**HARRISON CENTRAL APPRAISAL DISTRICT**



**2020 MASS APPRAISAL REPORT**

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**INTRODUCTION**

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***Scope of Responsibility***

The Harrison Central Appraisal District has prepared and published this report to provide our 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 the appraisal effort by the appraisal district.

The 2020 mass appraisal report was prepared under the provisions of the Texas Property Tax Code. 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 Harrison Central Appraisal District (CAD) is a political subdivision of the State of Texas. The provisions of the Texas Property Tax Code govern the legal, statutory and administrative requirements of the appraisal district. A board of directors, appointed by the taxing units within the boundaries of Harrison County, constitutes the district’s governing body. The chief appraiser, appointed by the board of directors, is the chief administrator and chief executive officer of the appraisal district.

The appraisal district is responsible for local property appraisals and exemption administration for twenty-two taxing jurisdictions in the county. Each taxing unit, such as the county, a city, school district or emergency services district sets its own tax rate to generate revenue. Appraisals established by the appraisal district allocate the year’s tax burden on the basis of each taxable property’s January 1st market value. Harrison CAD also determines eligibility for various types of property tax exemptions such as those for homeowners, the elderly, disabled veterans and charitable and religious organizations.

The 2020 mass appraisal results is 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.

***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.

\*The property characteristics data upon which the appraisals are based is assumed to be correct.

\*Physical inspections of the property appraised were performed as staff resources and time allowed.

\*Validation of sales transactions occurred through questionnaires to buyer and seller and field review.

 In the absence of such confirmation, residential sales data obtained from vendors was 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 or all liens or encumbrances, unless otherwise stated.

\*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, 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 would cause a loss in value. Nor responsibility is assumed for any such conditions, or for any expertise or engineering knowledge required to discover them.

***Effective Date of Appraisal and Date of the Report***

With the exception of certain inventories for which the property owner has elected a valuation date of September 1; all appraisals are as of January 1 yearly. The date of this report is October 29, 2020.

***Definition of Value***

Except as otherwise provided by the Texas Property Tax Code (hereafter “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 buyer know of all 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 seller and buyer 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. These categories include residential homestead property (Sec. 23.23, Tax Code), agricultural and timber property (Chapter 23, Subchapters C and D, 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, Tax Code), and nominal (Sec. 23.18, Tax Code) or restricted use property (Sec.23.83, Tax Code).

***Properties Appraised***

This mass appraisal valued 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 appraisal is included in the appraisal records to be submitted to the Harrison County Appraisal Review Board on June 16, 2020.

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

***Scope of Work Used to Develop the Appraisal***

This mass appraisal valued all taxable real and tangible personal property within the boundaries of the Harrison Central Appraisal District, which encompasses all of Harrison County, Texas. This involves more than 188,000 accounts.

The Chief Appraiser, who is the chief executive officer of the appraisal district, manages the district. All district departments report to the chief appraiser. The district is further subdivided into five departments. The five departments are Appraisal, responsible for all appraisal activities; Mapping, responsible for parcel mapping; Support Services, responsible for property records maintenance, taxpayer information and assistance and support the appraisal review board; Administration, responsible for budget and financial matters and Information Systems, which operates the district’s computer facilities. Property tax professionals are required to be registered with the Texas Department of Licensing and Regulation.

Harrison Central Appraisal District also has an additional division not common to appraisal districts: Tax Collections. The appraisal district collects taxes for nine taxing entities. Tax collection services were combined for these nine entities at a cost savings for the taxpayers. Tax monies collected for each taxing entity is turned over daily to that entity.

The appraisal district staff consists of 23 employees with the following classifications:

 \* 1 Official/Administrator (Executive Level Administration)

 \* 2 Professional (Supervisory and Management)

 \* 8 Appraisers

 \* 1 Appraiser/ IT Coordinator

 \* 3 Cartographers

 \* 9 Administrative Support (Customer Service, Clerical, Tax Collections)

While the appraisal district staff conducted most of the appraisal activities, the district received significant assistance in the appraisals of industrial properties, oil, gas and mineral properties from one professional valuation firm. The appraisal district’s boundaries are the same as the county’s boundaries. An adjoining appraisal district will now be involved only in cases where the property is actually split by the county line. If the county line does split your property, you will receive value notices from appraisal districts for both counties, and must file homestead exemption or agricultural productivity applications with both. In such cases, if you choose to file a value protest, you must do so with the appraisal review boards in both counties.

***Determination of Highest and Best Use for Real Property***

The district’s market value appraisals are performed pursuant to Article VII, 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:

 ***Section 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 (USPAP). The same or similar 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.

(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 be 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) 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 appraised value of property under the circumstances described by this subsection.

(e) 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. Previous to the addition of 23.01(c) concerning residential homesteads, there was no specific statute defining highest and best use as it applies in appraisals conducted under the Property 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, financially feasibility and maximum profitability.

 Clear Creek Drainage Dist. of Galveston County v. Mansion Not Report 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 Property Tax Code.

***Appraisal Performance Tests and Performance Measures Attained***

Government Code Section 403.302 requires the Comptroller to conduct a study to determine the degree of uniformity and the median level of appraisals by the appraisal district with each major category of property, as required by Section 5.10, Tax Code. This study is required every other year. If the locally appraised value in a school district is within the statistical margin of error of the stat value, the Comptroller’s Property Tax Assistance Division (PTAD) certifies a school district’s local tax roll value to the Commissioner of Education. A 5% margin of error is used to establish the upper and lower value limit for each school district. If the local value is outside the acceptable range, the PTAD certifies the state value, unless the school district is eligible for a grace period, which is a period when local value is used even though it is determined to be invalid.

Section 5.102, Tax Code requires the Comptroller of Public Accounts to review county appraisal district (CAD) governance, taxpayer assistance, operating standards and appraisal standards, procedures and methodology at least once every two years. School districts located in a county that does not receive the Methods and Assistance Program (MAP) reviews in one year will be subject to the property value studies in that year. Harrison CAD was selected for a 2020 MAP review, and therefore, is not the subject of a property value study until 2021. Harrison CAD received the PVS results in January, 2020, for the 2019 Property Value Study. There are four mandatory requirements that are graded as a pass/fail. Each mandatory requirement was passed. There are five appraisal district activities that are graded as one of the following based on a numerical score: meets all, meets, needs some improvement, needs significant improvement and unsatisfactory. Harrison CAD received a MEETS ALL (total score – 100) rating for governance, taxpayer assistance and operating procedures. Harrison CAD received a MEETS (total score – 90-100) rating for appraisal standards, procedures and methodology.

***Certification Statement***

“I, Robert Lisman, Chief Appraiser for the Harrison Central Appraisal District, 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.”

Robert Lisman, RPA, RTA, CCA

Chief Appraiser

**APPRAISAL ACTIVITIES**

**INTRODUCTION**

***Appraisal Responsibilities***

The field appraisal staff is responsible for collecting and maintaining property characteristic data for classification, valuation and other purposes. Accurate valuation of real and personal property by any method requires a physical description of personal property, land and building characteristics. The Deputy Chief Appraiser is responsible for administering, planning and coordinating all activities involving data collection and maintenance of all commercial, residential and personal property types which are located within the boundaries of Harrison County. The data collection effort involves the field inspection of real and personal property accounts, as well as the entering of all data collected into the existing information system. The goal is to periodically field inspect residential properties, personal properties and commercial properties in Harrison County every three years. Meeting this goal is dependent on budgetary constraints.

**PRELIMINARY ANALYSIS**

***Data Collection/Validation***

Data collection of real property involves maintaining data characteristics of the property on the CAMA system (Computer Assisted Mass Appraisal). The information contained in CAMA includes site characteristics, such as land size and topography, and improvement data such as square foot of living area, year built, quality of construction and condition. Field appraisers use appraisal manuals that establish uniform procedures for the correct listing of real property. All properties are coded according to these manuals and the approaches to value are structured and calibrated based on the coding system. The field appraisers use these manuals during their initial training and as a guide in the field inspection of properties.

***Sources of Data***

The sources of data collection are through the new construction field effort, data review field effort, hearings, sales validation field effort, commercial sales verification, newspapers and publications and property owner correspondence via the Internet. A principle source of data comes from building permits received from taxing jurisdictions that require property owners to take out a building permit. Other sources may include septic system permits, mechanics liens and material liens.

The sales validation effort in real property pertains to the collection of data of properties that have sold. In residential and commercial properties, the sales validation effort involves on-site inspection by field appraisers to verify the accuracy of the property characteristics data and confirmation of the sales price.

Property owners are one of the best sources for identifying incorrect data that generates a field check. Frequently, the property owner provides sufficient enough data to allow correction of records without having to send an appraiser on-site.

***Data Collection Procedures***

Field data collection requires organization, planning and supervision of the field effort. Data collection procedures have been established for residential, commercial and personal property. The appraisers are assigned throughout Harrison County to conduct field inspections. Appraisers conduct field inspections and record information on the property record card.

The quality of the data is used is extremely important in establishing accurate values of taxable property. New appraisers are trained in the specifics of data collection set forth. 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 supervisory review of the work being performed by the field appraisers.

***Data Maintenance***

The field appraiser is responsible for the data entry of his/her field work directly into the computer file. This responsibility includes not only data entry, but also quality assurance.

**INDIVIDUAL VALUE REVIEW PROCEDURES**

***Field Review***

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

***Performance Test***

The Chief Appraiser and/or the Deputy Chief Appraiser are responsible for conducting ratio studies and comparative analysis. Field appraisers may conduct field inspections to ensure the ratios produced are accurate and the appraised values utilized are based on accurate property data characteristics.

**Residential Valuation Process**

***Scope of Work***

The Residential Property Appraisers are responsible for collecting and maintaining property characteristic data for all residential property, and developing equal and uniform market values for each parcel. There are approximately 45,000 residential improved parcels and over 10,000 vacant residential parcels within the appraisal district’s jurisdiction.

Field data collection requires organization, planning and supervision of the field staff. Residential appraisers are assigned throughout Harrison County to conduct field inspections and record information. Data items required to accurately describe and value property are keyed into the CAMA system.

 Production standards are set and upheld for the various field activities. It is the Chief Appraiser’s and/or the Deputy Chief Appraiser’s responsibility to ensure that not only are production standards met, but that the quality of data is reliable.

New appraisers are trained in the specifics of data collection set forth in the appraisal procedures manual and receive hands-on training in the field. Experienced appraisers are routinely re-trained in listing procedures prior to each major project, such as new construction or field/office re-inspection. The county is segmented into geographic zones for work allocation. An appraiser is designated to a geographical area, and it is his/her responsibility to complete work assignments in that area.

The appraisers collect data at each property and key changes into the CAMA system. They update characteristics such as land size and topography, and improvement data, such as square foot of living area, year built, quality of construction and condition. All properties are coded and the approaches to value are structured and calibrated based on this coding system. Manufactured housing is listed as real property if a Statement of Ownership and Location is filed at the county in which the property is located, otherwise, the property receives a state classification of M1 and is listed as personal property.

***NEW CONSTRUCTION***

The field inspection of new construction permits and work file accounts began in July, 2019 and was completed at the beginning of April, 2020. Appraisers visit all properties yearly where changes to characteristics are identified through building permits and other sources. All changes in characteristics are recorded, including new homes, additions, remodels, pools and other improvements, demolitions, and disaster damage and repairs.

An Appraiser also conducts an office review of each property and reviews the value based on the changes made to the parcel.

Field work is generated via electronic workflow by geographic area. Work is grouped and assigned by the Deputy Chief Appraiser. Accounts are worked by the appraiser and routed to their supervisor upon completion. The supervisor oversees quality checks on all accounts that have been changed for the current year.

***SALES VERIFICATION***

For the 2020 year, HCAD had staff in the field to conduct sales verification. Appraisers visited properties with recent sales activity to verify the property characteristics and when able, to validate the sales information with the property owner.

***RE-INSPECTION***

Both field and office re-inspections were conducted for the tax year 2020. Appraisers are responsible for verifying the characteristics of each property visited. If changes are identified, they are keyed into the 2020 database. During the field effort, HCAD also incorporated confirmation of sales data and verification of characteristics of sold property. During the office re-inspection properties are reviewed using aerial photos. Appraisers are able to verify external characteristics, measure walls, and identify economic influences. If the improvements are not visible due to tree cover, or changes in the property are too substantial to fix, a field visit is performed.

Our goal is to comply with generally recognized guidelines that recommend re-inspection of properties every three years. For tax year 2020 reappraisal areas were: City of Waskom, Waskom ISD, Harleton ISD, New Diana ISD, Ore City ISD, Elysian Fields ISD, Karnack ISD.

***NEW SUBDIVISIONS***

New subdivisions are reviewed and valued based on information gathered in the field and office. Appraisal staff drives the area of the new subdivision, lists the property characteristics and identifies the status of the property as of January 1.

***SOURCES OF DATA***

The sources of data collection and verification include, but are not limited to, building permits, data mailers, informal meetings and formal hearings, information collected in the field, newspapers, publications, and property owner correspondence by letter and via the Internet. Oblique imagery, which allows the appraiser to view a property from multiple angels, is also frequently used for data verification. The appraiser can verify exterior measurements with this software if the tree cover is not too thick.

Building permit data obtained triggers field inspections on properties experiencing significant characteristic changes due to new construction and remodeling.

***HIGHEST AND BEST USE ANALYSIS***

The highest and best use of residential property is normally its existing use. This is due in part to the fact that residential communities through use of deed restrictions, and in some areas zoning precludes other land uses. The district undertakes the analysis of highest and best use in transition areas and areas of mixed residential and commercial use. In transition areas with ongoing changes, the appraiser reviews the existing residential property use and makes a determination regarding highest and best use. Once the conclusion is made that the highest and best use remains residential, further highest and best use analysis is done to decide the type of residential use on a neighborhood basis. for example, it may be determined in a transition area that older, non-remodeled homes are economically obsolete and the highest and best use of such property is the construction of new dwellings. In areas of mixed residential and commercial use, the appraiser reviews properties in these areas on a periodic basis to determine if changes in the real estate market require reassessment of the highest and best use of a select population of properties.

The exception to this process is residential homestead property. Texas Property Tax Code 23.01(c) provides that a residence homestead’s market value for ad valorem tax purposes is determined solely on the basis of the property’s value as a residence homestead, regardless of highest and best use. In mixed-use areas, residential homesteads were valued differently than non-homestead property.

***MODEL SPECIFICATION***

***AREA ANALYSIS***

Data on regional economic forces such as demographic patterns, regional location factors, employment and income patterns, general trends in real property prices and rents, interest rates trends, availability of vacant land, and construction trends and costs are collected from private vendors and public sources. Information is gleaned from real estate publications and sources such as The Real Estate Center of Texas A & M, Marshall & Swift, and fee appraisers. Continuing education courses, conference seminars from TAAO, TAAD and IAAO, along with real estate seminars from the Urban Land Institute provide the appraiser with a current economic outlook on the Harrison County real estate market.

***NEIGHBORHOOD AND MARKET ANALYSIS***

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

The first step in neighborhood analysis is the identification of a group of properties that share certain common traits. A “neighborhood” for an analysis purposes is defined as the largest geographic grouping of properties where the property’s physical, economic, governmental and social forces are generally similar and uniform. Geographic stratification accommodates the local supply and demand factors that vary across a jurisdiction. Once a neighborhood has been identified, the next step is to define its boundaries. This process is known as “delineation”. Some factors used in neighborhood delineation include location, sales price range, lot size, age of dwelling, quality of construction and condition of dwellings, square footage of living area, and story height. Part of neighborhood analysis is the consideration of discernible patters of growth that influence a neighborhood’s individual market. Few neighborhoods are fixed in character. Each neighborhood may be characterized as being in a state 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 shifts from older homes to newer homes. In the period of stability, or equilibrium, the forces of supply and demand are about equal. Generally, in the stage of equilibrium, older neighborhoods can be more desirable due to their stability of residential character and proximity to the workplace and other community facilities. The period of decline reflects diminishing demand or desirability. During decline, general property use may change from residential to a mix of residential and commercial uses. Declining neighborhoods may also experience renewal, reorganization, rebuilding, or restoration, which promotes increased demand and economic desirability.

Neighborhood identification and delineation is the cornerstone of the residential valuation system at the district. All the residential analysis work done in association with the residential valuation process is neighborhood specific. Neighborhoods are reviewed in the field and delineated based on observable aspects of homogeneity. Neighborhood boundaries are periodically reviewed to determine if further neighborhood delineation is warranted or, if existing neighborhoods could now be combined because of similar markets. The combined neighborhoods provided a larger sales base for analysis. Whereas neighborhoods involve similar properties in the same location, a neighborhood grouping is highly beneficial in cost derived areas of limited or no sales, or use in direct sales comparison analysis. Neighborhood groups, or clustered neighborhoods, increase the available market data by linking comparable properties outside a given neighborhood.

***MODEL CALIBRATION***

***COST SCHEDULES***

All residential parcels in the district are valued from cost schedules using a comparative unit method. The district’s residential cost schedules are calibrated to produce replacement cost new in comparison to nationally recognized cost estimator, Marshall & Swift, as well as locally collected cost and sales information. The cost schedules are reviewed and updated yearly if data indicates updates are warranted.

***DEPRECIATION ANALYSIS***

Depreciation analysis begins by extracting residential sales form two timeframes for comparison. for each sale, the residual building value (RBV) is subtracted from the replacement cost new (RCN), then divided by the RCN for a calculation of market-derived depreciation, or

% Depreciation = (RCN-RBV)/RCN

Percent good is also calculated by taking 1 minus the market-derived depreciation sales price (S) minus the total of the land value (LV) and other features value (OV) divided by the RCN, or

% Good=S- (LV+OV)/RCN

***SALES INFORMATION***

Residential improved and vacant sales are collected from a variety of sources; including district questionnaires sent to the grantee, and the grantor when available, filed discovery, protest hearings, various vendors, builders, and realtors. A sales coding system is maintained to define salient facts related to a property’s purchase or transfer.

In accordance with Texas Property Tax Code Sec. 552.148, the appraisal district must make confidential any information about properties than appraisal district obtains from private sources. We cannot publicly disclose (or display on our website) property sales information we obtain from private sources. Sales information is not available for public inspection.

Sales that are used or considered in arriving at a particular value are available to property owners who timely file a protest. This law in no way prohibits the district’s use of confidential sales in the valuation process. A property owner or agent who receives confidential sales information from HCAD in conjunction with the protest evidence is required by Sec. 552.148 of the Tax Code to hold that information in confidence. Failure to do so is a criminal violation of the Texas Public Information Act.

***LAND ANALYSIS***

Residential land analysis is conducted by each of the appraiser. The appraisers develop a base lot, primary rate and assign each parcel to one of the square foot land tables. The square foot land table is designed to systematically value the primary and residual land based on a specified percentage of the primary rate. Computerized land tables file stores the land information required to consistently value individual parcels. 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. The preferred method for appraising land is sales comparison approach. If a sufficient number of sales are not available, the analysts use abstraction or allocation methods to ensure that the land values best reflect the contributory market value of the land to the overall property value.

***STATISTICAL ANALYSIS***

The district performs statistical analysis annually to evaluate whether values are equitable e and consistent with the market. Ratio studies are conducted on residential neighborhoods in the district to judge the two primary aspects of mass appraisal accuracy—level and uniformity of value. Appraisal statistics of central tendency and dispersion generated from sales rations summarize statistics including, but not limited to, the weighted mean, median, standard deviation, coefficient of variation, and coefficient of dispersion and provide the appraiser a tool by which to determine both the level and uniformity of appraised value. The level of appraised values can be determined by the weighted mean for individual properties and a comparison of weighted means can reflect the general level of appraised value between comparable properties. Review of the standard deviation, coefficient of variation, and coefficient of dispersion can discern appraisal uniformity within the county.

The appraiser, through the sales ratio analysis process reviews properties annually. The first phase involves ratio studies that compare the recent sales prices of properties to the market values. The ratio study 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 needs to be updated in an upcoming reappraisal, or whether the level of market value in a district is at an acceptable level.

***TREATMENT OF RESIDENCE HOMESTEADS***

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

 \* the market value; or

 \* the preceding year’s appraised value;

 PLUS 10 percent for each year since the property was reappraised;

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

Values of capped properties must be recomputed annually. If a capped property sells, the cap automatically expires as of January 1st of the following year. In that following year, that homes is reappraised at its market value to bring its appraisal into uniformity with other properties. An analogous provision applies to new homes. While a developer owns them, unoccupied residences are appraised as part of and inventory using the district’s land value and the developer’s construction costs as of the valuation date. However, in the year following the sale they are reappraised at market value.

***FINAL MODELS: MARKET ADJUSTMENT AND TIME CONSIDERATION***

Market adjustment factors are developed from appraisal statistic provided from ratio studies and are used to ensure that estimated values are consistent with the market. The district’s primary approach to the valuation of residential properties uses a market trended cost approach. This type of approach accounts for neighborhood market influences not specified in the cost model.

The following question denotes the model used:

MV=MA [RCN-D] = LV

The market value (MV) equals the market adjustment factor (MA) multiplied by the replacement cost new less depreciation (RCNLD), plus the land value (LV). As the cost approach separately estimates both land and building values and uses depreciated replacement costs, which reflect only the supply side of the market, it is expected that adjournments to the cost values are needed to bring the level of appraisal to an acceptable standard. Market or location adjustments are applied uniformly to account for location variances across a jurisdiction.

If a jurisdiction is to be updated, the chief appraiser and/or deputy chief appraiser runs a ratio study that compares recent sales prices of properties appropriately adjusted for the effects of time within a delineated area with the properties’ previously trended cost values. The calculated ratio derived from the sum of the sold properties’ trended cost value divided by the sum of the sales prices indicates the level of value based on the previous cost value for the sold properties. This trended cost-to-sale ratio is compared to the appraisal-to-sale ratio to determine the current market adjustment factor. This market adjustment factor is needed to trend the values obtained through the trended cost approach closer to the actual market evidenced by recent sales prices within a given area. The sales used to determine the market adjustment factor will reflect the market influences and conditions only for the specified area, thus producing more representative and supportable values. The market adjustment factor calculated for each updated area is applied uniformly to all properties within a neighborhood. Once the market-trend factors are applied, a second run of the ratio study is generated that compares recent sales prices with proposed market values for these sold properties. From this set of ratio studies, the chief appraiser judges the appraisal level and uniformity in both updated and not-updated areas, and finally, for the school district as a whole.

***HOW ESTIMATES ARE REVIEWED***

***FIELD REVIEW***

The appraiser identifies individual properties in critical need of field review through sales ratio analysis. Sold properties with a high variance in sale ratios are field reviewed to check for accuracy of data characteristics. If data inaccuracies are found in a large percentage of the sold properties, the entire area will be field reviewed.

The varied sales activity in the area has resulted in a more substantial field effort on the part of the appraiser to review and resolve sales outliers. Additionally, the appraiser frequently performs field reviews on subjective data items such as quality of construction, condition, and physical, functional and economic obsolescence, factors that contribute significantly to the market value of the property. After preliminary estimates of value have been determined in targeted areas, the appraiser takes valuation documents to the filed to test the computer-assisted values against his or her own appraisal judgment. During the review, the appraiser is able to physically inspect both sold properties and unsold properties for comparability and consistency of value.

***OFFICE REVIEW***

Once the appraiser is satisfied with the level and uniformity of value for each area within his or her area or responsibility, queries ae run based on predetermined tolerances to identify accounts that have increased or decreased by a certain percent or dollar amount. Parcels that fail the tolerances are reviewed again by the appraiser and corrected accordingly.

Once the proposed value estimates are finalized, the appraiser reviews the sales ratio by area and resents pertinent valuation data, such as, history of hearing protest, sale-to-parcel ratio, and level of appraisal to the Deputy Chief Appraiser for final review and approval. The primary objective of this review is to ensure that the proposed values have met acceptable tolerance ranges based on the individual area’s profile.

***APPRAISAL PERFORMANCE TESTS USED/PERFORMANCE MEASURES ATTAINED***

***SALES RATIO STUDY***

The primary analytical tool used by the appraiser 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 to allow the appraiser to review general market trends within their area of responsibility and, to provide an indication of market appreciation over a specified period of time.

The intended purpose of the district’s independent school district (ISD) ratio study is to estimate the general level and uniformity of appraisal. The ratio of a property is calculated in order to evaluate the relationship between appraisals and sale prices as of the January 1 assessment date. The district’s ratio studies were designed and prepared, to the maximum extent possible, under the guidelines set forth in the International Association of Assessing Officers (IAAO) current *Standard on Ratio Studies*.

A ratio study was produced for each school district using the sale period from January 1, 2019 through February-March, 2020. There are many types of sampling; systematic sampling, stratified sampling, convenience sampling, judgement sampling; random sampling quota sampling. For this analysis we used random sampling, which is the purest form of probability sampling. Each observation of the population has an equal and known chance of being selected.

In a few school districts where no sales were available, the median ratio for geographically and economically similar market areas were applied. The sample data is assumed to be normally distributed and to represent the population of properties within each school district.

Texas does not have mandatory sales disclosure; therefore, the district does not have access to all property transactions, which limits the study sample to only those sales acquired by the district through a commercial vendor or submitted voluntarily by the property owner. Available sales were screened to ensure, to the extent possible, that only valid indicators of market value were included. Sales that were identified as invalid transactions due to atypical financing, sales between relatives or corporate affiliates, estate sales, or sales of convenience were excluded from the study. Also excluded from the study was partially complete new construction. It must be noted that district values reported for individual sales were current on or about April 1, 2020, and are subject to change prior to certification.

The median ratio for each school district is an indicator of the level of appraisal in the population of single-family properties. The median is the preferred measure of central tendency because it gives equal weight to each ratio and is less affected by extreme ratios than other measures. The coefficient of dispersion (COD) is a measure of variability, which relates to the distribution of the ratios, and generally, the smaller the measure of variability the better the uniformity. According to the current *Standard on Ratio Studies,* the ratio study performance standards for single-family residential property are between 5.0 and 10.00 for new, more homogeneous areas and between 5.0 and 15.00 for older, more heterogeneous areas.

**COMMERCIAL PROPERTY DIVISION**

***Scope of Work***

The scope of this mass appraisal includes all of the commercial real property, which falls under the responsibility of the commercial property appraisers that is located within the boundaries of Harrison County taxing jurisdiction. All three approaches to value are considered in estimating market value for each property, the most applicable of which is given primary emphasis.

The Cost Approach to Value is applied to all real property. This methodology involves using national cost data reporting services as well as actual cost information on comparable properties whenever possible. Cost models are developed based on the Marshall & Swift cost information, and are modified based on local factors. This approach also employs alternate valuation procedures to value the underlying land value.

The Income Approach to Value was applied to those real properties that are typically viewed by market participants as “income producing” and for which the income methodology is considered a leading value indicator.

The Sales Comparison (market) Approach was used for estimating land value and in comparing sales of similarly improved properties to each parcel on the appraisal roll. Other recognized appraisal methods and techniques are used in the valuation of properties where sales information is not available or is insufficient to produce credible results.

HCAD appraises 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 appraisement of any non-exempt taxable fractional interest in real property (i.e. certain multi-family housing projects). Fractional interest or partial holdings of real property are appraised in fee simple for the whole property and divided programmatically based on their pro-rata interest.

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 tax purposes in accordance with law.

***Procedure for Collecting and Validating Data***

The property characteristic data of every property subject to taxation by a jurisdiction within HCAD’s area of responsibility is incorporated into a computer-assisted mass appraisal (CAMA) system. The commercial appraisers perform appraisals of this inventory of special purpose properties. Building permits trigger field inspections, which capture any alterations to the properties pertinent tax year. Appraisers conduct field inspections and collect or update property characteristics. This information serves as the basis for valuation of property. Also, if any discrepancies are discovered during the hearing process or at any other time, field personnel are sent for a field check prior to the next valuation season, and in some cases, during the current valuation season.

The quality of data used is of paramount importance to accurate valuation of taxable property. While production standards are established and upheld for the various field activities, quality of data is emphasized as the goal and responsibility of each appraiser. New appraisers are trained in specifics of data collection. Experienced appraisers are routinely re-trained in listing procedures prior to major field projects such as new construction, sales validation or data review

***SOURCES OF DATA***

A vendor provides the district a copy of the deeds recorded in Harrison County that convey commercially classed properties. For those properties involved in a transfer of commercial ownership, a file is produced which begins the research and verification process. The initial steps in sales verification involves a questionnaire, which is mailed to both parties in the transaction (Grantor and Grantee). If the questionnaire is answered and returned, the documented responses are recorded in the sales database system. If the sales information is not obtained, other sources are contacted such as the brokers involved in the sale, property managers or commercial vendors. In other instances, sales verification is obtained from local appraisers. Finally, 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. Additionally, a nationally recognized vendor of market data provides online access to commercial sales information. Other sources of sales data include fee appraisal acquired through the hearings process and local and 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 (sale 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 hearing 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 (such as State Comptroller Hotel/Motel Report). 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 from various cities within Harrison County. These permits are matched to the district’s existing property records. Accounts that have building permits are assigned to appraisers in various areas. The field appraisers list new construction, note demolition, and record any changes in physical characteristics for properties within their specific work areas. Once the results of the field visit are in the system, the parcels are available to be valued and later noticed. When the appraisals are completed, they are routed to the Chief Appraiser and/or the Deputy Chief Appraiser for quality assurance checks.

***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 by 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 significantly different than market value, which approximates market price under the following assumptions: (i) no coercion of undue influence over the buyer or seller in an attempt to force the purchase or sale, (ii) well-informed buyers and sellers acting in their own best interest, (iii) a reasonable time for the transaction to take place, and (iv) payment in cash or its equivalent.

***MODEL SPECIFICATION***

***AREA ANALYSIS***

A market analysis relates directly to market forces affecting supply and demand. This study involves the relationships between social, economic, environment, government, 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. Local publications are also reviewed to lend detailed support to the various assumptions utilized in the valuation of real estate.

Published market studies provide current market data. The property is comprised of the land area and commercially-classed properties located within the boundaries of a taxing jurisdiction. Area analysis involves the examination of how physical, economic, governmental and social forces and other influences affect property values.

The effect of these forces is also used to identify, classify, and organize comparable properties into smaller, manageable subsets of a universe of properties. In the mass appraisal of commercial properties these subsets are generally referred to as market areas 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. These include, but are not limited to, similarities of rental rates, 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.

***MODEL CALIBRATION***

Model calibration involves the process of periodically adjusting the mass appraisal formulas, table and schedules to reflect current local market conditions. Once the models have undergone the specification process, adjustments can be made to reflect new construction procedures, materials and/or costs, and rental concessions, which can vary from year to year.

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

***COST APPROACH***

The cost approach to value is applied to all improved real property utilizing the comparative unit method. This methodology involves the utilization of national cost data reporting services, as well as actual cost information on comparable properties whenever possible. Cost models include the derivation of replacement cost new (RCN) of all improvements. These include comparative base rates, per unit adjustments and lump sum adjustments. This approach also employs other appraisal methods, including the sales comparison approach in the valuation of the underlying land value. Time and location modifiers are necessary to adjust cost data to reflect conditions in a specific market and changes in costs over a period of time.

Depreciation schedules are developed based on what is typical for each property type at that specific age. Depreciation schedules have been implemented for what is typical of each major class of commercial property by economic life categories. Schedules are then tested to ensure they are reflective of current market conditions. The actual and effective ages of improvements are noted in the CAMA appraisal system. The effective age estimates are based on the utility of the improvement relative to where the improvement lies on the scale of its total economic life and its competitive position in the marketplace. Market adjustment factors such as external and functional obsolescence can be applied if warranted.

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

***INCOME APPROACH***

The income approach to value was applied to real properties that are typically viewed by market participants as “income producing” and for which the income methodology is considered a leading value indicator.

The first step in the income approach pertains to the estimation of market rent on a per unit basis. This is derived primarily from actual rent data furnished by property owners and from local market study publications. This per unit rental rate multiplied by the number of units results in the estimate of potential gross rent.

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

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

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

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

Subtracting the allowable expenses (inclusive of non-recoverable expenses and replacement reserves) from the effective gross income yields an estimate of net operating income. Rates and multipliers are used to convert income into an estimate of market value. These include income multipliers, overall capitalization rates, and discount rates. Each of these is used in specific applications. Rates and multipliers also vary between property types, location, quality, condition, design, age, and other variables. Application of the various rates and multipliers must be based on a thorough analysis of the market.

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

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

***SALES COMPARISON APPROACH***

Although all three of the approaches to value are based on market data, the sales comparison approach is most frequently referred to as the market approach. This approach is utilized not only for estimating land value, but also in comparing sales of similarly improved properties to each parcel on the appraisal roll. As previously discussed in the Data Collection/Validation section of this report, pertinent data from actual sales of properties, both vacant and improved, is sought 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.

***HOW ESTIMATES ARE REVIEWED***

***FIELD REVIEW***

The date of last inspection, extent of that inspection, and the HCAD appraiser responsible are listed on each account in the CAMA system. If a property owner disputes the district’s records concerning this data in a protest hearing, the property record may be altered based on the credibility of the evidence provided. Typically, a field check is requested to verify this evidence for next year’s reappraisal. In addition, if a building permit is filed for a property indicating a change in characteristics, the property is scheduled for field review. Although every property cannot be inspected each year, each appraiser is designated certain segments of their appraisal area of responsibility to conduct field checks. A re-inspection program is in effect so that each commercial account will be inspected every three years. The appraiser will inspect the condition of the structures, and add or remove any structures, where applicable.

Commercial appraisers frequently field review subjective data items such as a building class, quality of construction, condition, and physical, functional and economic obsolescence factors contributing significantly to the market value of the property. Once preliminary estimates of value have been generated the appraiser tests these estimates against their own appraisal judgment. While in the field, the appraiser physically inspects sold and unsold properties for comparability and consistency of values.

***OFFICE REVIEW***

Office reviews are completed on properties not subject to field inspections. Office reviews are typically limited by the data presented in final value reports. These reports summarize the pertinent data of each property as well as comparing the previous values to the proposed value conclusions of the various approaches to value. These reports show proposed percentage value changes, income model attributes or overrides, economic factor (cost overrides) and special factors affecting the property valuation such as new construction status, prior year litigation and a three year sales history (USPAP property history requirement for non-residential property). The appraiser may review methodology for appropriateness to ascertain that is 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. Each appraiser’s review is limited to properties in their area of responsibility by property type or geographic area.

Once the appraiser is satisfied with the level and uniformity of value for each commercial property within their area of responsibility, the estimates of value are designated as ready for noticing. Although the value estimates are determined in a computerized mass appraisal environment, value edits enable an individual parcel review of value anomalies before the estimate of value is released for noticing.

***PERFORMANCE TESTS***

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

Harrison CAD has adopted the policies of the IAAO STANDARDS ON RATIO STUDIES regarding its ratio study standards and practices. Ratio studies generally have six basic steps: (1) determination of the purpose and objectives, (2 ) data collection and preparation, (3) comparing appraisal and market data, (4) stratification, (5) statistical analysis, and (6) evaluation and application of results.

***SALES RATIO STUDIES***

Sales ratio studies are an integral part of establishing equitable and accurate market value estimates and ultimately assessments for this taxing jurisdiction. The primary uses of sales ratio studies include the determination of a need for general reappraisal; prioritizing selected groups of property types for reappraisal; identification of potential problems with appraisal procedures; assist in market analyses; and calibrating models used to derive appraised values during valuation or reappraisal cycles. However, these studies cannot be used to judge the accuracy of an individual property’s appraised value. The Harrison County Appraisal Review Board by make individual value adjustments based on unequal appraisal protest evidence submitted on a case-by-case basis during the hearing process.

Overall, sales ratios are generated by use type to allow appraisers to review general market trends in their area of responsibility. In some cases, field checks may be conducted to ensure the ratios produced are accurate and the appraised values utilized are based on accurate property data characteristics. These ratio studies aid the appraisers by providing an indication of market activity by economic area or changing market conditions (appreciation or depreciation).

***STATISTICAL AND CAPITALIZATION ANALYSIS***

Statistical analysis of final values is an essential component of quality assurance. This technique represents a comparison of the final value against the standard and provides a concise measurement of the appraisal performance. Statistical comparisons of many different standards are used, including sales of similar properties, the previous year’s appraised value, audit trails, value change analysis and sales ratio analysis. Measures of central tendency and dispersion generated from sales ratios are available for each property type.

These summary statistics, including but not limited to, the weighted mean, standard deviation and coefficient of variation, provide the appraiser 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. Review of the standard deviation and the coefficient of variation can discern appraisal uniformity within a specific property type.

An appraiser reviews all commercial property types on an annual basis according to land use and utilizing the sales ratio analysis tool. The first phase involves ratio studies, which 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 need to be updated in an upcoming reappraisal, or whether the level of market value is acceptable.

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

***APPRAISAL PERFORMANCE TESTS USED AND PERFORMANCE MEASURES ATTAINED***

According to Chapter 5 of the Texas Property Tax Code and Section 403.302 of the Texas Government Code, the PTAD conducts a biennial Property Value Study (PVS) of each Texas school district and each appraisal district. As part of this biennial study, the code requires the PTAD to use sales and generally accepted auditing and sampling techniques, test the validity of school district taxable values in each appraisal district as regards the predicted level and uniformity of property tax appraisal in each appraisal district. The methodology used in the property value study includes stratified samples to improve sample representativeness and techniques or procedures of measuring uniformity. This study utilizes statistical analysis of sold properties (real property)( and appraisal of non-realty properties (appraisal ratio studies) as the basis for assessment ratio reporting. For appraisal districts, the reported measures include median level of appraisal, coefficient of dispersion (COD), and price-related differential (PRS) for properties overall and by state category. Commercially tested categories include multi-family (category B), vacant land (categories C and D), and commercial improved property (category F1).

In the non-study year the PTAD conducts a Methods and Assistance Program (MAP) review of the appraisal district’s appraisal methods, standards and procedures to determine whether the district used generally accepted standards and practices in developing the mass appraisal estimates of value.

The district’s 2020 Commercial Ratio Study was intended to measure the general level and uniformity of appraisals. In order to determine the relationship between appraisals and sales prices, a sales ratio was calculated using the guidelines set forth in the International Association of Assessing Officers current *Standard on Ratio Studies.* Properties within a school district are considered to be “similarly situated” for the purposes of Sec. 41.43 (b)(2), Texas Property Tax Code.

A ratio study was developed for each school district using the sales period from January 1, 2019 and February-March, 2020. Due to Texas being a non-disclosure state, the district does not have access to all property transaction, which limits the study sample to only those sales acquired by the district through a commercial vendor or submitted voluntarily by the property owner. A time adjustment factor was applied to all office and apartment properties based on the effect of price changes reflected in the market between the date of sale and the January 1 assessment. To the extent possible, data errors, characteristic changes, and other factors that might produce an erroneous sales ratio were identified and corrected. Available sales were selected without regard to ownership, account number, address, sale price or value, except then sale price was reported as zero. Additionally, the following transactions were excluded from the ration study; 1) sales identified as invalid transactions (atypical financing, sales between relatives, corporate affiliates, and estate sales) and 2) sales with partially complete new construction. Identified foreclosures were analyzed and considered in the study. The data was assumed to be normally distributed and to represent the distribution of properties within each school district.

**AGRICULTURAL APPRAISALS**

***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 WORK***

The mass appraisal of agricultural (Ag) property includes all property classified as 1-d-1 and 1-d agricultural uses, which are appraised based on the land’s ability to produce income from agriculture or timber production. The mass appraisal of agricultural property involves applying similar values within the same agricultural categories and classes.

The section appraises agricultural property according to the Texas Property Tax Code guidelines. Appraisal values are calculated using the cash lease method. A cash lease (cash rent) is an agreement between landowners and tenant to lease property at a fixed cash payment. Fractional interest or partial holdings of real property are appraised for the entire tract and value prorated based on eligibility and prorated interest.

***PROCEDURE FOR COLLECTING AND VALIDATING DATA***

Approximately one-third of the 1-d-1 agricultural properties are required to reapply every five years. Lease data is collected each year and used to calculate productivity values. A modified income approach to valuation is used in calculating these values.

***HOW APPLICATIONS AND VALUES ARE REVIEWED***

The 2020 agricultural appraisal process began on September 6, 2019. Field review of all agriculture accounts required to reapply in 2020 was conducted. Applications were evaluated for approval or denial using field review information.

***APPRAISAL PERFORMANCE TESTS USED AND PERFORMANCE MEASURES ATTAINED***

The Property Tax Assistance Division (PTAD) of the State Comptroller’s Office regularly reviews all values and procedures used in the calculation of the agricultural values. Staff also routinely evaluates its own valuation procedures. Additionally, the Harrison County Agricultural Advisory Board reviews values and provides cost information, as well as lease rates.

**BUSINESS/INDUSTRIAL PROPERTY DIVISION**

**INDUSTRIAL VALUATION**

***SCOPE OF WORK***

Industrial valuations are performed by a contracted professional valuation company. The company is responsible for developing fair and uniform market values for improved industrial properties and industrial vacant land. The company is also responsible for the valuation of all tangible general industrial personal property in Harrison County. There are approximately 3,000 parcels of industrial real property, not including minerals, in Harrison County.

***PROCEDURE OFR COLLECTING AND VALIDATING DATA***

The contract appraisal staff inspects their assigned properties to obtain information about buildings, site improvements, process and shop equipment, and various items of personal property. In addition, appraisal personnel use information provided by property owners concerning the cost to purchase, install, and construct items of real and personal property. The individual characteristics of the property being appraised are the primary factors that drive the appraised value.

An extended range of variations may exist within the same class of industrial property, and there are a multitude of property types within the industrial category. For this reason, effective data collection procedures are difficult to organize in a single comprehensive manual.

Industrial personal property also consists of many different classes of assets with a wide range of variation within each class. The contractor has adopted the convention of listing assets and estimating effective age of assets in the field. The field listing is then compared with information furnished by property owners during the final valuation review.

The City of Marshall Tax Office and Harrison County Tax Office supplied the initial real and personal property data used by HCAD. Since that time contract appraisal personnel have update the information based on field reviews. As new facilities are built, the appraisal personnel collect all the real and personal property data necessary to value the property initially, and thereafter, update the information when the property is again visited. Building permit information is received from the cities. Other sources of data include publications such as the Texas Register regarding waste control permits; legal notices published in newspapers, and various refining and chemical industry magazines regarding new construction.

Appraisal personnel periodically visit assigned plants. The frequency of the visit is determined by the nature of the business conducted at each facility. For example, refineries and chemical plants are continually changing or adding to processes to extract greater efficiencies or make new products, but machine shops may not add or remove equipment over a period of two or more years.

When conducting a field visit, the appraisers take with them the historical data on the buildings and site improvements and the previous listing of personal property at the facility. Changes to the existing structures and personal property are noted and that information is used for value estimation purposes. If cost information for the real or personal property is supplied later, the field data can be compared to that information to judge the accuracy of the information.

***HIGHEST AND BEST USE ANALYSIS***

The current use of the property is generally the highest and best use of that property. Industrial facilities are most commonly located in areas that support industrial use. In areas where mixed use does occur, the appraiser estimates the effect of this factor on highest and best use.

***MODEL SPECIFICATION***

***AREA ANALYSIS***

The scope of market forces affecting industrial products and the capital goods used in the production process tends to extend beyond regional considerations. The effects of information and transportation technology are such that most industrial market forces are measured globally. One exception to this general concept is the market for industrial land. The pricing of lands tends to be closely tied to possible alternative uses in the area. For this reason, appraisers assigned to land valuation analyze market forces for specific areas and adjust land value schedules appropriately.

***NEIGHBORHOOD ANALYSIS***

Neighborhood analysis is not performed due to the non-homogeneous nature of the property type. Industrial properties do not have the type of generic “sameness” that is appropriate for neighborhood models.

***MARKET ANALYSIS***

Market analysis is the basis for finalizing value estimates on industrial properties. Even though many industrial properties are unique in nature, the market for this property type is analyzed to see how the value of similar properties is affected by market forces. Industrial properties, such as machine shops, have many similar facilities that can be compared to the subject property in terms of type and size of equipment, type of property fabricated or serviced at the subject facility, and other factors. Those similarities help the appraiser estimate the value of the subject property. However, some facilities, such as specialty chemical plants, are so unique in nature that the appraiser must use the closest available plant in terms of output quantity, type of product manufactured, and other factors to estimate the value of the subject property.

Many industrial properties use the same type of building and, depending on the type of business, may use the same type of manufacturing or service equipment. However, the manner in which the entire business operation is put together makes that particular facility unique. Information from similar businesses are used to evaluate the real and personal property values at a particular business, but the individual characteristics of the business being reviewed determine the value estimation.

Many of the buildings encountered at industrial facilities are generic in construction, such as pre-engineered metal buildings. The cost per square foot to construct these type structures can be used to estimate values at facilities that have similarly constructed buildings. However, the building as is constructed will have differences that must be taken into account when estimating the final value of the property being reviewed.

A similar analysis is used for personal property. Many personal property items, such as furniture and fixtures, computers, and even machinery and equipment are generic in construction, but individual characteristics that affect value, such as usage, environment where used, and level of care will have an effect on the final estimation. When cost data for this property type is available and considered reliable, it is used for value estimation purposes at other plant facilities. However, on-site inspection and information provided by the property owner will affect the final value.

***MODEL CALIBRATION***

The real property valuation schedules are updated periodically through data supplied Marshall & Swift. The valuation schedule is updated annually using a calculated index factor compiled from data in Chemical Engineering Magazine, Marshall & Swift and other professional journals.

HCAD develops schedules based on indexed Marshall & Swift depreciation factors for use in the valuation of all business and industrial personal property. These schedules are updated annually by the appraisal staff. The contract appraisal firms use similar schedules and methodology based on their experience in valuing real and personal property.

***HOW ESTIMATES ARE REVIEWED***

***FIELD REVIEW***

The appraisal staffs periodically review their assigned real and personal property accounts where there is evidence of change, and when there is not, these accounts are revisited on a three year cycle. Certain properties are reviewed annually because past experience shows that changes are occurring continually in the real or personal property at that facility. Properties assigned to contract appraisal firms are reviewed annually because changes also occur regularly at these facilities.

The results of prior year hearings and the existence of building permits frequently trigger a field visit. Evidence if frequently presented during a protest hearing that supports a value adjustment. The issues presented in the hearing must be field checked subsequent to the hearing to determine if the influences will be on-going and warrant permanent value adjustment or are transitory and permanent adjustment is not warranted. This information is recorded so that appraiser will be better able to estimate the property value. Building permits must be field checked to see what affect these have on existing structures. Any new construction is noted and the information necessary to value the structure is recorded. Additionally, any structure demolition is noted so the improvement value can be adjusted accordingly. Part of the filed review includes noting any land characteristics that would affect the land value. The district appraisal staff values all land for the properties over which it has responsibility, including properties assigned to contract appraisal firms. The contract appraisal firms must advise the district of any characteristics that would affect the value of the land associated with that assigned facility. The land values used for industrial properties are coordinated with HCAD to maintain continuity of per acre or per square foot value in the same economic area of the county.

***RESULTS OF 2020 FIELD REVIEW***

Field review of real and personal property is generally conducted on a three year cycle. The accounts assigned to contract appraisal firms are field reviewed annually. The accounts inspected were those with building permits, tax abatements, and issues that were raised during 2019 hearings. Tax abatement related accounts have a yearly field visit requirement even if there is no new construction at the facility. Mineral and utility properties are not field reviewed because it is not practical or feasible to physically visit every electric substation or mineral lease, or follow every pipeline through the county. These properties are reviewed as stated in office review results below. Field review also includes the inspection of personal property, which occurs when visiting the real property accounts.

***OFFICE REVIEW***

All properties not subject to field review are reviewed in the office by appraisers assigned to specific real or personal properties. The office review relies on historical information in the real or personal property file as a basis for estimating the value to be placed on the property for the current year.

When valuing real property, the characteristics of the property being reviewed were the driving force in value estimation. Experience in valuing other real property, such as a similar building elsewhere, helps the appraiser decide the estimated value to be placed on the subject improvements.

When valuing personal property, the type of furniture, equipment, and computers will be used along with any cost data provided by the property owner to estimate the value. Experience in valuing similar property at other facilities helps the appraiser estimate the value of the subject facility. Individual characteristics of the property, such as usage and maintenance will have a bearing on the value calculated by use of district schedules.

***APPRAISAL PERFORMANCE TESTS USED AND PERFORMANCE MEASURES ATTAINED***

***SALES RATIO STUDIES***

Typically, there are not enough sales of industrial properties to show representativeness of that class of property in a ratio study. Ratio studies of industrial properties usually have to rely on independent appraisals as an indicator of market values.

***COMPARATIVE APPRAISAL ANALYSIS***

This type of analysis is usually not done on industrial properties due to the unique nature of the property, and also, because of time and budget constraints regarding available appraisal staff. A jurisdiction challenge filed with the Appraisal Review Board is generally the only reason for an analysis of this nature. If a jurisdiction challenge is received on a category of property, the appraisers assigned to those accounts will research the appraisal roll to see what other similar properties exist. The real property value can be compared on an average value per square foot of structure basis, but the differences from one facility to another must be carefully compared because it is unlikely that two different facilities are going to build like improvements and use them in similar ways. Similarly, the personal property values can be compared per category, such as furniture and fixtures, machinery and equipment, but the same comparison of the type of and use of the property must be examined to ensure property comparability.

**BUSINESS PERSONAL PROPERTY**

***SCOPE OF WORK***

The Personal Property appraisers are responsible for developing fair and uniform market values for business personal property located within the district.

***PROCEDURE FOR COLLECTING AND VALIDATING DATA***

A common set of data characteristics for each personal property account in Harrison County is collected in the field and data entered into the HCAD CAMA system. The property characteristic data drives the computer-assisted personal property appraisal (CAMA) system.

***SOURCES OF DATA***

***BUSINESS PERSONAL PROPERTY***

In addition to data collected and verified by the field appraisers, state sales tax listings and the assumed names database from the county clerk’s office are also researched to discover personal property. Tax assessors, city and local newspapers, business journals, and the public often provide the district information regarding new personal property and other relevant facts related to property valuation.

***VEHICLES AND LEASED AND MULTI-LOCATION ASSETS***

An outside vendor provides HCAD with a listing of business vehicles within Harrison County. The vendor develops this listing from the Texas Department of Transportation (DOT) Title and Registration Division records. HCAD also uses national and regional publications to research vehicle value benchmarks. Other sources of data include property owner renditions and field inspections. The primary source of leased and multi-location assets is property owner renditions of property. Data may also be provided in reports of field inspections.

***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.

***MODEL SPECIFICATION***

***SIC CODE ANALYSIS***

Four digit numeric codes, called Standard Industrial Classification (SIC) codes, were developed by the federal government to identify business entities having common attributes. These classifications are used by HCAD as a way to delineate personal property by business type.

***MODEL CALIBRATION***

***COST SCHEDULES***

The appraisers build cost schedules based on SIC codes. Cost data from property owner renditions, hearings, state schedules, and published cost guides are utilized to develop the cost schedules. 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 SIC codes are in a price per unit format, such as per room for hotels.

***STATISTICAL ANALYSIS***

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

***FINAL MODELS: DEPRECIATION SCHEDULE AND TRENDING FACTORS***

***BUSINESS PERSONAL PROPERTY***

The 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 existing valuation models. The trending factors used to develop RCN are based on the national average for equipment as published by Marshall & Swift and Chemical Engineering. The percent good depreciation factors are based on the depreciation schedules for furniture, fixtures, and equipment as published in the *Marshall Valuation Service* in October of each year. RCN is calculated as follows:

RCN=HISTORICAL COST x INDEX FACTOR

RCN and percent good depreciation factors are used to develop value estimates as follows:

MARKET VALUE ESTIMATE=RCN x PERCENT GOOD FACTOR

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

***VEHICLES AND LEASED AND MULTI-LOCATION ASSETS***

Value estimates for vehicles are provided by an outside vendor and are based on data furnished by National Market Reports. Vehicles are valued by an appraiser when the vendor does not provide a value estimate. The appraiser may use depreciated cost, NADA published book values, or Hunter McLean published book values to develop the estimate of current market value.

Leased and multi-location assets are valued using the index factor and percent good depreciation schedules mentioned above. If the asset to be valued in this category is a vehicle, then published book values or similar values provided by a vehicle data vendor are adjusted according to current economic criteria.

***HOW ESTIMATES ARE REVIEWED***

***BUSINESS PERSONAL PROPERTY***

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

***VEHICLES AND LEASED AND MULTI-LOCATION ASSETS***

A vehicle master file is received on a disk from an outside vendor. The vehicles are sorted by owner name and then prioritized by the number of vehicles owned. These vehicles are then matched to existing accounts and new accounts are created as needed. For those vehicles not matched to an existing account, a rendition form is sent to the owners of the unmatched vehicles. As property owners respond to the renditions, accounts are created as needed.

***FIELD REVIEW***

The appraisal staff reviews personal property accounts cyclically in an effort to review all accounts within a three year cycle. In addition to the annual field review, field checks are conducted on accounts identified as a result of discovery through hearings, business publications, and various correspondences.

***APPRAISAL PERFORMANCE TESTS USED AND PERFORMANCE MEASURES ATTAINED***

The Harrison Central Appraisal District (HCAD) Personal Property Ratio Study was conducted to determine the overall level of appraisal for this category of property in 2020. The ratio of a property is calculated in order to evaluate the relationship between the district’s appraisal and market value of a property as of January 1 assessment date. In a ratio study, the district’s appraised value is divided by an independent indicator of market value, which may be either a sale or an independent appraisal of the property.

Since sales of personal property are scarce and may not be representative of the universe of properties within the category, the district used independent appraisals generated by application of a nationally recognized depreciation schedule from Marshall & Swift. This methodology complies with guidelines set forth in the International Association of Assessing Officers *Standard on Ratio Studies.*

***TOTAL POPULATION***

The study reflects the results of accounts that rendered cost data. The HCAD 2020 depreciated value for accounts was divided by the independent appraisal to calculate the ratio. Ratios were arrayed and the median appraisal ratio was determined.

It is necessary to point out a ratio of 1.0 represents a perfect symmetry between the district’s appraised value and independent indicator of market value. The mode for the study is 1.00, which is the value that repeats most frequently and determines the perfect symmetry between these two variables.

***PERSONAL PROPERTY RATIO STUDY-GLOSSARY OF TERMS***

***DEFINITIONS***

Definitions are from the International Association of Assessing Officers *Property Appraisal and Assessment Administration.*

**Mean or average** is the result of adding all the value of a variable and dividing by the number of values. Also called arithmetic mean.

**Median** is the midpoint or middle value when a set of values is ranked in order of magnitude; if the number of values is even, then it is the midpoint or average of the two middle values.

**Mode** is the value most often assumed by a variable. By extension for grouped data, the class in which a plurality of the observations fall.

**Standard deviation** is the statistic calculated from a set of numbers by subtracting the mean from each value and squaring the remainders, adding together these squares, dividing by the size of the sample less one, and taking the square root results.

**Variance** is a measure of dispersion equal to the standard deviation squared.

**Outlier** is an observation that has an unusual value, that is, differs markedly from a measure of central tendency.

***2019 PROPERTY VALUE STUDY RESULTS BY***

***STATE COMPTROLLER***

The following chart contains the 2019 results (most recent) from the Texas Comptroller regarding appraisal levels by district in Harrison County. Any blanks in the “Median Level” column means the state did not test that particular category in Harrison County. An acceptable median level by the Comptroller’s office is 1.0 with a deviation of not less than .95 and not greater than 1.05.

**HARRISON COUNTY**

 **CATEGORY DESCRIPTION MEDIAN LEVEL**

 A Single –Family Residences 0.98

 B Multi-Family Residences

 C Vacant Lots

 E Real Prop/Non- Qualified 0.93

 F1 Commercial Real

 F2 Industrial Real

 G Minerals 1.00

 J Utilities 0.92

 L1 Commercial Personal

 L2 Industrial Personal

 M Other Personal

 O Residential Inventory

 S Special Inventory

 **OVERALL MEDIAN LEVEL 0.99**

**KARNACK ISD**

 **CATEGORY DESCRIPTION MEDIAN LEVEL**

 A Single –Family Residences 1.035

 B Multi-Family Residences

 C Vacant Lots

 D1 Rural Real 0.9984

 E Rural Real/Non- Qualified 0.7431

 F1 Commercial Real

 F2 Industrial Real

 G Minerals .9916

 J Utilities .9744

 L1 Commercial Personal

 L2 Industrial Personal

 M Other Personal

 O Residential Inventory

 S Special Inventory

 **OVERALL MEDIAN LEVEL 0.8512**

**ELYSIAN FIELDS ISD**

 **CATEGORY DESCRIPTION MEDIAN LEVEL**

 A Single –Family Residences .9623

 B Multi-Family Residences

 C Vacant Lots

 D1 Rural Real 1.0087

 E Rural Real/Non- Qualified 0.9500

 F1 Commercial Real

 F2 Industrial Real

 G Minerals 0.9982

 J Utilities 1.1927

 L1 Commercial Personal

 L2 Industrial Personal

 M Other Personal

 O Residential Inventory

 S Special Inventory

 **OVERALL MEDIAN LEVEL 1.0000**

**MARSHALL ISD**

 **CATEGORY DESCRIPTION MEDIAN LEVEL**

 A Single –Family Residences .9967

 B Multi-Family Residences

 C Vacant Lots

 D1 Rural Real 1.0346

 E Rural Real/Non- Qualified 0 .9101

 F1 Commercial Real 0 .9173

 F2 Industrial Real

 G Minerals 0.9965

 J Utilities 0.9695

 L1 Commercial Personal 0.9792

 L2 Industrial Personal

 M Other Personal

 O Residential Inventory

 S Special Inventory

 **OVERALL MEDIAN LEVEL .9706**

**WASKOM ISD**

 **CATEGORY DESCRIPTION MEDIAN LEVEL**

 A Single –Family Residences .9638

 B Multi-Family Residences

 C Vacant Lots

 D1 Rural Real 1.026

 E Rural Real/Non- Qualified .9340

 F1 Commercial Real .9648

 F2 Industrial Real

 G Minerals .9825

 J Utilities .9814

 L1 Commercial Personal

 L2 Industrial Personal

 M Other Personal

 O Residential Inventory

 S Special Inventory

 **OVERALL MEDIAN LEVEL .9850**

**HALLSVILLE ISD**

 **CATEGORY DESCRIPTION MEDIAN LEVEL**

 A Single –Family Residences 0.9673

 B Multi-Family Residences

 C Vacant Lots

 D1 Rural Real 1.0929

 E Rural Real/Non- Qualified 0.9115

 F1 Commercial Real 0.9944

 F2 Industrial Real

 G Minerals

 J Utilities

 L1 Commercial Personal 1.0226

 L2 Industrial Personal

 M Other Personal

 O Residential Inventory

 S Special Inventory

 **OVERALL MEDIAN LEVEL 0.9794**

**HARLETON ISD**

 **CATEGORY DESCRIPTION MEDIAN LEVEL**

 A Single –Family Residences .9705

 B Multi-Family Residences

 C Vacant Lots

 D1 Rural Real 1.0176

 E Rural Real/Non- Qualified 0.9282

 F1 Commercial Real

 F2 Industrial Real

 G Minerals

 J Utilities 0.9046

 L1 Commercial Personal

 L2 Industrial Personal

 M Other Personal

 O Residential Inventory

 S Special Inventory

 **OVERALL MEDIAN LEVEL 0.9351**

**HARRISON CENTRAL APPRAISAL DISTRICT**

**BUSINESS & INDUSTRIAL PROPERTY**

**VALUE CALCULATIONS GUIDELINES**

**TAX YEAR 2020**

 **Asset Category Schedule**

A. Inventory 100% Original Cost (unless Freeport eligible)

B. Supplies 100% Original Cost

C. Raw Materials 100% Original Cost (unless Freeport eligible)

D. Work in Process 100% Original Cost (unless Freeport eligible)

E. Furniture & Fixtures 8-Yr. Original Cost x Index Factor x % Good

F. Machinery & Equipment

 1. General Office Equipment 5-Yr. Original Cost x % Good

 2. Specific Equipment 5-Yr. Original Cost x % Good

  *(includes mobile radio*

 *equipment, telephone*

 *systems, cellular phones,*

 *& fax machines)*

 3. All other machinery Original Cost x Index Factor x % Good

 *(Based on type of machinery & equipment)*

G. Computer Equipment

 1. PC Computer Equip/Servers 3 Yr. Life Cost x % Good

  *(Includes input/output*

 *devices or peripherals.*

 *i.e. CPU, keyboard, mouse*

 *printers, servers)*

 2. Mainframes/High Speed

 Printers 5 Yr. Life Cost x % Good

H. Leasehold improvements 3-10 Yr. Life Original Cost x % Good

I. Vehicles 7 Yr. Life Original Cost x % Good

J. Miscellaneous Assets Original Cost x Index x % Good

 *(Based on type of machinery & equipment)*

The cost index is obtained by Marshall & Swift’s national average cost information for equipment as published in October yearly. The reported cost will be indexed using Marshall & Swift national average cost information for equipment as published in October 2019 to arrive at the replacement cost new then multiplied by the percent good factor (% Good).

Note: The value calculation guidelines normally apply to items appraised by the Personal Property department. Appraisers may apply an obsolescence factor to newer assets if the overall asset age mix is out of balance. Industrial properties may be subject to different maintenance regimens and may have longer useful lives. In any event, the schedules are guidelines and may be overridden based on the documentation presented in a hearing and the judgment of the appraiser.

**HARRISON CENTRAL APPRAISAL DISTRICT**

**PERSONAL PROPERTY LIFE TABLE**

**Property Type Life Index**

|  |  |  |
| --- | --- | --- |
| Furniture & Fixtures | 10 Year | Yes |
| Office Equipment | 5 Year | No |
| Computer Equipment | 3 Year | No |
| Printers | 3 Year | No |
| Main Frames | 5 Year | No |
| Vehicles | 7 Year | No |
| Trailers | 10 Year | No |
| Welded Steel Tanks | 20 Year | Yes |
| Pressurized or Bullet Tanks | 20-30 Year | Yes |
| Mobile Machinery | 10 year | Yes |
| Machinery & Equipment | 10-30 Year | Yes |
| Tractors & Construction Equipment | 5-10 Year | Yes |
| Security Equipment | 7 Year | No |

*Note: The appraiser can override this schedule as conditions warrant.*