PROCEDURES FOR APPRAISING AND VALUING REAL ESTATE

RESIDENTIAL AND COMMERCIAL

Introduction

The Palo Pinto Appraisal District (PPAD) appraises all real property in the county on a three year cycle. Appraisers work together in teams to get their specified areas appraised in a quick an efficient manner. Per Section 23.01 of the Texas Property Tax Code unless otherwise directed, all property shall be appraised at its market value as of January 1st of each year. Appraisal is an estimate of value not an exact science.

<u>Discovery of New Improvements:</u> There are steps that need to be handled in the office prior to the valuation of the properties that are to be appraised. First is the discovery of new improvements or changes to existing improvements. The district has several tools to help locate and code the accounts as a recheck. Some examples of these tools are building permits, city demolitions, county septic tank inspections, 911 filings, inspections from Pictometry Change Finder, etc. When the district receives information from these sources the accounts should be coded R with the last two digits of the year (R19, etc) in the "MISCELLANEOUS" section of the "PROPERTY SUMMARY" page in the computer system. Next there should be notes added to the "NOTATIONS" page of the computer system as to why there is a need for the recheck.

Property inspections usually begin August 1 of each year to verify the structures on the property and to verify land classifications. The deadline for all real estate inspections is around mid-March.

<u>Building Size Verification:</u> Each appraiser shall verify the exterior dimensions of all structures on the property as well as the type of materials used for construction, condition, age and all other attributes associated with each structure. IAAO standards require PPAD to verify at least two sides of all structures at least once every three years.

Class of Structures: The appraiser must then determine a class for each structure. Classifications differ with quality of construction, size and architectural design. Classification is a judgment call that is determined by the appraiser by using their knowledge and expertise as an appraiser and by referring to the PPAD Appraisal Manual. Cost of the Class of structures is derived from Marshall & Swift Valuation Services, a nationally recognized valuation service. Residential, commercial and all other building classes value ranges are based on their replacement cost new. After improvement classification any amenities or attributes must be added to the improvement. Those attributes range from central heat and air conditioning to sprinkler systems. This determines the RCN (Replacement Cost New)

<u>Depreciation:</u> Once the RCN has been calculated, the appraiser must then determine the physical depreciation, functional depreciation and the economic obsolescence of each structure. PPAD has a residential, commercial and mobile home depreciation scheduled in their appraisal manual to use as a guideline. The depreciation shall be estimated using effective age not actual

age of the structures. Effective age is an estimation of the actual remaining life of the structure. A 100 year old home that has been remodeled and had good maintenance will not be depreciated like a 100 year old house due to the maintenance and remodel added life to the house. The effective age and depreciation is based on the judgment and knowledge of the appraiser. The appraiser should consider the following

a. General Appearance - desirability of property

b. Building Service - functionality of the property

c. Extent of Deterioration - considering structural defects, hazards and normal wear and tear of property

d. Degree of Usefulness - random occupants, occupied by a use other than intended, or originally intended

or originally intended

e. Occupancy - rate the property is occupied or unoccupied

f. Maintenance and Repairs - condition of property based on the level of maintenance or repairs applied to property

g. Replacements/Renovations - level of renovations or replacements made to property

h. Housekeeping - level of housekeeping implemented from none or

infrequently to routinely with the health and safety of the

building occupants foremost

<u>Commercial Properties:</u> Field work for commercial properties is the same as residential properties. However, the income approach has to be considered if there is adequate information about the subject's income or if there is enough market rents to consider.

Comparative Sales Valuation: Once all field inspections are complete the verification of all valuations is started. By this point all sales received to date should be entered into the CAMA system to determine which sales are arms-length sales and can be used in the valuation phase. Appraisers are responsible for setting values in there designated areas. Each team of appraisers run sales ratio reports, of verified arms-length sales, in their areas using sales data within twelve to twenty-four prior to the date of the current appraisal, which is January 1st of each year. The district uses the most current sales to value the properties each year. Each appraiser team compares the most current sales information to the most current appraisals to see if there should be neighborhood modifiers to get all similar properties to what current market conditions show. Once all modifiers are applied to the CAMA system the appraisers should then run a new sales ratio report to verify that all appraisals are at their current market value.

COMMERCIAL PROPERTIES

INCOME APPROACH

Commercial properties can be appraised by the combination of the cost and sales comparison approaches or using a combination of the cost and income approach. The basic model used to convert income to value is adjusted income multiplied by a capitalization rate equals the value. The steps below explain the steps to the income approach. Market expenses and market rents

should always be used to appraise properties by the income approach. Never use actual income or expenses when appraising these properties. Potential Gross Rent or (PGR) less the vacancy & collection loss (V&C) is the Effective Gross Rent (EGR). Add to the EGR any secondary income. This establishes the Effective Gross Income (EGI). The allowable operating expense must be determined and must be deducted from the EGI to get the net operating income (NOI). The appraiser must then capitalize the Net operating income by using the proper capitalization rate that is provided by the Senior Appraiser. (NOI/CAP=PV). PPAD uses the method direct capitalization with the property residual technique and an overall capitalization rate. The district also uses a yield capitalization method when it is applicable. Due to the difficulty in Palo Pinto County of obtaining information on cap rates, the district does obtain cap rate information from local banks in the county.

To try to collect data to be using in the income approach the district studies rental income from the local newspaper. PPAD also mails a request for income and expense information to know owners of income producing properties. However, there is little if any response to these requests. Therefore, the district has limited cooperating resources to use the income approach on a wide spread basis. When income information is provided to an appraiser a copy must be given to the Senior Appraiser for preservation of data. This information is compiled into a spreadsheet to combine with any other income or expense information that the district has received. If it is determined that the income approach is not the best method to be used on an income property, the property value must be determined by using the methods below.

RESIDENTIAL – RURAL – COMMERCIAL

LAND ANALYSIS

To start the appraisal process, the appraisal team must verify that the **land** is put into a correct land class for the area of the county or subdivision that they are working. The district has in place a set of land schedules based on sales of comparable properties that have sold within a twenty four month time frame prior to January 1 of the preceding year. By statute the district can use older sales if needed to have a reasonable sample of sales. The land schedules are based on valuing the land as if vacant. Appraisal teams have a complete land schedule in their PPAD Appraisal Manual. The appraisal team should always make sure that the land is valued equal and uniform to other similar properties in the area that they are working. Residential and Commercial land valuation analysis is conducted prior to neighborhood sales analysis. The value of the land component to the property will be estimated based on available market sales for comparable and competing land under similar usage. A comparison and analysis of comparable land sales will be conducted based on a comparison of land characteristics found to influence the market price of land located in the neighborhood. Specific land influences will be considered, where necessary, and depending on neighborhood and individual lot or tract characteristics, to adjust parcels outside the neighborhood norm for such factors as access, view, shape, size and topography. The appraisers use abstractions and allocation methods to assure that estimated land values will best reflect the contributory market value of the land to the overall property value. The land-toproperty value ratio can be used to determine market value and assure equity.

AREA ANALYSIS

The universe of properties appraised by PPAD falls within the physical boundaries of Palo Pinto County. Palo Pinto County is located west of Fort Worth on Interstate 20 in the North Central Prairies Region. Palo Pinto is adjoined by Parker & Hood Counties on the east, Jack & Young Counties to the north and Erath & Eastland Counties to the south and Stephens County to the west. Palo Pinto County covers 949 square miles.

One major city, Mineral Wells is located on the east border of Palo Pinto County, with Some of the city lying in Parker County. There are four smaller cities, Gordon, Graford, Mingus and Strawn. There are several communities that are not incorporated cities including but not limited to Santo and the county seat of Palo Pinto.

The Brazos River flows through the county from the North-western corner to the South-eastern county line. There are two major lakes in Palo Pinto County. The lakes are Palo Pinto Lake that covers 2,661 acres and Possum Kingdom Lake that covers 17,711 acres.

In the past Palo Pinto County was strictly a cattle area. Current conservation concerns included overgrazing, undesirable brush and weeds, and wind and water erosion, and difficulties in grass establishment. Much of Palo Pinto County has now changing to a recreational area for individuals from the more populated areas of the state. With the counties lakes, rivers, scenic drives, beautiful landscape of the land, and the abundant hunting in the area we have seen a change in Palo Pinto County in the past few years. Many farms and ranches are being split into smaller tracts.

The Palo Pinto Appraisal District currently values property for ad valorem tax purposes for a total of 21 separate taxing entities consisting of the county, cities, school districts, mud districts, hospital district and fire district.

The 2018 certified appraisal roll for Palo Pinto Appraisal District indicates a total of 44,157 parcels.

These parcels are comprised of:

Real Estate 31,203 parcels

Mineral and Industrial 11,673 parcels

Commercial Personal Property 1,281 parcels

This is a decrease from previous years due to the decline in the oil & gas industry.

VALUATION AND STATISTICAL ANALYSIS -OR- MODEL CALIBRATION

COST SCHEDULES

All residential parcels in the district are valued with a replacement cost estimated from identical cost schedules based on the improvement classification system using a comparative unit method. The district currently uses cost data from Marshall and Swift Valuation Service, a nationally recognized cost estimator service. These cost estimates are compared to actual costs of similar improvements obtained from local builders. Adjustments will be made as necessary to reflect local market costs. A review of the residential and commercial cost schedules are performed annually. As part of this review and evaluation process of the estimated replacement cost, newly constructed sold properties representing various levels of quality of construction in the district are considered. The property data characteristics of these properties will be verified and photographs will be taken of the samples. PPAD's replacement costs are compared against

Marshall & Swift's cost information and the indicated replacement cost is abstracted from the market sales of comparable structures. The results of this comparison will be analyzed using statistical measures, including stratification by class, quality and reviews of estimated building costs plus land to sales prices. As a result of this analysis, a locally adjusted multiplier or economic index factor is developed for use in the district's cost tables.

SALES INFORMATION

The sales comparison model is a Window based computer-generated adjustment grid with access to the PPAD sales file. These residential and commercial improved and vacant land sales are collected from a variety of sources, including district questionnaires sent to buyers and sellers, field discovery, protest hearings, commercial providers, builders and local real estate professional. A system of source, validity, type and verification codes have been established to define salient facts related to a property's purchase or transfer and to help determine relevant market sale prices. The effect of time and personal property as an influence on price will be considered as indicated. Neighborhood sales reports are generated as an analysis tool for the appraiser in the development and estimation of market price ranges and property component value estimates. Abstraction and allocation of property components based on sales of similar properties is an important analysis tool to interpret market sales under the cost and market approaches to value. These analysis tools will help determine and estimate the effects of change, with regard to price, as indicated by sale prices for similar property within the current market.

TIME ADJUSTMENTS

Time adjustments will be applied when appropriate. Sales of the same property will be considered and analyzed for any indication of changes in sales price attributed to time. Sales must be adjusted to reflect the appraisal date of the district. Otherwise the sales prices would reflect the market conditions as of the date they sold and not the current value of similar property. If a representative sample of current sales is available there is no need for time adjustments. Sometimes market conditions do not change and no time adjustment would be necessary. One method to minimize the use of time adjustments, would be to find current sales of similar properties in adjoining neighborhood. If this is possible time adjustments may not be needed. Also the appraiser should look for properties that have sold more than once in a period of three years or less. This will help the appraiser indicate an appropriate time adjustment. PPAD also uses information from Texas A&M University on their calculated time adjustments for Texas.

STATISTICAL ANALYSIS

Sales ratio studies are used to evaluate the District's mass appraisal performance. The appraisers perform statistical analysis annually to evaluate if the values are equitable and consistent with the market. Appraisal statistics of central tendency generated from sales ratios will be evaluated and analyzed for each neighborhood. The level of appraised value is determined by the analysis of the measures of central tendency for sales of individual properties within a neighborhood. The district reviews each neighborhood numerous times throughout the year through ratio studies. These studies not only provide a measure of performance, but are an excellent means of improving mass appraisal performance. PPAD uses ratio studies not only to aid in the reappraisal of properties, but also to test the State Comptroller's Property Tax Division Annual Property Value Study results.

The ratio study usually begins in February with all sales runs being compiled by school districts and or neighborhoods. The first phase involves ratio studies that compare recent sales prices to the appraised values of the sold properties. Outliers and questions that were not identified in the field are reviewed and analyzed. Field cards indicating results of inspections are

available for each individual sale to further aid the analysts in making decisions regarding outliers. Outliers are characterized as having low or high ratios. They can result from an erroneous or unrepresentative sale price, and error in the appraisal of mismatch between the property sold and the property appraised.

The remaining sales are then correlated to indicate comparable neighborhoods within each school district. The sales from each comparable neighborhood are grouped or stratified according to classification. The median ratio indicated by the sales is then compared to the desired ratio. The coefficient of dispersion is also studied to indicate how tight the ratios are in relation to the measures of central tendency. The median and coefficient of dispersion are good indicators of the types of changes to be made if any are necessary.

This ratio study affords the appraiser an excellent mean of judging the present level of appraised value and uniformity of the sales. The appraisers based on the sales ratio statistics and designated parameters for valuation update, will make a preliminary decision as to whether the value level in a neighborhood needs to be updated or if the level of market value in a neighborhood or school district is at an acceptable level.

The use of local modifiers is the predominant method of adjusting sales for location and time to indicate market values.

LOCATION OR MARKET MODIFIERS

Market or location modifiers are methods of adjusting property to equal the market without changing the schedules. If the level of appraisal for the neighborhood is outside the acceptable range, adjustments to the location or market modifier will be made. If the ratio of a neighborhood as a whole is less than 1, the location or market modifier needs to be adjusted up. If the ratio is greater than 1, the location modifier needs to be adjusted down.

To calculate the market or location modifier, divide the target ratio by the current ratio. This indicates the increase or decrease to be made to the neighborhood to obtain market value. Note that individual market or location adjustments are not permitted, market or location adjustments are applied in mass using summary statistics from a sample of properties. The district only uses the median out of the several Measures of Central Tendencies. The median is the middle ratio in an array of ratios in listed descending order. The median is used because it minimizes the effects of high and low ratios or outliers. To calculate the location or market adjustments using Measures of Central Tendency the district uses the desired ratio divided by the median ratio. The result will be the location or market modifier.

MARKET & COST RECONCILIATION

The analysis of school district or neighborhood market sales to achieve an acceptable sale ratio or level of appraisal is also the combination of the market and cost approaches to valuation. Market factors will be developed from appraisal statistics provided from market analyses and ratio studies and will be used to assure that estimated values are consistent with the market and are also used to reconcile cost indicators. PPAD primarily uses the sales approach while also using the cost approach as a basis. This type of approach accounts for neighborhood market influences not particularly specified in a

complete cost model. Below you will find an example of calculations to arrive at the market value.

RCN/SQ = Replacement Cost New per Square Foot (includes cost of AC)

SQFT = Square foot of living area

EXTRA = Improvement Amenities Contributory Value

%GD – Percent Good Remaining from New Condition

LV= Land Value
LOC=Neighborhood Market Adjustment or Modifier
MV = Market Value
(RCN/SQ x SQFT) + EXTRA x LOC x %GD + LV = MV

MEASURES OF CENTRAL TENDENCY

As the appraiser reviews a neighborhood the ratio study will be reviewed and evaluated on how current sales prices of properties compare to their current value on the districts CAMA system. Other sales appropriately adjusted for the effects of time and personal property may also be considered with a neighborhood. The measures of central tendency are reviewed with emphasis placed on the median to indicate the neighborhood level of appraisal based on sold properties. This ratio will be compared to an acceptable appraisal ratio indicating market value to determine appropriate adjustments for each neighborhood. If reappraisal of the neighborhood is indicated, the appraiser will analyze current available market sales, appropriately adjusted for time using a ratio study. These studies will develop the adjustments needed to bring the weighted mean with the acceptable range. Therefore, based on the analysis of recent sales located with a given neighborhood, estimated property values will reflect the market influences and conditions only for the specified neighborhood, thus producing more representative and supportable values. The estimated property values calculated for each neighborhood will be based on market indicated factors applied uniformly to all properties within a neighborhood. Finally, with all the market trend factors applied, a final ratio study will be generated comparing recent sales prices with the proposed appraised values for these sold properties. From this set of ratio studies, the appraiser will determine the appraisal level and uniformity in both updated and non-updated neighborhoods and will verify appraised values against overall trends as exhibited by the local market, and finally for the school district or neighborhood as a whole.

MEASURES OF UNIFORMITY

The most generally useful measure of uniformity or variability is the Coefficient of Dispersion (COD). The COD measures the average percentage deviation of the ratios from the median ratio and is calculated by first subtracting the median from each ratio, then calculate the sum of the absolute value of the calculated differences. Divide this figure by the number of ratios to obtain the average absolute deviation and divide by the median and multiply by 100. In general, more than half of the ratios fall within one COD of the median. Do not calculate the COD using the mean ratio.

CONCLUSION

The primary analysis tool used by the district to measure and improve performance is the use of ratio studies. 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 neighborhood to allow the appraiser to review general market trends within their area of responsibility, and provide an indication of market appreciation over a specified period of time. Once the proposed value estimates are finalized, the appraiser will review the sales ratios by neighborhood and present the appropriate valuation data to the chief appraiser for final review and approval. This review will include comparison of level of value between related neighborhoods within and across school district lines. The primary objective of this review will be to assure that the proposed values have met present appraisal guidelines. The ratio studies are designed to create the findings of the comptroller of the state of Texas property value study.