MASS APPRAISAL SUMMARY REPORT

PECOS COUNTY APPRAISAL DISTRICT

2017

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INTRODUCTION

The purpose of this summary report is to aid the taxpaying public in better understanding the methods and techniques utilized by the Pecos County Appraisal District (PCAD) in the valuation and revaluation of taxable property within Pecos County. This report attempts to comply with Standard 6 of the Uniform Standards of Professional Appraisal Practice (USPAP), effective January 1, 2017. Pecos CAD maintains detailed appraisal manuals for appraisal use.

Pecos CAD is a Central Appraisal District formed by the Texas Legislature in 1979 and is charged with the appraisal of all taxable property within the District's boundaries. Covering 4,765 square miles, Pecos CAD consists of 8 taxing entities named below:

Pecos County
City of Fort Stockton
Fort Stockton ISD
Buena Vista ISD
Iraan Sheffield ISD
Middle Pecos Groundwater Conservation District
Iraan-Sheffield Hospital
Midland College

Current state law, set out in Section 6.02 (a) of the Texas Property Tax Code, mandates that appraisal district boundaries are the same as the county's boundaries.

Assumptions and Limiting Conditions

Pecos CAD has taken reasonable steps to secure adequate funding, however fiscal restraints do impact the mass appraisal process. Limited resources and personnel are available to perform the appraisals; therefore, it is not possible to physically inspect every property included on the appraisal roll. When physical inspections were conducted on real property, they were generally performed with exterior review only. It is assumed that the interior conditions are consistent with the exterior condition. When physical inspections were made for the valuation of personal property, inspections were made of the entire facility if allowed by the owner or management of the business.

This mass appraisal has been made under the following additional assumptions and limiting conditions:

- It is assumed that the title to the properties is good and merchantable.
- No liability is assumed for matters of a legal nature.
- Assumptions made in the report are based on the best knowledge and judgment of the appraiser and are believed to be typical of the market.
- All properties are appraised as if free and clear of any or all liens or encumbrances, unless otherwise stated.
- Existence of hazardous materials or other adverse environmental conditions are not considered, unless otherwise indicated.
- Any drawings, photographs, plan, or plats are assumed to be correct and are included solely to assist in visualizing the property.
- It is assumed that there is full compliance with all applicable federal, state, and local regulations and laws, unless otherwise noted.
- No responsibility is assumed for hidden or unapparent conditions in the property that may affect its value.
- It is assumed that all required licenses, certificates of occupancy, consents or other administrative authority from local, state or federal governments can be obtained or renewed for any use on which the value estimate contained in this report is based.
- A specific survey and analysis of properties to determine compliance with the provisions of the Americans with Disabilities Act has not been performed and possible non-compliance has not been considered in valuing these properties.
- While it is believed all information included in the appraisal is correct and accurate; the appraiser does not guarantee such.

This report may not be used for any purpose or by any person other than the party to which it is addressed without the written permission of the Pecos County Appraisal District.

USPAP

The Chief Appraiser is the chief administrative and executive officer of the appraisal district. The Chief Appraiser employs and directs the district's staff, oversees all aspects of the appraisal district's operations and performs either directly or through the district staff a variety of operations.

The chief appraiser's appraisal responsibilities include:
    (1.) Discover, list and appraise all property within the CAD along with his appraisal staff
    (2.) Determine exemptions and special use requests
    (3.) Organize periodic reappraisals
    (4.) Notify taxpayers, taxing units and the public about matters that affect property values

Pecos County Appraisal District is a small office consisting of the Chief Appraiser, two Real Appraisers, one Business Personal Property Appraiser and two clerks.

Pecos CAD contracts with Thomas Y. Pickett, Inc., an appraisal firm, to appraise minerals, industrial plants, pipelines, industrial personal property and utilities within the boundaries of the appraisal district. The district uses computer software provided by Pritchard & Abbott, Inc. for the data processing of all appraisal records, records management system, and maintenance of the digitized mapping system.

As of March, 2017 the appraisal roll for Pecos County Appraisal District indicates a total of 86,694 parcels. The breakdown of these parcels is as follows:

(a.) Category A	(Residential) -		4,718
(b.) Category B	(Multi-Family Residential) -		71
(c.) Category C1	(Vacant Lots) -		2061
(d.) Category C2	Colonia Lots		198
(e.) Category D1	(Qualified Open Space Land		13,905
(f.) Category D2	(Improvements on D1)		357
(g.) Category E	Non Qualified Open Space Land & Improvements		6893
(h.) Category F	(Commercial/Industrial) -		661
(i.) Category G	(Minerals) -		45,751
(j.) Category H	(Vehicles Tangible PP)-		0
(k.) Category J	(Industrial/Utilities) -		1956
(l.) Category L	(Personal Property) -		1418
(m.) Category M	(Mobile Homes, Aircraft, Other) -		509
(n.) Category O	(Residential Inventory) -		71
(o.) Category S	(Special Inventory)-		5
(p.) Category X	(Exempt Parcels) -		8120

TOTAL PARCELS   86,694

VALUATION APPROACH

MARKET VALUE

Market value for purposes of this mass appraisal is defined by the Texas Property Tax Code, §1.04(7), which states:

> "Market value" means the price at which a property would transfer for cash or its equivalent under prevailing market conditions if:
>
> A. exposed for sale in the open market with a reasonable time for the seller to find a purchaser;
> B. 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
> C. 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.

In regards to inventory held as part of a business, §23.12(a) of the Texas Property Tax Code further provides, in part; "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."

The effective date of appraisals is January 1 with the exception of inventory, which may be appraised at its market value as of September 1. To receive the September 1 appraisal date, a taxpayer must file an application by July 31.

The purpose of and intended use of the appraisals performed by the Pecos County Appraisal District is to estimate market value for ad valorem tax purposes for the taxing entities located within the boundaries of Pecos County Appraisal District. It is the goal of the staff of the Pecos County Appraisal District to provide the best possible service to the tax paying public and the taxing entities. The Pecos County Appraisal District staff promotes and adheres to the professional standards and ethics as set forth by the Texas Department of Licensing and Regulation, Texas Association of Appraisal Districts, Texas Association of Assessing Officers, and the International Association of Assessing Officers (IAAO).

AREA ANALYSIS

Overview of Types of Properties Appraised

There are four major categories of property appraised by the Pecos County Appraisal District. These categories are:

    (1.) Real: Residential (both single family and multi-family)
           Commercial/Industrial
           Vacant Lots (both residential and commercial)
            Vacant rural land and improvements on rural land
    (2.) Personal: Income producing business personal property
             Industrial personal properties
    (3.) Utilities: Telephone companies
            Cable companies
            Electrical companies
            Fiber Optics
            Railroads
            Pipelines
            Misc. Other Utilities
    (4.) Minerals: Oil and Gas

The Property Tax Assistance Division of the State Comptroller's Office requires properties to be identified by type using a standard identification code. The codes currently used by the Pecos County Appraisal District are as follows:

Code	Description	Code	Description
A1	Real Residential Single-Family	I1	Banks
A2	Real Residential Mobile Homes	J1	Real & Tangible Personal UTIL Water Systems
A3	Real Residential Multiple Family	J2	Gas Companies
B1	Real Residential Multiple Family	J3	Electric Companies
B2	Real Residential Duplexes	J4	Telephone Companies
C1	Real Vacant Platted Lots/Tracts	J5	Railroads
C2	Business Vacant Lots/Tracts	J6	Pipelines
C3	Rural Vacant Lots/Tracts	J7	Other
D1	Real Acreage Ranch Land	J8	Other
D2	Timberland	K1	Tangible Personal Farms
D3	Farmland	K2	Tangible Personal Cattle
D4	Undeveloped	K3	Tangible FM/Ranch Vehicle Over 1 Ton
E1	Real FM/Ranch House & LTD Acres	L1	Tangible Personal Business

E2	Real FM/Ranch Mob Home & LTD Acres	L2	Business Equipment
E3	Real FM/Ranch Other Improvements	L3	Business Vehicles Over 1 Ton
F1	Real Commercial and Industrial	M1	Tangible Personal Other Watercraft
F2	Real Industrial	M2	Tangible Personal Other Private Aircraft
F3	Commercial Building ONLY	M3	Tangible Personal Other Mobile Homes
G1	Oil, Gas and Mineral Reserve	M4	Miscellaneous– other improvements other than Residential
H1	Tangible Personal Vehicles	M5	Miscellaneous– Water Well
H2	Vehicles Under 1 Ton Farm or Ranch	N1	Intangibles
H3	Vehicles Under 1 Ton Commercial	ZZ	Unidentified Codes

Highest and Best Use Analysis

The highest and best use of real estate is defined as the most reasonable and probable use of land that will generate the highest return to the property over a period of time. This use must be legal, physically possible, economically feasible and the most profitable of the potential uses. The chief appraiser's identification of a property's highest and best use is always a statement of opinion, never a statement of fact.

In order to complete the highest and best use analysis of a property, the chief appraiser must estimate the highest and best use as if the land were vacant. This estimate ignores the value of and the restrictions created by existing improvements. It is the highest value the land could have if it were available for any legal, physically possible and economically feasible kind of development.

In determining the highest and best use, preliminary judgments are made in the field by chief appraisers. The chief appraiser is normally aware of zoning regulations within physical boundaries of each city.

Pecos County Appraisal District property appraisal cards contain information regarding lot size and frontage that allow the chief appraiser to make judgments on the highest and best use of sites in the field. Economically feasible and most profitable uses are determined by observing surrounding property. However, changes in property use require a more detailed and technical highest and best use analysis. These studies are performed in the office.

Market Analysis

National, regional, and local trends affect the universe of properties appraised in Pecos County. An awareness of social, economic, governmental and environmental conditions is essential in understanding, analyzing, and identifying local trends that affect the real estate market.

Market analysis is performed throughout the year. Both general and specific data is collected and analyzed. An in-house ratio study is conducted at least once a year.

Examples of sources of general data include *"Trends"* issued by The Real Estate Center at Texas A&M University, *"The Appriser"* published by The Texas Association of Appraisal Districts, and the *"Texas Assessor's News"* published by the Texas Association of Assessing Officers. When possible, local sources such as lending institutions, local realtors, the Chamber of Commerce, and articles published in the local and area newspapers are used to obtain financing information, market trends and information, demographics, and labor statistics.

Sales information is received from various sources. Sales confirmation letters are mailed to each buyer and seller when a property changes hands. In addition, sales information is obtained from local realtors, fee appraisers, and lending institutions.

County deed records are regularly checked for new real estate transactions. Pecos CAD uses county deed records to generate sales confirmation letters for each buyer and seller to obtain detailed information on the sale. Because full sales disclosure is not mandatory in the State of Texas only a small percentage of letters are returned with useful information. This is a serious problem in that there is usually inadequate sales data to perform as thorough an analysis of sales data as USPAP would require. However, every effort is made to use what data is available. The Property Tax Assistance Division also sends out sales letters and that data is made available to the appraisal district at least once a year.

Pecos County Appraisal District currently does reappraisals on a three-year basis. The reappraisal includes the inspection of properties and the updating of all information on the properties. Sales and market analysis are performed each year on residential properties, as information is available. Each year new properties are inspected, measured and added to the roll. In addition, building permits issued by City of Fort Stockton are obtained and changes to property records are made accordingly. Individual properties are also reappraised with changes to the condition as the property warrants; for example, fire, remodeling, or an addition or

demolition of a portion of the improvement. Refer to the **_Peocs Appraisal District Re-Appraisal Plan for Years 2017 and 2018_** for further information on reappraisal requirements.

When performing field work, the chief appraiser carries property record cards that contain specific information regarding the property being appraised. These cards contain brief legal descriptions, ownership interests, property use codes, property addresses, land size, sketches of improvements as well as any available detailed information of the improvements. A copy of a property record card may be obtained at the appraisal office.

Field inspections require the chief appraiser to check all information on the property record cards and to update if necessary. If physical inspection of the property indicates changes to improvements, the chief appraiser notes these changes in the field. Examples of types of changes may be condition or effective age of the improvements as well as additions to the improvements. The classification of residential properties is also reviewed during the revaluation process. New improvements are also added at this time.

Data Collection and Validation

Pecos County Appraisal District cost and value schedules include land and residential improvements. Residential schedules are built and maintained using current market (sales) data. Commercial schedules are developed by using information from Marshall & Swift Valuation Services and local factor adjustments. Personal property schedules reflect information obtained from national valuation publications, such as Marshall and Swift, business personal property renditions and on-site inspections. Marshall & Swift Valuation Service is a nationally recognized source for residential, commercial and personal property cost schedules. Cost manuals are based on cost per square foot and also the unit in place method. The unit in place method involves estimating cost by using actual building components. Marshall and Swift provides the base price of buildings as per classification with modifications for equipment and additional items. The schedule is then modified for time and location. Business personal property renditions are confidential sources of information filed by business owners, however, data from renditions may be compared with data from cost manuals and used to test for accuracy.

Data on individual properties is also collected from the field, compiled and analyzed. Buildings and other improvements are inspected in the field, measured and classified. The chief appraiser estimates the age and determines the condition of the improvements. This data is used to compile depreciation (loss of value) tables, and any notes pertaining to the improvements are made at this time.

Currently, single family dwellings are classified for quality and type of construction, whether frame or brick veneer. The classifications range from a class 1 to a class 6+ on frame dwelling and class from a class 1 to a class 7+ on a brick veneer dwelling. Class 1 is the most basic of structures using the poorest quality materials and lowest workmanship while a class 6+ and 7+ structure is of the highest possible quality using only the best of materials and the highest and best quality workmanship available. For any dwelling that exceeds the general description of the top-most classification, a special class is assigned.

Age of building is used to estimate depreciation and based on effective age of the improvements. Effective age is the age the property appears to be due to maintenance and upkeep. Effective age for a house that is properly maintained may be its actual or chronological age. However, if a structure suffers from deferred maintenance due to neglect, its effective age may be older than the actual age. In contrast, if a house is an older structure and has been remodeled or updated, its effective age may be less than its actual age.

Depreciation is also estimated by condition of the improvements. Condition ranges from unsound to excellent. Appraisals are based on exterior observations, however, if the taxpayer requests, an interior inspection may be made.

Foundation failure may occur in varying degrees and may also result in loss of value. The chief appraiser makes allowances for foundation problems on a case by case basis determined by the cost to repair.

Additional depreciation may be estimated for a variety of reasons including functional obsolescence resulting from bad floor plans or out of date construction methods. Economic obsolescence results from a loss of value to a property due to adverse influences from outside the physical boundaries of the property.

Examples on economic obsolescence may be proximity to correctional facilities, location of residences outside city limits with no access to city amenities, residences located on farm and ranch land, etc.

Valuation Analysis

Pecos County Appraisal District valuation schedules are divided into three main classifications: residential, commercial, and personal property. These schedules are based on the most current market and cost data available. Miscellaneous special categories such as mobile homes, special inventory, and agricultural land are appraised using different techniques, which are addressed later in this report. Depreciation tables/schedules are also included within these schedules. These tables are calibrated from costs as well as sales data and updated as needed. These tables and schedules are included in Pecos CAD's appraisal manuals.

Residential Schedules

Residential valuation schedules are cost based tables modified by actual sales data from the county. That is, the cost reflects actual replacement cost new of the subject property. Market research indicates that the common unit of comparison for new residential construction as well as sales of existing housing is the price paid per square foot. The value of extra items is based on their contributory value to the property. This value may be estimated by the price per square foot or a value of the item as a whole. This data is extracted from the market by paired sales analysis and conversations with local chief appraisers and brokers.

The residential schedule is based on the size, age, and condition of structure, quality of construction, contributory value of extra items and land value. Each of these variables has a direct impact on the cost as well as the property. The following is an example of each of the variables and how they affect market value:

1. Quality of construction: Residential construction may vary greatly in quality of construction. The type of construction affects the quality and cost of material used, the quality of the workmanship as well as the attention paid to detail. The cost and value of residential property will vary greatly depending on the quality of the construction. Pecos County Appraisal District's residential schedules currently class houses based on quality of construction from 1 to 6+ and 7+.
2. Size of structure: The size of a structure also has a direct impact on its cost as well as value. The larger the structure, the less the cost per square foot. Pecos County Appraisal District's schedules are generally graduated in 100 square foot increments, depending on market conditions.
3. Condition of improvements: Pecos County Appraisal District captures the condition of real improvements via its classification codes 1 through 6+ and 7+, with 1 being poor and 6+ and 7+ representing excellent or superior condition. Properties that in the opinion of the chief appraiser are unlivable may be taken off the schedule and given a salvage value.
4. Age of structure: Age is the primary factor when determining residential depreciation. Effective age and chronological age may be the same or different depending on the condition of the structure.
5. Extra items: As stated above, extra items are valued according to their contributory value to the whole. Examples of extra items include storage buildings, swimming pools, fireplaces, additional baths, etc.
6. Land value: Pecos County Appraisal District values land based on market data. Other recognized methods of land valuation may be used when market data is limited. The two most common methods are the land residual method and the land ratio method. Land schedules are available at the appraisal district office.

COMMERCIAL AND MULTIFAMILY REAL PROPERTY

Cost Approach

The cost approach to value will be applied using the comparative unit, or square foot method of cost estimating. The following is the basic model that the district utilizes when employing the cost approach:

$$MV = RCNLD + LV$$

This methodology involves the use of national sources of cost data as well as actual cost information gathered from the local market whenever possible. Cost models utilized by the district are based on data obtained by the Marshall Valuation Service also known as *Marshall and Swift*. These costs include comparative base rates, per unit adjustments, and lump sum adjustments as appropriate and necessary to account for the specific factors affecting value. Time and location modifiers will be applied as necessary to adjust cost data to reflect conditions in a specific market as well as changes in costs over a period of time. A cost estimate will be generated by the appraisal staff based upon the cost schedules as they are applied to the specific characteristics of the subject property of the appraisal.

Depreciation schedules have been implemented for economic lives and condition that is typical of each major class of commercial property-by-property use. The schedules utilized by the district are developed using recognized sources and mirror *Marshall and Swift*. These schedules will be tested annually to ensure they will be reflective of current market conditions in Pecos County. The actual and effective ages of improvements are judged by the appraiser and noted in the improvement records contained within each property record. Effective age estimates will be based on the utility of the improvements relative to the improvement's total economic life, condition, and its competitive position in the marketplace. These adjustments are generally determined during field operations.

Certain adjustment factors such as external and or functional obsolescence will be applied to properties as applicable based upon market data. These adjustments will typically be applied to a specific property type or location and will be developed through ratio studies or other market analyses. Accuracy in the development of the cost schedules, condition ratings, and depreciation schedules usually minimize the necessity of this type of an adjustment factor. The sum total of depreciation, also expressed as the loss in value from all causes, is subtracted from the replacement cost new of the structure to arrive at a replacement cost new less depreciation (RCNLD).

The cost approach requires the district to value the land utilizing one of the four accepted methods of land valuation: the sales comparison approach, allocation by abstraction, allocation by ratio, or the capitalization of ground rent. Once the land is valued by the method deemed most appropriate in terms of the data available, the resulting land value is added to the RCNLD of the improvements to yield an estimate of market value by the cost approach. Any estimate of value completed by the cost approach will be made in accordance with Section 23.011 of the Texas Property Tax Code.

Sales Comparison Approach

Pertinent data from actual sales of properties will be obtained throughout the year and the appraisal staff will analyze the relevant information. This data will be utilized in all aspects of the appraisal process.

Sales of similarly improved properties will provide a basis for the test of depreciation schedules used 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 appraiser a means of judging the present level and uniformity of the appraised values. The ratio studies used are in compliance with the current IAAO *Standard on Ratio Studies*.

Based on the market data gathered and analyzed by the appraisal staff, the cost and income models will be calibrated annually. The calibration results will be added to the schedules and models in the CAMA system to apply to all commercial properties in the district as appropriate. Any estimate of value completed by the sales comparison approach will be made in accordance with Section 23.013 of the Texas Property Tax Code.

Income Approach

The income approach to value will be applied to those real properties that are typically viewed by market participants as income producing. Income producing properties are those that are bought and sold based on the property's ability to produce an income; therefore, the price paid for a property is directly related to the amount of income the property is capable of producing. The appraisal staff utilizes income and expense data furnished by property owners; data collected by staff and information from local market study publications. Income models by property use and neighborhood / market area are developed and deployed for use in valuation.

The following model is the basis for commercial property valuation by the income approach:

PGR
-V&C
EGR
+SI
EGI
-Allowable EXP
-Reserves for Replacement
NOI

Value = NOI/CAP Rate

This income model reflects the normalization of an income stream from Potential Gross Rent at 100% occupancy to an indication of Net Operating Income. The process involves estimating the rental producing capacity of the subject property under prudent management (PGR). Market derived vacancy and collections (V&C) losses are subtracted from the potential gross rent to arrive at effective gross rent (EGR). Any net income from secondary property uses (vending income or parking income, etc.) (SI) are added to the effective gross rent to yield an estimate of effective gross income (EGI).

Allowable expenses are the expenses that are recurring annual expenses necessary to operate the property sufficiently to achieve the projected level of effective gross income. These vary by property type and are researched by the commercial appraisal staff. Once identified or projected, the allowable expenses are subtracted from the effective gross income. Reserves for replacement are estimated by considering the amortized costs of replacing certain building components whose economic lives are shorter than total economic life of the improvement (carpets, roof cover, air conditioning, etc.). Generally, these are calculated by either dividing the replacement cost new of the item by its economic life, a flat reserve amount per unit justified by the market, or a percentage of EGI; whichever is deemed appropriate. Once all allowable expenses and reserves have been identified or calculated,

these amounts are subtracted from the effective gross income to yield an estimate of net operating income (NOI).

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

Direct Capitalization will be used in the income approach models. This methodology involves dividing the net operating income by the appropriate capitalization rate to arrive at an indication of market value for a specific property. Capitalization rates utilized will be derived from the market as to estimate what a market participant would require from an investment as of the date of appraisal. Additionally, overall capitalization rates may be derived from the summation method, band-of-investment, debt coverage ratio, or obtained from published sources for similar properties. The capitalization rates utilized will relate directly to satisfying the market return requirements of both the debt and equity positions of a real estate investment.

In valuing property by the income approach, the district will consider the income characteristics of all properties, as they are available. Adjustments will be made as necessary and appropriate and the models, schedules, and value indications developed will be made pursuant to section 23.012 of the Texas Property Tax Code.

Personal Property Schedules

The personal property schedules value business furniture, fixtures, and equipment as well as inventory that are taxable by law. Business vehicles located within the appraisal district boundaries are also appraised for ad valorem tax purposes.

Business personal property values are derived from several sources. Business owners are required by Texas Law to render their income producing personal property each year. Rendered values are used on business personal property if the value is reasonable for the type of business when compared to similar business renditions and personal property cost schedules. Should the rendered values not be accepted, personal property is appraised using current cost schedules. Value on all business personal property not rendered is established using cost schedules for the type of business being valued. Depreciation is determined by the age of the property and its expected life. Schedules are available in the appraisal district office.

Business vehicles are valued based on the NADA Used Car Guide trade-in value for the particular make, model, and age of the vehicle. The trade-in value may also be obtained from "Car-Point" or other web-sites available on the internet. When adverse factors such as high mileage are known, then the appropriate adjustments are made to the value. The Pecos County Appraisal District uses obtained from "Just Texas" for vehicles that registered as commercial vehicles.

METHODS FOR DEVELOPING LAND VALUES

Land values can be developed using any one of the following methods:

Sales Comparison
Allocation
Abstraction
Anticipated Use or Development
Capitalization of Ground Rent
Land Residual Capitalization

SALES COMPARISON

The sales comparison approach to value is used to develop commercial land values. Typically the District relies on one of the following methods: the comparative unit method or the base-lot method.

The Comparative Unit Method is used in areas where tracts vary in size but are fairly similar in other aspects. The following steps are used to arrive at a price per unit (usually expressed in square feet or acres).
- stratify by market area and then by zoning or use types
- determine typical value by calculating the median sales price per unit
- review results and determine reliability of data

If the analysis shows that there is insufficient sample size, then the District may resort to one or more of the following:
- combine sales from areas with similar strata
- include older sales which may need to be adjusted for time
- include residual land values (this is calculated by subtracting appraised building value from the sales price)

The steps to arrive at a price per unit are then repeated. After the values have been established for each stratum, they are refined to the individual parcel.

The Base-Lot Method is used when the parcels have variations such as size, access and topography. The following steps are used to arrive at standard value for parcels.
- determine the base or standard parcel for an area
- adjust the sales to the base parcel (adjust for the variations)
- calculate the median and mean value

If the analysis shows that there is insufficient data, then the District may need to include older sales.

ALLOCATION

The Allocation approach to value is based on the principle of balance. It states that land should have a relationship to the total property value. Sales of improved properties are studied to determine the typical ratio of land to total property values. This method is not employed to develop land values for commercial properties.

ABSTRACTION

This method extracts land values from sales of improved properties by subtracting the appraised values of the improvements from the sale price. This method is used by the District to develop land values in combination with the sales comparison approach to value. It should not be used until other methods have been considered.

ANTICIPATED USE

This is used primarily to value land that is in transition from agricultural to residential or commercial use. This requires subtracting development costs from the projected sales prices of developed lots to determine the land value. The District does not employ this method to calculate commercial land values.

CAPITALIZATION OF GROUND RENT

This method employs the income approach to value. The rental data of parking lots or ground leases are capitalized to arrive at a value. The comparisons are then made on a per square foot or per acre basis. This method of developing commercial land values is considered, but not always used. In many instances, there may be insufficient data to make any conclusive determination.

LAND RESIDUAL CAPITALIZATION

The Land Residual Capitalization is used only for income producing properties for which an improvement value can be developed and supported. It should only be used when the following is true:
- there are no vacant land sales
- the building value is known
- the building is new
- the property represents highest and best use

The following information is needed in order to use this method:
- NOI
- Building value
- Discount Rate
- Recapture Rate
- Effective Tax Rate

This method requires the NOI to be calculated before taxes. Then the NOI attributed to the improvement (building value x the total of discount, recapture & effective rate) is subtracted from the total NOI. The remaining income is then capitalized to arrive at the land value. This method may be considered to determine commercial land values. The District, however, does not generally use it.

LAND ADJUSTMENTS

Land adjustments are applied to properties when they do not conform to the standard (or typical lot) in a defined market area. These land adjustments are usually described by either their quality in comparison to the standard or by the degree of difference from the standard.

An adjustment may be applied by describing the difference of the subject property to the standard in terms of quality. How does the subject property compare to what is defined as typical for that market area? Is it superior or inferior? If the typical property is defined as Average, then an inferior lot could be defined as Fair.

The following range may be used to describe the property.

Quality	Code
Poor	P
Fair	F
Average	A
Good	G
Very Good	V
Excellent	E

An adjustment may also be applied using a percentage to represent the degree of the either positive or negative influence. The influence is first identified by using one of the following descriptions. Although this list does not include all of the influences to a property, it does include those most commonly used.

Accessibility
Corner
Drainage easement
Easement
Flood plain
Frontage
Shape

Topography

Once the type of land influence is identified, then the amount of necessary adjustment is applied using a percentage. If a property is superior to the typical commercial lot due to its corner location, then it may be given an upward adjustment of 110%.

ABBREVIATIONS

The following is a list of commonly used terms and their respective abbreviations.

Accessibility	= access
Acre	= ac
Adjustment	= adj
Commercial	= comm
Condition	= cond or cdn
Drainage easement	= e-drn
Easement	= esmnt
Economic	= eco
Estimate	= est
Flood plain	= flood
Frontage	= frtg
Functional	= func
Inventory	= inv
Market	= mkt
Parking	= prkg
Residential	= res
Square foot	= sq ft
Topography	= topo

Land schedules are determined by market activity (sales) and are updated at least once every three years, as required by PCAD's biennial reappraisal plan, or more often if dictated by the market. See the most recent reappraisal plan for additional information.

Statistical Analysis

Statistics are a way to analyze data and study characteristics of a collection of properties. In general, it is not feasible to study the entire population. Statistics are used to test representative samples of the population.

Pecos County Appraisal District's statistical analysis for real estate is based on measures of central tendency and measures of variability. The measure of central tendency determines the center of a distribution. The measures of central tendency utilized with the aid of computer based programs are the mean, median, mode, and the weighted mean.

Pecos CAD measures variability by calculating a coefficient of dispersion (COD). The COD is used to indicate the spread from the measure of central tendency. Statistical bias is measured by the price related differential (PRD). The PRD indicates how high price properties are appraised in relation to low price properties.

These statistics are included in the district's ratio studies and may be obtained from the appraisal office.

<center>**Individual Value Review Procedures**</center>

In order for comparable sales data to be considered reliable it must contain a sales date, sales price, financing information, tract size and details of the improvements. Sales data is gathered by sending sales letters to the buyers and sellers of properties when deeds are file with the county clerk. Commercial sales are confirmed from the direct parties involved whenever possible. Local realtors, fee appraisers and lending institutions are also considered reliable sources for sales confirmation.

Sales data is compiled and the improved properties are physically inspected and photographed. All data listed on the property record card is verified and updated as needed including building classification, building size, and additions or new out buildings, condition of structures and any type of change in data or characteristics that would affect the value of the property.

Individual sales are analyzed to meet the test of market value. Pecos CAD adheres to IAAO's *Standard on Sales Verification* and only considers arms-length transactions as indicators of current market values. Examples of sales typically not considered good indicators of market value are:
1. Properties acquired through foreclosures or auction.
2. Properties sold between relatives.
3. The buyer or the 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. Outliers. Sales may be unusually high or low when compared with typical sales in the same market.
6. Property purchased through an estate.
7. Sales involving intangibles or personal property that cannot be verified.

Due to the population size and nature of Pecos County, it is often difficult to obtain sufficient sales data to meet USPAP standards for analysis of sales and exception is taken to USPAP Standard 6 in this area.

<center>**Performance Tests**</center>

Sales ratio studies are used to evaluate the district's mass appraisal performance. These studies not only provide a measure of performance but also are an excellent means of improving mass appraisal performance. Pecos County Appraisal District uses ratio studies not only to aid in the revaluation of properties, but also to test the Comptroller's Property Tax Assistance Division property value study results.

Sales ratio studies are usually performed in the spring of the year to test cost schedules. They may also be performed at any other time deemed appropriate by the chief appraiser. Prior to running the ratio reports, individual properties which have sold are reviewed for appraisal accuracy. Property record cards indicating the results of the field inspections are used to further aid in the analysis and decision making.

Ratio studies are generally calculated countywide and by school district for each category of property having enough sales data. Residential sales are also analyzed by construction type and class. Pecos CAD's goal is to achieve appraisal accuracy between .95 and 1.05 percent of market value and adjusts it cost and value schedules accordingly. The coefficient of dispersion is also studied to indicate how tight the ratios are in relation to measures of central tendency. The median and coefficient of dispersion are good indicators of the types of changes, if any, that need to be made. If properties that fall outside of the common parameters (referred to as outliers) are held out or not included in the study, these properties shall be identified and explanations given for their exclusion from the ratio study.

QUALITY CONTROL

It is a requirement of the appraisal district to have accurate records of all properties within its boundaries. To this end, Pecos CAD adheres to IAAO's *Standard on Mass Appraisal of Real Property*, Sections 3.3.2.4 *Data Accuracy Standards* and 3.3.2.5 *Data Collection Quality Control*. In order for the district to do this it must employ a process

where quality of work and services can be identified and evaluated. The results must show certain minimum levels of quality are being attained, identify those areas that do not meet the district's specified standards and lead to the correction of any issues identified.

Quality control as it relates to appraisers should be utilized as a learning tool by providing the opportunity for constructive feedback over the course of their development. An appraiser's work should be monitored for understanding of the process, uniformity of procedures followed, and accuracy of work turned in. Quality control will help identify appraisers having difficulty with appraisal concepts, technical aspects of data collection, or mass appraisal techniques which may lead to retraining. End results of quality control should promote appraiser development and produce a more accurate final product.

Appraisal supervisors will provide frontline quality control and will be held responsible for the quality of work done by appraisers under their direct supervision. Quality control tasks should include going to the field with appraisers to ensure correct procedures are being followed and to witness interaction with property owners, random field checks of work turned in, and review of field data entered into the CAMA system.

PERFORMANCE STANDARDS

Data Accuracy Standards

The District expects all appraisers to contribute to the accuracy of property appraisals. Accuracy standards for data collection include:

Measurements for living area and wall heights: accurate within one foot (rounded to the nearest foot) or within 5% of actual area. If areas, dimensions or volumes must be estimated, the property record card must note the measurements are estimates.

Property characteristics must be 95% accurate. In other words, the coding for attributes or characteristics such as bathrooms, roof type, fireplaces, land attributes and location must be 95% correct.

Subjective characteristics such as quality grade, physical condition and architectural style must be coded correctly 90% of the time.

Data Collection Quality Control

Immediately after data has been collected and entered into the CAMA system, supervisors and appraisers begin reviewing the data for accuracy and clerical errors. Every appraisal card submitted for data entry will be audited daily comparing the original appraisal card showing field notes and changes to the newly updated and recalculated appraisal card. Coding and clerical errors are noted by supervisors and appraisers and resubmitted for corrections.

Certification Statement

I certify that, to the best of my knowledge and belief:

- The statements of fact contained in this report are true and correct.
- The reported analysis, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are my personal, unbiased professional analyses, opinions, and conclusions.
- I have no present or prospective interest in the properties that are the subject of this report, except for those properties that are personally owned, and I have no personal interest with respect to the parties involved.
- I have no bias with respect to any property that is the subject of this report or to the parties involved with this assignment.
- My compensation is not contingent upon the reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value estimate, the attainment of a stipulated result, or the occurrence of a subsequent event.
- My analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Uniform Standards of Professional Appraisal Practice.
- I may not have made a personal inspection of each and every property subject of this report.

Sam Calderon III., Chief Appraiser
Pecos County Appraisal District