, local lending sources, and from real estate and financial publications.

Vacancy losses are collected from the HCAD income survey and market vacancy is estimated for specific property types.

Sales Comparison (Market) Approach

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

Final Valuation Schedules

Based on the market data analysis and review discussed previously in the cost, income and sales approaches, the cost and income models are calibrated and finalized. The calibration results are keyed to the schedules and models on the CAMA system for utilization on all commercial properties in the district. Market factors reflected within the cost and income approaches are evaluated and confirmed based on market sales of commercial properties. The appraisers review

the cost, income, and sales comparison approaches to value for each of the types of properties with available sales information. The final valuation of a property is estimated based on reconciling these indications of value considering the weight of the market information available for evaluation and analysis in these approaches to value.

Statistical and Capitalization Analysis

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

Appraisal statistics of central tendency and dispersion generated from sales ratios are calculated for each property type with available sales data. These summary statistics including, but not limited to, the weighted mean provide the appraisers an analytical tool by which to determine both the level and uniformity of appraised value of a particular property type. The level of appraised values can be determined by the weighted mean for individual properties within a specific type, and a comparison of weighted means can reflect the general level of appraised value.

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

Potential gross rent estimates, occupancy levels, secondary income, allowable expenses (inclusive of non-recoverable and replacement reserves), net operating income and capitalization rate and multipliers are continuously reviewed. Income

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

INDIVIDUAL VALUE REVIEW PROCEDURES

Field Review

The date of last inspection, extent of that inspection, and the appraiser responsible are listed in the CAMA system. If a property owner disputes the District's records concerning this data in a protest hearing, the CAMA may be altered based on the credibility of the evidence provided. Normally, a new field check is then requested to verify this information for the current year's valuation or for the next year's valuation. In addition, if a building permit is filed for a particular property indicating a change in characteristics, that property is added to a work file for review.

The appraisers are limited in the time available to field review commercial properties of a specific use type. However, appraisers field review remodels, renovations, or retrofits, changes in occupancy levels or rental rates, new leasing activity, new construction, or wide variations in sale prices. Field review of real property accounts is accomplished during the routine drive out. Additionally, the appraisers frequently field review subjective data items such as building class, quality of construction, condition, and physical, functional and economic obsolescence factors contributing significantly to the market value of the property. While in the field, the appraisers physically inspect sold and unsold properties for comparability and consistency of values.

Office Review

Office reviews are completed on properties subject to field inspections and are performed in compliance with the guidelines required by the existing classification system. Office reviews are typically limited by the available market data presented for final value analysis. These sale reviews summarize the pertinent data of each property as well as comparing the previous value to the proposed value conclusions of the various approaches to value. These evaluations and reviews show proposed value changes, income model attributes or overrides, economic

factor (cost overrides) and special factors affecting the property valuation such as new construction status, and a three years sales history (USPAP property history requirement for non-residential property). The appraiser may review methodology for appropriateness to ascertain that it was completed in accordance with USPAP or more stringent statutory and district policies. This review is performed after preliminary ratio statistics have been applied. If the ratio statistics are generally acceptable overall the review process is focused primarily on locating skewed results on an individual basis. Previous values resulting from protest hearings are individually reviewed to determine if the value remains appropriate for the current year based on market conditions.

Once the appraiser is satisfied with the level and uniformity of value for commercial property, the estimates of value go to noticing.

PERFORMANCE TESTS

The primary tool used to measure mass appraisal performance is the ratio study. A ratio study compares appraised values to market prices. In a ratio study, market values are typically represented with the range of sale prices. Independent, expert appraisals may also be used to represent market values in a ratio study (i.e. an appraisal ratio study). If there are not enough examples of market price to provide necessary representativeness, independent appraisals can be used as indicators for market value. This can be particularly useful for commercial, 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. An example of this are multi-family housing projects subject to subsidized rent provisions or other governmental guarantees as provided by legislative statutes (affordable housing) or agricultural lands to be appraised on the basis of productivity or use value.

Hamilton CAD has adopted the policies of the IAAO STANDARD ON RATIO STUDIES, regarding its ratio study standards and practices which can be viewed on their website at

http://www.iaao.org/wcm/Resources/Publications_access/Technical_Standard/s/wmc/Resources_Content/Pubs/Technical_Standards.aspx

Ratio studies generally have seven basic steps: (1) define the purpose, scope and

objectives, (2) design, (3) stratification, (4) collection and preparation of market data, (5) matching of appraisal and market data, and (6) statistical analysis and (7) evaluation and use of results.

Sales Ratio Studies

Sales ratio studies are an integral part of estimating equitable and accurate market values, and ultimately property assessments for the taxing jurisdictions. The primary uses of sale ratio studies include identification of potential problems with appraisal procedures; assist in market analyses; and, to calibrate models used to estimate appraised values during valuation or reappraisal cycles. However, these studies cannot be used to judge the accuracy of an individual properties appraised value. The Hamilton County Appraisal Review Board may make individual value adjustments based on protest evidence submitted on a case-by-case basis during the hearing process.

Overall sales ratios are generated quarterly to allow appraisers to review general market trends in the county and for the Property Value Study from the Property Tax Division of the Comptroller's Office. In many cases, field checks are conducted to ensure the ratios produced are accurate and the appraised values utilized are based on accurate property data characteristics. These ratio studies aid the CAD by providing an indication of market activity by economic area or changing market conditions (appreciation or depreciation).

Texas does not have mandatory sales disclosure; therefore, the district does not have access to all property transactions, which limits sales analysis to only those sales acquired by the district through a commercial vendor or submitted voluntarily by the property owner. Available sales are screened to ensure, to the extent possible, that only valid indicators of market value are included. Sales identified as invalid transactions due to atypical financing, sales between relatives, corporate affiliates and estate sales, and sales with partially complete new construction are excluded from the ratio study.

BUSINESS PERSONAL PROPERTY VALUATION PROCESS

INTRODUCTION

Scope of Responsibility

There are four different personal property types appraised by the district's personal property section: Business Personal Property accounts; Leased Assets; Vehicles and aircraft; and Multi-Location Assets. There are approximately 581 business personal property accounts appraised by Hamilton CAD.

Appraisal Resources

Data- A common set of data characteristics for each personal property account in Hamilton CAD is collected in the field and data entered to the district's computer. The property characteristic data drives the computer-assisted personal property appraisal (CAPPA) system. The personal property appraisers collect the field data and maintain property files making updates and changes gathered from field inspections, newspapers, property renditions and interviews with property owners.

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.

VALUATION APPROACH (Model Specification)

SIC Code Analysis

Business personal property is classified and utilizes a four-digit numeric codes, called Standard Industrial Classification (SIC) codes that were developed by the federal government to describe business entities having common attributes. These classifications are used by Hamilton CAD to delineate personal property by business type.

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

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.

Sources of Data

Business Personal Property

The district's property characteristic data was collected over the recent past and from property owner renditions. From year to year, reevaluation activities permit district appraisers to collect new data via a field drive-out. This project results in the discovery of new businesses not revealed through other sources. Various discovery publications such as the County Reporter, assumed names listing and state sales tax listings 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, Just Texas, provides Hamilton CAD with a listing of vehicles within this 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 and field inspections.

VALUATION AND STATISTICAL ANALYSIS (model calibration)

Cost Schedules

Cost schedules are developed based on the SIC code by the Property Tax Division of the Comptroller's Office and by district personal property 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, such as per room for hotels.

Statistical Analysis

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

Depreciation Schedule and Trending Factors:

Business Personal Property

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

MARKET VALUE ESTIMATE = PVF x HISTORICAL COST

This mass appraisal PVF schedule is used to ensure that estimated values are uniform and consistent within the market and reflect current economic pressures of supply and demand.

Computer Assisted Personal Property Appraisal (CAPP)

The CAPP valuation process has two main objectives: 1) Analyze and adjust estimated asset cost with existing SIC models. 2) Develop new models for business classifications not previously integrated into CAPP. The delineated sample is reviewed for accuracy of SIC code, square footage, field data, and original cost information. Models are created and refined using actual original cost data to derive a typical 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 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.

Vehicles

Value estimates for vehicles are provided by an outside vendor and are based on Blue Book 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 mentioned above. If the asset to be valued in this category is a vehicle, then Blue Book published book values are used. Assets that are not valued by the vendor are valued by an appraiser using PVF schedules or published guides.

PERFORMANCE TESTS

Field Review

The appraisal staff reviews personal property accounts during the three-year reappraisal cycle.

Ratio Studies

Every other 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 and the results 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 Hamilton CAD's personal property values and ratios are indicated.

AGRICULTURAL VALUATION PROCESS

Agricultural property represents approximately 71% of the market value in Hamilton County.

INTRODUCTION

Definition of Agricultural Value

Net to land values is the average annual net income that a class of land would be likely to have generated over a five-year period.

Scope of Responsibility

The mass appraisal of agricultural property includes all properties classified as 1-d-1 and 1-d agricultural uses, which are appraised on the land's ability to produce agricultural or timber production. The mass appraisal of agricultural property involves applying similar values within the same agricultural categories and classes, and is appraised according to the Tax Code guidelines. Appraisal values are calculated using the cash lease method. A cash lease is an agreement between landowner and tenant to lease property at a fixed cash payment.

In order for land to qualify under this special-use, it must be devoted principally to agricultural use. *“Agriculture” means the use of land to produce plant or animal products, including fish or poultry products, under natural conditions but does not include the processing of plant or animal products after harvesting or the production of timber or forest products. The term also includes the use of land for wildlife management. The term also includes the use of land to raise or keep bees for pollination or for the production of human food or other tangible products having a commercial value, provided that the land used is not less than 5 or more than 20 acres.*

Section 23 of the Texas Property Tax Code allows a property owner to have his property taxed on productivity value instead of market value after making the appropriate application to the Appraisal District.

Application Filing and Processing

A sample Agricultural Open Space Application Form is available on the Texas State Comptroller's website and can be viewed at:

<http://www.window.state.tx.us/taxinfo/taxforms/50-129.pdf>

A property owner must file an application for special appraisal before May 1. For good cause, the Chief Appraiser may extend the deadline by written order for a single period not to exceed 60 days. Hamilton County compiles a list of properties that had the special-use agricultural appraisal in the previous year but changed ownership during the year. This list is used to mail an application form to the new owners requesting that they complete the application to continue to receive the special-use appraisal. If the application form is not returned by April 1, the property owners receive a reminder to return the application by May 1. If the application form is not returned by date a certified letter goes out informing the property owner then Appraisal Notices are sent the property owners are noticed at market value. If a property owner files an application after the deadline for filing but prior to the date the Appraisal Review Board approves the records (usually July 20), the application will be accepted. If it is approved, the property owner is liable for a penalty of 10 percent of the difference between the amount of the tax imposed on the property under the special appraisal and the amount of tax that would have been imposed if the property were taxed at market value. If a property owner files an application after the date the ARB approves the records, the land is ineligible for special appraisal that year. If the Chief Appraiser denies an application, they shall deliver a written notice by certified mail of the denial to the claimant within five days of the denial. The notice must include a brief explanation of the procedures for protesting the denial.

Once property has been designated for a special appraisal, the property shall continue to be eligible for special appraisal without a new application being filed unless the ownership of the land changes, the application is outdated or the properties eligibility ends. If the Chief Appraiser has good cause to believe that the land is ineligible, a new application may be mailed to a property owner in order to confirm the land's eligibility.

An application for agricultural use designation is confidential and **NOT** open to public inspection.

VALUATION APPROACH

The Cost Approach and the Market Approach are not utilized in estimating agricultural values for farm and ranch properties since they are to be estimated based upon their production/income capabilities. Agricultural values are estimated using the Income Approach, and are based upon historical cash lease income and expense data. Each property that is being used in this manner has stored land segments which reflect the acreage and the land type. They are further categorized by their individual production capabilities based upon the United States Department of Agriculture's Natural Resources Conservation Service soil classification maps with a Class 1 being the most productive and a Class 3 being the least productive soils.

Class 1-Is comprised of the Class I, II & III soil map classification

Class 2- Is comprised of the Class IV, V & VI soil map classification

Class 3- Is comprised of the Class VII & VIII soil map classification

Section 23 of the Texas Property Tax Code also allows for this special-use value if the land is used to manage wildlife. It is a qualifying agricultural use, if such land was previously qualified open-space land and is actively used for wildlife management. Wildlife management means actively using land (that at the time the wildlife management use began was appraised as qualified open-space land) in at least 3 of the following ways to propagate a sustaining breeding, migrating, or wintering population of indigenous wild animals for human use, including food, medicine, or recreation:

1. Habitat control
2. Erosion control
3. Predator control
4. Providing supplemental supplies of water
5. Providing supplemental supplies of food
6. Providing shelter
7. Making of census counts to determine population

The property owner must submit a written Wildlife Management Plan that lists the specific ways the property will be managed to meet the overall objective. A sample Wildlife Management Plan is available on the Texas Parks and Wildlife website can be viewed at:

http://www.tpwd.state.tx.us/publications/pwdforms/media/pwd_885_w7000_open_space_agric_valuation_wildlife_mgmt_plan.pdf

Guidelines for qualification of agricultural land in Wildlife Management Use as published by the Texas State Comptroller's Office may be viewed at:

<http://www.window.state.tx.us/taxinfo/proptax/pdf/96-354.pdf>

Agricultural land must be used at a level of intensity that is common in the local area and must have been devoted to agricultural use for at least five of the past seven years. Land inside the city limits is not eligible unless it has been devoted to agricultural use continuously for the preceding 5 years. PTC 23.56

Appraisal Resources

Data- Lease information gathered is grouped and placed in a spreadsheet annually for analysis. Statistical measures are utilized annually for analyzing the measures most reflective of net income to the land from production, and net income to the land from hunting to assist in selecting the unit prices per acre for agricultural production schedule building for all agricultural land classes. The cash lease and potential income from hunting filters into a unit price per acre estimate of net to land for each land classification and expenses for each land are deducted from this income. The value of land is determined by capitalizing the average net income the land would have yielded under prudent management from production of agricultural products during the five years preceding the current year for each of the land classifications.

The capitalization rate to be used in determining the appraised value of qualified open-space land is 10 percent or the interest rate specified by the Farm Credit Bank of Texas or its successor on December 31 of the preceding year plus 2-1/2 percentage points, whichever percentage is greater.

Results of annual analysis are compiled for a five year history. These results are utilized for building agricultural land schedules.

Appraisal Performance Testing

The PTAD of the State Comptroller's Office during the PVS reviews all values and procedures used in the calculation of the agricultural values and staff routinely evaluate procedures. Additionally, the Hamilton County Agricultural Advisory Board discusses agricultural income, expenses and the appraisal process.

INDUSTRIAL, UTILITY, AND MINERAL VALUATION PROCESS

INTRODUCTION

Appraisal Responsibility

The Hamilton Central Appraisal District currently contracts with Capitol Appraisal Group out of Austin, Texas to value 228 accounts Industrial, Utility, and Mineral/Gas Properties within the county. Their website can be viewed at:

<http://www.cagi.com/WebSite/home.htm>

This property represents approximately 2% of the market value in Hamilton County.

2018 CERTIFIED TOTALS

Property Count: 12,398

CAD - County Appraisal District
Grand Totals

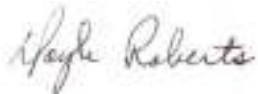
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State Category Breakdown

State Code	Description	Count	Acres	New Value	Market Value	Taxable Value
A	SINGLE FAMILY RESIDENCE	2,398		\$1,285,000	\$155,516,429	\$154,329,303
B	MULTIFAMILY RESIDENCE	16		\$0	\$1,857,020	\$1,857,020
C1	VACANT LOTS AND LAND TRACTS	653		\$0	\$4,853,090	\$4,852,035
D1	QUALIFIED OPEN-SPACE LAND	5,951	514,404.6332	\$0	\$1,339,725,203	\$41,410,185
D2	IMPROVEMENTS ON QUALIFIED OP	1,870		\$445,390	\$38,620,950	\$38,574,487
E	RURAL LAND, NON QUALIFIED OPE	2,213	3,025.6558	\$8,908,490	\$191,070,524	\$190,408,465
F1	COMMERCIAL REAL PROPERTY	414		\$80,250	\$54,070,353	\$54,065,397
F2	INDUSTRIAL AND MANUFACTURIN	17		\$0	\$2,405,760	\$2,405,760
G1	OIL AND GAS	29		\$0	\$359,235	\$359,235
J2	GAS DISTRIBUTION SYSTEM	6		\$0	\$1,501,700	\$1,501,700
J3	ELECTRIC COMPANY (INCLUDING C	31		\$0	\$15,465,930	\$15,465,930
J4	TELEPHONE COMPANY (INCLUDI	20		\$0	\$4,178,830	\$4,178,830
J5	RAILROAD	1		\$0	\$16,660	\$16,660
J6	PIPELAND COMPANY	35		\$0	\$19,292,790	\$19,292,790
L1	COMMERCIAL PERSONAL PROPE	421		\$0	\$20,312,940	\$20,312,940
L2	INDUSTRIAL AND MANUFACTURIN	124		\$0	\$16,297,520	\$16,297,520
M1	TANGIBLE OTHER PERSONAL, MOB	120		\$182,770	\$2,107,260	\$2,107,260
O	RESIDENTIAL INVENTORY	12		\$0	\$36,000	\$36,000
S	SPECIAL INVENTORY TAX	7		\$0	\$1,077,210	\$1,077,210
X	TOTALLY EXEMPT PROPERTY	478		\$1,197,470	\$28,792,632	\$0
	Totals		517,430.2888	\$10,099,370	\$1,897,358,036	\$668,348,727

CERTIFICATION STATEMENT

"I, Doyle Roberts, Chief Appraiser for HCAD, solemnly swear that I have made or caused to be made a diligent inquiry to ascertain all property in the district subject to appraisal by me, and that I have included in the records all property that I am aware of at an appraised value which, to the best of my knowledge and belief, was determined as required by law."

A handwritten signature in cursive script that reads "Doyle Roberts".

Doyle Roberts
Chief Appraiser