ORANGE COUNTY APPRAISAL DISTRICT

2021-2022
Reappraisal Plan

As Adopted by the OCAD
Board of Directors

July 9, 2020

SCOPE OF RESPONSIBILITY

The Orange County Appraisal District (OCAD) is a political subdivision of the State of Texas created effective January 1, 1980 and is responsible for establishing the fair market value of all property within the territorial boundaries of the appraisal district each year. The district has prepared and published this reappraisal plan to provide the district's board of directors, the taxing units and citizens with a better understanding of the district's responsibilities and reappraisal activities.
Provisions of the Texas Property Tax Code govern the legal, statutory, and administrative requirements of the appraisal district. A five-member board of directors, elected by the taxing units within the boundaries of Orange 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.

OCAD is responsible for the discovery, listing and appraisal of approximately 74,053 accounts of which 53,693 are real property parcels; 13,505 are mineral accounts; and 6,855 are business and other personal property accounts with a total appraised value of $8,096,103,101 (as of certification 2019). The Appraisal District serves 22 taxing units consisting of 5 school districts, 8 cities, the county, and 8 special use districts, such as navigation, drainage, water supply, and emergency services. Orange County Appraisal District employs an outside appraisal firm, Pritchard & Abbott, Inc., to appraise natural resources, utilities, industrial and various other complex properties and are guided by the principles set forth in USPAP.

The Orange County Appraisal District's estimated values are necessary to allocate each year's tax burden for all taxing units within the county. The district also determines eligibility for various types of property tax exemptions such as those for homeowners, the elderly, disabled veterans, charitable or religious organizations and agricultural productivity valuations. Each taxing unit, such as the county, a city, school district, etc., sets its own tax rate to generate revenue to fund its annual maintenance and operations budget, which includes police and fire protection, public schools, road and street maintenance, courts, water and sewer systems and other public services, and its debt service.

Orange County Appraisal District collects and maintains relevant data and characteristics of each property along with any improvements as well as a comprehensive Geographic Information System (GIS). Data pertaining to each property is maintained using a Computer Assisted Mass Appraisal (CAMA) system which enables the district to utilize mass appraisal techniques in accordance with the International Association of Assessing Officers (IAAO) standards and produces an appraisal that complies with the Uniform Standards of Professional Appraisal Practice (USPAP), as required in Section 23.01(b) of the Property Tax Code.

The purpose of this reappraisal plan is to provide Orange County Appraisal District with a foundation to organize and proceed annually with the reappraisal process through the implementation of the plan. The Chief Appraiser is authorized by the board of directors to modify the reappraisal plan as necessary in order to meet USPAP requirements or if circumstances affecting the district operations are significantly changed.

ORANGE COUNTY TAXING ENTITIES

Jurisdiction	Parcel County	2019 Certified Value
Orange County	74,053	$8,096,103,101
Lateral Road		$8,096,103,101
Bridge City ISD		$1,377,347,904
Little Cypress-Mauriceville		$1,485,661,867
Orangefield ISD		$ 835,783,076
Vidor ISD		$1,701,451,867
West Orange-Cove		$2,695,858,597
City of Bridge City		$ 550,759,792
City of Orange		$1,507,588,397
City of Pinehurst		$ 135,567,004
City of Vidor		$ 555,876,414
City of Pine Forest		$ 24,750,903
City of Rose City		$ 55,776,047
City of West Orange		$ 177,376,757
City of Port Arthur		$ 176,443,965
Navigation and Port Dist.		$8,096,103,101
Drainage District		$8,096,103,101
Water Control & Imp Dist. #1		$ 612,223,541
Emergency Service Dist. 1		$1,736,834,056
Emergency Service Dist. 2		$1,564,377,183
Emergency Service Dist. 3		$ 362,522,492
Emergency Service Dist. 4		$ 814,848,926

LEGAL REQUIREMENTS

The Texas Constitution contains the laws that form the foundation for the Texas Property Tax Code. The Tax Code provides an annotated and cross-referenced version of the tax laws that govern property tax administration in Texas. For the most part, Chapter 23 of the tax code defines the scope of work required for local property tax appraisals. Appraisals are based on each property's worth or market value as of January 1 of each year. Under the tax code, "market value" is defined as the price at which a property would transfer for cash or its equivalent under prevailing market condition if:

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

TAX CODE REQUIREMENT

Section 6.05(i) of the Texas Property Tax Code requires each appraisal district to adopt a written biennial reappraisal plan every two years. Section 25.18 of the Tax Code requires the district to implement the plan.

THE WRITTEN PLAN

Section 6.05, Tax Code, is amended by adding Subsection (i) to read as follows:

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

PLAN FOR PERIODIC REAPPRAISAL

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

1) Each appraisal office shall implement the plan for periodic reappraisal of property approved by the board of directors under Section 6.08(i).

2) The plan shall provide for the following reappraisal activities for all real and personal property in the district at least once every three years:Identifying properties to be appraised through physical

inspection or by other reliable means of identification, including deeds or other legal documentation, aerial photographs, land-based photographs, surveys, maps, and property sketch;

b) Identifying and updating relevant characteristics of each property in

the appraisal records;

c) Defining market areas in the district;

d) Identifying property characteristics that affect property value in each market area including:

1. The location and market area of the property;
2. Physical attributes of property, such as size, age, and condition;
3. Legal and economic attributes; and
4. Easements, covenants, leases, reservations, contracts, declarations, special assessments, ordinances, or legal restrictions;

e) Developing an appraisal model that reflects the relationship among the property characteristics affecting value in each market area and determines the contribution of individual property characteristics;

f) Applying the conclusions reflected in the model to the characteristics of the properties being appraised; and

g) Reviewing the appraisal results to determine value.

REVALUATION DECISION (REAPPRAISAL CYCLE)

The Orange County Appraisal District reappraises all property in the district biannually. These properties include:

1. Residential Real Property (Land and Improvements)
2. Commercial Real Property (Land and Improvements)
3. Manufactured Homes
4. Business Personal Property
5. Industrial Real and Personal Property
6. Utilities
7. Natural Resources

The revaluation process includes the physical inspection of properties, when applicable, and the updating of all necessary information on the properties such as changes to condition, size, and amenities or out buildings. In addition, OCAD appraisers inspect all new construction each year. Tax years 2021 and 2022 are reappraisal years. The chief appraiser will provide a notice of appraisal for each property in compliance with Section 25.19 of the Property Tax Code. The activities involved in the appraisal analysis are described below.

REAPPRAISAL ACTIVITIES

ANALYSIS OF AVAILABLE RESOURCES

In each tax year, 2021 and 2022, the previous tax year's equalized values are analyzed with ratio studies to determine appraisal accuracy and appraisal uniformity overall and, by market area within state property reporting categories. Ratio studies are conducted in compliance with the current Standard on Ratio Studies from the International Association of Assessing Officers. Mean, median, and weighted mean ratios will be calculated for properties in each reporting category to measure the level of appraisal accuracy. The coefficient of dispersion (COD) will be calculated to measure appraisal uniformity by property reporting category. This analysis will be used to establish the level and accuracy of appraisal performance.

Ratio studies are performed upon completion of the appraisal cycle as often as necessary to determine how the market is trending and to assist in developing plans to adjust appraisal schedules county-wide or in particular, areas (neighborhoods) to accurately reflect the market.

PERSONNEL RESOURCES

Staffing and budget requirements for tax year 2021 are detailed in the 2022 appraisal district budget as adopted by the Board of Directors and attached to the written biennial plan by reference. This reappraisal plan is adjusted to reflect the available staffing in tax year 2021 and the anticipated staffing for tax year 2022. Staffing will impact accomplishment of real property re-inspection and personal property on-site review for each year.

The OCAD staff consists of the chief appraiser, deputy chief appraiser, appraisers, GIS, Information Systems, and Clerks. All personnel performing appraisal work must be registered with the Texas Department of Licensing and Regulation and are required to attend appraisal courses to achieve the status of Registered Professional Appraiser. Appraisers must complete all course work within 5 years of their registration date. After certification, appraisers must comply with continuing education requirements per the Texas Administrative Code, Rule 94.25. OCAD currently employs eight registered professional appraisers and two registered but not yet certified.

OCAD appraisers are actively involved in the discovery, listing, and appraisal of all types of property. Properties are grouped by location, type, use, quality, and a variety of other quantitative data elements. A common set of data characteristics on each specific type of property is observed, listed, and collected during field inspection. Each appraiser is trained in the use of the Orange County Appraisal District's appraisal manual, CAMA system, appraisal techniques, methodology, and philosophy in the use of this information.

Real property appraisal depreciation tables and cost new tables are tested against verified sales data to ensure they represent current market data. Personal property density schedules are tested and analyzed based on rendition and prior year hearing documentation.

COMPUTER RESOURCES

Orange County Appraisal District contracts with Tyler Technologies, Inc. for appraisal administration software. OCAD employs the use of a server driven computer network with personal computers as workstations to form the CAD computer system. The OCAD appraisal software is a CAMA system (computer assisted mass appraisal). This system contains cost and depreciation schedules that utilize common data elements to assist in creating base values. The district also provides each appraiser with a "tablet" computer for use in the field. Each tablet computer is equipped with "Mobile Office" software which allows the appraiser to inspect specific properties and easily make necessary changes to the drawings, photographs, and the appraisal data while the inspection is being performed.

The entire OCAD database is available to the public via the Internet at www.orangecad.net. This service provides instant access to individual property information including homestead, ownership, address, and all related appraisal data as of the last certified roll. This information includes square foot of building segment area, land size, age, class, construction type, and a variety of other useful information. Computer generated forms are reviewed for revisions based on year and reappraisal status. Links to tax information, the district's current budget, agricultural use guidelines, rendition guidelines, appeal information and videos, the district's GIS (mapping), and many other items are also available.

MAPPING RESOURCES

Orange County Appraisal District uses a Geographic Information System (GIS) for the purpose of providing an accurate mapping system. The GIS System consists of one server and four PC computers operating on the ESRI software on which 100% of the district properties are mapped. Recent aerial photography is integrated into the GIS system and is available for employees and taxpayers to use. The mapping department receives scanned copies of all deeds on a daily basis. This information is used to make ownership changes and property splits as they are received. Footprint drawings of each improvement have been drawn over the improvement photographs. An inspection of the current aerial photography with the drawing of the improvements overlaid allows for an easy inspection of all improvements to determine changes.

INFORMATION RESOURCES

OCAD appraisal staff and administration collect data on local and regional economic forces that may affect value. Locational forces are carefully observed as we find location to be the most significant factor in determining the market value of the property in our geographic area. General trends in employment, interest rates, availability of vacant land, and new construction trends are closely monitored.

THE DATABASE

The Orange County Appraisal District database was constructed from property data obtained originally from Orange County and the 5 school districts in 1981. Data received was on-site field-inspected and revised to create the foundation of our current database. Since the inception of the Appraisal District, this database has been continually updated to recognize the current status of the property records. A

variety of programs designed to discover changes that may occur to data elements are maintained. Property inspections occur periodically as well as resulting from information gathered during various forms of analysis. Building permits, field review, renditions, reports of value, local news publications, tax office, and the public are but a few of the sources of information considered by staff analysts during the discovery phase of the appraisal process. Information from building permits is compiled from local taxing units, sorted, and keypunched into our computer-assisted building permit system.

Data collection in the field has been made considerably more efficient using the "Mobile Office" software for use with the district's tablet computers. During the year, any permits, potential changes to improvements or other notification of a new construction/change is "flagged" in the CAMA system for field review. This information is then downloaded into the Mobile Office software. The flagged accounts show as color-coded tract on a map/aerial photograph indicating what needs to be inspected and giving the appraiser the ability to efficiently plan their inspection day. Each appraiser is assigned an area within the county and is responsible for the appraisal of all real property within that area.

PLANNING AND ORGANIZATION

A calendar of key events with critical completion dates is prepared for each major work department. This calendar identifies all key events for appraisal, clerical, customer service, mapping and information systems. A separate calendar is prepared for each reappraisal year (2021 and 2022). Production standards for field activities are calculated and incorporated in the planning and scheduling process. The scope of work, available time frame, staffing resources, and any budgetary constraints have been considered in the development of this reappraisal plan and will be submitted to the Board of Directors for approval. (See Addendum) If necessary, the Chief Appraiser may make minor adjustments to these deadlines if necessary.

Apart from the work plan, key appraisal activities which occur every year include:

1. Any account that has been flagged for re-inspection or partial complete status as of January 1 of the prior year;
2. Any account that had a significant building permit issued from a city or the county during the year with construction beginning prior to January 1;
3. Any account where data or inquiry has been provided to OCAD that indicates the property has had a conditional change that is not currently reflected on the record;
4. The delineated market areas (neighborhoods), using statistical analysis and mass appraisal market factors;
5. Any account or area deemed to be in need of reappraisal by management;
6. All business personal property accounts;
7. Any accounts in accordance with contracted appraisal services for minerals, industrial or utilities;
8. Any neighborhoods showing a significant variance in ratio or coefficient of dispersion as compared to other neighborhoods.

A calendar is prepared showing important deadlines for each reappraisal year (2021 and 2022). See Addendum.

MASS APPRAISAL SYSTEM

Computer Assisted Mass Appraisal (CAMA) system revisions and enhancements will be specified and scheduled with Information Systems. Legislative mandates will be addressed and implemented into system applications as warranted. All computer-generated forms and Information Systems procedures are reviewed and revised as required. Details of these procedures as they relate to the 2021 and 2022 tax years are as follows:

REAL PROPERTY VALUATION

Revisions to cost models, income models, and market models will be specified, updated and tested each tax year.

Cost schedules will be tested against market data to ensure that the appraisal district complies with Section 23.011 of the Property Tax Code. Replacement cost new tables and depreciation tables will be tested for accuracy and uniformity using ratio studies as well as by comparing with nationally recognized costing services such as *Marshall & Swift Services.*

Land schedules will be updated using current market data (sales) and then tested with ratio study tools. Value modifiers will be developed for property categories by market area and tested on a pilot basis with ratio study tools. Other factors affecting value such as zoning, restrictions, etc. will be identified and analyzed. Standardized land influence factors for adjusting for differences in physical characteristics (topography, frontage, etc.) will be developed from appropriate paired sales analysis derived from sales used to calibrate the land schedules.

Income, expense, and occupancy data is updated in the income models for each market area and capitalization rate studies are completed using current sales data. The resulting models are tested using ratio study tools.

PERSONAL PROPERTY VALUATION

Business personal property renditions are received from taxpayers between January 1 and May 1 of each year. Accounts will be reviewed as categories based on Standard Industrial Classification Codes. Variance among the categories will be analyzed. A review of the current commercial vehicles will be performed. This analysis will identify variances between currently assessed vehicle values and those commercially registered in the county.

Depreciation schedules will be compared to those released by the State Comptroller's office. Quality and density schedules, where utilized, will be updated as needed, using data received from renditions and hearing documentation. Valuation procedures will be reviewed modified as needed and tested.

DATA COLLECTION REQUIREMENTS

Field and office procedures will be reviewed and revised as required for data collection and verification of value-related and descriptive property characteristics for each property. Activities scheduled for each tax year include inspection of new construction, demolition, remodeling, re-inspection of problematic

market areas, and re-inspection of the universe of properties on an annual basis. The appraisal district will rely on the use of on-site inspection and orthographic/oblique imagery which is updated biannually.

NEW CONSTRUCTION / DEMOLITION

New construction field and office review and inspection procedures are identified and revised as required. Field production standards will be established and procedures for monitoring tested. Source of building permits is confirmed, and system input procedures will be identified. Process of verifying demolition of improvements is specified. The district has added the improvement footprints to the GIS system to aid the appraisers in the inspection and discovery process. This critical annual activity is projected and entered on the key events calendar for each tax year.

REMODELING

Market areas with extensive improvement remodeling will be identified, verified and field activities scheduled to update property characteristic data. Updates to valuation procedures are tested with ratio studies before finalized in the valuation modeling. This field activity, when entered in the key events calendar, must be monitored carefully.

RE-INSPECTION OF PROBLEMATIC MARKET AREAS

Real property market areas, stratified by property classification, will be tested for: low or high protest volumes; low or high sales ratios; or high coefficient of dispersion. Market areas that fail any or all of these tests are determined to be problematic. Field reviews are performed with special attention given to verify and/or correct property characteristic data. Additional sales data is to be researched and verified. In the absence of adequate market data, neighborhood delineation is verified, and neighborhood clusters are identified.

SALES DATA

Sales data is gathered by sending sales letters to the buyers and sellers of properties that the district knows changed ownership. Sales are confirmed from the direct parties involved whenever possible. Confirmation of sales from local real estate appraisers is also considered a reliable source.

Data listed on the property record is verified and updated as needed such as building classification, building size, additions, condition of structures and any change in characteristics that would affect the value of the property. Individual sales are analyzed to verify whether they meet the definition of market value per Texas Property Tax Code Section 1.04(7). Arm's-length (valid) transactions are preferred for mass appraisal purposes. In accordance with Texas Property Tax Code, Section 23.01(c)(1), distressed sales will be considered. In neighborhoods where the number of sales is scarce, sales with non-typical financing may be used if the terms of financing are known and proper adjustments can be made to the sale price.

Examples of reasons why sales may be deleted or not considered are:

1. Property acquired through foreclosures or auction, if the transaction does not meet the definition of market value in the Texas Property Tax Code;
2. Property sold between relatives;
3. The buyer or seller is under duress and may be compelled to sell or purchase;
4. Financing may be non-typical or below or above prevailing market rates;
5. Considerable improvements or remodeling have been done since the date of the sale and the appraiser is unable to make judgments on the property's condition at the time of the transaction;
6. Sales may be unusually high or low when compared with typical sales located in the market area due to seller relocation or divorce proceedings;
7. The property is purchased through an estate sale;
8. The sale involves intangibles, such as goodwill;
9. There are value-related problems associated with the sale, i.e. incorrect land size or square footage of living area;
10. Property use changes occurring after the sale.

Several sources are explored for economic and market data which can be used in market analyses. Some examples include: the Texas A&M Real Estate Center, Zillow.com, Realty.com, the Economic Development Council, the U.S. Bureau of Economic Analysis, along with OCAD's own collection techniques using surveys and deed information.

Sales information must be verified and property characteristic data contemporaneous with the date of sale captured. The district will obtain sales prices through deeds, sales letter responses, third party sources, such as real estate agents or fee appraisers. The sales ratio tools require that the property that sold must equal the property appraised in order that statistical analysis results will be valid.

PILOT STUDY

New and/or revised mass appraisal models are tested on randomly selected market areas. These modeling tests (sales ratio studies) are conducted each tax year to test the models. Actual test results are compared with anticipated results and those models not performing satisfactorily will be refined and retested. The procedures used for model specification and model calibration will be in compliance with *Uniform Standards of Professional Appraisal Practice,* STANDARD RULE 6 for the applicable year.

MARKET AREA DELINEATION

Market areas are defined by the physical, economic, governmental and social forces that influence property values. The effects of these forces were used to identify, classify, and stratify or delineate similarly situated properties into smaller, more comparable and manageable subsets for valuation purposes. Delineation can involve the physical drawing of neighborhood boundary lines on a map or it can also involve statistical separation or stratification based on attribute analysis. In performing this analysis for Orange County, it was determined that the primary factor affecting market conditions were school districts. Further investigation showed other physical, legal, economic, and social factors had little or no effect when compared within school districts. The market areas used by the appraisal district are the five school districts: Bridge City ISD, Orangefield ISD, Little Cypress-Mauriceville CISD, Vidor ISD and West Orange-Cove CISD.

REINSPECTION OF THE UNIVERSE OF PROPERTIES

As required by Section 23.18 of the Tax Code, the universe of properties should be re-inspected on a cycle of 3 years. The Orange County Appraisal District re-inspects all real property on a bi-annual basis. For years 2021 and 2022, re-inspection requirements will be identified by property type and classification and scheduled on the events calendar. Review of property for the 2021 and 2022 tax years will include the examination of aerial photographs, property sketches, and field review as appropriate.

QUALITY CONTROL

Mass appraisal is the valuation of many properties as of a given date, using standard procedures and statistical testing. The scale of mass appraisal requires that many people work on the process. It requires standardized procedures across many properties. Quality is therefore measured differently in mass appraisal compared to single property appraisal. In mass appraisal, statistical methods are used to measure quality. These methods are described in this reappraisal plan under the topics of Reappraisal Cycle, Reappraisal Activities, Performance Analysis and Production of Values.

During the field review process, the deputy chief appraiser and/or the appraisal supervisor will measure performance keyed to the concepts of Mass Appraisal quality assurance as required by USPAP, IAAO, and State law. The quality of data is important in establishing accurate values of property. The quality control process is performed by supervisory review of the appraisal work being done by appraisers. The appraisers will be responsible for quality assurance of data entry.

The chief appraiser and/or the appraisal supervisor will be responsible for confirmation of the accuracy of collected field data of the appraisers for residential, commercial, and business personal property. A routine audit of field work of completed areas will be accomplished by performing random audits of property throughout the appraisal cycle.

APPRAISAL NOTICES

In accordance with Section 25.18 of the Property Tax Code which states that all real and personal property in the appraisal district be reappraised at least once every three years, Section 25.19(a) requires that, "By April 1, or as soon thereafter as practicable", the chief appraiser, "shall deliver a clear and understandable written notice to a property owner of the appraised value of the property owner's property." Furthermore, the Tax Code outlines the circumstances in which a notice should be mailed which include:

1. The appraised value of the property is greater than it was in the preceding year;
2. The appraised value of the property is greater than the value rendered by the property owner;
3. The property was not on the appraisal roll in the preceding year.

Moreover, in accordance with Section 25.19(b)(1) – (b)(9), appraisal notices will be reviewed for legal sufficiency and correctness. Enclosures will be updated as needed to comply with legal requirements.

The Orange County Appraisal District board of directors may allow the chief appraiser to observe Property Tax Code Section 25.19(e), which states "The chief appraiser, with the approval of the appraisal district board of directors, may dispense with the notice required by subsection (a)(1) if the amount of increase in the appraised value is $1,000 or less."

HEARING PROCESS

Protest hearing scheduling for informal and formal Appraisal Review Board hearings will be reviewed and updated as required. Standards of documentation are reviewed and amended as required. The Orange County Appraisal District will conduct staff training beginning in early April of each year to ensure and understanding of procedures for informal and formal hearings. These hearings will typically begin in late April or early May. Any changes or enhancements affecting hearing scheduling procedures for Appraisal Review Board hearings will be reviewed and updated as necessary. The appraisal district hearing documentation is reviewed and updated to reflect the current valuation process. Production of documentation is tested and compliance with the Tax Code ensured.

LEGAL ATTRIBUTES AFFECTING VALUE

The District will maintain an active procedure to identify and describe elements of recorded conveyances that will affect the use or value of the property, such as easements, covenants, reservations, and declarations. The district will also monitor the enactment or changes of governmental restrictions affecting property value, such as zoning, health ordinances, special assessments, and other legal restrictions. Where leases and other possessory interests are of a nature and duration that they affect value, they will be considered in the individual valuation of the property to which they apply.

VALUATION BY TAX YEAR

Using market analysis of comparable sales and locally tested cost data, market area specific income and expense data, valuation models will be specified and calibrated in compliance with the supplemental standards from the International Association of Assessing Officers and the *Uniform Standards of Professional Appraisal Practice.* The calculated values will be tested for accuracy and uniformity using ratio studies. Performance standards are those as established by the IAAO *Standard* on Ratio Studies. 2021 and 2022 are reappraisal years and property values in all market areas will be updated.

RESIDENTIAL REAL PROPERTY

MARKET ANALYSIS

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

NEIGHBORHOOD 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. The most common boundary used to define location is the school district boundary. In all types of property, valuation analysis and neighborhood analysis are conducted on school districts. The IAAO defines a neighborhood as the environment of a subject property that has a direct and immediate effect on value. For our purposes, the neighborhood boundary is the environment of the subject property. The neighborhood concept is used in the grouping of all taxable property located in Orange County Appraisal District with the exception of some special use properties.

HIGHEST AND BEST USE ANALYSIS

In considering the fair market value of taxable property, OCAD employs the principle of 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. Highest and best use is the first step in the District appraisers' economic analysis. For the purpose of ad valorem property taxation in Texas, the specific time is January 1 of each calendar year. The highest and best use must be legal, physically possible, and financially feasible. OCAD appraisers generally consider that the current use of the property is most likely its highest and best use. In certain types of property, local zoning and deed restrictions often determine highest and best use. However, in areas of transition, it may be necessary for the analyst to more carefully consider the concept of highest and best use. The chief appraiser and the deputy chief appraiser generally discuss decisions regarding changes in highest and best use determination. Highest and best use may not be the present use of the property when the agents of

production are not in alignment (i.e. land, labor, capital, and management), then highest and best use of the property may not currently exist.

COST APPROACH

All residential parcels in the District will be valued based on cost schedules using a comparative unit method. The District's residential cost schedules were designed on a comparative unit method. Residential cost schedules will be designed and built using *Marshall & Swift Residential Cost Handbook* and are adjusted to fit Orange County local residential building and labor markets. Marshall and Swift is a nationally recognized costing service. When reliable data from the local market is available, it will be considered, particularly with regards to secondary structures. The results will be analyzed using several measures, including stratification by quality and review of estimated building costs, as well as land values to sales prices when appropriate. Neighborhood or market adjustment factors will be developed from appraisal statistics provided by ratio studies to ensure that appraisals reflect both the supply and demand side of the market. The cost schedules are reviewed regularly as a result of Section 23.011(4) requiring that the appraisal district cost schedules be within a range of 10% of generally accepted cost data. Cost data is adjusted each year in the software application.

SALES COMPARISON APPROACH

In the absence of a sale of the subject property, sales prices of comparable properties are usually considered the best evidence of market value. The sales comparison approach models the behavior of the market by comparing the properties being appraised with comparable properties that have recently sold or for which offers to purchase have been made. Sales prices will then be adjusted for differences from the subject property and a market value for the subject is determined from the adjusted sales of the comparable properties. A sales file for the storage of sales data compared with the appraisal at the time of sale is maintained. Residential improved and vacant sales are collected from a variety of sources including: District questionnaires sent to the buyer, field discovery, protest hearings, builders and appraisers. A system of type, source, validity and verification codes is established, defining salient facts related to a property's purchase or transfer. School district neighborhood sales reports are generated as an analysis tool for the appraiser in the development of value estimates.

INCOME APPROACH

The income approach is most suitable for types of properties frequently purchased and held for the purpose of producing income such as apartments, commercial buildings, office buildings, warehouses and hotels. It is not conducive to the valuation of single-family residential properties that are seldom rented or where market demand factors such as personal preferences or location unduly influence the market.

STATISTICAL ANALYSIS

The chief appraiser and appraisal supervisor will perform statistical analysis annually to evaluate whether values are equitable and consistent with the market. Ratio studies will be conducted by residential class and by neighborhood to measure appraisal accuracy. Appraisal statistics of central tendency and dispersion generated from sales ratios are calculated for each school district by residential

classification. These statistics provide the district a tool by which to determine both the level and uniformity of appraised value.

Neighborhoods are reviewed annually by way of the sales ratio analysis process. By comparing recent sales prices to values within each neighborhood, the appraiser is able to judge the present level and uniformity of appraised values. Based on this information, a decision can be made as to whether the neighborhood needs to be updated or if the level of market value is at an acceptable level.

MARKET ADJUSTMENT OR TRENDING FACTORS

Neighborhood, or market adjustment, factors will be developed from appraisal statistics provided from ratio studies and are used to ensure that estimated values are consistent with the market. The District's primary approach to the valuation of residential properties uses a hybrid cost/sales comparison approach. This type of approach accounts for neighborhood market influences not specified in the cost model.
The following equation denotes the hybrid model used:

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

Whereas, the market value equals the land value plus the depreciated replacement cost of buildings times the market adjustment factor. This adjustment factor is applied uniformly throughout the neighborhood to account for Locational variances between market areas or across a jurisdiction.

The market adjustment factor is calculated by using a cost ratio study that compares recent sales prices of properties with the properties' actual cost value. The calculated ratio derived from the sum of the sold properties' cost value divided by the sum of the sales prices indicates the neighborhood level of value based on the unadjusted cost value for the sold properties. This cost-to-sale ratio is compared to the appraisal-to-sale ratio to determine the market adjustment factor for each neighborhood. The sales used to determine the market adjustment factor will reflect the market influences and conditions only for the specified neighborhood, thus producing more representative and supportable values. The market adjustment factor calculated for each update neighborhood is applied uniformly to all properties within a neighborhood. Once the market-trend factors are applied, a second set of ratio studies is generated that compares recent sale prices with the proposed appraised values for these sold properties enabling the appraiser to judge appraisal levels in the updated neighborhood.

SPECIAL INVENTORY RESIDENTIAL PROPERTY

Section 23.12 of the Property Tax Code says: "the market value of an inventory is the price for which it would sell as a unit to a purchaser who would continue the business. An inventory shall include residential real property which has never been occupied as a residence and is held for sale in the ordinary course of a trade or business, provided that the residential real property remains unoccupied, is not leased or rented, and produces no income."

The methods used to appraise this property consist of the following steps:

a) Using a rendition required by the Chief Appraiser, the appraiser determines how many properties are being held in inventory by the owner.

b) A determination is made as to the age of the subdivision and the estimated number of years for sell out of the properties (typically 10 years). The remaining years to sell out the inventory is then calculated.

c) The number of properties in inventory is then divided by the years remaining in the estimated sell out period to calculate the average properties selling per year.

d) Using sales data as described in the Residential Real Property section above, the average sales price per property is developed.

e) Annual income is then calculated by dividing the average sale price by the average number of lots sold per year.

f) The present worth factor is calculated by dividing 1.0 by 1.0 plus the current capitalization rate.

g) The present worth is calculated for all properties. The total market value for all properties is also calculated. The total present worth is divided by the total market value for a modification factor to be used on each property in inventory.

The three approaches to value are considered, depending on the type property (vacant or improved), as described in the Residential Real Property section above.

MULTI-FAMILY RESIDENTIAL PROPERTY

See Commercial Real Property below

COMMERCIAL REAL PROPERTY

The Orange County Appraisal District employs all three approaches to value, when possible, in valuing income-producing property. The appraisal supervisor will be responsible for supervising the appraisal of commercial property types by the real property appraisers assigned to this task.

Data used by the District includes verified sales of vacant land and improved properties and the pertinent data obtained from each (sales price levels, capitalization rates, income multipliers, marketing period, etc.). Other data used by the appraiser includes actual income and expense data, actual contract rental data, leasing information and actual construction cost data. In addition to the actual data obtained from specific properties, market data publications will be also reviewed to provide additional support for market trends.

COST APPROACH

The primary approach used to initiate the valuation process will be the cost approach to value. Each commercial property is listed according to its quantitative data elements. The data elements are entered into the Orion software system in which *Marshall & Swift Commercial Cost Estimator* runs in tandem with Orion. Using this information, a replacement cost for each segment of the improvements is calculated and totaled. Depreciation is calculated and assigned during this process. After deducting

depreciation estimated from all causes from the replacement cost new, a value estimate for the improvements is calculated and added to the estimated value of the land for a total value estimate via the cost approach. It will be sometimes necessary to consider the unit-in-place, quantity survey, or historical cost method to derive accurate cost estimates.

SALES COMPARISON APPROACH (MARKET APPROACH)

Although all three 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 as a primary method for estimating land value, but also in comparing sales of similarly improved properties to each parcel on the appraisal roll. Pertinent data from actual sales of properties, both vacant and improved, will be obtained throughout the year in order to analyze relevant information, which is then 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 will also be used in ratio studies, which afford the analyst an excellent means of judging the present level and uniformity of appraised values.

Sales of commercial properties occur rarely in Orange County. Confirmation of these sales is extremely difficult. Due to this fact, the Sales Comparison Approach will typically be given less credence than the cost and income approaches.

INCOME APPROACH

The income approach to value will be applied to those real properties that are typically viewed by market participants as “income producing”, which are bought and sold based on the property’s ability to produce income, 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. 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. 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 then added to effective gross rent to arrive at an effective gross income or EGI.

Allowable expenses and expense ratio estimates will be 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 will be included in the expenses. A non-recoverable expense represents costs that the owner pays to lease rental space. Different expense ratios will be developed for different types of commercial property based on use.

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

Rates and multipliers will be 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 application of the various rates and multipliers must be based on a thorough analysis of the market.

Capitalization analysis will be used in the income approach models. This methodology involves the capitalization of net operating income as an indication of market value for a specific property. Capitalization rates will be derived from the market. Sales of improved properties from which actual income and expense data are obtained provide a very good indication of what a specific market participant is requiring from an investment at a specific point in time. Overall capitalization rates may also be derived from using other recognized methods (band of investment, built-up, etc.). The capitalization rates relate to satisfying the market return requirements of both debt and equity positions of a real estate investment. This information will be obtained from real estate and financial publications as well as from other sources such as real estate appraisers and lenders.

Rent loss concessions will be made on specific properties with known 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 will be calculated by multiplying the rental rate by the percent difference of the property's stabilized occupancy and its actual occupancy.

VACANT REAL PROPERTY

LAND ANALYSIS

Residential land values will be estimated based on market sales. Adjustments to land appraisals may be based on parcel size, shape, rights-of-way or easements, slope, drainage issues, and where necessary, economic obsolescence. Land values will be calculated by any of the various units in place, or when data is insufficient to accurately determine the appropriate unit or unit values, by site value. Abstraction and allocation methods are used, when necessary, to ensure that the land values created best reflect the contributory market value of the land to the overall property value.

Land analysis will be supervised by the appraisal supervisor with the assistance of each of the residential appraisers. A computerized land table file, contained within the district's GIS, stores the land information required to consistently value individual parcels within neighborhoods. This GIS driven land schedule shows values as color-coded by value allowing the appraiser to visually analyze uniformity within competing areas.

Using sales within the neighborhood, a base lot and a base unit rate is developed. 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. Abstraction and allocation methods are used, when necessary, to ensure that the land values created best reflect the contributory market value of the land to the overall property value.

The District uses market transactions to define factors that influence rural land value. Unlike fee appraisers, the District cannot compare each tract individually to each market transaction to make adjustments due to the volume of the properties to be appraised. The District appraisers must incorporate the factors indicated by market transactions into general standards or schedules of value. Such schedules are normally comprised of per acre, per front foot, per lot or per square foot prices that will be multiplied by the number of acres in an individual tract to develop an estimate of value. Schedules of this kind are divided into categories or classes as necessary to reasonably reflect market values when applied to individual tracts of land. Ratio studies are then run by neighborhood throughout the District to determine the level and accuracy of the schedules. The District's land schedules are contained as a layer within the GIS (mapping system).

SPECIAL VALUATION PROPERTIES

AGRICULTURAL LAND

Section 23.52 of the Property Tax Code requires that "the appraised value of qualified open-space land is determined on the basis of the category of the land, using accepted income capitalization methods applied to average net to land. The appraised value so determined may not exceed the market value as determined by other appraisal methods."

For these properties, two values are maintained by the District; market value and "ag" or special value based on the income attributable to the land. The market value is established as described in other sections of this report. To be eligible for this special valuation, an application must be timely filed providing the District with pertinent information about the agricultural history of the property. When a determination is made by the District agricultural appraiser that the property meets minimum requirements, approval for this special appraisal is granted.

The District annually calculates a price per acre schedule for the various types of agricultural products and uses of the property. These prices are derived using five-year averages of land rent information as well as income attributable to the land from products grown on the property. The net income to the land is then capitalized using a formula spelled out in the property tax code in Section 23.53.

TIMBER LAND

Section 23.73 of the Property Tax Code requires that "the appraised value of qualified timber land is determined on the basis of the category of the land, using accepted income capitalization methods applied to average net to land. The appraised value so determined may not exceed the market value of the land as determined by other appraisal methods."

The District annually calculates a price per acre schedule for the various types of timber products and uses (hardwood, pine, mixed timber, etc) of the property. The prices are derived using five-year averages of land rent information as well as income attributable to the land from products grown on the property. The net income to the land is then capitalized using a formula spelled out in the Property Tax Code in Section 23.74.

BUSINESS TANGIBLE PERSONAL PROPERTY

All income-producing business personal property located within the OCAD boundaries is subject to appraisal by the District. Business personal property types appraised by District personnel include such items as inventory, furniture and fixtures, leased assets, vehicles and multi-location assets. There are approximately 5,016 business personal property accounts in Orange County Appraisal District. The District employs 1 personal property appraiser.

OCAD uses the Standard Industrial Code to group like types of personal property. The codes are incorporated within the account numbers used on each account. Each year, schedules are reviewed for accuracy by comparing owner renditions considered to be accurate by the appraiser, against calculated values using district schedules. Adjustments are made as necessary. Section 22.01 of the Property Tax Code requires each owner of tangible personal property used for the production of income to render said property. This information is used in the discovery phase and the valuation phase of the appraisal.

The personal property appraiser will make an onsite inspection of appropriate businesses over a two-year cycle. A comparison of the listed personal property gathered from previous inspections as well as renditions is made and any changes noted. The information is entered into the personal property section of Orion for and an appraisal performed. Depreciation of the property is determined using the age/life method. Special equipment, airplanes, automobiles and trucks, etc. are valued using various trade publications. The rendered amount is then compared with the appraisal to determine similarity. If similar, the rendered amount is generally used. If not, the appraisal is used.

INDUSTRIAL VALUATION (REAL, PERSONAL, UTILITIES, PIPELINE & MINERALS)

Orange County Appraisal District has contracted with Pritchard and Abbott, Inc for the 2021 and 2022 tax years for the appraisal of Industrial Real, Industrial Personal, Utilities and Minerals located within the District. Appraisers and engineers with Pritchard and Abbott, Inc. make annual inspections on all industrial properties and utilities and use methods following USPAP procedures to appraise these properties. Natural resources (minerals) are valued using information provided by the Texas Railroad Commission as well as trade and other publications. The cost approach is most applicable in valuation of these properties. Industrial personal property is appraised using similar techniques to those in the Business Tangible Personal Property section.

FINAL PERFORMANCE ANALYSIS

INDEPENDENT PERFORMANCE TEST

In addition to sales ratio studies performed by the appraisal district, the State Comptroller's Property Tax Assistance Division conducts a biannual property value study (PVS) of each Texas school district and each appraisal district. As part of this study, the code requires the Comptroller to use sales and recognize auditing and sampling techniques to test the validity of the school district taxable values in each appraisal district and determine the level and uniformity of property tax appraisal in each appraisal district. Each school district is arrayed by value and stratified into quartiles with the lowest 5% of a school districts value omitted from the study. Moreover, real estate is separated into several categories to test each independently.

The Property Tax Study, ratio studies, and the prior year's mass appraisal report are all used in conjunction to determine proper direction for the future year's reappraisal efforts. Results from the upcoming 2020 Property Value Study will be reviewed and analyzed by the appraisal district. Geographic areas or property categories with unsatisfactory ratio results will be added to the work plan for the 2021 reappraisal cycle.

VALUE DEFENSE

Evidence to be used by Orange County Appraisal District to meet its burden of proof for market value and equity in both informal and formal appraisal review board hearings is specified and tested. The District makes every attempt to notify the taxpayer of any property value changes through required notices which are sent annually to all properties. Informal hearings are held with the District appraisers in an attempt to allow the taxpayer to present evidence that may not have been considered in the appraisal. The District also provides the ability for owners of real property to file informal appeals on-line. Formal protests are scheduled and if requested, District evidence is presented as required by the Property Tax Code before the hearing. Inspection and/or disclosure of evidence and related materials will comply with Section 41.461 of the Property Tax Code. Disclosure of such data will be compliant with statutory confidentiality requirements. At the formal hearing, District personnel, at the instruction of the Appraisal Review Board, present a defense of the appraisal using the evidence listed below.

Evidence provided (as deemed necessary) includes but is not limited to:

Sales of similar properties
Appraisal Manual
Photos of property and comparable
Aerial photography integrated with GIS (Pictometry)
Appraisal card
Testimony by appraiser
Ratio Studies by neighborhood
Income / Expense information
Income Approach calculations

THE MASS APPRAISAL REPORT

Each tax year, the tax code required Mass Appraisal Report is prepared and certified by the Chief Appraiser at the conclusion of the appraisal phase of the ad valorem tax calendar (on or about May 15th). The Mass Appraisal Report is completed in compliance with STANDARD RULE 6-8 of the *Uniform Standards of Professional Appraisal Practice*. The signed certification by the Chief Appraiser is compliant with STANDARD RULE 6-9 OF *USPAP*. This written reappraisal plan is attached to the Mass Appraisal Report by reference.

ADDENDUM

CALENDAR OF KEY EVENTS
2021-2022

REAL PROPERTY

	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.
Land Analysis	■	■	■	■	■	■	■					■
Sales Collection & Valuation	■	■	■	■	■	■	■	■	■	■	■	■
Income & Expense Collection & Validation	■	■	■	■	■	■	■	■	■	■	■	■
Re-inspection (Onsite and/or Pictometry)	■	■	■	■	■	■	■					■
New Construction / Discovery	■	■	■	■	■	■	■					■
Permits	■	■	■	■	■	■	■	■	■	■	■	■
Mobile Home Parks					■	■						
Model Calibration						■	■					
Final Value Review							■	■	■			
Jurisdiction Estimates								■				
Notices Mailed								■				
Current Year Hearings									■	■	■	
Prior Year Hearings	■	■	■	■	■	■	■	■	■	■	■	■
Rolls Certified											■	

INDUSTRIAL REAL & PERSONAL, UTILITES & MINERALS

	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.
Negociate Appraisal Contrator Contract								■	■	■		
Land Analysis	■	■	■	■	■	■	■					■
Re-inspection / Discovery				■	■	■	■					
Deliver Estimates of Value								■	■			
Industrial Values Delivered									■			
Mineral Lease Information Delivered									■			
Mineral Changes Made									■	■		
Industrial Notices Mailed (by Contractor)									■			
Mineral Notices Mailed (by Contractor)									■			
Current Year Hearings									■	■	■	
Prior Year Hearings	■	■	■	■	■	■	■	■	■	■	■	■
Rolls Certified											■	

LOCAL PERSONAL PROPERTY

	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.
Personal Property Inspections	■	■	■	■	■	■	■					■
Renditions Mailed					■							
Rendition Processing							■	■	■	■		
Finish Processing Renditions with Extentions									■	■		
Testing Personal Property Schedules								■	■			
VIT Monthly Reports	■	■	■	■	■	■	■	■	■	■	■	■
VIT Declarations					■	■						
Notices Mailed										■		
Current Year Hearings										■	■	