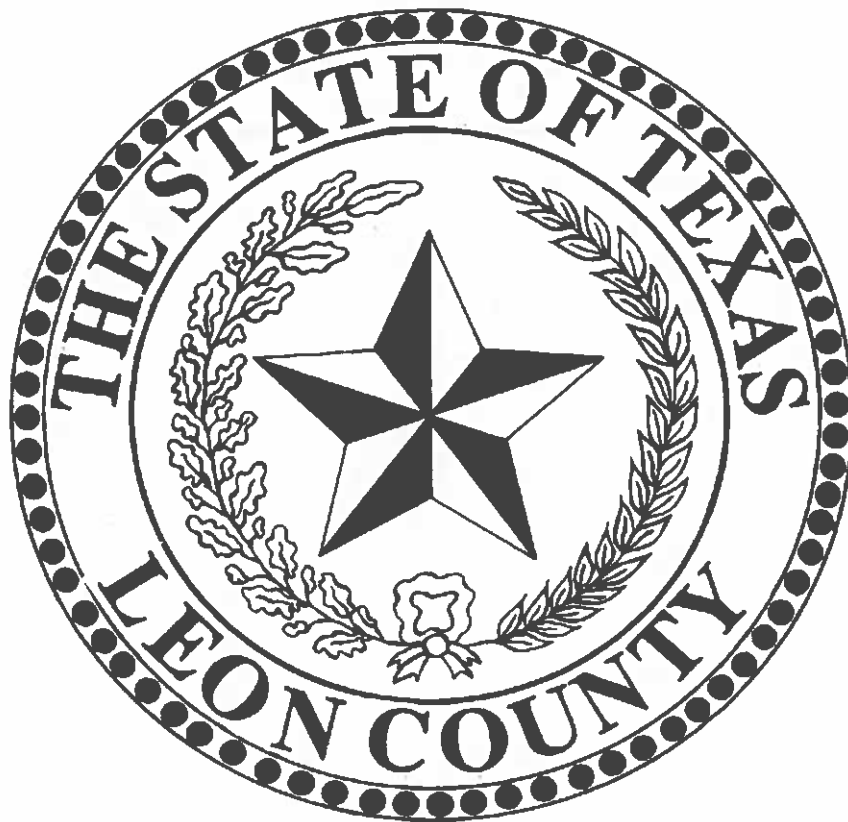


**LEON COUNTY APPRAISAL DISTRICT
MASS APPRAISAL REPORT**

2021



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GENERAL OVERVIEW:

THE MASS APPRAISAL REPORT

The appraisal district works off of a time schedule of events that must take place each tax year in order to ensure that property values get certified to the taxing entities by July 25th. The date of certification is the conclusion of the year's work that includes the discovery process, the revaluation process, the notice process and the appeal process. The certification date is the date as generally required by law that all protests have been resolved and the values can then be certified to the taxing entities. The mass appraisal report is completed in compliance with USPAP Rule 6-8. The signed certification by the chief appraiser is compliant with USPAP Standard Rule 6-9.

The Texas Property Tax Code governs the legal, statutory, and administrative requirements of the appraisal district. It is governed by the board of directors elected by the voting taxing units within its boundaries. The boundary of the Leon CAD is set forth by the physical lines of Leon County. It is recognized that the school districts of Leon, Buffalo, Normangee and Oakwood all extend across the county line into adjoining counties while Centerville is the lone district situated entirely in Leon County. Those areas that overlap are appraised by the county appraisal districts in which they are located (Freestone, Madison and Robertson).

Appraisals established by LCAD allocate the year's tax burden on the basis of each taxable property's January 1st market value as defined in the Texas Property Tax Code, Section 1.04(7).

"Market Value" means the price at which a property would transfer for cash or its equivalent under prevailing market conditions if:
exposed for sale in the open market with a reasonable time for the seller to find a purchaser; both the seller and the purchaser know of all the uses and purposes to which the property is adapted and for which it is capable of being used and of the enforceable restrictions on its use; and
Both the seller and purchaser seek to maximize their gains and neither is in a position to take advantage of the exigencies of the other.

The Leon CAD Chief Appraiser and staff conduct the business of the Leon CAD in a manner as prescribed by TDLR (Texas Department of License and Regulations), Texas Property Tax Code and the Texas Comptroller of Public Accounts. This is done in order to assure that the taxpayers of Leon County are afforded the best possible, most ethical, treatment available.

The 16 taxing entities, as identified in the table below, are the intended users of the appraised values as determined by the Leon Central Appraisal District. The certified values are delivered to each taxing entity in written, or electronic, format prior to July 25 of that year, as required by the Texas Property Tax Code. The entities utilize the appraisals conducted by the LCAD for ad valorem tax purposes with the effective date of those appraisals being January 1st 2021.

LEON COUNTY	BUFFALO ISD
CENTERVILLE ISD	LEON ISD
NORMANGEE ISD	OAKWOOD ISD
CITY OF BUFFALO	CITY OF CENTERVILLE
CITY OF OAKWOOD	CITY OF JEWETT
CITY OF NORMANGEE	CITY OF MARQUEZ
SOUTHEAST ESD #1	SOUTHWEST ESD #2
NORTHWEST ESD #3	NORTHEAST ESD #4

Reappraisal Plan

As set forth by the Texas Property Tax Code, the Leon County Appraisal District Board of Directors is responsible for approving a reappraisal plan that is prepared and presented by the Chief Appraiser for the next two years. This plan is prepared and approved during even number years and it is the responsibility of the Chief Appraiser to make sure that all of the items identified in the reappraisal plan are acted upon as per the Texas Property Tax Code.

Included as Addendum A is a copy of the most current reappraisal plan (2021 – 2022) for the Leon CAD. This plan calls for a reappraisal of all property types in the district, with physical inspections of real and personal properties being made at least once every three years. Cost schedules are tested against sold properties and adjustments are made as needed in order to keep them reflective of market values. The Chief Appraiser views this as an annual reappraisal of the district's parcels. The district is divided into three major areas for the purpose of the inspection of properties. The three areas are cities, rural subdivisions and rural properties. Oil and gas properties, as well as pipelines, heavy industrial and other properties requiring specific expertise are appraised annually by Pritchard & Abbott, Inc.

Reappraisal Activities

1. Performance Analysis —The performance of the appraisal district is determined by the Property Tax Division of the Texas Comptroller of Public Accounts via the annual property value study. In the study, the previous year’s values are analyzed against sales of properties and appraisals performed by State Field Appraisers in order to determine a ratio. The ratio study received in 2021 (utilizing data from 2020) indicated an overall ratio of approximately 1.02% for the entire district. As a result, the CAD is analyzing sales of different types of property preparing to run internal ratio studies to identify those areas that are lacking or may need adjustments. This includes the primary steps involved in the reappraisal process that includes the gathering of sales information, testing of schedules, field review of property, administration of exemptions and special valuations, notification to the taxpayer, the appraisal review process and certification of the appraisal roll to the taxing entities.
2. Analysis of Available Resources - Staffing and budget requirements for tax year 2021 are detailed in the 2021 budget, as adopted by the board of directors. Section 6.06 of the Property Tax Code sets forth the guidelines and requirements by which the budget is prepared and adopted. The CAD complied with all steps in the 2021 budget process. For all appraisal purposes, the CAD utilized its current staff for not only completing all appraisal assignments, but also in the everyday operations of the appraisal district.

Jeff Beshears – RPA, Chief Appraiser and CEO of the Leon CAD
Richard Williams – RPA, Deputy Chief Appraiser
David Faske – Class III Business Personal Property Appraiser and Field Appraiser
Marcus Williams – Class III Field Appraiser
Wesley Roe – Class I Field Appraiser
Leigh Ann Ross – Class II Field Appraiser
VACANT – Class I Field Appraiser
Jazmine Diaz – Administrative Assistant
Debbie Muschler – Clerk
Karen Johnson - Clerk

Pritchard and Abbott, Inc., is under contract with the Leon Central Appraisal District to provide professionally prepared appraisals for the CAD on all mineral and industrial properties that are not handled by the CAD on a local level. All appraisers with P&A are licensed appraisers by TDLR and are qualified to be doing appraisal work for Leon CAD. Attached as Addendum D is a copy of the 2021 Mass Appraisal Report on those properties appraised by Pritchard & Abbott, Inc.

3. Planning and Organization — a calendar of key events with critical completion dates will be prepared for each major work area. This calendar identifies key events for appraisal,

mapping and records, administrative, inquiry, and information systems. Production goals for field activities will be established and incorporated in the planning and scheduling process.

Listed below is a brief calendar that outlines the accomplishments of the appraisal district staff with regard to the responsibilities necessary to complete the reappraisal plan.

The staff of the Leon Central Appraisal District work diligently to conform to all deadlines imposed by the Texas Property Tax Code and any deadlines set by the Chief Appraiser. As a guideline, the Leon CAD operates with the following deadlines and schedules; however, some deviations have occurred.

- | | |
|--|--|
| January thru April: | Complete field work and mail all applications; |
| February: | Run notice in paper regarding exemptions and other required publications; |
| March/April | Update schedules and land values, recalculate system and adjust schedules; |
| April/May | Mail notices on exemption and applications not received back by the appraisal district; |
| April 30 th – May 15 th Mail notices of appraised values for current year; | |
| April 30 th | Estimates of value to taxing entities; |
| Before July 20 th | Conclude ARB hearings and approve Appraisal Records; |
| July 25 th | Deadline to certify rolls |
| July – January | Pick up new improvements for next year, check market areas, and work on specific projects. |

4. Mass Appraisal System — Pritchard & Abbott, Inc. provides the district with software and hardware necessary to generate mass appraisals. This type of system is often referred to as a CAMA (computer assisted mass appraisal) appraisal system. Each year the system is revised

and updated with new equipment and software. For 2021, the software was updated to the Paragon System. This is newest and latest version of the Pritchard and Abbott, Inc., CAMA system.

5. Identifying and updating relevant characteristics — Field and office procedures will be reviewed and revised as required for data collection. Activities scheduled for each tax year include new construction, demolition, remodeling, re-inspection of market areas as needed, periodic re-inspection of the universe of properties, and field or office verification of sales data and property characteristics. Re-inspection of properties is to be completed using physical inspection or by other reliable means of identification, including deeds or other legal documentation, aerial photographs, land-based photographs, surveys, maps, and property sketches.

Valuation by tax year — Valuation models are specified and calibrated using market analysis of comparable sales and cost data, and market area specific income and expense data. Calculated values are tested for accuracy and uniformity using ratio studies. Property values in all market areas are reviewed for update each year.

Attached as Addendum B is a copy of the 2021 tax rates as set by the 16 taxing entities of the county. In addition, a chart of historical certified values for each of the taxing units has been included as Addendum C.

6. Value defense —The Appraisal District has the burden of proof regarding protests related to appraisal or market value as well as unequal appraisal. Inspection and/or disclosure of evidence and related materials will comply with Section 41.461 of the Tax Code. The 2021 appraisal roll was subjected to the appraisal review process that took place once all of the Notice of Appraised Values were sent in late May. There were over 10,000 notices of appraised value concerning the real property of Leon County sent to their owner or owner's representative for 2021. In addition, another 3,146 of mineral/industrial notices were sent. The total number of notices that were sent to taxpayers totaled over 13,000 for the 2021 tax year. The month of June was utilized by the appraisal staff to address any issues from the taxpayers with regard to values or exemptions that might be worked out through an informal appeal. All of those protests that could not be resolved were scheduled to be heard before the Appraisal Review Board for a formal hearing in the early parts of July (phone protest only). The number of protest heard in 2021 were down from the protest heard in 2020. However, 2019 was a record year for value increases at the Leon CAD. 2020 was also a year in which values continued to increased. It is estimated that over 1,000 protest were filed, including both

mineral/industrial and real property. Many of these protests were discussed with the owners, and owners withdrew afterwards. In the end, all of the protest were either heard, settled or withdrawn. The only exception would be approximately 5 property owners who refused to have their protest heard by phone and agreed to postpone their hearing until 2021

7. **New Construction/Demolition** – The field appraisers and office staff of the Leon CAD utilize all available sources for the identification of any new construction and or demolition of structural improvements each year. There are no building permits in Leon County and therefore it becomes necessary for the field appraisers to stay on the road every week looking for new construction. However, the district purchased Eagleview (Pictometry) in 2018 and has begun using change finder to locate improvements that are either new, or have never been on the appraisal roll. This addition has greatly enhanced the appraisal district’s ability to keep up with new construction. The Field Appraisers spend many hours looking for any type of new construction. In addition, the district has utilized this sophisticated aerial photography to locate missing structural improvements. When these improvements are located, they are back-assessed as required by the Texas Property Tax Code.
8. **Remodeling** – This is the most difficult aspect of discovery, with regard to structural improvements of any type. With the lack of building permits in the county, the appraisal district has a difficult time locating and identifying structures that are subject to remodeling. There is a great dependency by the LCAD on local contractors and the taxing entities to report this activity to the appraisal district, when known.

Market Area Review

Real property market areas, stratified by property classification, will be tested for low or high sales ratios, and high coefficients of dispersion. Market areas that fail any or all of these tests will be reviewed. Field reviews will be scheduled to verify and correct property characteristics data. Additional sales data will be researched and verified in order to assess whether the market area is correctly defined and stratified.

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. These homogeneous properties have been delineated into valuation neighborhoods for residential property or economic class for commercial property. Because there are discernible patterns of growth that characterize a neighborhood or market segment, analyst staff will evaluate and redefine the neighborhood boundaries or market segments, when necessary, in order to ensure homogeneity of property characteristics.

The Chief Appraiser notes that there are two areas of interest, with regard to residential development, that is driven by different demands than those that inhibit the other residential areas of the district. These are Lake Limestone and Hilltop Lakes. Hilltop Lakes is an over-65 community built around several lakes and an 18-hole golf course. This area was developed in the late 1960's and early 1970's. This residential area was originally developed as a resort, which includes a small asphalt paved runway, lodging and tennis courts, but later became an over-65 community. There are currently 665 plus homes in this community that is located in the Normangee ISD. Lake Limestone, on the other hand, is located in Leon ISD and is situated in the northwest portion of the county. The lake actually straddles the Leon/Limestone county lines and is heavily developed with residential properties. There are many full-time residents at Lake Limestone but the vast majority of the residents are part-time residents enjoying their 2nd home or vacation property. These two described residential areas tend to succumb to different demands in the market other than your normal residential property demands. A lot of the ownership around the subdivisions on Lake Limestone are out-of-county homes. The CAD, in the last 12 months, has continued to monitor the very active market surround the lake. Studies indicated that the market continues to grow with surges that are not normally found in other markets in the county.

With regard to rural land markets, the county as a whole is considered to be the market. This is best supported by the fact that LCAD utilizes a universe of rural land sales from across the county when examining the land schedules each year. It is noted that as of 2021 there is no market evidence that would tend to support more than one rural land market in the county. All factors must be considered when analyzing vacant land sales such as time, sale date, location, access, topography and other influential factors that are relative to the price paid by a knowledgeable buyer to a knowledgeable seller.

Re-inspection of the Universe of Properties

Re-inspection of properties will be completed using a combination of field inspections and office review. Office review of property for the 2021 tax year will include the examination of aerial photography (Goggle Earth) and the district's mapping system (Microstations Bentley). In 2018, Pictometry (Eagleview) was purchased for the CAD. This is a software package that does a year-to-year aerial photography comparison to identify structural differences. This would include new

structures and additions to existing structures. The district is responsible for establishing and maintaining approximately 37,000 real and personal property accounts within Leon County Appraisal District's jurisdiction. A goal of the CAD is to be able to inspect approximately 20,000 to 23,000 real parcels each year. This can only be achieved with the appropriate mapping software.

Residential Real Property

Ratio studies will be conducted on each of the residential valuation neighborhoods in the district to judge the two primary aspects of mass appraisal accuracy--level and uniformity of value. The valuation process for residential property typically begins in September. Land analysis, sales outlier review, neighborhood sales analysis, and finalization of proposed estimates of value will likely occur from September through March. As previously noted, the residential market includes the cities of the county, Hilltop Lakes and Lake Limestone, and the rural markets.

Valuation Methods Used

Cost Approach

The district will use a combined cost-market approach when valuing single-family and multifamily residential properties. A review and revision as needed of the base cost and additional residential cost schedules will be performed before each reappraisal year.

Residential cost schedules are reviewed and revised using sales of newly constructed sold properties of varying construction quality in Leon County. In this method, the indicated "base cost" must be "backed into". In the last several years this process has become more difficult with many home-builders using widely varying profit margins, often from one project to the next.

The district also uses the comparative unit method to develop the "base" cost of a structure. In this method the base would be the remaining difference (constant) after all additional components are determined by using the unit-in-place method. Table-driven cost factors, taken from Marshall & Swift, a nationally recognized commercial cost service, will be adjusted for local or regional differences in construction and labor costs. When reliable data is available from the local market it will be used, particularly with regards to secondary structures. The results of this comparison will be analyzed using several measures, including stratification by quality and review of estimated building costs, as well as land value to sales prices.

The focus on new cost (discussed above), may result in a pattern of under-appraisal of older

properties and neighborhoods. This sometimes occurs because of limited data in our market required to accurately adjust depreciation tables. Ratio studies limited to sales of homes with depreciated RCNs may be used to determine the necessary adjustment to the base-cost to more accurately appraise the older homes/neighborhoods. This enables efficient and more accurate direct equalization between neighborhoods, in effect providing for direct compensation of any appraisal inaccuracies in new construction on a neighborhood basis.

In 2021 the methods described above were used and the results reconciled to determine appropriate adjustments to the base-cost. Neighborhood or Market Adjustment factors will be developed from appraisal statistics provided by ratio studies to ensure that estimated values reflect both the supply and demand side of the market. The following equation denotes the model used:

$$MV = [((RCN-D) + AV) * MA] + L$$

Where MV = appraised or estimated market value

RCN = replacement cost new of improvements(s)

MA = Market Area – specific adjustment factor

D = Accrued depreciation

AV = additional improvement value

L = land value

Market Area-specific adjustment factors are applied to account for local differences between defined areas. This appraisal phase is also known as direct equalization.

Residential land values are 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 are 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.

In saturated Market Areas (Neighborhoods) where there are insufficient vacant land sales available, market area specific adjustment factors for land are calculated based upon ratio studies. The appropriate land adjustment will be determined by calculating the MA required to achieve an appropriate land: total value or land: total sale price ratio. This model may be described in equation form as follows:

$$MV = ((RCN-D) + AV) + (L * MA)$$

After this has been completed the ratio study will then be used to determine whether an additional MA is required to adjust the improvement values to accomplish accurate appraisals. The model required to adjust both the improvement and land values may be described in the equation form as follows:

$$MV = [((RCN-D) + AV) * MA] + (L * MA)$$

The sales used to determine the market adjustment factor(s) will reflect the market influences and conditions only for the specified neighborhood, thus producing more representative and supportable values. The market adjustment factor(s) calculated for each update neighborhood will be applied uniformly to all properties within a neighborhood and a second set of ratio studies will be generated that compares recent sale prices with the proposed market values for these sold properties. From this set of ratio studies, the analyst will judge the appraisal level and uniformity in both update and non-update neighborhoods.

Sales Comparison Approach

As indicated in *Property Appraisal and Assessment Administration (IAAO, 1990)*, in the absence of a sale of the subject, 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. Their sales prices will then be adjusted for differences from the subject and a market value for the subject is estimated from the adjusted sales prices of comparable properties.

Although the district does not use the direct sales comparison approach as a primary method of valuation, it is, on occasion, used for verification of market value estimates.

Income Approach

The income approach is based on the principle that the value of an investment property reflects the quality and quantity of the income it is expected to generate over its life. In other words, value is the estimated present value of future benefits, namely income and proceeds from the sale of the property. The appraiser must estimate income from a property and capitalize the income into an estimate of current value.

The model used to estimate the present value of income expected in the future is represented by the following formulas known as IRV.

Value Income/Rate or, Income = Rate x Value or, Rate = Income/Value

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, and office buildings. 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.

Inventory Residential Property

Residential improved and vacant property, when qualified as an inventory, will be appraised in compliance with the Texas Property Tax Code, Section 23.12 (a).

In general, the district uses its land value estimates and the actual itemized construction, labor, and material costs, plus other soft or indirect costs to estimate market value as of the assessment date. The market values of improved inventory will be reviewed annually and inventory consideration will be eliminated when ownership transfers to the individual property owner.

Vacant residential inventory, when appropriate, will be valued using a discounted cash flow formula that considers value relative to the income or cash flow, the interest or discount rate, and the number of years the property is likely to be held. As with improved inventory, full market value will be applied once the vacant land is absorbed and ownership transfers for the purpose of residential construction. However, it is noted that as of 2021 there are no inventory residential properties subject to this valuation.

Agricultural and Timber Land, Rural Land

The appraisal of agricultural or timber land is governed by Chapter 23 of the Property Tax Code. The appraised value of qualified open-space or timber land is determined on the basis of the category of land, using accepted income capitalization methods applied to average net to land. Schedules for valuing qualified land have been developed for various agricultural uses and types of timber production. These schedules are reviewed annually and updated as needed using data from recognized sources such as the Texas Forest Service and the Texas Agricultural Extension Service as well as local landowners engaged in leasing land for agricultural use.

In addition, vacant rural land is valued based on a land schedule developed for each size tract in the county. The land schedule is a combination of historical values that have been adjusted over the years to address the current year's value. This schedule is revised annually based on an analysis utilizing the most recent vacant rural land sales.

Commercial Real Property

All commercial properties including but not limited to retail properties, apartments, warehouses, medical offices, golf courses, office buildings and mobile home parks will be valued by the cost approach, the income approach, or the sales comparison approach as deemed most appropriate pursuant to Section 23.0101 of the Property Tax Code. Ratio studies will be performed to test the level and uniformity of appraisal within specific property use categories.

Valuation Methods Used

Cost Approach

The cost approach to value will be applied using the comparative unit method. This methodology involves the use of national cost data estimating services as well as actual cost information on comparable properties whenever possible. Cost models are typically developed based on *Marshall & Swift Service* and cost tables developed from local construction indexes. Cost models include the use of replacement cost new (RCN) of all improvements. The "replacement cost" will be used because it values the cost of a property that is a utility equivalent of the property being appraised using current construction methods and materials. Such costing is contra to "reproduction cost", which is defined as the cost to construct an exact duplicate of the property being appraised. Replacement cost new includes comparative base rates, per unit adjustments and lump sum adjustments. Time and location modifiers will be necessary to adjust cost data to reflect conditions in a specific market and changes in costs over a period of time. Because a national cost estimating service is used as a primary basis for our cost models, local modifiers will be applied to adjust the base costs specifically for Leon County.

Depreciation schedules are developed based on what is typical for each property type of a specific age. Depreciation schedules have been implemented for what is typical of each major class of commercial property by economic life categories. Schedules have been developed for improvements with various terms of estimated expected economic life. These schedules will be tested periodically to ensure they will be reflective of current market conditions. The actual and effective ages of improvements will be noted in the PACS software. Effective age estimates will be based on the utility of the improvements relative to the improvement's total economic life and its competitive position in the marketplace.

Market adjustment factors such as external, economic and functional obsolescence will be applied, if warranted. A depreciation calculation override will be applied if the condition or effective age

of a property varies from the norm. This override is indicated by appropriately noting the physical condition and functional utility ratings on the property data characteristics. 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.

Sales Comparison Approach

Although all three of the approaches to value are based on market data, the Sales Comparison Approach is most frequently referred to as the Market Approach. This approach is utilized not only 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 the appraised values.

Based on the market data analysis and review discussed in the cost, income and sales approaches, the cost and income models will be calibrated annually. The calibration results will be keyed to the schedules and models in the PACS system for utilization on all commercial properties in the district.

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 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 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 derived from actual data collected and available market information. The secondary income estimate is then added to effective gross rent to arrive at an effective gross income 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. For instance, retail properties are most frequently leased on a triple-net basis, whereby the tenant is responsible for his pro-rata share of taxes, insurance and common area maintenance. In comparison, a multi-tenant office building is most often leased on a base year expense stop. This lease type stipulates that the owner is responsible for all expenses incurred during the first year of the lease. However, any amount in excess of the total per unit expenditure in the first year is the responsibility of the tenant. Under this scenario, the total operating expense in year one establishes the base rate. Any increase in expense over the base rate throughout the remainder of the lease term would be the responsibility of the tenant. As a result, expense ratios will be implemented based on the type of commercial property.

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

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 types, as well as by location, quality, condition, design, age, and other factors. Therefore, application of the various rates and multipliers must be based on a thorough analysis of the market and are substantiated by national and regional surveys.

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, both overall (going-in) cap rates for the direct capitalization method and terminal cap rates for discounted cash flow analyses 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. Additionally, overall capitalization rates can be derived from the built-up method, band-of-investment, debt coverage ratio, and published sources for similar properties, as well as results from verified sales. The capitalization rates relate to satisfying the market return requirements of both the debt and equity positions of a real estate investment. This information is obtained from real estate and financial publications, as well as cap rate studies conducted by the district using verified sales and income information for that specific property.

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. Build out allowances (for first generation space or retrofit/second generation space) and leasing expenses will be added to the rent loss estimate. A leasing expense necessary to bring the property to a stabilized level is also included in this adjustment. The total adjusted loss from these real property operations will be discounted using an acceptable risk rate. The discounted value, inclusive of rent loss due to extraordinary vacancy, build out allowances and leasing commissions, becomes the rent loss concession and will be deducted from the value estimate of the property at stabilized occupancy. A variation of this technique allows that for every year that the property's actual occupancy is less than stabilized occupancy a rent loss deduction may be estimated. Conversely, if a property were consistently above the stabilized occupancy level as of the appraisal date, the market would pay a premium for this situation. In this instance, the present value of the excess income over the stabilized level will be added to the value of the property.

The Leon CAD utilizes the Income Approach to value hotels and motels within the boundaries of the district. The Income Approach has been utilized for these properties for several years now and represent a change from prior valuation methods. Beginning in 2020 the mini warehouse market has also be considered as one of the methods of valuation. However, this approach has been hampered by the owners refusal to complete the income/expense surveys sent out. As a result, the mini warehouse market is currently valued utilizing the Cost Approach.

Should enough market information be ascertained, the Income Approach will be utilized for future valuations on these types of property.

Industrial Real Property

These properties will be valued each tax year by Pritchard & Abbott. Inc., and to a lesser extent by the district staff. Industrial properties will typically be valued on a cost approach basis since these properties have a low frequency of being bought and sold in the open market compared to commercial and residential properties. In addition, since most of these properties are owner occupied, the income approach to value will rarely be applicable to industrial properties.

Some special use properties, such as amusement facilities, will be valued in the commercial section. An income approach may be used to value these properties.

Valuation Methods Used:

Cost Approach

The cost approach is most applicable to the valuation of industrial properties. The values will be appropriately adjusted for age and condition and, if warranted, additional adjustment will be made for facility utilization. For example, two facilities making the same or similar products will not necessarily have values close together because one facility may have better efficiencies, which makes that facility worth more in the market. The market's estimation of the worth of a facility will be taken into account since there will rarely be any similar properties available for comparison under the sales or income approaches to value.

Cost schedules will be tested to ensure that the appraisal district is in compliance with Texas Property Tax Code, Section 23.011. Replacement cost new tables as well as depreciation tables will be tested for accuracy and uniformity using cost data primarily from *Marshall & Swift*.

Sales Comparison Approach

As previously stated, industrial real property does not have a history of being bought and sold with any regularity in the open market. In fact, most industrial facilities remain just as they are, without changing ownership.

The few sales of industrial facilities that do occur are not typically used as market sales, because the sales are usually part of a merger or acquisition or liquidation and other assets and intangible considerations are part of the sales price, and are not disclosed. There will usually not be enough verifiable sales of stand-alone industrial properties to have a representative sample of properties to which to compare when valuing industrial properties.

Utility properties, such as electric generation, electric transmission, telephone, and cable systems will rarely be sold in the open market on a stand-alone basis. In other words, when a utility sells, it sells as an entire company, not piecemeal assets. The sales comparison approach is not an appropriate method of valuation.

Income Approach

Industrial facilities are rarely valued by the income approach to value since they are usually owner occupied. These facilities are usually general commercial structures built to meet an industrial owner's very specific needs over a certain period of time. In other words, an industrial facility is built for that owner's needs and not built to lease out the facility to another industrial user. There are not enough industrial facilities built by industrial users that are leased out to other industrial users to be a meaningful universe of properties for valuation purposes, if they can be found at all.

Industrial real property valuation analysts consider all three approaches to value to see which approach is most applicable to the property being valued. Usually, the cost approach is most applicable for the reasons previously given, but if there are any commercial properties that are closely similar to the industrial property being valued, then the approach to value for the commercial property is reviewed to see if its method is suitable for the industrial property being examined.

The income approach is the most valid approach to use in valuing utility properties. The reason is that the unit as a whole is being valued and the result apportioned to the component parts of the whole. The worth of this income stream can be compared to other investment opportunities to select the proper capitalization rate to apply to the income stream to estimate the value of the system. The worth of a utility is the income stream the system will generate compared to

alternative investments that may have less risk in the market. The capitalization rate that is used to estimate the value of the income stream from the utility will always have a risk component in the capitalization rate. The usual forms of depreciation will be applied to the valuation and any additional consideration for economic issues will be applied. These factors will usually be reflected in the risk portion of the capitalization rate.

Business and Industrial Personal Property

Valuation Methods Used:

Cost Approach

The primary approach to the valuation of business and industrial personal property is the cost approach. Cost schedules will be developed based on Standard Industrial Classification (SIC) codes. These schedules will be reviewed to conform to changing market conditions, if necessary.

Actual original cost data is used to derive valuation models for specific categories of assets and/or SIC codes. The models indicate a range of values for replacement cost new (RCN) per square foot (or applicable unit).

These model values will be used to estimate the value of new accounts for which no property owner's rendition is filed. They also establish parameters for testing the valuation of property for which prior years' data exist or for which current year rendered information is available. This approach uses RCN, which is developed from property owner reported historical cost or from existing valuation models provided by the Property Tax Division of the State Comptroller's Office.

The percent good depreciation factors will be consistent with the depreciation schedules for furniture, fixtures, and equipment provided by the Property Tax Division of the State Comptroller's Office each year. This mass appraisal percent good depreciation schedule is used to ensure that estimated values are uniform and consistent within the market. RCN and percent good depreciation factors will be utilized to develop value estimates using the following formula:

MARKET VALUE ESTIMATE = RCN x PERCENT GOOD FACTOR

Sales Comparison Approach

Business personal property is typically sold as part of the business as a whole and not by itself,

which makes this approach unsuitable for valuing most personal property. This approach is only suitable for the valuation of certain types of vehicles, heavy equipment, and airplanes. Value estimates for vehicles will be provided by independent sources and are based on data furnished by National Market Reports. These types of properties will be appraised using published market guides such as NADA book values or Aircraft Bluebook Price Digest.

There are not enough known sales of industrial personal property to have a meaningful population of sales for value comparison purposes. This category of personal property is inclusive of all types at a facility, such as furniture, computers, and machinery. It is typical for personal property to be included in the sale of a facility, instead of being sold separately. There may be subsets of personal property that are sold, but that does not provide the sales of all personal property necessary to make value comparisons under the sales approach.

Income Approach

The income approach has limited use in the appraisal of machinery, equipment, furniture, fixtures, and leasehold improvements because of the difficulty in estimating future net benefits; except in the case of certain kinds of leased equipment. When reliable data on equipment leases is available, the income approach may be used to estimate fair market value of the equipment.

The income approach is not suitable in the appraisal of industrial personal property because the industrial facility operator in the production of an end service or product is using the personal property. Industrial facilities are not in the business of leasing their personal property to another industrial facility for the production of an end service or product.

Oil, Gas and Utility Property

Oil and gas properties can be complex and require expertise that the LCAD is unable to provide. Pritchard and Abbott Inc., an oil and gas appraisal company, is contracted on an annual basis to provide the appraisals of all oil, gas and utility properties within the district. They are contractually obligated to appraise these types of property as required by The Texas Property Tax Code, USPAP and any other applicable standards.

All three approaches to value are considered, however, considering the nature of the property being appraised only the Income Approach to value is considered to be applicable in most cases. In addition, when necessary, the Unit Value is utilized within the definition of Income Approach.

Value Defense

The appraisal district, to meet its burden of proof for market value and equity in both informal and/or formal appraisal review board hearings, will rely on data in its possession or data obtained from other sources, as appropriate. 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.

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 is 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 analysis, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Uniform Standards of Professional Appraisal Practice.
- I have made limited inspections of a general sample of the various properties that is the subject of this report.
- No one provided significant professional assistance to the person signing this report.

Jeff Beshears, Chief Appraiser, RPA

ADDENDUM A

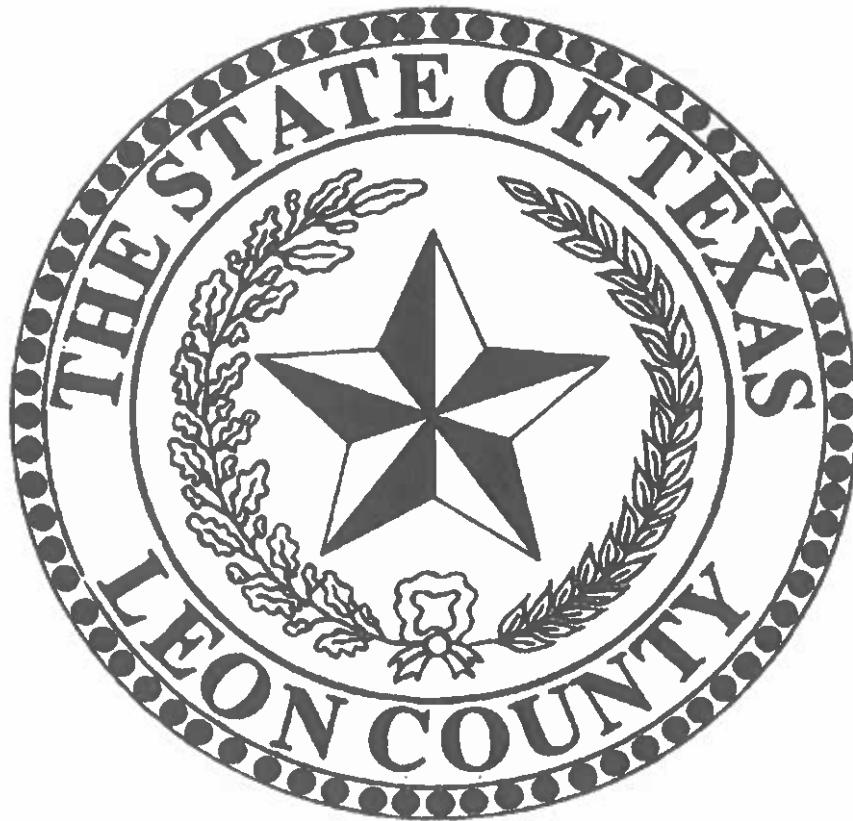
2021 – 2022

REAPPRAISAL PLAN

LEON CENTRAL APPRAISAL DISTRICT

2021 - 2022

Reappraisal Plan





Leon County Central Appraisal District

2021 – 2022

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Leon County Central Appraisal District Reappraisal Plan 2021 - 2022

INTRODUCTION

Scope of Responsibility

The Leon County Central Appraisal District has prepared and published this reappraisal plan and appraisal report to provide our Board of Directors, citizens and taxpayers with a better understanding of the district's responsibilities and activities. This report has several parts: a general introduction and then, several sections describing the appraisal effort by the appraisal district.

The Leon County Central Appraisal District (CAD) is a political subdivision of the State of Texas that was created effective January 1, 1980. The Central Appraisal District Office was officially open January 1, 1983. The provisions of the Texas Property Tax Code govern the legal, statutory, and administrative requirements of the appraisal district. A seven-member Board of Directors, elected by the taxing units within the boundaries of Leon County, constitutes the district's governing body. The Leon County Tax Assessor/Collector is a non-voting member of the board and their position is an appointment by the Texas State Legislators. The other six members are elected to a two-year term on every odd calendar year. The chief appraiser, appointed by the Board of Directors, is the chief administrator and chief executive officer of the appraisal district. Each year the Board of Directors approves an Operating Budget that is provided by the Chief Appraiser. The 16 taxing entities that make up the taxing units of the Leon Central Appraisal District fund the budget.

The appraisal district is responsible for local property tax appraisal and exemption administration for 16 jurisdictions or taxing units in the county. Each taxing unit, such as the county, a city, school district, emergency special district, etc., sets its own tax rate to generate revenue to pay for such things as police and fire protection, public schools, road and street maintenance, courts, water and sewer systems, and other public services. Property appraisals and estimated values by the appraisal district allocate the year's tax burden on the basis of each taxable property's market value and rendered business personal property value. We also determine eligibility for various types of property tax exemptions such as those for homeowners, the elderly, disabled veterans, charitable or religious organizations and agricultural productivity valuation. The Leon Central Appraisal District contracts with Pritchard and Abbott Inc., to appraise all mineral, industrial and utilities, for the purpose of ad valorem taxation. The contract for the mineral/industrial/utilities is typically a three-year contract that is generally re-negotiated and renewed in the third year of each contract.

Except as otherwise provided by the Property Tax Code, all taxable property is appraised at its “market value” as of January 1st. Under the tax code, “market value” means the price at which a property would transfer for cash or its equivalent under prevailing market conditions if:

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

The Property Tax Code defines special appraisal provisions for the valuation of residential homestead property (Sec. 23.23), productivity (Sec. 23.41), real property inventory (Sec. 23.12), dealer inventory (Sec. 23.121, 23.124, 23.1241 and 23.127), nominal (Sec. 23.18) or restricted use properties (Sec. 23.83) and allocation of interstate property (Sec. 23.03). The owner of real property inventory may elect to have the inventory appraised at its market value as of September 1st of the year proceeding the tax year to which the appraisal applies by filing an application with the chief appraiser requesting that the inventory be appraised as of September 1st.

The Texas Property Tax Code, under Sec. 25.18, requires each appraisal office to implement a plan to update appraised values for real property at least once every three years. Appraised values are reviewed annually and are subject to change each year. Business personal properties, minerals and utility properties are appraised every year.

The appraised value of real estate is calculated using specific information about each property. Using computer-assisted mass appraisal programs, and recognized appraisal methods and techniques, we compare that information with the data for similar properties, and with recent cost and market data. The district follows the standards of the International Association of Assessing Officers (IAAO) regarding its appraisal practices and procedures, and subscribes to the standards promulgated by the Appraisal Foundation known as the Uniform Standards of Professional Appraisal Practice (USPAP) to the extent they are applicable.

Personnel Resources

The office of the Chief Appraiser is responsible for all operations of the district, whether administrative or appraisal related. The Chief Appraiser oversees the planning, organizing, staffing, coordinating, and controlling of district operations, as well as the functions that relate to human resources, budget, finance, records management, purchasing, fixed assets, facilities and postal services. These responsibilities are in addition to being responsible for the valuation of all real and personal property

accounts. The property types appraised include commercial, residential, business personal, mineral, utilities, and industrial. The district's appraisers are subject to the provisions of the Property Taxation Professional Certification Act and must be duly registered with the Texas Department of Licensing and Regulation.

The appraisal district staff consists of 10 (ten) full time employees with the following classifications:

- Chief Appraiser
- Deputy Chief Appraiser
- Mapper/Appraiser
- Field Appraiser/Ag Appraiser
- Field Appraiser
- Field Appraiser
- Business Personal Property and Field Appraiser
- Clerk – Bookkeeping
- Clerk – Deeds & Ownership
- Clerk – Customer Service

Staff Education and Training

All personnel that are performing appraisal work are registered with the Texas Department of Licensing and Regulation and are required to take appraisal courses to achieve the status of Registered Professional Appraiser within five years of employment as an appraiser. After they are awarded their license, they continue to receive continuing education as required by the Texas Department of Licensing and Regulation, with many of the required hours being centered on USPAP and the Code of Ethics.

Additionally, because of the small size of Leon Central Appraisal District, all appraisal personnel receive extensive on-the-job training delivered directly by a combination of the Chief Appraiser and the Deputy Chief Appraiser to ensure consistency with regard to appraisal methods.

Data

The district is responsible for establishing and maintaining approximately 71,422 real property, minerals/industrial and business personal property accounts covering approximately 688,000 acres within Leon County. Portions of adjoining counties include properties of three districts (Leon ISD, Buffalo ISD, Normangee ISD) that are centrally located within Leon County but extend (over-lapping) into Madison, Robertson and Freestone County. Under current law, those counties, where the districts overlap, are responsible for appraising those portions of over-lapping school districts and certifying

those values to each individual school district. Those areas outside Leon County are not the responsibility of the Leon County CAD.

This data includes property characteristics, ownership, and exemption information. Property characteristic data on new construction is updated through an annual field effort; existing property data is maintained through a field review utilizing Pictometry and other aerial photography. Sales are routinely validated during a separate field effort; however, numerous sales are validated as part of the new construction and field inspections. General trends in employment, interest rates, new construction trends, cost and market data are acquired through various sources, including university research centers, and market data centers and vendors.

The district has recently entered into a contract with Pritchard and Abbott Inc., to convert all existing Bentley files to an Esri computer program. The purpose of this conversion is to make the district's mapping system an interactive system. The conversion is necessary in order to convert the existing maps from line form to shape files. In addition to this conversion P&A will also complete any portion of the county that is not currently mapped. This will be done in partnership with the CAD. Mapping is currently estimated at approximately 80 percent complete and is a work in progress.

Information Systems

The District utilizes a network server system with individual PC's for the staff that operates on software provided by Pritchard and Abbott Inc. (P&A). Pritchard and Abbott Inc. stay abreast of the latest laws and requirements and update the mass appraisal system software periodically. In addition, all property information as required by the State Comptroller's Office is filed electronically by P&A, who is contracted by the Appraisal District to appraise all mineral and industrial property that is not appraised by the local staff. The Leon Central Appraisal District does not collect taxes for any of the 16 taxing entities within its boundaries.

Independent Performance Test

According to Chapter 5 of the TPTC and Section 403.302 of the Texas Government Code, the State Comptroller's Property Tax Division (PTD) conducts an annual property value study (PVS) of each Texas school district and each appraisal district. As part of this annual study, the code requires the Comptroller to: use sales and recognized auditing and sampling techniques; review each appraisal district's appraisal methods, standards and procedures to determine whether the district used recognized standards and practices (MSP review); test the validity of school district taxable values in each appraisal district and presume the appraisal roll values are correct when values are valid; and, determine the level and uniformity of property tax appraisal in each appraisal district. The methodology used in the property value study includes stratified samples to improve sample representativeness and techniques or procedures of measuring uniformity. This study utilizes statistical analyses of sold properties (sale ratio studies)

and appraisals of unsold properties (appraisal ratio studies) as a basis for assessment ratio reporting. For appraisal districts, the reported measures include median level of appraisal, coefficient of dispersion (COD), the percentage of properties within 10% of the median, the percentage of properties within 25% of the median and price-related differential (PRD) for properties overall and by state category.

There are 5 independent school districts in Leon CAD for which appraisal rolls are annually developed. The preliminary results of this study are released January 31st in the year following the year of appraisal. The final results of this study are certified to the Education Commissioner of the Texas Education Agency (TEA) the following July of each year. This outside (third party) ratio study provides additional assistance to the CAD in determining areas of market activity or changing market conditions.

As of January 1, 2020, all school districts were reported to be in compliance with regard to the 2019 Property Value Study. This followed the largest reappraisal year in the history of the CAD. Total value for the county was increased in excess of \$1,000,000,000 of total value. Every taxing entity in the county realized a positive increase in value for 2019. The increase, largely due to the homestead cap, carried over into 2020 with the entities showing another large increase.

However, the CAD was notified around August 21, 2020, that two ISD's in the county were being determined in non-compliance after errors in the EARS submission were verified. It is noted that only two school districts in the state were in error, and both were in Leon County. The two school districts were Normangee and Centerville. Both are protesting those findings as of the printing of this Reappraisal Plan and both are expected to recover local values.

Appraisal Activities

INTRODUCTION

Appraisal Responsibilities

- **General Responsibilities:** The field appraisal staff is responsible for collecting and maintaining property characteristic data for classification, valuation, and other purposes. Accurate valuation of real and personal property by any method requires a comprehensive physical description of personal property, and land and building characteristics. This appraisal activity is responsible for administering, planning and coordinating all activities involving data collection and maintenance of all commercial, residential and personal property types located within the boundaries of Leon County and the jurisdictions of this appraisal district. The data collection effort involves the field inspection of real and personal property accounts, as well as data entry of all data collected into the existing information system.
- **Reappraisal Plan:** The goal is to field inspect residential, commercial, agricultural and personal properties in the district at a minimum of once every three years. Over the next three years LCAD will utilize the routing schedules developed over the past two years. This three-year plan will continue the inspection of all rural residential and agricultural property, land companies, municipal residential, commercial and personal property respectively.

Due to the rural nature of Leon County many properties are not physically inspected every other year due to the lack of access to an improvement that is located behind locked gates. In these instances, every effort is made by the appraiser to contact the property owner for access, i.e. telephone, email or certified postal mail. In the event the property owners cannot be contacted the properties that are inaccessible for physical inspection will be appraised by use of the "Eagle View" Pictometry program.

The Eagle View Pictometry system is a computer software system that uses oblique imagery which is high resolution aerial photography images captured at an angle of 40 to 45 degrees. This imagery is designed to provide a natural perspective and make objects easy to recognize and interpret. The images are captured from all points of the compass to offer a 360-degree view of every property and parcel. Every pixel in Eagle View Pictometry is georeferenced giving the CAD users the ability to interact with, measure and extract data from these actionable images. The photographs are updated every 24 months (odd number years) with the flyover done in January of those years. An update flight is scheduled for January 2021.

The county was divided into 24 different zones, excluding the cities of Buffalo, Centerville, Oakwood, Normangee, Jewett, Marquez and Flynn, within the county. These smaller zones make it more comfortable for the appraisers to identify specific properties and any problems with those properties. More importantly, the Change Finder program utilizes the zones to determine which properties are to be back-assessed. As a result, the CAD is able to track which areas of the county have been analyzed for missing improvements. The cities are analyzed for missing improvements every two years. Improvement changes within the cities are more easily recognizable than the rural areas.

- **New Construction:** The field appraisal staff is responsible for discovering and listing all new construction and renovation activity. The Leon County CAD Field Appraisers are on the road every day so many properties are subject to a visual inspection numerous times a year. With the aid of Eagle View - Change Finder, new structures are identified on the Eagle View Change Finder mapping display. The Field Appraisers follow up with a Field Review of these improvements, if accessible, for verification and appraisal. If the improvements are inaccessible the Appraisers will contact the owner for access. If the Field Appraisers are unable to contact or do not receive a response from the owner the Appraiser will list the improvements by the characteristics identified on Pictometry. Additionally, Field Appraisers routinely review septic system permits and mechanic liens for construction and renovation activities.

Appraisal Resources

- **Personnel** – 5 (five) appraisers conduct the appraisal activities.
- **Data** - The data used by field appraisers includes the existing property characteristic information contained in CAMA (Computer Assisted Mass Appraisal System) from the district's computer system. The data is printed on an appraisal card, or personal property data sheets. Other data used includes Eagle View Pictometry system from the photography flight in 2018, maps, sales data, septic installation reports, revaluation request, photos and actual cost and market information. Sources of information are gathered using excellent reciprocal relationships with other participants in the real estate market place. The district cultivates sources and gathers information from both buyers and sellers participating in the real estate market.

Appraisal Frequency and Method Summary

- **Residential Property** - Residential property that is accessible will be physically examined every two to three years with appraisers noting any physical changes

that affect the physical condition of each home. This will include new improvements, obvious remodeling, age and condition and any other factors that might possibly affect the market value of the property. Eagle View Change Finder will be updated every third year with the next flight to occur in January 2021. Change Finder will identify improvements added that are in addition to improvements identified in the 2018 flight. There is an on-going analysis of home sales in order to maintain a constant vigil on market value. If sales, combined with the Comptrollers Property Value Study, indicate that the value of homes, whether negative or positive are changing, then attention will be given to the building cost schedules of the class of homes effected. Because of the time frame of the PVS, the protesting of the preliminary findings, and the release of the final value findings, any issues which must be addressed are actually accomplished in the following year.

- **Agricultural Property** - Rural acreage is the largest class of property appraised by the Leon Central Appraisal District. Inspection of rural property is an everyday occurrence with the appraisers of the Leon Central Appraisal District. Rural property values are analyzed yearly. Specific Inspections of these properties are not conducted each year, but daily outings by the field appraiser allow us to keep an eye on these properties for any change that might be evident. Agriculture productivity is calculated annually or semi-annually, based on an analysis of lease rates and expenses associated with property that is qualified as 1-d-1 Open Space Valuation, whether that use be ag or timber.
- **Commercial Property** - Due to the limited amount of commercial and industrial real estate. These properties are observed annually with consideration given to change and condition. There is limited sales information available within the market due to the market being driven largely by owner occupied property as opposed to investor owned property. All three approaches to Market Value are considered, however, only the Cost Approach is typically utilized due to the overall lack of information within the market. The exception to this is hotel/motels whereby the Income Approach is also given consideration due to the availability of income information from the State Web site for hotel/motel income. There are, from time to time, market sales of commercial property, and when applicable, these sales are compared against the commercial schedules utilized by the appraisal district.
- **Business Personal Property**- Renditions, as required by the Texas Property Tax Code, are filed annually for all businesses located within the boundaries of Leon County. Around January 1st of each year the appraisal district mails a blank copy of a BPP Rendition form, as promulgated by the state, to each business owner in the district. As required by the Texas Property Tax Code Sec 22.23, the deadline for filing renditions is April 15th. By written notice, this deadline may be

extended so renditions are required to be filled out by the business owner and returned to the CAD by May 15th of the current year. An additional 15 days extension may be granted by the Chief Appraiser if good cause can be illustrated.

- **Minerals-** Working and royalty interests of producing oil and gas wells are appraised annually. The most recent production data available from the Texas Railroad Commission is downloaded into appraisal software that estimates economically recoverable reserves. Those reserves are then valued based upon State mandated pricing using the previous year's average of oil or gas values. A discount is applied over the anticipated life of the well in order to consider the value of money over time to recover those reserves. Each producing lease is valued as a unit and then that value is divided according to the various owners of the lease listed in division orders. Pritchard & Abbott, Inc. appraises all mineral values.
- **Utilities and Pipelines-** Utility companies and pipelines are appraised annually using a unit value developed using all three approaches to value. For example, a utility company's total value in the State is estimated using cost, market, and income approaches to value and then the entire value is allocated using the components of that utility company that have situs in the various tax units of Leon CAD. Components include such things as miles of transmission lines, miles of distribution lines, substations and the like for an electric utility. Pritchard & Abbott, Inc. appraises all industrial values.

WORK SCHEDULE

The staff of the Leon Central Appraisal District will work diligently to conform to all deadlines imposed by the Texas Property Tax Code and any deadlines set by the Chief Appraiser. As a guideline, the Leon CAD will operate with the following deadlines and schedules; however, some deviation can be expected.

January thru April:	Complete field work and mail all applications;
February:	Run notice in paper regarding exemptions and other required publications;
March/April	Update schedules and land values, recalculate system and adjust schedules;
April/May	Mail notices on exemption and applications not received back by the appraisal district;
April 30 th – May 15 th	Mail notices of appraised values for current year;
June 1 st	Estimates of value to taxing entities;

Before July 20 th	Conclude ARB hearings and approve Appraisal Records;
July 25 th	Deadline to certify rolls
July – January	Pick up new improvements, check market areas, and work on specific projects.

PRELIMINARY ANALYSIS

Data Collection/Validation

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

Sources of Data

The sources of data collection are through property inspection, new construction field effort, data review list field effort, hearings, sales validation field effort, commercial sales verification and field effort, newspapers, publications, and property owner correspondence by mail or via the Internet. Area and regional real estate brokers and managers are also sources of market and property information. Data surveys of property owners requesting market information and property description information is also valuable data. Soil surveys and agricultural surveys of farming and ranching property owners and industry professionals are helpful for productivity value calibration. Improvement cost information is gathered from local building contractors and Marshall and Swift Valuation Service.

Property owners are one of the best sources for identifying incorrect data that generates a field check. Frequently, the property owner provides reliable data to allow correction of records without having to send an appraiser on-site. We depend on the property owners to provide accurate and current information. For the property owner without access to the Internet, letters are sometimes submitted notifying the district of inaccurate data. Properties identified in this manner are added to a work file and

inspected at the earliest opportunity. Accuracy and validity in property descriptions and characteristics data is the highest goal and is stressed throughout the appraisal process from year to year. Appraisal opinion quality and validity relies on data accuracy as its foundation.

Data Collection Procedures

With the breakdown of the county into 24 separate zones, the appraisers are routinely rotating from one zone to the next, by school district, in order to maintain equality in their analysis. A ledger is maintained to help assist the appraisers from duplicate analysis and work. There are no known economic factors that would indicate an unusual amount of discrepancy among the five school districts that make up the market area of Leon County.

The quality of the data used by the appraisal district is extremely important in estimating market values of taxable property. The more accurate the data utilized, obviously, the more accurate the appraisal results. The Chief Appraiser is responsible for the ultimate verification of all data utilized in building schedules that are then used to determine the value of property within the district lines. Inspection of, and verification, of good data is the key to maintaining accurate schedules to work with. While the Leon CAD may maintain a record of numerous sales that have occurred, it is the policy of the appraisal district to not include non-arm's length transactions in the analysis of sales that are utilized to build land and building schedules.

Data Maintenance

The field appraiser is responsible for the data entry of his/her fieldwork into the computer file. This responsibility includes not only data entry, but also quality assurance to ensure that all records are as accurate as possible. The Chief Appraiser, with assistance from the Deputy Chief Appraiser, is responsible for maintaining all schedules and building classes to help assist the field appraisers in their normal daily work of appraising property for the purpose of Ad Valorem Taxation.

INDIVIDUAL VALUE REVIEW PROCEDURES

Field Review

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

is done during the data review/re-list field effort. A random field review is performed on selected personal property accounts within the various jurisdictions each year.

Office Review

Office reviews are completed on properties where updated information has been received from the owner of the property and is considered accurate and correct. Data mailers, sent in masse, or at the request of the property owner, frequently verify some property characteristics or current condition of the property. When the property data is verified in this manner, and considered accurate and correct, field inspections may not be required. The appraisal district mails personal property rendition forms, 1-d-1 Open Space Valuation Applications, Timber Applications, Wildlife Management Applications and Homestead Applications each year. This mailing generally takes place as near to January 1st as is possible.

PERFORMANCE TEST

The Chief Appraiser is responsible for conducting ratio studies and comparative analysis on properties within the district to determine compliance with the Texas Property Tax Code's requirement to stay within 5% of the median level of appraised value. Ratio studies are conducted on property located within certain neighborhoods or districts by appraisal staff. The sale ratio and comparative analysis of sale property to appraised property forms the basis for determining the level of appraisal and market influences and factors for the neighborhood. This information is the basis for updating property valuation for the entire area of property to be evaluated. Field appraisers, in many cases, may conduct field inspections to insure the accuracy of the property descriptions at the time of sale for this study. This inspection is to ensure that the ratios produced are accurate for the property sold and that appraised values utilized in the study are based on accurate property data characteristics observed at the time of sale. Also, property inspections are performed to discover if property characteristics had changed as of the sale date or subsequent to the sale date. Sale ratios should be based on the value of the property as of the date of sale not after a subsequent or substantial change was made to the property after the negotiation and agreement in price was concluded. Properly performed ratio studies are a good reflection of the level of appraisal for the district.

The Leon CAD Chief Appraiser relies heavily on a comparison between state estimated ratios and those ratios conducted by the CAD in order to determine if and when reappraisals or schedule adjustments are warranted.

Residential Valuation Process

INTRODUCTION

Scope of Responsibility

The residential appraisers are responsible for estimating equal and uniform market values for residential improved and vacant property. There are approximately 10,215 residential improved single and multiple family parcels and 9,761 vacant residential properties in Leon County.

Appraisal Resources

- **Personnel** - The residential appraisal staff consists of 6 appraisers. The Chief Appraiser is responsible for collecting data utilized to support the building schedules of the appraisal district. The following appraisers are responsible for estimating the market value of all property appraised by the Leon Central Appraisal District.

Chief Appraiser, RPA

Deputy Chief Appraiser, RPA

Field Appraiser,

Field Appraiser,

Field Appraiser,

Business – Personal Property & Field Appraiser, RPA

- **Data** - An individualized set of data characteristics for each residential dwelling and multiple family units in this district are collected in the field and data entered to the computer. The property characteristic data drives the application of computer-assisted mass appraisal (CAMA) under the Cost, Market, and Income Approaches to property valuation.

VALUATION APPROACH

Land Analysis

Residential land valuation analysis is conducted prior to neighborhood sales analysis. The value of the land component to the property is estimated based on available market sales for comparable and competing land under similar usage. A comparison and analysis of comparable land sales is conducted based on a comparison of land characteristics found to influence the market price of land located in the neighborhood. A computerized land table files stores the land information required to consistently value individual parcels within neighborhoods given known land characteristics. Specific land influences are considered, where necessary, and depending on neighborhood and individual lot or tract characteristics, to adjust parcels outside the neighborhood norm for

such factors as access, view, shape, size, and topography. The appraisers use abstraction and allocation methods to ensure that estimated land values best reflect the contributory market value of the land to the overall property value.

Area Analysis

Data on regional economic forces such as demographic patterns, regional 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 are collected from private vendors and public sources and provide the field appraiser a current economic outlook on the real estate market. Information is gleaned from real estate publications and sources such as continuing education in the form of IAAO and BTPE classes.

Neighborhood and Market Analysis

Market Areas in Leon County are designated as Rural Residential/Agricultural, Residential Land Companies, Municipal Residential, Municipal Commercial, Lake Limestone Residential and Hilltop Lakes.

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. Residential valuation and neighborhood analysis are conducted on various market areas within each of the political entities known as Independent School Districts (ISD). Analysis of comparable market sales forms the basis of estimating market activity and the level of supply and demand affecting market prices for any given market area, neighborhood or district. Market sales indicate the effects of these market forces and are interpreted by the appraiser into an indication of market price ranges and indications of property component change considering a given time period relative to the date of appraisal. Cost and Market Approaches to estimate value are the basic techniques utilized to interpret these sales. For multiple family properties the Income Approach to value is also utilized to estimate an opinion of value for investment level residential property.

The first step in neighborhood analysis is the identification of a group of properties that share certain common traits. A "neighborhood" for analysis purposes is defined as the largest geographic grouping of properties where the property's physical, economic, governmental and social forces are generally similar and uniform. Geographic stratification accommodates the local supply and demand factors that vary across a jurisdiction. Once a neighborhood with similar characteristics has been identified, the next step is to define its boundaries. This process is known as "delineation". Some factors used in neighborhood delineation include location, sales price range, lot size, age of dwelling, quality of construction and condition of dwellings, square footage of

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

Neighborhood identification and delineation is the cornerstone of the residential valuation system at the district. All the residential analysis work done in association with the residential valuation process is neighborhood specific. Neighborhoods are field inspected and delineated based on observable aspects of homogeneity. Neighborhood delineation is periodically reviewed to determine if further neighborhood delineation is warranted. Whereas neighborhoods involve similar properties in the same location, a neighborhood group is simply defined as similar neighborhoods in similar locations. Each residential neighborhood is assigned to a neighborhood group based on observable aspects of homogeneity between neighborhoods. Neighborhood grouping is highly beneficial in cost-derived areas of limited or no sales, or use in direct sales comparison analysis. Neighborhood groups, or clustered neighborhoods, increase the available market data by linking comparable properties outside a given neighborhood. Sales ratio analysis, discussed below, is performed on a neighborhood basis, and in soft sale areas on a neighborhood group basis.

The real estate market of Leon County has illustrated signs of diversity over the past three years that is typical of a market that continues to grow and show signs of sophistication. Over the past three years there appears to be a separation of markets between the rural market and the rural subdivision markets. In the past, these two markets have basically coexisted as one; however, sales within the past two to three years have started to show that buyers are willing to pay more for land that is located within a "rural subdivision" than for property located entirely in a rural location. It is the belief of the Chief Appraiser, that the availability of utilities and typically good road surfaces is the driving factors for the diversification between the two. The rural

subdivision market typically deals with tracts of land that are 50 acres and smaller. However, it is noted that there are exceptions to every rule and this would also be true in this regard.

Hilltop Lakes and Lake Limestone Residential properties continue to be two separate residential markets that obviously isolated themselves from other residential markets in the area. Hilltop Lakes is largely a retirement community with a private golf course, airplane runway and numerous lakes with lake front building opportunities. This area has separated itself from the remainder of Leon County with a historical record of sales that continue to lead the county with regard to price per square foot. While this market is subject to the same driving forces that affect all markets (size, location, time, style and design, etc.), the amenities available to the homeowners in this area are the driving force that divides and elevates this market from the typical housing market in other areas of the county. Homes that sell within this market are not considered to be comparable to other homes located outside the Hilltop Lakes market area and vice versa. Only the Hilltop Lakes market has illustrated any type of slowdown in the past couple of years. After undergoing a large reappraisal in 2010, this market began to show some signs of an extended period of growth and high prices as prices leveled off and stabilized in 2015 and 2016. However, during 2017, growth in the Hilltop Lakes market began to once again illustrate signs of slight inflation in the houses within this market as a number of sales clearly indicated growth in the market. This particular market for 2018 and 2019 was monitored very closely with expected growth in the year 2020. Values are increased during 2020 and are expected to continue into the coming years.

Lake Limestone is a typical popular waterfront subdivision. Values have exploded in the last 24 months in the subdivisions on the lake. Lake Limestone is very non-typical with regard to its location. It is situated in parts of three counties and all three counties have experienced growth in the lake side neighborhoods. The market of Lake Limestone differs from Hilltop Lakes in that it is driven by different types of buyers. Hilltop Lakes is a retirement type community while Lake Limestone is a combination of local owners and recreational owners from Dallas and Houston areas.

Other markets noted in the area served by the Leon CAD are the residential market and commercial markets that are located within the cities of the county.

The city market has remained very consistent over the past five years and has shown very little erratic activity. Sales have been slow at times but prices have remained constant for the most part. Most of the homes are owner occupied and there continues to be a solid demand for rental properties. There are six different cities in the county; Buffalo, Centerville, Jewett, Marquez, Normangee and Oakwood. Each of the cities has their own individual markets but the values appear to be consistent as of the date of this writing. The discrepancy in price between cities seems to be based solely on the class

of property as well as the size of the property being sold, or analyzed. Each city provides the same essential services, and for the most part, prices are consistent.

Buffalo continues to lead the cities in the county with regard to commercial development. For years, the City of Buffalo has been the location of any type of new major commercial development for the county. This is attributed largely to the intersection of IH 45 and SH 79. Two major traffic arteries that intersect in an area where there is surrounding available property, adequate utilities, and an obvious demand for growth. Each time there is a new development in this area, there appears to be more support for even more development. With the available utilities and growth potential, it is likely that this area will continue to see more growth in the near future. Construction has been completed on the new entrance and exist ramps on the south bound side of IH 45. This also involved the IH 45 and SH 79 interchange.

Overall, the Leon County real estate market is in sound condition with demand exceeding supply in various aspects of the residential/rural markets. Effects of the COVID 19 virus are unknown as of the date of this plan. So far, the virus has had little or no obvious effect on the real estate market of Leon County. The soundness of the market is attributable to the location of Leon County with regards to the major metropolitan areas of Texas such as Houston and Dallas, combined with the presence of energy exploration in the immediate area. In addition, the sound cattle market is also considered to be a factor that contributes in a positive manner to the sound real estate market within the area. There are no known conditions that exist that would negatively impact the near future of the market. This is not to say that a major catastrophe in the nations market could not also adversely affect the local economy.

Highest and Best Use Analysis

The highest and best use of property is the reasonable and probable use that supports the highest present value as of the date of the appraisal. The highest and best use must be physically possible, legal, financially feasible, and productive to its maximum. The highest and best use of residential property is normally its current use. This is due in part to the fact that residential development, in many areas, through use of deed restrictions and zoning, precludes other land uses. Residential valuation undertakes reassessment of highest and best use in transition areas and areas of mixed residential and commercial use. In transition areas with ongoing gentrification, the appraiser reviews the existing residential property use and makes a determination regarding highest and best use. Once the conclusion is made that the highest and best use remains residential, further highest and best use analysis is done to decide the type of residential use on a neighborhood basis. As an example, it may be determined in a transition area that older, non-remodeled homes are economic mis improvements, and the highest and best use of such property is the construction of new dwellings. In areas of mixed residential and commercial use, the appraiser reviews properties in these areas on a periodic basis to determine if changes in the real estate market require reassessment of the highest and best use of a select population of properties.

VALUATION AND STATISTICAL ANALYSIS (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's residential cost schedules are estimated from Marshall and Swift, a nationally recognized cost estimator service. These cost estimates are compared with sales of new improvements and evaluated from year to year and indexed to reflect the local residential building and labor market. Costs may also be indexed for neighborhood factors and influences that affect the total replacement cost of the improvements in a smaller market area based on evidence taken from a sample of market sales. The cost schedules are reviewed regularly as a result of recent state legislation requiring that the appraisal district cost schedules be within a range of plus or minus 10% from nationally recognized cost schedules.

A review of the residential cost schedule is performed annually. As part of this review and evaluation process of the estimated replacement cost, newly constructed sold properties representing various levels of quality of construction in district are considered. The property data characteristics of these properties are verified and photographs are taken of the samples. CAD replacement costs are compared against Marshall & Swift, a nationally recognized cost estimator, and the indicated replacement cost abstracted from these market sales of comparably improved structures. The results of this comparison are analyzed using statistical measures, including stratification by quality and reviewing of estimated building costs plus land to sales prices. As a result of this analysis, a new regional multiplier or economic index factor and indications of neighborhood economic factors are developed for use in the district's cost process. These new economic indexes are estimated and used to adjust the district's cost schedule to comply with local building costs as reflected by the local market.

Sales Information

A sales file for the storage of "snapshot" sales data at the time of sale is maintained for real property. Residential vacant land sales, along with commercial improved and vacant land sales are maintained in a sales information system. Residential improved and vacant sales are collected from a variety of sources, including: district questionnaires sent to buyer and seller, field discovery, protest hearings, Board of Realtor's MLS, various sale vendors, builders, and realtors. A system of type, source, validity and verification codes has 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 as an influence on price was considered by paired comparison and applied in the ratio study to the sales as indicated within each neighborhood area.

Neighborhood sales reports are generated as an analysis tool for the appraiser in the development and estimation of market price ranges and property component value estimates. Abstraction and allocation of property components based on sales of similar property is an important analysis tool to interpret market sales under the cost and market approaches to value. These analysis tools help determine and estimate the effects of change, with regard to price, as indicated by sale prices for similar property within the current market.

Monthly time adjustments are estimated based on comparative analysis using paired comparison of sold property. Sales of the same property were considered and analyzed for any indication of price change attributed to a time change or influence. Property characteristics, financing, and conditions of sale were compared for each property sold in the pairing of property to isolate only the time factor as an influence on price.

Statistical Analysis

The residential valuation appraisers perform statistical analysis annually to evaluate whether estimated values are equitable and consistent with the market. Ratio studies are conducted on each of the residential valuation neighborhoods in the district to judge the two primary aspects of mass appraisal accuracy--level and uniformity of value. Appraisal statistics of central tendency generated from sales ratios are evaluated and analyzed for each neighborhood. The level of appraised values is determined by the weighted mean ratio for sales of individual properties within a neighborhood, and a comparison of neighborhood weighted means reflect the general level of appraised value between comparable neighborhoods.

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

Market and Cost Reconciliation and Valuation

Neighborhood analysis of market sales to achieve an acceptable sale ratio or level of appraisal is also the reconciliation of the market and cost approaches to valuation. Market factors are developed from appraisal statistics provided from market analyses and ratio studies and are used to ensure that estimated values are consistent with the market and to reconcile cost indicators. The district's primary approach to the valuation of residential properties uses a hybrid cost-sales comparison approach. This type of

approach accounts for neighborhood market influences not particularly specified in a purely cost model.

The following equation denotes the hybrid model used:

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

Whereas, in accordance with the cost approach, the estimated market value (MV) of the property equals the land value (LV) plus the replacement cost new of property improvements (RCN) less accrued depreciation (AD). As the cost approach separately estimates both land and building contributory values and uses depreciated replacement costs, which reflect only the supply side of the market, it is expected that adjustments to the cost values may be needed to bring the level of appraisal to an acceptable standard as indicated by market sales. Thus, demand side economic factors and influences may be observed and considered. These market, or location adjustments, may be abstracted and applied uniformly within neighborhoods to account for locational variances between market areas or across a jurisdiction. Whereas, in accordance with the Market Approach, the estimated market value (MV) of the property equals the basic unit of property under comparison, times the market price range per unit for sales of comparable property. For residential property, the unit of comparison is typically the price per square foot of living area or the price indicated for the improvement contribution. This analysis for the hybrid model is based on both the cost and market approaches as a correlation of indications of property valuation. A significant unknown for these two indications of value is determined to be the rate of change for the improvement contribution to total property value. The measure of change for this property component can best be reflected and based in the annualized accrued depreciation rate. This cost related factor is most appropriately measured by sales of similar property. The market approach, when improvements are abstracted from the sale price, indicates the depreciated value of the improvement component, in effect, measuring changes in accrued depreciation, a cost factor. The level of improvement contribution to the property is measured by abstraction of comparable market sales, which is the property sale price less land value. The primary unknown for the cost approach is to accurately measure accrued depreciation affecting the amount of loss attributed to the improvements as age increases and condition changes. This evaluation of cost results in the depreciated value of the improvement component based on age and condition. The evaluation of this market and cost information is the basis of reconciliation and indication of property valuation under this hybrid model.

When the appraiser reviews a neighborhood, the appraiser reviews and evaluates a ratio study that compares recent sales prices of properties, appropriately adjusted for the effects of time, within a delineated neighborhood, with the value of the properties' based on the estimated depreciated replacement cost of improvements plus land value. The calculated ratio derived from the sum of the sold properties' estimated value divided by the sum of the time adjusted sales prices indicates the neighborhood level of

appraisal based on sold properties. This ratio is compared to the acceptable appraisal ratio, 96% to 100%, to determine the level of appraisal for each neighborhood. If the level of appraisal for the neighborhood is outside the acceptable range of ratios, adjustments to the neighborhood are made.

If reappraisal of the neighborhood is indicated, the appraiser analyzes available market sales, appropriately adjusted for the apparent effects of time, by market abstraction of property components. This abstraction of property components allows the appraiser to focus on the rate of change for the improvement contribution to the property by providing a basis for calculating accrued depreciation attributed to the improvement component. This impact on value is usually the most significant factor affecting property value and the most important unknown to determine by market analysis. Abstraction of the improvement component from the adjusted sale price for a property indicates the effect of overall market suggested influences and factors on the price of improvements that were a part of this property, recently sold. Comparing this indicated price or value allocation for the improvement with the estimated replacement cost new of the improvement indicates any loss in value due to accrued forms of physical, functional, or economic obsolescence. This is a market driven measure of accrued depreciation and results in a true and relevant measure of improvement marketability, particularly when based on multiple sales that indicate the trending of this rate of change over certain classes of improvements within certain neighborhoods. Based on this market analysis, the appraiser estimates the annual rate of depreciation for given improvement descriptions considering age and observed condition. Once estimated, the appraiser recalculates the improvement value of all property within the sale sample to consider and review the effects on the neighborhood sale ratio. After an acceptable level of appraisal is achieved within the sale sample, the entire neighborhood of property is recalculated utilizing the indicated depreciation rates taken from market sales. This depreciation factor is the basis for trending all improvement values and when combined with any other site improvements and land value, brings the estimated property value through the cost approach closer to actual market prices as evidenced by recent sale prices available within a given neighborhood. Therefore, based on analysis of recent sales located within 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 update neighborhood are 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 is generated that compares recent sale prices with the proposed appraised values for these sold properties. From this set of ratio studies, the appraiser judges the appraisal level and uniformity in both update and non-update neighborhoods and verifies appraised values against overall trends as exhibited by the local market, and finally, for the school district as a whole.

TREATMENT OF RESIDENCE HOMESTEADS

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

- the market value; or

- the preceding year's appraised value;
Plus, 10 percent for each year since the property was re-appraised;

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

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

INDIVIDUAL VALUE REVIEW PROCEDURES

Field Review

The appraiser identifies individual properties in critical need of field review through sales ratio analysis. Sold properties are field reviewed on a monthly and periodic basis to check for accuracy of data characteristics. In the case that the CAD discovers a property that has sold, and the sale price is known, and there is a large differential between the sale price and the appraised value, the property is then inspected to ensure that all structural improvements are on the appraisal roll and that all improvements are appropriately classed. If errors are discovered, then legally allowed corrections are made to the appraisal roll.

As the district's parcel count has increased through new home construction, and the homes constructed in the boom years of the late 70's and early 80's experience remodeling, the appraisers are required to perform the field activity associated with transitioning and high demand neighborhoods. Increased sales activity has also

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

Office Review

Once field review is completed, the appraiser conducts a routine valuation review of all properties as outlined in the discussion of ratio studies and market analysis. Valuation reports comparing previous values against proposed and final values are generated for all residential improved and vacant properties. The percentage of value difference are noted for each property within a delineated neighborhood allowing the appraiser to identify, research and resolve value anomalies before final appraised values are released. Previous values resulting from a hearing protest are individually reviewed to determine if the value remains appropriate for the current year.

Once the appraiser is satisfied with the level and uniformity of value for each neighborhood within his area of responsibility, the estimates of value go to noticing.

PERFORMANCE TESTS

Sales Ratio Studies

The primary analytical tool used by the appraisers to measure and improve performance is the ratio study. The district ensures that the appraised values that it produces meet the standards of accuracy in several ways. Overall sales ratios are generated for each 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. The PC-based ratio studies are designed to emulate the findings of the state comptroller's annual property value study for category a property. The appraisal district relies heavily on the Annual PVS in addition to our own study in order to more accurately reflect the values of the Leon Central Appraisal District.

Management Review Process

Once the proposed value estimates are finalized, the appraiser reviews the sales ratios by neighborhood and presents pertinent valuation data, such as weighted sales ratio and pricing trends, to the appraisal supervisors and the Chief Appraiser for final review and approval. This review includes comparison of level of value between related neighborhoods within and across jurisdiction lines. The primary objective of this review

is to ensure that the proposed values have met preset appraisal guidelines appropriate for the tax year in question.

Field Review

The date of last inspection, extent of that inspection, and the Leon County CAD appraiser responsible are listed in the CAMA system. If a property owner disputes the District's records concerning this data in a protest hearing, CAMA may be adjusted based on the credibility of the evidence provided. Normally, a new field check is then requested to verify this information for the current year's valuation or for the next year's valuation. There are no building permits required in Leon County, only septic permits. Adding Pictometry with Change Finder aids in offsetting the gap caused by the lack of a Building Permit process. Eagle View flew Leon County in 2018 for the Pictometry system now employed in our county. An updated flight will occur in January 2021 and will be loaded into the system by April 2021. Eagle View Change Finder utilizes the data collected from this photography flight and compared it to available satellite imagery. This comparison was used to produce a visual overlay to the Pictometry map that identifies any improvements that were not evident on the satellite imagery. The process will continue with Eagle View accomplishing a new photography flight every three years. The flight in 2021 will be compared to the photography flight accomplished in 2018 rather than satellite imagery for an even higher degree of accuracy. Additionally, the data provided by Change Finder will be verified by a Field Review of the property.

The Chief Appraiser is somewhat limited in the time available to field review all commercial properties of a specific use type. However, a major effort is made by appraisers to field review as many properties as possible or economic areas experiencing large numbers of remodels, renovations, or retrofits, changes in occupancy levels or rental rates, new leasing activity, new construction, or wide variations in sale prices. Field review of real property accounts is accomplished while business personal property is reviewed and inspected in the field. Additionally, the appraisers frequently field review subjective data items such as building class, quality of construction (known as cost modifiers), condition, and physical, functional and economic obsolescence factors contributing significantly to the market value of the property. In some cases, field reviews are warranted when sharp changes in occupancy or rental rate levels occur between building classes or between economic areas. With preliminary estimates of value in these targeted areas, the appraisers test computer assisted values against their own appraisal judgment. While in the field, the appraisers physically inspect sold and unsold properties for comparability and consistency of values.

Office Review

Office reviews are completed on properties subject to field inspections and are performed in compliance with the guidelines required by the existing classification system. Office reviews are typically limited by the available market data presented for final value analysis. These reviews summarize the pertinent data of each property as well as comparing the previous value to the proposed value conclusions of the various approaches to value. These evaluations and reviews show proposed value changes, income model attributes or overrides, economic factor (cost overrides) and special factors affecting the property valuation such as new construction status, and a three years sales history (USPAP property history requirement for non-residential property). The appraiser may review methodology for appropriateness to ascertain that it was completed in accordance with USPAP or more stringent statutory and district policies. This review is performed after preliminary ratio statistics have been applied. If the ratio statistics are generally acceptable overall the review process is focused primarily on locating skewed results on an individual basis. Previous values resulting from protest hearings are individually reviewed to determine if the value remains appropriate for the current year based on market conditions. Each appraiser's review is limited to properties in their area of responsibility by property type (improved) or geographic area (commercial vacant land).

Once the appraiser is satisfied with the level and uniformity of value for each commercial property within their area of responsibility, the estimates of value go to noticing. Each parcel is subjected to the value parameters appropriate for its use type.

Business Personal Property Valuation Process

INTRODUCTION

Appraisal Responsibility

There are four different personal property types appraised by the district's personal property section: Business Personal Property accounts; leased assets; vehicles and aircraft; and multi-location assets. All commercial and heavy industrial valuations are handled by Pritchard and Abbott, Inc. Renditions are filed with the appraisal district for review before being forwarded to the staff at Pritchard and Abbott, Inc., The Chief Appraiser is available to assist the staff of Pritchard and Abbott, Inc., with any questions or concerns involving the accounts handled by Pritchard and Abbott.

- **Personnel** - The personal property staff consists of the Chief Appraiser and the field appraiser that works in the market on a daily basis.
- **Data** – The Leon Central Appraisal District maintains copies of renditions for year-to-year reference purposes on business personal property accounts. The staff of the appraisal district collects field data and maintains electronic property files making updates and changes gathered from field inspections, newspapers, property renditions, sales tax permit listing and interviews with property owners.

VALUATION APPROACH

SIC Code Analysis

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

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

Highest and Best Use Analysis

The highest and best use of property is the reasonable and probable use that supports the greatest income and the highest present value as of the date of the appraisal. The highest and best use must be physically possible, legal, financially feasible, and productive to its maximum. The highest and best use of personal property is normally its current use.

DATA COLLECTION/VALIDATION

Data Collection Procedures

Personal property data collection procedures are published and distributed to Business Personal Property appraiser involved in the appraisal and valuation of personal property. The appraisal procedures are reviewed and revised to meet the changing requirements of field data collection.

Sources of Data

Business Personal Property

The district's property characteristic data was collected through a massive field data collection effort coordinated by the district over the recent past and from property owner renditions. From year to year, reevaluation activities permit district appraisers to collect new data via an annual field inspection. This project results in the discovery of new businesses, changes in ownership, relocation of businesses, and closures of businesses not revealed through other sources. Tax assessors, city and local newspapers, and the public often provide the district information regarding new personal property and other useful facts related to property valuation.

Vehicles

An outside vendor provides Leon CAD with a listing of vehicles within the jurisdiction. The vendor develops this listing from the Texas Department of Transportation (TX DOT) Title and Registration Division records. Other sources of data include property owner renditions and field inspections.

Leased and Multi-Location Assets

The primary source of leased and multi-location assets is property owner renditions of property. Other sources of data include field inspections.

VALUATION AND STATISTICAL ANALYSIS (model calibration)

Cost Schedules

Cost schedules are developed based on the SIC code by the Property Tax Division of the Comptroller's Office and by district personal property valuation appraisers. Analyzing cost data from property owner renditions, hearings, state schedules, and published cost guides develops the cost schedules. The cost schedules are reviewed as necessary to conform to changing market conditions. The schedules are typically in a price per square foot format, but some exception SIC's are in an alternate price per unit format, such as per room for hotels.

Statistical Analysis

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

Depreciation Schedule and Trending Factors:

Business Personal Property

Leon CAD's primary approach to the valuation of business personal property is the cost approach. The replacement cost new (RCN) is either developed from property owner reported historical cost or from CAD developed valuation models. The trending factors used by the CAD to develop RCN are based on published valuation guides. The percent good depreciation factors used by Leon CAD are also based on published valuation guides. The index factors and percent good depreciation factors are used to develop present value factors (PVF), by year of acquisition, as follows:

$PVF = INDEX\ FACTOR \times PERCENT\ GOOD\ FACTOR$

The PVF is used as an "express" calculation in the cost approach. The PVF is applied to reported historical cost as follows:

$MARKET\ VALUE\ ESTIMATE = PVF \times HISTORICAL\ COST$

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

Computer Assisted Personal Property Appraisal (CAPP)

The CAPP valuation process has two main objectives: 1) Analyze and adjust estimated asset cost with existing SIC models. 2) Develop new models for business classifications not previously integrated into CAPP. The delineated sample is reviewed for accuracy of SIC code, square footage, field data, and original cost information. Models are created and refined using actual original cost data to derive a typical replacement cost new (RCN) per square foot for a specific category of assets. The RCN per square foot is depreciated by the estimated age using the depreciation table adopted for the tax year.

The data sampling process is conducted in the following order: 1) Prioritizing Standard Industrial Classification (SIC) codes for model analysis. 2) Compiling the data and developing the reports. 3) Field checking the selected samples. The models are built and adjusted using internally developed software. The models are then tested against the previous year's data. The typical RCN per square foot (or applicable unit) is determined by a statistical analysis of the available data.

CAPPA model values are used in the general business personal property valuation program to estimate the value of new accounts for which no property owner's rendition is filed. Model values are also used to establish tolerance parameters for testing the valuation of property for which prior data years' data exist or for which current year rendered information is available. The calculated current year value or the prior year's value is compared to the indicated model value by the valuation program. If the value being tested is within an established acceptable percentage tolerance range of the model value, the account passes that range check and moves to the next valuation step. If the account fails the tolerance range check, it is flagged for individual review. Allowable tolerance ranges may be adjusted from year to year depending on the analysis of the results of the prior year.

Vehicles

Value estimates for vehicles are provided by an outside vendor and are based on Red Book published book values, and there are also considerations available for high mileage. An appraiser using PVF schedules or published guides values vehicles that are not valued by the vendor.

Leased and Multi-Location Assets

Leased and multi-location assets are valued using the PVF schedules mentioned above. If the asset to be valued in this category is a vehicle, then Red Book published book values are used. Assets that are not valued by the vendor are valued by an appraiser using PVF schedules or published guides.

INDIVIDUAL VALUE REVIEW PROCEDURES

Office Review

Business Personal Property

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

PERFORMANCE TESTS

Ratio Studies

Each year the Property Tax Division of the state comptroller's office conducts a property value study (PVS). The PVS is a ratio study used to gauge appraisal district performance. Results from the PVS play a part in school funding. Rather than a sales ratio study, the personal property PVS is a ratio study using state cost and depreciation schedules to develop comparative personal property values. These values are then compared to Leon CAD's personal property values and ratios are indicated.

Value Review Procedures

The method of value review for this type of property is based on the review of the factors estimated within the discounted cash flow analysis methodology such as the discount rate, product prices, and operating expenses. Evaluation and verification of these economic factors as to their validity within current economic times and based on current capital requirements for investment in this type property is re-confirmed and reviewed for reasonableness. Sales of mineral properties are considered but adequate sale data is usually not available due to difficulty in confirming sales. The market for this type of property is neither an active nor an efficient market, there are very few participants and pricing information is mostly confidential. There is no central source for tracking these transactions and property owners are reluctant to reveal market information concerning prices paid or terms of the transaction. Because of a lack of market sales on mineral property, appraised values are regularly compared to similar properties within the same production field, field of exploration, strata of formation, or production history and expense level.

When market sales are available the ratio study is based on a comparison of the appraised value to the sale price. For mineral property, which lacks available market sales, a ratio study is a comparison of another appraisal opinion with the opinion of the district to determine level and uniformity of appraisal. The Property Tax Division of the Comptroller's Office conducts an annual ratio study of selected mineral properties to gauge the districts appraisal performance. The PTD utilizes the same valuation methodology to appraise individual mineral properties. This opinion of value is then utilized as market evidence with the same significance as if the property sold for that value. The estimated value of the property by Leon CAD is compared to the appraisal by the PTD to calculate the ratio and the indicated level of appraisal. This study indicates the median and mean levels of appraisal for mineral property and is considered reliable as a review and evaluation tool.

Reappraisal Plan Approval

This plan was approved by the Leon Central Appraisal District Board of Directors in an Open Meeting held September 14, 2020.



**PRITCHARD & ABBOTT, INC.
VALUATION CONSULTANTS**

S.B. 1652* BIENNIAL REAPPRAISAL PLAN

**FOR THE ANNUAL APPRAISAL FOR
AD VALOREM TAX PURPOSES OF
MINERAL, INDUSTRIAL, UTILITY AND
RELATED PERSONAL PROPERTY**

For Tax Years:

2021 and 2022

Originally Printed: June 29, 2020

*Senate Bill 1652 passed by the Texas Legislature, 79th Regular Session in 2005, amending Section 6.05 of the Texas Property Tax Code, adding Subsection (i) 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 for 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."

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POLICY STATEMENT OF PRITCHARD & ABBOTT, INC., ON THE UNIFORM STANDARDS OF PROFESSIONAL APPRAISAL PRACTICE

Pritchard & Abbott, Inc., (P&A), a privately held company engaged primarily, but not wholly, in the ad valorem tax valuation industry endorses Uniform Standards of Professional Appraisal Practice (USPAP) as the basis for the production of sound appraisals. Insofar as the statutory requirement to appraise groups (or a “universe”) of real and personal property within an established period of time using standardized procedures—and subjecting the resulting appraisals to statistical measures—is the definition of mass appraisal, P&A subscribes to USPAP Standards 5 and 6 (Mass Appraisal, Development and Reporting) whenever applicable in the development and defense of values. When circumstances clearly dictate the use of single property appraisal procedures, P&A adheres to the spirit and intent of the remaining USPAP Standards within all appropriate, practical, and/or contractual limitations or specifications.

A biennial reappraisal plan is, at its core, a discussion of the CAD’s intended implementation of the Scope of Work Rule in USPAP. This plan provides general information about this rather comprehensive USPAP rule, as well as the specific steps P&A takes in the actual appraisal of various property types per our contractual obligations. This Biennial Reappraisal Plan should not be confused or conflated with an “appraisal manual” or other “how-to” guide which may or may not exist within P&A for any particular property type we appraise.

This reappraisal plan discusses a few other USPAP rules that interact with the Scope of Work Rule, such as the Ethics Rule, the Record Keeping Rule, and Jurisdictional Exception Rule. For further information regarding other sections of USPAP, including the Competency Rule, definitions, and appraisal reports, please reference P&A’s “USPAP report” which accompanies our appraisals and supporting documentation provided to clients per Property Tax Code, Sec. 25.01(c) at the completion of each tax year. *An appraisal season thus begins with an appraisal plan (approved by the CAD’s Board of Directors) and ends with appraisal reports.* Providing these reports is definitely part of the plan. Likewise, much of the verbiage in the “USPAP report” is a reiteration of the Biennial Reappraisal Plan.

USPAP defines “appraisal” as the act or process of developing an opinion of value or pertaining to appraising and related functions such as appraisal practice or appraisal services. Valuation services is defined as services pertaining to an aspect of property value, regardless of the type of service and whether it is performed by appraisers or by others. The USPAP definition of “appraiser” is one who is expected to perform valuation services competently and in a manner that is *independent, impartial, and objective*. USPAP Advisory Opinion 21: *USPAP Compliance* states that this expectation (by clients and intended users of appraisal reports) is the basis that creates an ethical obligation to comply with USPAP, even if not legally required. Advisory opinions do not establish new standards or interpret existing standards, but instead are issued to illustrate the applicability of appraisal standards in specific situations.

The majority of property types that P&A typically appraises for ad valorem tax purposes are categorized as unique, complex, and/or “special purpose” properties (mineral interests, industrial, utility, and related personal property). These categories of properties do not normally provide sufficient market data of reliable quality and/or quantity to support the rigorous use of all USPAP-prescribed mass appraisal development mandates (Standard 5: Mass Appraisal, Development), particularly with regards to some, but not all, of the *model calibration and statistical performance testing* confines. However, P&A does strive to employ all or most elements of mass appraisal techniques with regards to the *definition and identification of property characteristics and model specification* and application.

Per USPAP Advisory Opinion 32: *Ad Valorem Property Tax Appraisal and Mass Appraisal Assignments*, in the

interests of equity, the scope of work in mass appraisal assignments for ad valorem taxation can include consideration of appraisal level (the overall proximity between appraised values and actual prices) and the uniformity of property values (equity within groups of like properties). The appraiser is responsible for recognizing when the concepts of appraisal level and appraisal uniformity are necessary for credible assignment results in a mass appraisal assignment for ad valorem taxation.

Residential real estate property appraisers most frequently apply mass appraisal methods within the sales comparison (market) approach to value. Through the use of standardized data collection (i.e., actual market sales), specification and calibration of mass appraisal models, tables, and schedules are possible. Through ratio study analysis and other performance measures, a cumulative summary of valuation accuracy can thus be produced in order to calibrate the appraisal model(s). Where sufficient data of reliable quality exists, mass appraisal is also used for other types of real estate property such as farms, vacant lots, and some commercial uses (e.g., apartments, offices, and small retail).

Regarding mass appraisal reports due the client and other intended users per USPAP (Standard 6 (Mass Appraisal, Reporting), a written report of the mass appraisal as described in Standards 6-2 is not provided for each individual property. An individual property record or worksheet may describe the valuation of the specific property after the application of the mass appraisal model. To understand the individual property result developed in a mass appraisal requires the examination of all the information and analysis required by Standards 6-2.

P&A will clearly state or otherwise make known all extraordinary assumptions, hypothetical conditions, limitations imposed by assignment conditions, and/or jurisdictional exceptions in its appraisal reports as they are conveyed to our clients. *Intended users of our reports are typically the client(s) for which we are under direct contract.* Although taxpayers or their agents who own and/or represent the subject property being appraised often receive these reports either by law or as a courtesy of the client or P&A, this receipt does not mean these parties automatically become Intended Users as defined by USPAP. *A party receiving a copy of a report in order to satisfy disclosure requirements does not become an intended user of the appraisal or mass appraisal unless the appraiser specifically identifies such party as an intended user.* Potential other users include parties involved in adjudication of valuation disputes (review board members, lawyers, judges, etc.), governmental agencies which periodically review our appraisals for various statutory purposes (such as the Texas Comptroller's Office) and private parties who may obtain copies of our appraisals through Open Records Requests made to governmental agencies.

USPAP does not currently address communications of assignment results prior to completion of the assignment, thus such communications have no requirements other than to comply with the general requirements in the ETHICS RULE, the COMPETENCY RULE, and the JURISDICTIONAL EXCEPTION RULE. The client and all intended users should be aware that mass appraisals, as opposed to most "fee" appraisals, are somewhat inherently "limited" versus "complete" and that appraisal reports, unless otherwise contracted for by the client, will most often be of a "restricted" nature whereas explanations of appraisal methods and results are more concise versus lengthy in order to promote brevity, clarity, and transparency to the intended user(s).

Per USPAP, the appropriate reporting option and level of information in a report are dependant on the intended use and the intended users. Although the reporting verbiage in USPAP Standard 6 does not specifically offer or promulgate a "Restricted Appraisal Report" such as in Standard 2 (Real Property Appraisal, Reporting) and Standard 8 (Personal Property Appraisal, Reporting), it should be noted that: a) all mass appraisals and mass appraisal reports deal with real and personal property in some form or fashion; and b) P&A is a private consulting firm, a fact which may necessitate the withholding of certain data and/or appraisal models/techniques which are deemed confidential, privileged and/or proprietary in nature. The use of "limited" appraisals in conjunction with "restricted" reports in no way implies non-compliance with USPAP. *The substantive content of a report*

determines its compliance.

P&A believes that, with its vast experience and expertise in these areas of appraisal, all concluded values and reports thereof are credible, competent, understandable, uniform and consistent; and most importantly for ad valorem tax purposes, accomplished in a cost-efficient and timely manner.

Per previous ASB comments under Standard 6-2(b) *[scope of work... special limiting conditions]*:

“Although appraisers in ad valorem taxation should not be held accountable for limitations beyond their control, they are required by this specific requirement to identify cost constraints and to take appropriate steps to secure sufficient funding to produce appraisals that comply with these standards. Expenditure levels for assessment administration are a function of a number of factors. Fiscal constraints may impact data completeness and accuracy, valuation methods, and valuation accuracy. Although appraisers should seek adequate funding and disclose the impact of fiscal constraints on the mass appraisal process, they are not responsible for constraints beyond their control.”

In any event, however, it is not P&A’s intent to allow constraints, fiscal or otherwise, to limit the scope of work to such a degree that the mass appraisal results provided to our clients are not credible within the context of the intended use(s) of the appraisal.

PREAMBLE

The purpose of USPAP is to establish requirements and conditions for ethical, thorough, and transparent property valuation services. Valuation services pertain to all aspects of property value and include services performed by appraisers and other professionals including attorneys, accountants, insurance estimators, auctioneers, or brokers. Valuation services include appraisal, appraisal review, and appraisal consulting. The primary intent of these Standards is to promote and maintain a high level of public trust in professional appraisal practice.

It is essential that professional appraisers develop and communicate their analyses, opinions, and conclusions to intended users of their services in a manner that is meaningful and not misleading. The importance of the role of the appraiser places ethical obligations upon those who serve in this capacity. These USPAP Standards reflect the current standards of the appraisal profession.

These Standards are for both appraisers and users of appraisal services. To maintain a high level of professional practice, appraisers observe these Standards. However, these Standards do not in themselves establish which individuals or assignments must comply. The Appraisal Foundation nor its Appraisal Standards Board is not a government entity with the power to make, judge, or enforce law. Compliance with USPAP is only required when either the service or the appraiser is obligated to comply by law or regulation, or by agreement with the client or intended users. When not obligated, individuals may still choose to comply.

USPAP addresses the ethical and performance obligations of appraisers through DEFINITIONS, Rules, Standards, Statements (if any), and Advisory Opinions. USPAP Standards deal with the procedures to be followed in performing an appraisal or appraisal review and the manner in which each is communicated. A brief description of the USPAP Standards are as follows:

- **Standards 1 and 2:** establish requirements for the development and communication of a real property appraisal.
- **Standards 3 and 4:** establishes requirements for the development and communication of an appraisal review.
- **Standards 5 and 6:** establishes requirements for the development and communication of a mass appraisal.
- **Standards 7 and 8:** establish requirements for the development and communication of a personal property appraisal.
- **Standards 9 and 10:** establish requirements for the development and communication of a business or intangible asset appraisal.

Section 23.01(b) [Appraisals Generally] of the Texas Property Tax Code states:

"The market value of property shall be determined by the application of generally accepted appraisal methods and techniques. If the Appraisal District determines the appraised value of a property using mass appraisal standards, the mass appraisal standards must comply with the Uniform Standards of Professional Appraisal Practice...." (underline added for emphasis)

Consequently, USPAP Standards 5 and 6 are assumed to be the applicable standard for ad valorem tax purposes in Texas, if mass appraisal practices are in fact being used to appraise the subject property. USPAP Advisory Opinion 32 suggests several USPAP standards other than Standards 5 or 6 can apply in ad valorem tax work. It appears that an appraiser engaged in ad valorem tax work in Texas is not specifically required by law to follow these USPAP standards if in fact mass appraisal practices have not been used to appraise the subject property. In this case it could be deemed appropriate to invoke the Jurisdictional Exception Rule which is applicable when

there is a contradiction between the requirements of USPAP and the law or regulation of a jurisdiction. Please see the P&A Policy Statement on USPAP as provided elsewhere in this report for a more detailed discussion regarding this matter.

ETHICS RULE

Because of the fiduciary responsibilities inherent in professional appraisal practice, the appraiser must observe the highest standards of professional ethics. This Ethics Rule is divided into three sections:

- Conduct;
- Management;
- Confidentiality.

This Rule emphasizes the personal obligations and responsibilities of the individual appraiser. However, it should be noted that groups and organizations *which are comprised of individual appraisers engaged in appraisal practice* effectively share the same ethical obligations. To the extent the group or organization does not follow USPAP Standards when legally required, individual appraisers should take steps that are appropriate under the circumstances to ensure compliance with USPAP.

Compliance with these Standards is required when either the service or the appraiser is obligated by law or regulation, or by agreement with the client or intended users, to comply. *Compliance is also required when an individual, by choice, represents that he or she is performing the service as an appraiser.*

An appraiser must not misrepresent his or her role when providing valuation services that are outside of appraisal practice.

Honesty, impartiality, and professional competency are required of all appraisers under USPAP Standards. To document recognition and acceptance of his or her USPAP-related responsibilities in communicating an appraisal or appraisal review completed under USPAP, an appraiser is required to certify compliance with these Standards.

CONDUCT

An appraiser must perform assignments with impartiality, objectivity, and independence, and without accommodation of personal interests.

An appraiser:

- must not perform an assignment with bias;
- must not advocate the cause or interest of any party or issue;
- *must not accept an assignment that includes the reporting of predetermined opinions and conclusions;*
- must not misrepresent his or her role when providing valuation services that are outside of appraisal practice;
- must not communicate assignment results with the intent to mislead or to defraud;
- must not use or communicate a report or assignment results known by the appraiser to be misleading or fraudulent;
- must not knowingly permit an employee or other person to communicate a report or assignment results that are misleading or fraudulent report;
- must not use or rely on unsupported conclusions relating to characteristics such as race, color, religion, national origin, gender, marital status, familial status, age, receipt of public assistance income, handicap, or an unsupported conclusion that homogeneity of such characteristics is necessary to maximize value;
- must not engage in criminal conduct;

- must not willfully or knowingly violate the requirements of the RECORD KEEPING RULE; and must not perform an assignment in a grossly negligent manner.

If known prior to accepting an assignment, and/or if discovered at any time during the assignment, an appraiser must disclose to the client, and in each subsequent report certification:

- any current or prospective interest in the subject property or parties involved; and
- any services regarding the subject property performed by the appraiser within the three year period immediately preceding acceptance of the assignment, as an appraiser or in any other capacity.

The appraiser can agree with the client to keep the mere occurrence of a prior appraisal assignment confidential. If an appraiser has agreed with the client not to disclose that he or she has appraised a property, the appraiser must decline all subsequent assignment that fall with the three year period. In assignments in which there is no report, only the initial disclosure to the client is required.

Presumably all parties in ad valorem tax appraisal will be aware of the ongoing yearly nature of the appraisal assignments performed by valuation consulting firms like Pritchard & Abbott, Inc.—i.e., it will not be confidential—so that this particular conduct instruction is more or less a moot point (regarding the three year period discussed) if the prior service is in fact the ad valorem tax appraisals performed in previous tax years.

MANAGEMENT

The payment of a fee, commission, or a thing of value by the appraiser in connection with the procurement of an assignment must be disclosed. This disclosure must appear in the certification and in any transmittal letter in which conclusions of value are stated; however, the disclosure of the amount paid is not required. Intra-company payments to employees of groups or organizations involved in appraisal practice for business development do not require disclosure.

It is unethical for an appraiser to accept compensation for performing an assignment when it is contingent upon the reporting of *a predetermined result, a direction in assignment results that favors the cause of the client, the amount of a value opinion, the attainment of a stipulated result*, or the occurrence of a subsequent event directly related to the appraiser's opinions and specific to the assignment's purpose.

Advertising for or *soliciting assignments in a manner that is false, misleading, or exaggerated* is unethical. Decisions regarding finder or referral fees, contingent compensation, and advertising may not be the responsibility of an individual appraiser, but for a particular assignment it is the responsibility of the individual appraiser to ascertain that there has been no breach of ethics, that the assignment consulting assignment has been prepared in accordance with USPAP Standards, and that the report can be properly certified when required by USPAP Standards 2-3, 4-3, 6-3, 8-3, or 10-3.

An appraiser must affix, or authorize the use of, his or her signature to certify recognition and acceptance of his or her USPAP responsibilities in an appraisal or appraisal review assignment. An appraiser may authorize the use of his or her signature only on an assignment-by-assignment basis.

In addition, an appraiser must not affix the signature of another appraiser without his or her consent. An appraiser must exercise due care to prevent unauthorized use of his or her signature. However, an appraiser exercising such care is not responsible for unauthorized use of his or her signature.

CONFIDENTIALITY

An appraiser must protect the confidential nature of the appraiser-property owner relationship.

An appraiser must act in good faith with regard to the legitimate interests of the client in the use of confidential information and in the communication of assignment results.

An appraiser must be aware of, and comply with, all confidentiality and privacy laws and regulations applicable in an assignment.

An appraiser must not disclose confidential factual data obtained from a property owner to anyone other than:

1. The client;
2. Parties specifically authorized by the client;
3. State appraiser regulatory agencies;
4. Third parties as may be authorized by due process of law; or
5. A duly authorized professional peer review committee except when such disclosure to a committee would violate applicable law or regulation.

An appraiser must take reasonable steps to safeguard access to confidential information and assignment results by unauthorized individuals, whether such information or results are in physical or electronic form. In addition, an appraiser must ensure that employees, coworkers, subcontractors, or others who may have access to confidential information or assignments results, are aware of the prohibitions on disclosure of such information or results.

It is unethical for a member of a duly authorized professional peer review committee to disclose confidential information presented to the committee.

When all confidential elements of confidential information are removed through redaction or the process of aggregation, client authorization is not required for the disclosure of the remaining information, as modified.

RECORD KEEPING RULE

An appraiser must prepare a workfile for each appraisal or appraisal review assignment. A workfile must be in existence prior to the issuance of any report or other communication of assignment results. A written summary of an oral report must be added to the workfile within a reasonable time after the issuance of the oral report.

The workfile must include the name of the client and the identity, by name or type, of any other intended users, and true copies of all written reports, documented on any type of media. (A true copy is a replica of the report transmitted to the client. A photocopy or an electronic copy of the entire report transmitted to the client satisfies the requirement of a true copy.) A workfile must contain summaries of all oral reports or testimony, or a transcript of testimony, including the appraiser's signed and dated certification; and all other data, information, and documentation necessary to support the appraiser's opinions and conclusions and to show compliance with USPAP, or references to the location(s) of such other data, information, and documentation.

A workfile in support of a Restricted Appraisal Report or an oral appraisal report must be sufficient for the appraiser to produce an Appraisal Report. A workfile in support of an oral appraisal review report must be sufficient for the appraiser to produce an Appraisal Review Report.

An appraiser must retain the workfile for a period of at least *five years after preparation* or at least two years after final disposition of any judicial proceeding in which the appraiser provided testimony related to the assignment, whichever period expires last.

An appraiser must have custody of the workfile, or make appropriate workfile retention, access, and retrieval arrangements with the party having custody of the workfile. This includes ensuring that a workfile is stored in a medium that is retrievable by the appraiser throughout the prescribed record retention period. An appraiser having custody of a workfile must allow other appraisers with workfile obligations related to an assignment appropriate access and retrieval for the purpose of:

- submission to state appraiser regulatory agencies;
- compliance with due process of law;
- submission to a duly authorized professional peer review committee; or
- compliance with retrieval arrangements.

A workfile must be made available by the appraiser when required by a state appraiser regulatory agency or due process of law.

An appraiser who willfully or knowingly fails to comply with the obligations of this Record Keeping Rule is in violation of the Ethics Rule.

SCOPE OF WORK RULE

For each appraisal or appraisal review assignment, an appraiser must:

1. Identify the problem to be solved;
2. Determine and perform the scope of work necessary to develop credible assignment results; and
3. Disclose the scope of work in the report.

An appraiser must properly identify the problem to be solved in order to determine the appropriate scope of work. The appraiser must be prepared to demonstrate that the scope of work is sufficient to produce credible assignment results.

Scope of work includes, but is not limited to:

- the extent to which the property is identified;
- the extent to which tangible property is inspected;
- the type and extent of data researched; and
- the type and extent of analyses applied to arrive at opinions or conclusions.

Appraisers have broad flexibility and significant responsibility in determining the appropriate scope of work for an appraisal or appraisal review assignment. Credible assignment results require support by relevant evidence and logic. *The credibility of assignment results is always measured in the context of the intended use.*

PROBLEM IDENTIFICATION

An appraiser must gather and analyze information about those assignment elements that are necessary to properly identify the appraisal, appraisal review or appraisal consulting problem to be solved. The assignment elements necessary for problem identification are addressed in the Standard 6-2:

- client and any other intended users;
- intended use of the appraiser's opinions and conclusions;
- type and definition of value;
- effective date of the appraiser's opinions and conclusions;
- subject of the assignment and its relevant characteristics; and
- assignment conditions.

This information provides the appraiser with the basis for determining the type and extent of research and analyses to include in the development of an appraisal. Similar information is necessary for problem identification in appraisal review and appraisal consulting assignments. Assignment conditions include:

- assumptions;
- extraordinary assumptions;
- hypothetical conditions;
- laws and regulations;
- jurisdictional exceptions; and
- other conditions that affect the scope of work.

SCOPE OF WORK ACCEPTABILITY

The scope of work must include the research and analyses that are necessary to develop credible assignment results. The scope of work is acceptable when it meets or exceeds:

- the expectations of parties who are regularly intended users for similar assignments; and
- what an appraiser's peers' actions would be in performing the same or a similar assignment.

Determining the scope of work is an ongoing process in an assignment. Information or conditions discovered during the course of an assignment might cause the appraiser to reconsider the scope of work. An appraiser must be prepared to support the decision to exclude any investigation, information, method, or technique that would appear relevant to the client, another intended user, or the appraiser's peers.

An appraiser must not allow assignment conditions to limit the scope of work to such a degree that the assignment results are not credible in the context of the intended use. In addition, the appraiser must not allow the intended use of an assignment or a client's objectives to cause the assignment results to be biased.

DISCLOSURE OBLIGATIONS

The report must contain sufficient information to allow intended the client and other intended users to understand the scope of work performed. Proper disclosure is required because clients and other intended users may rely on the assignment results. Sufficient information includes disclosure of research and analyses performed or not performed. *The information disclosed must be appropriate for the intended use of the assignment results.*

Sufficient information includes disclosure of research and analyses performed and might also include disclosure of research and analyses not performed. *The appraiser has broad flexibility and significant responsibility in the level of detail and manner of disclosing the scope of work in the appraisal report or appraisal review report.* The appraiser may, but is not required to, consolidate the disclosure in a specific section or sections of the report, or use a particular label, heading or subheading. An appraiser may choose to disclose the scope of work as necessary throughout the report.

JURISDICTIONAL EXCEPTION RULE

If any applicable law or regulation precludes compliance with any part of USPAP, only that part of USPAP becomes void for that assignment. When compliance with USPAP is required by federal law or regulation, no part of USPAP can be voided by a law or regulation of a state or local jurisdiction. *When an appraiser properly follows this Rule in disregarding a part of USPAP, there is no violation of USPAP.*

In an assignment involving a jurisdictional exception, an appraiser must:

- identify the law or regulation that precludes compliance with USPAP;
- comply with that law or regulation;
- clearly and conspicuously disclose in the report the part of USPAP that is voided by that law or regulation; and
- cite in the report the law or regulation requiring this exception to USPAP compliance.

The purpose of the Jurisdictional Exception Rule is strictly limited to providing a saving or severability clause intended to preserve the balance of USPAP if one or more of its parts are determined as contrary to law or public policy of a jurisdiction. By logical extension, there can be no violation of USPAP by an appraiser who disregards, with proper disclosure, only the part or parts of USPAP that are void and of no force and effect in a particular assignment by operation of legal authority.

It is misleading for an appraiser to disregard a part or parts of USPAP as void and of no force and effect in a particular assignment without identifying the part or parts disregarded and the legal authority justifying this action in the appraiser's report.

“Law” includes constitutions, legislative and court-made law, and administrative rules (such as from the Office of the Texas Comptroller of Public Accounts) and ordinances. “Regulations” include rules or orders having legal force, issued by an administrative agency. *Instructions from a client or attorney do not establish a jurisdictional exception.*

A jurisdictional exception prevalent in Texas is that appraisers are seeking to establish “fair market value” as defined by the Texas Property Tax Code instead of “market value” as found in the USPAP definitions section.

USPAP STANDARDS 5 AND 6: MASS APPRAISAL, DEVELOPMENT AND REPORTING (General Discussion)

In developing a mass appraisal, an appraiser must be aware of, understand, and correctly employ those recognized methods and techniques necessary to produce and communicate credible mass appraisals.

Standards 5 and 6 apply to all mass appraisals of real and personal property regardless of the purpose or use of such appraisals. It is directed toward the substantive aspects of developing and communicating competent analyses, opinions, and conclusions in the mass appraisal of properties, whether real property or personal property. Standard 5 is directed toward the substantive aspects of developing credible analyses, opinions, and conclusions in the mass appraisal of properties, while Standard 6 addresses the content and level of information required in a report that communicates the results of a mass appraisal. The reporting and jurisdictional exceptions applicable to public mass appraisals prepared for purposes of ad valorem taxation do not apply to mass appraisals prepared for other purposes.

A mass appraisal includes:

- identifying properties to be appraised;
- defining market areas of consistent behavior that applies to properties;
- identifying characteristics (supply and demand) that affect the creation of value in that market area;
- developing (specifying) a model structure that reflects the relationship among the characteristics affecting value in the market area;
- calibrating the model structure to determine the contribution of the individual characteristics affecting value;
- applying the conclusions reflected in the model to the characteristics of the properties being appraised; and
- reviewing the mass appraisal results.

The Jurisdictional Exception Rule may apply to several sections of Standards 5 and 6 because ad valorem tax administration is subject to various state, county, and municipal laws.

As previously stated in the P&A Policy Statement (page 2), it may not be possible or practicable for all the mass appraisal attributes listed above to be rigorously applied to the many types of complex and/or unique properties that P&A typically appraises. Often there are contractual limitations on the scope of work needed or required. More prevalently, these types of properties do not normally provide a reliable database of market transactions (or details of transactions) necessary for statistically supportable calibration of appraisal models and review of appraisal results. Generally these two functions are effectively accomplished through annual extended review meetings with taxpayers (and clients) who provide data, sometimes confidentially, that allows for appraisal models to be adjusted where necessary. Nevertheless, and notwithstanding whether P&A implicitly or explicitly employs or reports all attributes listed above, in all cases P&A at the minimum employs tenants of “generally accepted appraisal methods” which are the genesis of USPAP Standards.

Per USPAP guidelines, P&A will make known all departures and jurisdictional exceptions when invoked (if an appraisal method or specific requirement is applicable but not necessary to attain credible results in a particular assignment).

The various sections of Standard 5 (development of mass appraisal) and Standard 6 (communication of the mass appraisal results) are briefly summarized below:

- **Standard 5-1:** Establishes the appraiser's technical and ethical framework. Specifically, appraisers must recognize and use established principles, methods and techniques of appraisal in a careful manner while not committing substantial errors of fact or negligence that would materially affect the appraisal results and not give a credible estimate of fair market value. To this end appraisers must continuously improve his or her skills to maintain proficiency and keep abreast of any new developments in the real and personal property appraisal profession. This Standards does not imply that competence requires perfection, as perfection is impossible to attain. Instead, it requires appraisers to employ every reasonable effort with regards to due diligence and due care.
- **Standard 5-2:** Defines the introductory framework requirements of developing a mass appraisal, focusing on the identification and/or definition of: client(s), intended users, effective date, appraisal perspective, scope of work, extraordinary assumptions, hypothetical conditions, the type and definition of value being developed (typically "fair market value" for ad valorem tax purposes), characteristics of the property being appraised in relation to the type and definition of value and intended use, the characteristics of the property's market, the property's real or personal attributes, fractional interest applicability, highest and best use analysis along with other land-related considerations, and any other economic considerations relevant to the property.
- **Standard 5-3:** Defines requirements for developing and specifying appropriate mass appraisal data and elements applicable for real and personal property. For real property, the data and elements include: existing land use regulations, reasonably probable modification of such regulations, economic supply and demand, the physical adaptability of the real estate, neighborhood trends, and highest and best use analysis. For personal property, the relevant data and elements include: identification of industry trends, trade level, highest and best use, and recognition of the appropriate market consistent with the type and definition of value.
- **Standard 5-4:** Further defines requirements for developing mass appraisal models, focusing on development of standardized data collection forms, procedures, and training materials that are used uniformly on the universe of properties under consideration. This rule specifies that appraisers employ recognized techniques for specifying and calibrating mass appraisal models. Model specification is the formal development of a model in a statement or mathematical equation, including all due considerations for physical, functional, and external market factors as they may affect the appraisal. These models must accurately represent the relationship between property value and supply and demand factors, as represented by quantitative and qualitative property characteristics. Models must be calibrated using recognized techniques, including, but not limited to, multiple linear regression, nonlinear regression, and adaptive estimation. Models may be specified incorporating the income, market, and/or cost approaches to value and may be tabular, mathematical, linear, nonlinear, or any other structure suitable for representing the observable property characteristics such as adaptive estimation. Model calibration refers to the process of analyzing sets of property and market data to determine the specific parameters of a model.
- **Standard 5-5:** Defines requirements for collection of sufficient factual data, in both qualitative and quantitative terms, necessary to produce credible appraisal results. The property characteristics collected must be contemporaneous with the effective date of the appraisal. The data collection program should incorporate a quality control procedure, including checks and audits of the data to ensure current and consistent records. This rule also calls for calls for an appraiser, in developing income and expense statements and cashflow projections, to weigh historical information and trends, current market factors affecting such trends, and reasonably anticipated events, such as competition from developments either planned or under construction. Terms and conditions of any leases should be analyzed, as well as the need for and extent of any physical inspection of the properties being appraised.

- **Standard 5-6:** Defines requirements for application of a calibrated model to the property being appraised. This rule calls for: the appraiser to recognize methods or techniques based on the cost, market, and income approaches for improved parcels; the appraiser to value sites by recognized methods or techniques such as allocation method, abstraction method, capitalization of ground rent, and land residual; the appraiser to develop value of leased fee or leasehold estates with consideration for terms and conditions of existing leases, and, when applicable by law, as if held in fee simple whereas market rents are substituted for actual contract rents; the appraiser to analyze the effect on value, if any, of the assemblage of the various parcels, divided interests, or component parts of a property; the appraiser to analyze anticipated public or private improvements located on or off the site, and analyze the effect on value, if any, of such anticipated improvements to the extent they are reflected in market actions.
- **Standard 5-7:** Defines the reconciliation process of a mass appraisal. Specifically, appraisers must analyze the results and/or applicability of the various approaches used while ensuring that, on an overall basis, standards of reasonableness and accuracy are maintained with the appraisal model selected (underline added for emphasis). It is implicit in mass appraisal that, even when properly specified and calibrated models are used, some individual value conclusions will not meet standards of reasonableness, consistency, and accuracy. Appraisers have a professional responsibility to ensure that, on an overall basis, models produce value conclusions that meet attainable standards of accuracy.
- **Standard 6-1:** Defines general requirements of a mass appraisal written report by addressing the level of information required that will allow the report to be non-misleading, clearly understood, and sufficiently qualified with any assumptions and conditions (elements of which are further detailed in the next three sections of this report that discuss P&A appraisal procedures with regards to specific categories of property).
- **Standard 6-2:** Defines specific content required to be included in a mass appraisal written report.
- **Standard 6-3:** Defines the certification of the mass appraisal written report.

The following sections of this report discuss in more detail the various elements of the development of P&A's mass appraisals and associated written reports as required by USPAP Standards 5 and 6, with regards to P&A appraisal of Mineral Interests, Industrial, Utility, Related Personal Property, and Real Estate.

USPAP STANDARDS 5, 6-1, 6-2: MASS APPRAISAL OF MINERAL INTERESTS

INTRODUCTION

Definition of Appraisal Responsibility (Scope of Effort): The Mineral Valuation Department of Pritchard & Abbott, Inc. ("P&A" hereinafter), is responsible for developing credible values for mineral interests (full or fractional percentage ownership of oil and gas leasehold interest, the amount and type of which are legally and/or contractually created and specified through deeds and leases, et.al.) associated with producing (or capable of producing) leases. Mineral interests are typically considered real property because of their derivation from the bundle of rights associated with original fee simple ownership of land. Typically all the mineral interests that apply to a single producing lease are consolidated by type (working vs. royalty) with each type then appraised for full value which is then distributed to the various fractional decimal interest owners prorata to their individual type and percentage amount.

P&A's typical client is a governmental entity charged with appraisal responsibility for ad valorem tax purposes, although other types of clients (private businesses, individuals, etc.) occasionally contract for appraisal services which are strictly for various non-ad valorem tax purposes so that no conflicts of interest are created with P&A's core ad valorem tax work.

P&A hereby makes the assumption that, in all appraisal assignments performed for governmental entities in satisfaction of contractual obligations related to ad valorem tax, the client does not wish to or cannot legally request the appraisal report not identify the client.

Intended users of our reports are typically the client(s) for which we are under direct contract. Although taxpayers or their agents who own and/or represent the subject property being appraised often receive these reports either by law or as a courtesy of the client or P&A, this receipt does not mean these parties automatically become Intended Users as defined by USPAP. **A party receiving a copy of a report in order to satisfy disclosure requirements does not become an intended user of the appraisal or mass appraisal unless the appraiser specifically identifies such party as an intended user.** Potential other users include parties involved in adjudication of valuation disputes (review board members, lawyers, judges, etc.), governmental agencies which periodically review our appraisals for various statutory purposes (such as the Texas Comptroller's Office) and private parties who may obtain copies of our appraisals through Open Records Requests made to governmental agencies.

This section of P&A's USPAP report is not applicable to any mineral or mineral interest property that an appraisal district appraises outside of P&A's appraisal services, in which case the appraisal district's overall USPAP report should be referenced.

P&A makes the **Extraordinary Assumption** that all properties appraised for ad valorem tax purposes are marketable whereas ownership and title to property are free of encumbrances and other restrictions that would affect fair market value to an extent not obvious to the general marketplace. If and/or when we are made aware of any encumbrances, etc., these would be taken into account in our appraisal in which case the extraordinary assumption stated above would be revoked.

P&A is typically under contract to determine current market value or "fair market value" of said mineral interests. Fair market value is typically described as the price at which a property would sell for if:

- exposed in the open market with a reasonable time for the seller to find a purchaser;

- both the buyer and seller know of all the uses and purposes to which the property is, or can be, adapted and of the enforceable restrictions on its use; and
- both the buyer and seller seek to maximize their gains and neither is in a position to take advantage of the exigencies of the other. [Exigencies are pressing or urgent conditions that leave one party at a disadvantage to the other.]

For ad valorem tax purposes the effective date is usually legislatively specified by the particular State in which we are working - for example, in Texas the lien date is January 1 per the Texas Property Tax Code. For ad valorem tax purposes, the date of the appraisals and reports are typically several months past the effective date, thereby leaving open the possibility that a retrospective approach is appropriate under limited and prescribed circumstances (information after the effective date being applicable only if it confirms a trend or other appraisal condition that existed and was generally known as of the effective date).

P&A believes this section of this report, in conjunction with any attached or separately provided P&A-generated report(s), meets the USPAP definition of "typical practice"; i.e., it satisfies a level of work that is consistent with:

- the expectations of participants in the market for the same or similar appraisal services; and
- what P&A's peers' actions would be in performing the same or similar appraisal services in compliance with USPAP.

Legal and Statutory Requirements: In Texas, the provisions of the Texas Property Tax Code and other relevant legislative measures involving appraisal administration and procedures control the work of P&A as an extension of the Appraisal District. Other states in which P&A is employed will have similar controlling legislation, regulatory agencies, and governmental entities. P&A is responsible for appraising property on the basis of its fair market value as of the stated effective date (January 1 in Texas) for ad valorem tax purposes for each taxing unit that imposes ad valorem taxes on property in the contracted Appraisal District. All mineral properties (interests) are reappraised annually. The definition of Fair Market Value is provided and promulgated for use in ad valorem tax work in Texas by the Texas Property Tax Code, and therefore as a **Jurisdictional Exception** supercedes the definition of "market value" as found in USPAP definitions.

NOTE: IN TEXAS, P&A BELIEVES THE PROPERTY BEING APPRAISED AND PLACED ON THE TAX ROLL IS THE INTEREST AND NOT THE OIL OR GAS MINERAL ITSELF, PER PROPERTY TAX CODE SECTION 1.04(2)(F). WHILE OIL AND GAS RESERVES CERTAINLY HAVE VALUE, THE FACT IS THAT IT IS THE INTERESTS IN THESE MINERALS THAT ARE BOUGHT AND SOLD, NOT THE MINERALS THEMSELVES. THE SALE OF MINERALS AS THEY ARE EXTRACTED FROM THE SUBSURFACE OF THE LAND WHERE THEY RESIDE AS MINERALS IN PLACE "MONETIZES" THE INTEREST AND THUS GIVES THE INTEREST ITS VALUE. WHENEVER P&A REFERS TO "MINERAL PROPERTIES" IN THIS REPORT OR IN ANY OTHER SETTING, IT IS THE MINERAL INTEREST, AND NOT THE MINERAL ITSELF, THAT IS THE SUBJECT OF THE REFERENCE.

Administrative Requirements: P&A endorses the principals of the International Association of Assessing Officers (IAAO) regarding its appraisal practices and procedures. P&A also endorses, and follows when possible, the standards promulgated by the Appraisal Foundation known as the Uniform Standards of Professional Appraisal Practice (USPAP). In all cases where IAAO and/or USPAP requirements cannot be satisfied for reasons of practicality or irrelevancy, P&A subscribes to "generally accepted appraisal methods and techniques" so that its value conclusions are credible and defensible. P&A submits annual or biannual contract bids to the Appraisal District Board of Directors or the Office of the Chief Appraiser and is bound to produce appraisal estimates on mineral properties within the cost constraints of said bid. Any appraisal practices and procedures followed by P&A not explicitly defined or allowed through IAAO or USPAP requirements are specified by the Texas Property Tax Code or at the specific request or direction of the Office of the Chief Appraiser.

Appraisal Resources

Personnel: The Mineral Valuation Division staff consists of competent Petroleum Engineers, Geologists, and Appraisers. All personnel are Registered Professional Appraisers with the State of Texas, or are progressing towards this designation within the allowable time frames prescribed by the Texas Department of Licensing and Regulation (TDLR) and/or other licensing and regulatory agencies as applicable.

Data: For each mineral property a common set of data characteristics (i.e. historical production, price and expense data) is collected from various sources and entered into P&A's mainframe computer system. Historical production data and price data is available through state agencies (Texas Railroad Commission, Texas Comptroller, et al.) or private firms who gather, format and repackage such data for sale commercially. Each property's characteristic data drives the computer-assisted mass appraisal approach to valuation.

Information Systems: The mainframe systems are augmented by the databases that serve the various in-house and 3rd-party applications on desktop personal computers. In addition, communication and dissemination of appraisals and other information is available to the taxpayer and client through electronic means including internet and other phone-line connectivity. The appraiser supervising any given contract fields many of the public's questions or redirects them to the proper department personnel.

VALUATION APPROACH (MODEL SPECIFICATION)

Concepts of Value: The valuation of oil and gas properties is not an exact science, and exact accuracy is not attainable due to many factors. Nevertheless, standards of reasonable performance do exist, and there are usually reliable means of measuring and applying these standards.

Petroleum properties are subject to depletion, and capital investment must be returned before economic exhaustion of the resource (mineral reserves). The examination of petroleum properties involves understanding the geology of the resource (producing and non-producing), type of reservoir energy, the methods of secondary and enhanced recovery (if applicable), and the surface treatment and marketability of the produced petroleum product(s).

Evaluation of mineral properties is a continuous process; the value as of the lien date merely represents a "snapshot" in time. The potential value of mineral interests derived from sale of minerals to be extracted from the ground change with mineral price fluctuation in the open market, changes in extraction technology, costs of extraction, and other variables such as the value of money.

Approaches to Value for Petroleum Property

Cost Approach: The use of cost data in an appraisal for market value is based upon the economic principle of substitution. The cost approach typically derives value by a model that begins with replacement cost new (RCN) and then applies depreciation in all its forms (physical depreciation, functional and economic obsolescence). This method is difficult to apply to oil and gas properties since lease acquisition and development may bear no relation to present worth. Though very useful in the appraisal of many other types of properties, the cost approach is not readily applicable to mineral properties. [Keep in mind that the property actually being appraised is the mineral interest and not the oil and gas reserves themselves. Trying to apply the cost approach to evaluation of mineral interests is like trying to apply the cost approach to land; it is a moot point because both are real properties that are inherently non-replaceable.] **As a general rule, and for the reasons stated above, Pritchard & Abbott, Inc., does not employ the cost approach in the appraisal of mineral interests.**

Market Approach: This approach may be defined as one which uses data available from actual transactions recorded in the market place itself; i.e., sales of comparable properties from which a comparison to the subject property can be made. Ideally, this approach's main advantage involves not only an opinion but an opinion supported by the actual spending of money. Although at first glance this approach seems to more closely incorporate the aspects of fair market value per its classical definition, there are two factors that severely limit the usefulness of the market approach for appraising oil and gas properties. First, oil and gas property sales data is seldom disclosed (in non-disclosure states such as Texas); consequently there is usually a severe lack of market data sufficient for meaningful statistical analysis. Second, all conditions of each sale must be known and carefully investigated to be sure one does have a comparative indicator of value per fair market value prerequisites.

Many times when these properties do change hands, it is generally through company mergers and acquisitions where other assets in addition to oil and gas reserves are involved; this further complicates the analysis whereby a total purchase price must be allocated to the individual components - a speculative and somewhat arbitrary task at best. In the case of oil and gas properties, a scarcity of sales requires that every evidence of market data be investigated and analyzed. Factors relative to the sale of oil and gas properties are:

- current production and estimated declines forecast by the buyer;
- estimated probable and potential reserves;
- general lease and legal information which defines privileges or limitation of the equity sold;
- undeveloped potential such as secondary recovery prospects;
- proximity to other production already operated by the purchaser;
- contingencies and other cash equivalents; and
- other factors such as size of property, gravity of oil, etc.

In the event that all these factors are available for analysis, the consensus effort would be tantamount to performing an income approach to value (or trying to duplicate the buyer's income approach to value), thereby making the market approach somewhat moot in its applicability. **As a general rule, and for the reasons stated above, Pritchard & Abbott, Inc., rarely employs a rigorous application of the market approach in the appraisal of mineral interests.**

Income Approach: This approach to value most readily yields itself to the appraisal of mineral interests. Data is readily available whereby a model can be created that reasonable estimates a future income stream to the property. This future income may then be converted (discounted) into an estimate of current value. Many refer to this as a capitalization method, because capitalization is the process of converting an income stream into a capital sum (value). As with any method, the final value is no better than the reliability of the input data. The underlying assumption is that people purchase the property for the future income the property will yield. If the land or improvements are of any residual value after the cessation of oil and gas production, that value should also be included (if those components are also being appraised).

The relevant income that should be used is the expected future net income. Assumptions of this method are:

- Past income and expenses are not a consideration, except insofar as they may be a guide to estimating future net income.
- That the producing life as well as the reserves (quantity of the minerals) are estimated for the property.
- Future income is less valuable than current income, and so future net income must be discounted to make it equivalent to the present income. This discount factor reflects the premium of present money over future money, i.e., interest rate, liquidity, investment management, and risk.

As a general rule, and for the reasons stated above, Pritchard & Abbott, Inc., relies predominantly on the income approach to value in the appraisal of mineral interests.

DATA COLLECTION/VALIDATION

Sources of Data: The main source of P&A's property data is data from the Railroad Commission of Texas as reported by operators. As a monthly activity, the data processing department receives data tapes or electronic files which have updated and new well and production data. Other discovery tools are fieldwork by appraisers, financial data from operators, information from chief appraisers, tax assessors, trade publications and city and local newspapers. Other members of the public often provide P&A information regarding new wells and other useful facts related to property valuation.

Another crucial set of data to obtain is the ownership of these mineral interests. Typically a mineral lease is fractionated and executed with several if not many owners. This information is typically requested (under a promise of confidentiality concerning owners' personal information) from pipeline purchasers and/or other entities (such as operators) who have the responsibility of disbursing the income to the mineral interest owners. Another source of ownership information is through the taxpayers themselves who file deeds of ownership transfer and/or correspond with P&A or the appraisal district directly.

Data Collection Procedures: Electronic and field data collection requires organization, planning and supervision of the appraisal staff. Data collection procedures for mineral properties are generally accomplished globally by the company; i.e., production and price data for the entire state is downloaded at one time into the computer system. Appraisers also individually gather and record specific and particular information to the appraisal file records, which serves as the basis for the valuation of mineral properties. P&A is divided into four district offices covering different geographic areas. Each office has a district manager, appraisal and ownership maintenance staff, and clerical staff as appropriate. While overall standards of performance are established and upheld for the various district offices, quality of data is emphasized as the goal and responsibility of each appraiser.

VALUATION ANALYSIS (MODEL CALIBRATION)

Appropriate revisions and/or enhancements of schedules or discounted cash flow software are annually made and then tested prior to the appraisals being performed. Calibration typically involves performing multiple discounted cash flow tests for leases with varying parameter input to check the correlation and relationship of such indicators as: Dollars of Value Per Barrel of Reserves; Dollars of Value Per Daily Average Barrel Produced; Dollars of Expense Per Daily Average Barrel Produced; Years Payout of Purchase Price (Fair Market Value). In a more classical calibration procedure, the validity of values by P&A's income approach to value is tested against actual market transactions, if and when these transactions and verifiable details of these transactions are disclosed to P&A. Of course these transactions must be analyzed for meeting all requisites of fair market value definition. Any conclusions of this analysis are then compared to industry benchmarks for reasonableness before being incorporated into the calibration procedure.

INDIVIDUAL VALUE REVIEW PROCEDURES

Individual property values are reviewed several times in the appraisal process. P&A's discounted cashflow software dynamically generates various benchmark indicators that the appraiser reviews concurrent with the value being generated. These benchmarks often prompt the appraiser to reevaluate some or all of the parameters of data

entry so as to arrive at a value more indicative of industry standards. Examples of indicators are dollars of value per barrel of oil reserve, years payout, etc. In addition to appraiser review, taxpayers are afforded the opportunity to review the appraised values, either before or after Notices of Appraised Value are prepared. Operators routinely meet with P&A's appraisers to review parameters and to provide data not readily available to P&A through public or commercial sources, such as individual lease operating expense and reserve figures. And of course, all property values are subject to review through normal protest and Appraisal Review Board procedures, with P&A acting as an extension of the Office of the Chief Appraiser.

PERFORMANCE TESTS

An independent test of the appraisal performance of properties appraised by P&A is conducted by the State of Texas Comptroller's Office through the annual Property Value Study for school funding purposes. This study determines the degree of uniformity and the median level of appraisal for mineral properties. School jurisdictions are given an opportunity to appeal any preliminary findings. After the appeal process is resolved, the Comptroller publishes a report of the findings of the study, including in the report the median level of appraisal, the coefficient of dispersion around the median level of appraisal and any other standard statistical measures that the Comptroller considers appropriate.

USPAP STANDARDS 5, 6-1, 6-2: MASS APPRAISAL OF INDUSTRIAL, UTILITY AND RELATED PERSONAL PROPERTY

INTRODUCTION

Definition of Appraisal Responsibility: The Engineering Services Department of Pritchard & Abbott, Inc. (P&A) is responsible for developing fair and uniform market values for industrial, utility and personal properties.

P&A's typical client is a governmental entity charged with appraisal responsibility for ad valorem tax purposes, although other types of clients (private businesses, individuals, etc.) occasionally contract for appraisal services which are strictly for various non-ad valorem tax purposes so that no conflicts of interest are created with P&A's core ad valorem tax work.

P&A hereby makes the assumption that, in all appraisal assignments performed for governmental entities in satisfaction of contractual obligations related to ad valorem tax, the client does not wish to or cannot legally request the appraisal report not identify the client.

Intended users of our reports are typically the client(s) for which we are under direct contract. Although taxpayers or their agents who own and/or represent the subject property being appraised often receive these reports either by law or as a courtesy of the client or P&A, this receipt does not mean these parties automatically become Intended Users as defined by USPAP. **A party receiving a copy of a report in order to satisfy disclosure requirements does not become an intended user of the appraisal or mass appraisal unless the appraiser specifically identifies such party as an intended user.** Potential other users include parties involved in adjudication of valuation disputes (review board members, lawyers, judges, etc.), governmental agencies which periodically review our appraisals for various statutory purposes (such as the Texas Comptroller's Office) and private parties who may obtain copies of our appraisals through Open Records Requests made to governmental agencies.

P&A believes this section of this report, in conjunction with any attached or separately provided P&A-generated report(s), meets the USPAP definition of "typical practice"; i.e., it satisfies a level of work that is consistent with:

- the expectations of participants in the market for the same or similar appraisal services; and
- what P&A's peers' actions would be in performing the same or similar appraisal services in compliance with USPAP.

This section of P&A's USPAP report is not applicable to any Industrial, Utility, or related Personal Property that an appraisal district appraises outside of P&A's appraisal services, in which case the appraisal district's overall USPAP report should be referenced.

P&A makes the **Extraordinary Assumption** that all properties appraised for ad valorem tax purposes are marketable whereas ownership and title to property are free of encumbrances and other restrictions that would affect fair market value to an extent not obvious to the general marketplace. If and/or when we are made aware of any encumbrances, etc., these would be taken into account in our appraisal in which case the extraordinary assumption stated above would be revoked.

Legal and Statutory Requirements: The provisions of the Texas Property Tax Code and relevant legislative measures involving appraisal administration and procedures control the work of P&A as a subcontractor to the

Appraisal District. P&A is responsible for appraising property on the basis of its market value as of January 1 for ad valorem tax purposes for each taxing unit that imposes ad valorem taxes on property in the contracted Appraisal District. All industrial, utility and personal properties are reappraised annually. The definition of Fair Market Value is provided and promulgated for use in ad valorem tax work in Texas by the Texas Property Tax Code, and therefore as a **Jurisdictional Exception** supercedes the definition of "market value" as found in USPAP definitions.

Administrative Requirements: P&A follows generally accepted and/or recognized appraisal practices and when applicable, the standards of the International Association of Assessing Officers (IAAO) regarding its appraisal practices and procedures. P&A, when applicable, also subscribes to the standards promulgated by the Appraisal Foundation known as the Uniform Standards of Professional Appraisal Practice (USPAP). P&A submits annual or biannual contract bids to the Office of the Chief Appraiser and is bound to produce appraisal estimates on industrial, utility and personal properties within the cost constraints of said bid. Any appraisal practices and procedures followed by P&A not explicitly defined through IAAO or USPAP requirements are specified by the Texas Property Tax Code and/or at the specific request or direction of the Office of the Chief Appraiser.

Appraisal Resources

Personnel: The Engineering Services Department and P&A's appraisal staff consists of appraisers with degrees in engineering, business and accounting. All personnel are Registered Professional Appraisers with the State of Texas, or are progressing towards this designation as prescribed by the Texas Department of Licensing and Regulation (TDLR).

Data: A set of data characteristics (i.e. original cost, year of acquisition, quantities, capacities, net operating income, property description, etc.) for each industrial, utility and personal property is collected from various sources. This data is maintained in either hard copy or computer files. Each property's characteristic data drives the appropriate computer-assisted appraisal approach to valuation.

Information Systems: P&A's mainframe computer system is composed of in-house custom software augmented by schedules and databases that reside as various applications on personal computers (PC). P&A offers a variety of systems for providing property owners and public entities with information services.

VALUATION APPROACH (MODEL SPECIFICATION)

Concepts of Value: The valuation of industrial, utility and personal properties is not an exact science, and exact accuracy is not attainable due to many factors. These are considered complex properties and some are considered Special Purpose properties. Nevertheless, standards of reasonable performance do exist, and there are reliable means of measuring and applying these standards.

The evaluation and appraisal of industrial, utility and personal property relies heavily on the discovery of the property followed by the application of recognized appraisal techniques. The property is subject to inflation and depreciation in all forms. The appraisal of industrial and personal property involves understanding petroleum, chemical, steel, electrical power, lumber and paper industry processes along with a myriad of other industrial processes. Economic potential for this property usually follows either the specific industry or the general business economy. The appraisal of utility properties involves understanding telecommunications, electrical transmission and distribution, petroleum pipelines and the railroad industry. Utility properties are subject to regulation and

economic obsolescence. The examination of utility property involves the understanding of the present value of future income in a regulated environment.

The goal for valuation of industrial, utility and personal properties is to appraise all taxable property at "fair market value". The Texas Property Tax Code defines Fair Market value as the price at which a property would transfer for cash or its equivalent under prevailing market conditions if:

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

Approaches to Value for Industrial, Utility, and Personal Property

Cost Approach: The use of cost data in an appraisal for market value is based upon the economic principle of substitution. This method is most readily applicable to the appraisal of industrial and personal property and some utility property. Under this method, the market value of property equals the value of the land plus the current cost of improvements less accrued depreciation. An inventory of the plant improvements and machinery and equipment is maintained by personally inspecting each facility every year. **As a general rule, and for the reasons stated above, Pritchard & Abbott, Inc., relies predominantly on the cost approach to value in the appraisal of industrial, utility, and personal property.**

Market Approach: This approach is characterized as one that uses sales data available from actual transactions in the market place. There are two factors that severely limit the usefulness of the market approach for appraising industrial, utility and personal properties. First, the property sales data is seldom disclosed; consequently there is insufficient market data for these properties available for meaningful statistical analysis. Second, all conditions of sale must be known and carefully investigated to be sure one does have a comparative indicator of value. Many times when these properties do change hands, it is generally through company mergers and acquisitions where other assets and intangibles in addition to the industrial, utility and personal property are involved. The complexity of these sales presents unique challenges and hindrances to the process of allocation of value to the individual components of the transaction.

In the case of industrial, utility and personal properties, a scarcity of sales requires that all evidence of market data be investigated and analyzed. Factors relative to the sale of these properties are:

- plant capacity and current production; terms of sale, cash or equivalent;
- complexity of property;
- age of property;
- proximity to other industry already operated by the purchaser; and
- other factors such as capital investment in the property.

As a general rule, and for the reasons stated above, Pritchard & Abbott, Inc., rarely employs a rigorous application of the market approach in the appraisal of industrial, utility, and personal property.

Income Approach: This approach to value most readily yields itself to all income generating assets, especially utility properties. Data for utility properties is available from annual reports submitted to regulatory agencies

whereby future income may be estimated, and then this future income may be converted into an estimate of value. The valuation of an entire company by this method is sometimes referred to as a Unit Value. Many refer to this as a capitalization method, because capitalization is the process of converting an income stream into a capital sum (value). As with any method, the final value estimate is no better than the reliability of the input data. The underlying assumption is that people purchase the property for the future income the property will yield.

The relevant income that should be used in the valuation model is the expected future net operating income after depreciation but before interest expense (adjustments for Federal Income Taxes may or may not be required). Assumptions of this method are:

- Past income and expenses are a consideration, insofar as they may be a guide to future income, subject to regulation and competition.
- The economic life of the property can be estimated.
- The future production, revenues and expenses can be accurately forecasted. Future income is less valuable than current income, and so future net income must be discounted to make it equivalent to the present income. This discount factor reflects the premium of present money over future money, i.e., interest rate, liquidity, investment management, and risk.

As a general rule, and for the reasons stated above, Pritchard & Abbott, Inc., employs the income approach in the appraisal of industrial and utility property only when quantifiable levels of income are able to be reliably determined and/or projected for the subject property. P&A does not employ the income approach in the appraisal of personal property.

DATA COLLECTION/VALIDATION

Sources of Data: The main source of P&A's property data for industrial and personal property is through fieldwork by the appraisers and commercially/publicly available schedules developed on current costs. Data for performing utility appraisals is typically provided by the taxpayer or is otherwise available at various regulatory agencies (Texas Railroad Commission, Public Utilities Commission, FERC, et. al.). Other discovery tools are financial data from annual reports, information from chief appraisers, renditions, tax assessors, trade publications and city and local newspapers. Other members of the public often provide P&A information regarding new industry and other useful facts related to property valuation.

Data Collection Procedures: Electronic and field data collection requires organization, planning and supervision of the appraisal staff. Data collection procedures have been established for industrial and personal properties. Appraisers gather and record information in the mainframe system, where customized programs serve as the basis for the valuation of industrial, utility and personal properties. P&A is divided into multiple district offices covering different geographic zones. Each office has a district manager and field staff. While overall standards of performance are established and upheld for the various district offices, quality of data is emphasized as the goal and responsibility of each appraiser. Additionally, P&A's Engineering Services Department provides supervision and guidance to all district offices to assist in maintaining uniform and consistent appraisal practices throughout the company.

VALUATION ANALYSIS (MODEL CALIBRATION)

The validity of the values by P&A's income and cost approaches to value is tested against actual market transactions, if and when these transactions and verifiable details of the transactions are disclosed to P&A. These transactions are checked for meeting all requisites of fair market value definition. Any conclusions from this analysis are also compared to industry benchmarks before being incorporated in the calibration procedure. Appropriate revisions of cost schedules and appraisal software are annually made and then tested for reasonableness prior to the appraisals being performed.

INDIVIDUAL VALUE REVIEW PROCEDURES

Individual property values are reviewed several times in the appraisal process. P&A's industrial, utility, personal property programs and appraisal spreadsheets afford the appraiser the opportunity to review the value being generated. Often the appraiser is prompted to reevaluate some or all of the parameters of data entry so as to arrive at a value more indicative of industry standards. Examples of indicators are original cost, replacement cost, service life, age, net operating income, capitalization rate, etc. In addition to appraiser review, taxpayers are afforded the opportunity to review the appraised values either before or after Notices of Appraised Value are prepared. Taxpayers, agents and representatives routinely meet with P&A's appraisers to review parameters and to provide data not readily available to P&A through public or commercial sources, such as investment costs and capitalization rate studies. And of course, all property values are subject to review through normal protest and Appraisal Review Board procedures, with P&A acting as a representative of the Office of the Chief Appraiser.

PERFORMANCE TESTS

An independent test of the appraisal performance of properties appraised by P&A is conducted by the State of Texas Comptroller's Office through the annual Property Value Study for school funding purposes. This study determines the degree of uniformity and the median level of appraisal for utility properties. School jurisdictions are given an opportunity to appeal any preliminary findings. After the appeal process is resolved, the Comptroller publishes a report of the findings of the study, including in the report the median level of appraisal, the coefficient of dispersion around the median level of appraisal and any other standard statistical measures that the Comptroller considers appropriate.

Appendix A
APPRAISAL PLAN BY YEAR

APPRAISAL PLAN YEAR 1 – Rural Residential – Agricultural Market Areas
Rural properties by abstract, Divided by four Sections: Dividing lines being IH-45 North & South and Hwy 7, East & West - See Appendix "B" Page B-1
#1 SE Section - See Appendix "B" Page B-2
#2 NE Section - See Appendix "B" Page B-3
#3 NW Section - See Appendix "B" Page B-4
#4 SW Section - See Appendix "B" Page B-5
This phase of the Reappraisal will cover Abstract #1 through Abstract # 1469 - Except and excluding abstracts and properties within Land Companies & City Limits

Appendix A
APPRAISAL PLAN BY YEAR

APPRAISAL PLAN YEAR 2 – Residential Land Company Market Area	
Land Company	Abstract #
Centerville Independent School District	
3178 Land Company	935
811 Land Company	536,904
B & B Land Company	8
Anna Land Company	1146
B & C Land Company	580,283
BWB Land Company	8
Beaver Dam estates	8,306
Big 3 Land Company	8
Big oaks Estates	14
Big Oaks Vista	14
Bit Land Company	8
Black Land Company	43,97,187,241,281,346,459, 98,619,872,942,1344,1367
Boggy Creek Land Company	1,29
Boykin Land Company	722,366
Burleson Place	54, 944
Byron Knight	1009
CJ Ranch	550,670,10
Cairo Bluff Estates	161,387,653,794
Carroll Land Company	224,13,660
Carter Land Company	665
Carter Land Company II	540
Cindy's Place	161
Ben Cleveland	220
William R Coffey	55
Jeff C Coleman	11,502
Courson Land Company	425
Dawn Land Company	55
Dixie Land Estates	387,882,103,550,16
Dorman	579,197,624,1176,935
Durst Land Company	5
Wayne Gillespie	18,91
Gindratt Land Company	27
Goolsby Land Company	18
H&H Land Company	18,1370
HM Land Company	14
Darrell Hall Subdivision	460
Darrell Hall	535
AC Heil	1051,580,283
AC Heil	11
Hickman Land Company	29
Hicks Land Company	944

Appendix A
APPRAISAL PLAN BY YEAR

Land Company	Abstract #
Highway Seven Estates	540
Highway 7 Land Company	1023
Hill Subdivision	18,1370
Homestead Acres	29
I-45 Estates	717
I-45 Land Company	271
Jackson Road Land Company	412
Jackson Road Subdivision	310,1433,1052,415,1006,412
King Land Company	1294
Lakewood Subdivision	122,217
Largent Estates	29,16
Largent Land Company	29
Leona Land Company	5
Lower Keechi Creek Land Company	109,435,667,730,903
Luedke Land Company	875,876
Matheny Land Company	29
Monroe Land Company	606
J A Neal	1294
North Creek Land Company	583
Oakhill Land Company	224,8
Oakhill Subdivision	14,18
Oden Travis Estates	527,436
Pine Branch Estates	541,540
Pine Branch Hollow 1&2	503
Piney Grove Land Company	436,519
R P Land Company	7
Ranchett Estates	14
Red Oak Subdivision	5
Riverland Acres	161,435
Riverland Estates Section 2	8
River Road Subdivision	8
River Oaks Subdivision	2
Rocky Land Company	875,876
Rolling K Land Company	1233,8
H H Salter	605
Sean Land Company Phase 1	18
Senator Ranch	96
Small Land Company	366
Stell Estates	55
Suttle Hattie B Estates	1269,1264
Sunshine Acres	2
Charles Tisdale	11

Appendix A
APPRAISAL PLAN BY YEAR

Land Company	Abstract #
Tanner Land Company	20,314
Tisdale Development Company	11
C Tisdale (Sonny's Place)	8
Trails End Estates	124,1272,1233
Two Mile Estates (Pine Branch Hollow II)	11,502
Village Creek Estates	482,650
Wakefield Land Company	2
Ward Estates	1366,432,741
Wayne Land Company	1357,535
Bert Wheeler Inc.	436
White Land Company	1148
Wilson Estates	161,653,29
JG Wiseman	990,534
Buffalo Independent School District	
831 Land Company	165,343,548,704,709,116
Allbritton Land Company	696,391
B W Land Company	59,455
Neal Barker	671,698,92
Bliss Land Company	463,1096
Boyd Land Company	791
C T Land Company	669,1175,1084,1149,1280,423,424
Cadenhead Land & cattle	59
Caldwell Land Company	520,914,925,1092,260,451,153
Campbell Land Company	103,173
Castles Land Company	811
Centerville Land Company	796
Cedar Creek Estates	359
J D Coburn Estates	211,271,1104
Woody Land Company	1162,1426
William R Coffey	1087
Copper Creek Land Company	138,392,393,623,725,834,1029
Country Place	914,987,1432
Crow Land Company	544,348
Crowder DC & Bennie	954
Deerland Acres	1345,91
Detroit Pecan Orchard	1151
Duffy Land Company	1064
FM 1618 Land Company	628,271,998,1020
FM 2539 Land Company	395,734,1183
Flo Land Company	424,425,432
Garland Road Subdivision	455
Fort Boggy Land Company	135,1134,1151,476

Appendix A
APPRAISAL PLAN BY YEAR

Land Company	Abstract #
Gulf Land Investments	369,59
Hales Acres	287,923
Harper Land Company	291,250
Hays Land Company	734
AC Heil	761,1157
AC Heil	248,834
AC Heil	390,392
Wayne Heil	622,949
Highway 75 Land Company	184,241,919
Mary Holloway Estates	1089,505,705
Tom G Holmes Subdivision	700
Tom Holmes	820,827
Tom G Holmes	293,673,1169
Hope Land Company	287
J K Land Company	394
Jackson Land Company	123
Jennifer Land Company	479,999,1112,1122,1311
Jewett Land Company	267,1031,45,1338
Keechi Creek Wildlife	99
Keechi Land Company	65
Dawson L King Estates	261
Kirkwood Land Company	1087
Knox Subdivision	479
Viola Lee	817,953
MT Land Company	451
Magourik Land Company	977,105
Helen Tinsley Miller ETAL	884,894
Moore Estates	157,1314,607
Mullenax Land Company	135,476,1151,1134
Lloyd Murff	997
J A Neal ETAL	1169,675
Bob Salley Real Estates	834,248
Pace Land Company	791,353
Newel Parker	360,921
Shelley Pate	866
Pine Hill Estates 1,2,3	1317,77,134,1158,634,220,1345,414
Pleasant Springs Land	541
Prasifka Land Company	1108,1376
Richardson Land Company	1108
Robinson Land Company	1103
Russell Land Company	1060
Shady Oak Edition	767

Appendix A
APPRAISAL PLAN BY YEAR

Land Company	Abstract #
Smith Land Company	185
Steel Land Company	820
Winnie Taylor Estates	1076,1292,1283,1291
Tisdale Development	218,515
Tittle Land Company	977
Weeden Land Company	392,393,463
Whatley Land Company	432
Wheelock Land Company	372,373,404,607,915,929
Whitehorn Land Company	590,391,395,1231,527
T R Williams Estates	1216, 1248
Oakwood Independent School District	
6RS Ranch	
Carter Ranch	483
CJT Land Company	31,32
Coffey Land Company	474,32,343,145,727,1116,704
Coffey Land Company	832,343,727,165
Duncan Hill Land Company	198,676
Tisdale Development	782,982
Oakwood Land Company	1103,58
Sue Oats Estates	982,1062,108,970,677
Peler Switch Land Company	1103
John Thomas Richmond ETAL	663
Rocking R Land & Cattle	67,175,809,1166
Silverbrook Ranch	23
Southern Pine Land Company 1	692
St Paul Land Company	483
Texas Parks & Wildlife Blasingame Land	756,504,384
Tisdale Development Company	782,982
Trinity River Land Company	340
542 Land Company	483
Leon Independent School District	
4Cs Land Company	121,205
Barkley Land Company	12
Brushey Creek	597,543
Carrington Land Company	12,166,543
Cates Land Company	100,918,776
Cenderra Corporation	222
Chaney Lake	17
Dorsey Land Company	537
Etheridge Land Company	537
Granada Land & Cattle	17,206,586,699
Grant Land Company 1,2,3	230,235,437,619,701,267,234,

Appendix A
APPRAISAL PLAN BY YEAR

Land Company	Abstract #
The Hills	1396,1379
Roy Hull Subdivision	26,19
J M Land Company	902,255
Jewett Land Investment	365
Jewett Land Company (HT Land Company)	356
James J Johnston	325
Johnston Land Company 1	918,253,786,787
Terry Keeling	339
John R Knight	253,780,786,787
Knight Ranch	17
Lakeside Village Phase 1	19
Lakewood Shores	19
Lanier Point	19
Mandy Land Company	54,537
Mike Land Company	120,121,906
Mill Creek Land Company	12
BD Murff Subdivision	865
Bonner Murff Trustee	880
Lloyd Murff Subdivision Hwy 7	222
Neyland Land Company	325,880
Oehler	909,900
Oak Tree Estates Allen Helmcamp	914
Old Bowling Land Company	352,758
Robbins Land Company 2	325
Robbins Nest	222
Rolling Country Estates	1379,766,96,120,121,1287
Rumfield Estates	19
Scenic View	19
Seaburg 1 Land Company	946,1352,78,285,627
Seaburg 2 Land Company	437,285,78,946,322
Shadey Oaks (Robinson Land Company)	19
Sky View Ranch	718,159,905
Souther Trust	12
P M Standley	127,126
T C Acres	19
T J Estates	19
T & J Land Company	325,880
Trent Turner ETAL	739
Warfwood Subdivision	19
Brent & Estelle Watson Estates	206
Wheeler Land Company	432

Appendix A
APPRAISAL PLAN BY YEAR

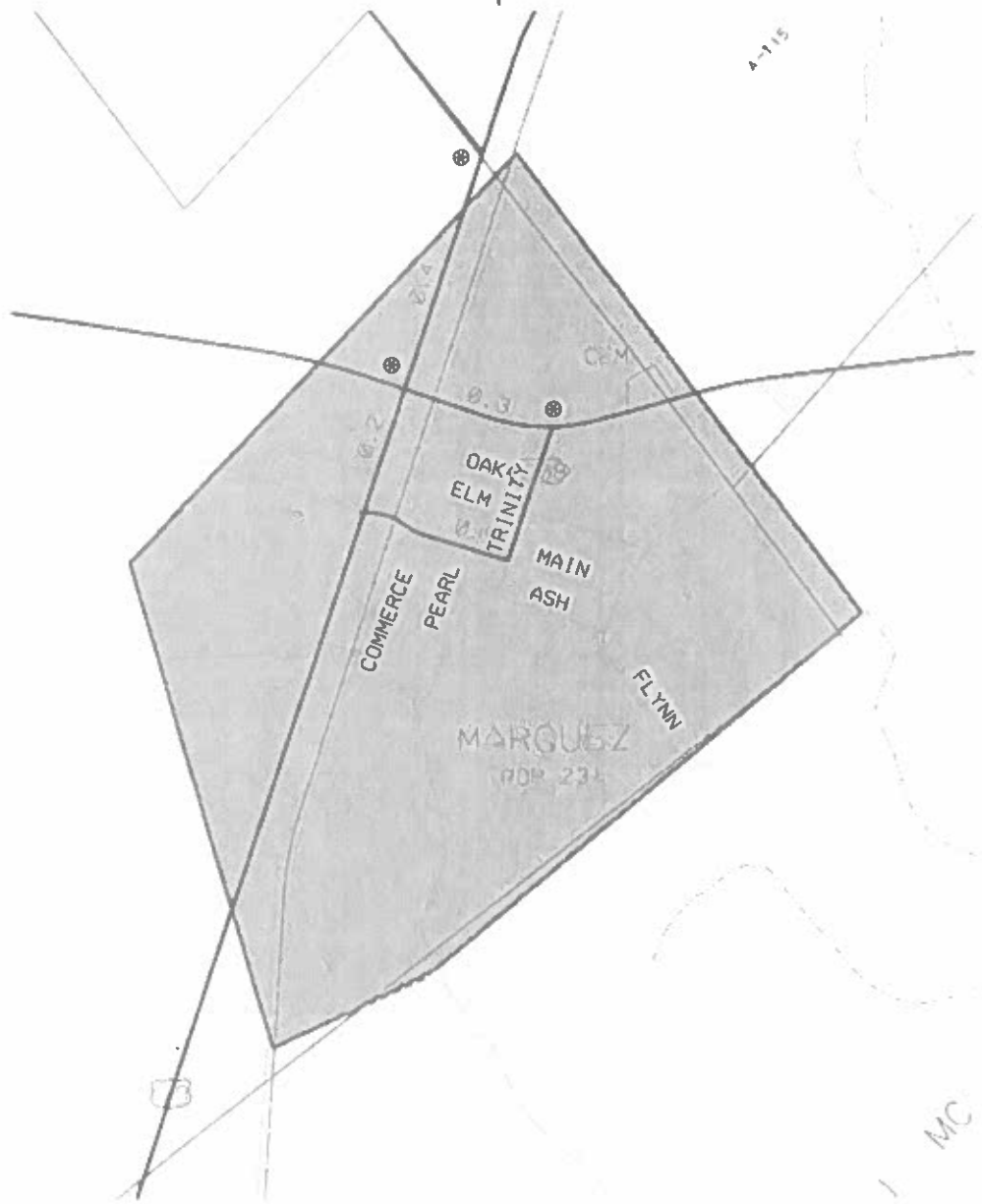
Whitney Smith	12,25
Land Company	Abstract #
Normangee Independent School District	
Central Texas Land Company	21
Creel Land Company	26
Crow & Ginn Land Company	162
Dennis Land Company	6
B T Donahoe	31
Donahoe Land Company	615
Donahoe Land Company	896
Economy Investments	609,611,615
Richard Ellison Land Company	30
Feagin Land Company	167
Flynn Land Company	612
Ginn Land Company	162
A C Heil	17
Highway 3 Land Company	1198,740,162
HWY 39 Land Company	609
K C Estates Tisdale Development	6
Lockhart Land Company	846,1318
Martin Land Company	21
McKinney Land Company	486
Bonner Murff Land Company	26
Pigeon Roost Land Company	30,167
State Land Company	380
Spanish Grant	30
Sugar Loaf Hills (Flynn Land Company)	167
Willomore Corporation (Dr. Alford)	662
Windsong Convalescent	69,845,175,465,9

Appendix A
APPRAISAL PLAN BY YEAR

APPRAISAL PLAN YEAR 3 – Municipal Residential – Commercial Market Areas & Hilltop Lakes	
Cities of Leon County -----	See Appendix "B" Page B- 6
City of Centerville -----	See Appendix "B" Page B- 7
City of Marquez -----	See Appendix "B" Page B- 8
City of Normangee -----	See Appendix "B" Page B- 9
City of Oakwood -----	See Appendix "B" Page B-10
City of Buffalo -----	See Appendix "B" Page B-11
City of Jewett -----	See Appendix "B" Page B-12
Hilltop Lakes -----	See Appendix "B" Page B-13
NOTE : Including all Land Companies and Subdivisions within the city limits	

APPENDIX B

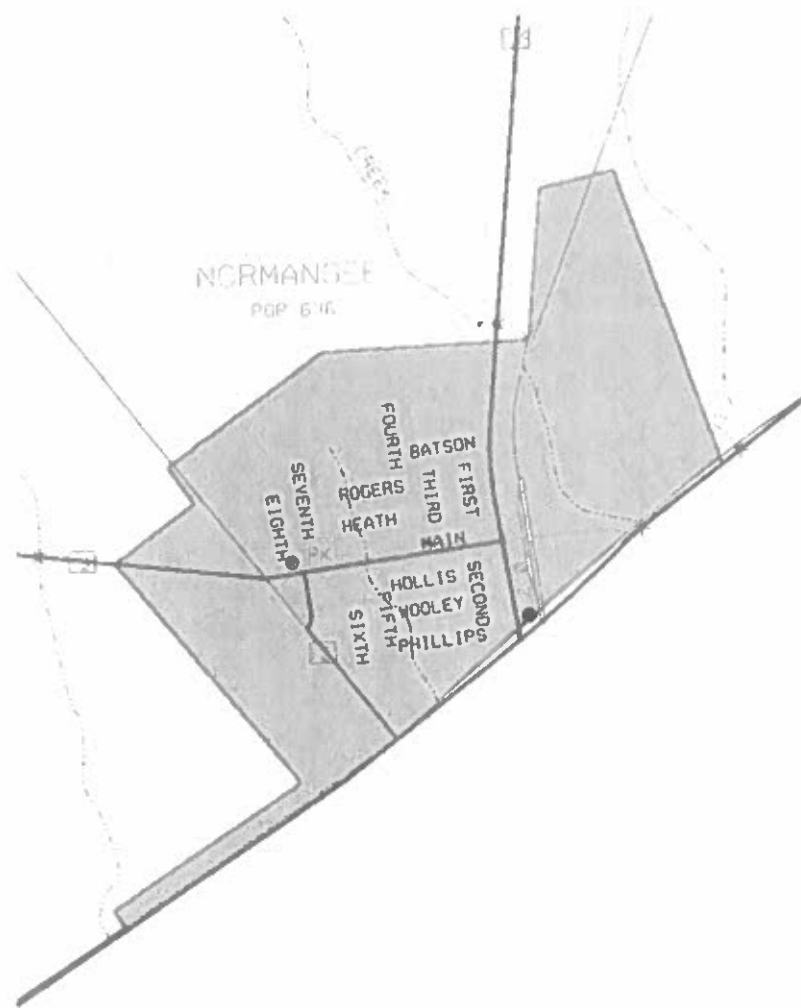
City of Marquez



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APPENDIX B

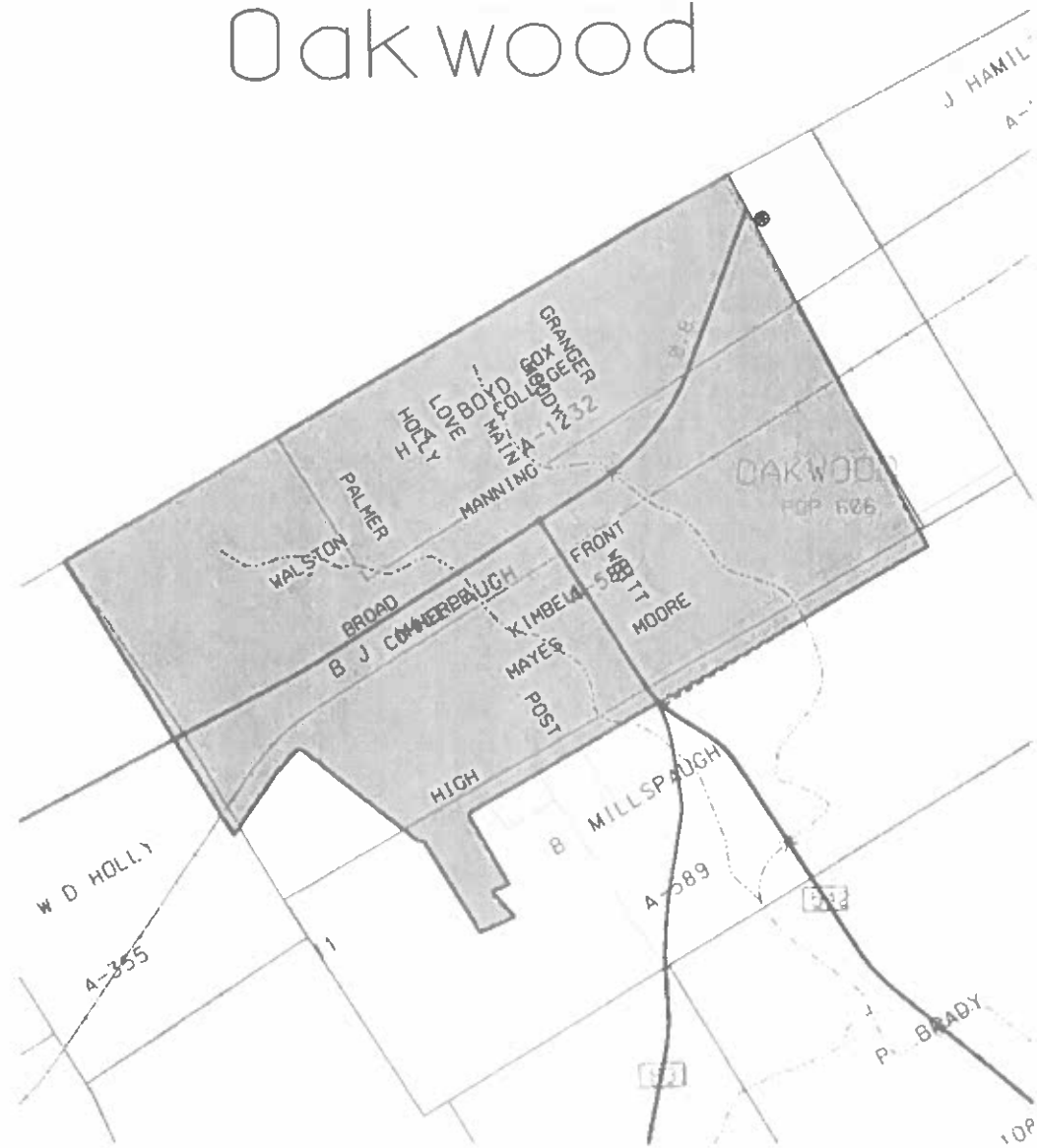
City of Normangee



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APPENDIX B

City of Oakwood



B-10

APPENDIX B

City of Buffalo



B-11

APPENDIX B



B-6

APPENDIX B

City of Jewett



B-12

APPENDIX B

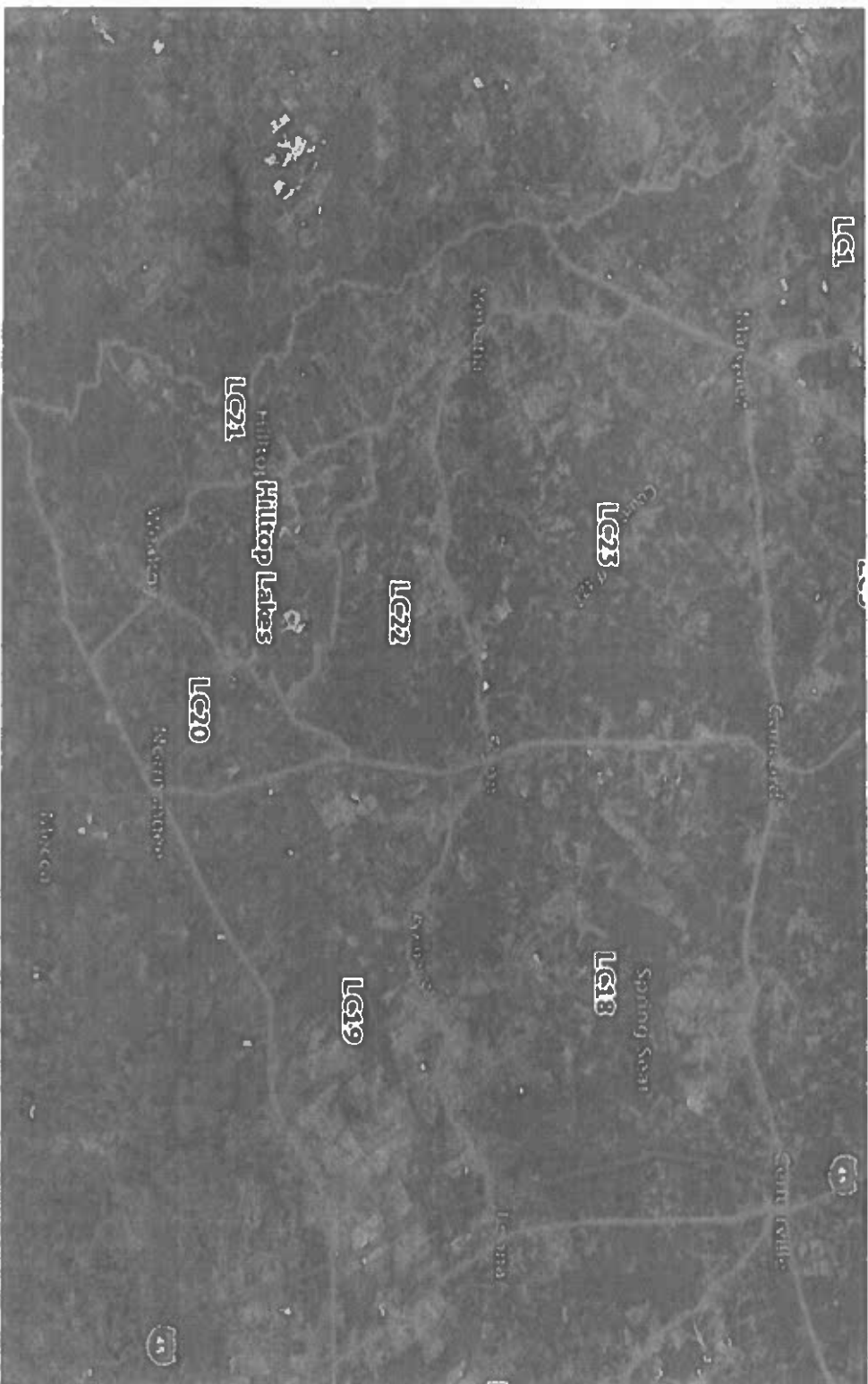
Hilltop Lakes



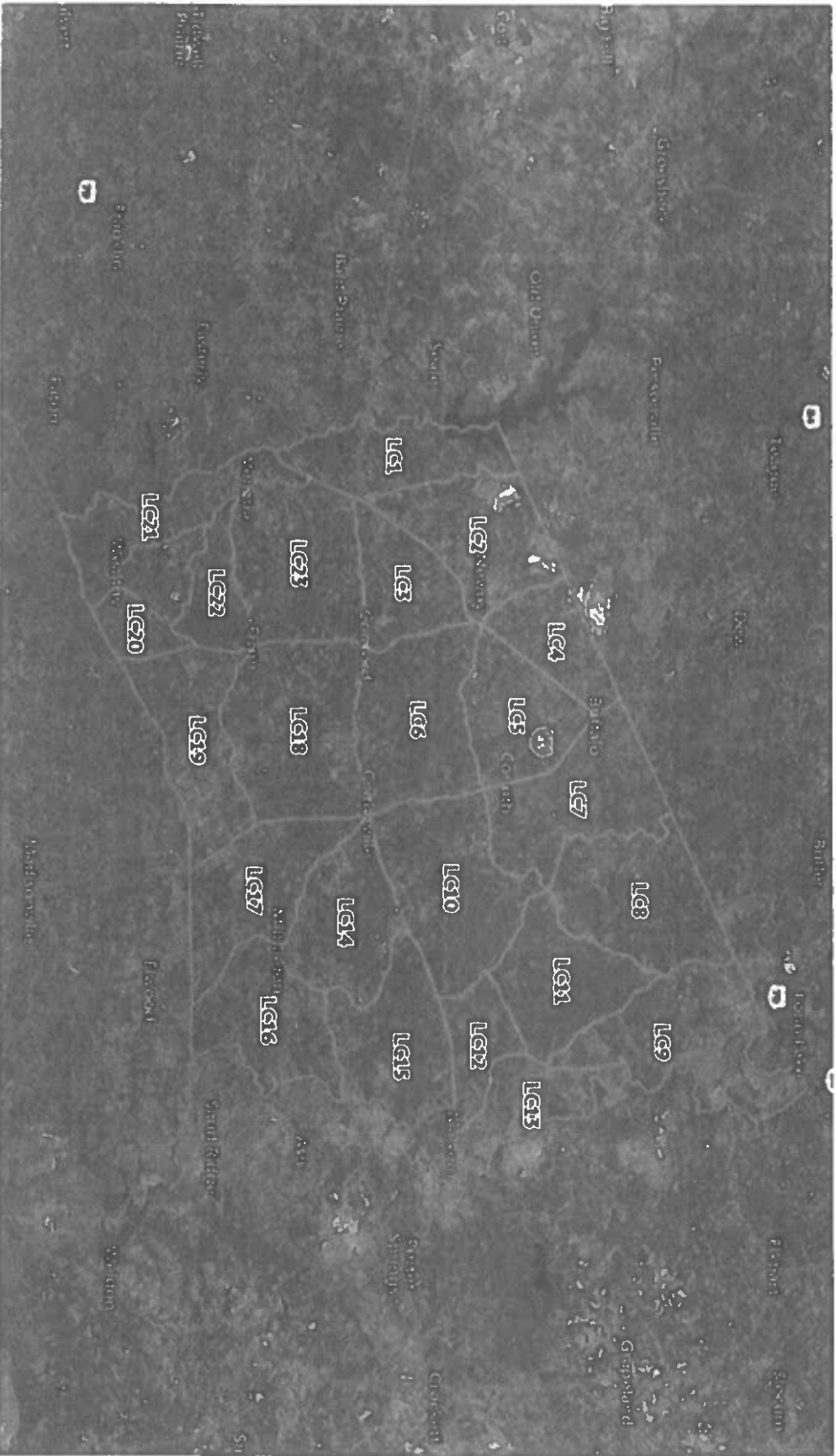
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APPENDIX B

LC ZONES SOUTHWEST QUADRANT



APPENDIX B
LC ZONE LEON COUNTY



APPENDIX B

LC ZONES NORTHWEST QUADRANT



APPENDIX B

LC ZONES NORTHEAST QUADRANT

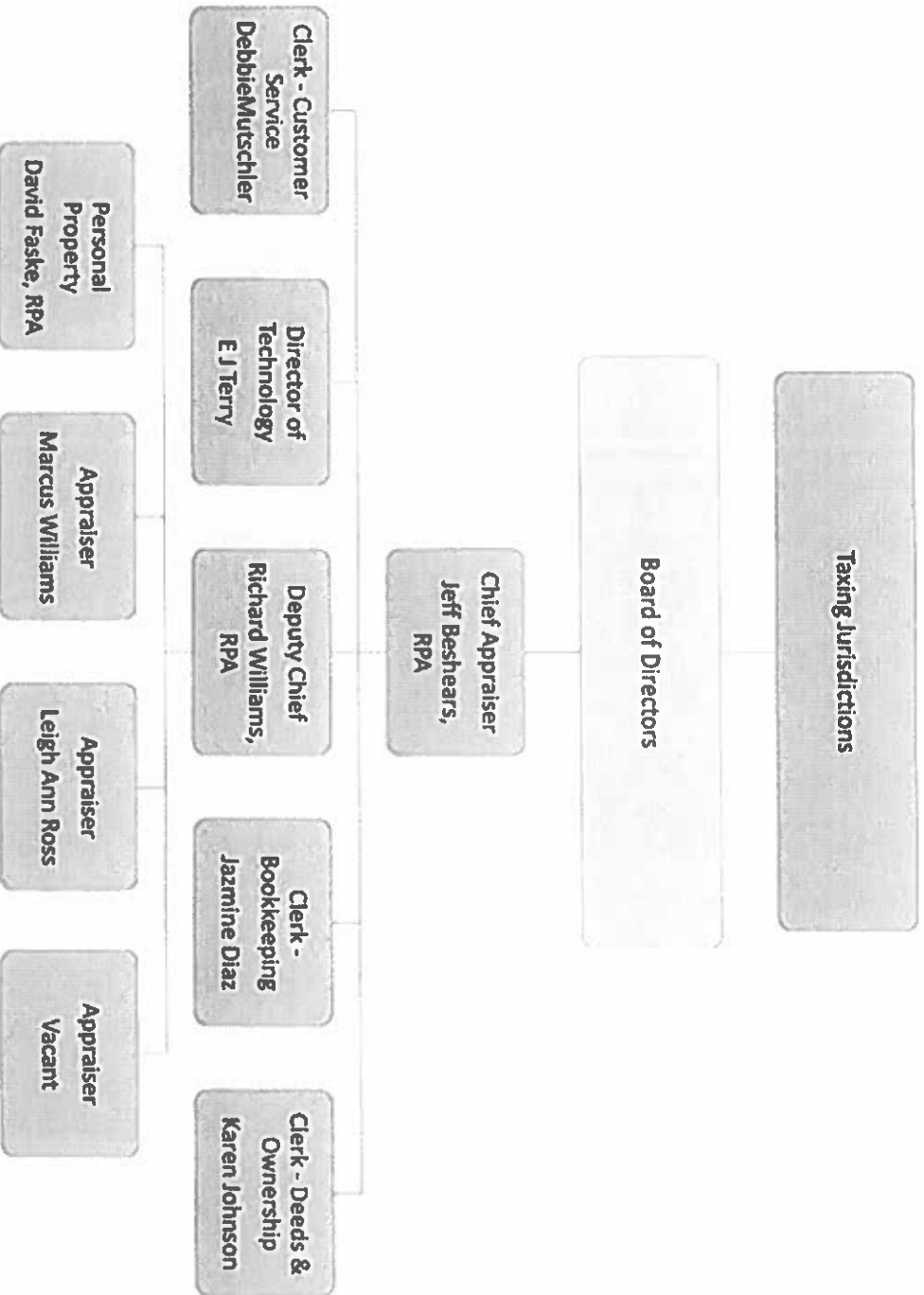


APPENDIX B

LC ZONES SOUTHEAST QUADRANT



**LEON CAD
ORGANIZATIONAL CHART**



ADDENDUM B

2021 TAX RATES

LEON COUNTY TAX RATES - 2021

JUR	TAXING ENTITY	ASSESSOR/COLLECTOR	M & O	I & S	RATE/\$100
1	Leon County	Robin Shafer	0.443095	0.000000	0.443095
10	City Buffalo	Robin Shafer	0.091426	0.323636	0.415062
11	City Centerville	Robin Shafer	0.352981	0.000000	0.352981
12	City Jewett	Robin Shafer	0.141580	0.057511	0.199091
13	City Normangee	Robin Shafer	0.244924	0.000000	0.244924
14	City Marquez	Robin Shafer	0.167399	0.000000	0.167399
15	City Oakwood	Robin Shafer	0.349000	0.000000	0.349000
30	Buffalo ISD	Robin Shafer	1.007300	0.287700	1.295000
31	Centerville ISD	Robin Shafer	0.906700	0.291500	1.198200
32	Leon ISD	Jamie Watson	0.963400	0.130000	1.093400
33	Normangee ISD	Robin Shafer	0.963400	0.380000	1.343400
34	Oakwood ISD	Robin Shafer	0.959700	0.184400	1.144100
60	ESD # 1	Robin Shafer	0.100000	0.000000	0.100000
62	ESD # 2	Robin Shafer	0.100000	0.000000	0.100000
64	ESD # 3	Robin Shafer	0.100000	0.000000	0.100000
66	ESD # 4	Robin Shafer	0.100000	0.000000	0.100000

Homestead:

Regular Homestead:

All Schools - State Mandated \$25,000

Centerville Local Option 10%

Normangee Local Option 20%

Buffalo Local Option 1%

Leon County Local Option 10%

******Local Option minimum is \$5,000******

Over 65 Homestead or Disabled:

School State Mandated \$10,000 (\$35,000 total) plus local option

Leon County: 10% plus \$20,000

City of Jewett: \$3,000

ADDENDUM C

**HISTORICAL CERTIFIED
VALUES**

HISTORICAL VALUES - LEON CAD

YEAR	Leon County	Buffalo USD	Centerville USD	Leon USD	Normalview USD	Oakwood USD	Buffalo City	Centerville City	Jewett City	Normalview City	Manriquez City	Oakwood City	ESD #1	ESD #2	ESD #3	ESD #4
2002	\$689,807,122	\$130,492,339	\$159,628,600	\$417,093,125	\$120,593,615	\$71,934,002	\$47,264,548	\$23,634,810	\$17,533,186	\$15,797,787	\$5,626,728	\$8,751,639	\$201,675,636	N/A	N/A	N/A
2003	\$676,044,848	\$140,466,076	\$161,147,874	\$399,379,187	\$126,776,716	\$81,137,996	\$49,656,715	\$24,017,200	\$17,894,843	\$16,212,828	\$5,284,751	\$8,849,703	\$207,896,946	\$76,411,640	N/A	N/A
2004	\$1,001,096,141	\$172,858,507	\$171,175,430	\$469,840,256	\$134,263,894	\$91,842,042	\$52,767,795	\$25,940,752	\$17,880,983	\$17,646,125	\$5,516,282	\$10,515,520	\$219,395,704	\$77,886,345	\$441,102,987	N/A
2005	\$1,251,107,594	\$228,026,310	\$199,148,953	\$652,123,296	\$158,996,935	\$110,708,245	\$84,696,631	\$26,123,895	\$18,080,020	\$18,184,822	\$5,829,827	\$12,324,891	\$252,251,278	\$11,330,549	\$678,510,385	N/A
2006	\$1,503,694,080	\$295,402,110	\$214,655,860	\$849,581,800	\$165,811,430	\$128,099,410	\$96,828,690	\$27,136,610	\$20,448,910	\$20,021,350	\$5,635,400	\$14,670,690	\$268,029,390	\$131,167,220	\$847,296,700	N/A
2007	\$1,785,212,170	\$379,474,210	\$275,836,050	\$1,029,018,300	\$189,026,800	\$137,833,610	\$97,419,630	\$28,153,840	\$19,446,210	\$19,936,390	\$5,656,550	\$14,827,500	\$289,328,880	\$119,102,870	\$1,024,752,810	N/A
2008	\$2,424,706,590	\$441,672,280	\$278,078,220	\$1,386,249,370	\$140,869,650	\$128,535,170	\$60,897,000	\$30,392,980	\$21,266,520	\$19,137,240	\$5,975,580	\$16,330,640	\$345,566,890	\$145,247,670	\$1,388,328,990	N/A
2009	\$2,066,798,360	\$328,565,530	\$189,046,880	\$1,116,954,790	\$161,622,340	\$134,642,370	\$66,895,700	\$31,046,680	\$23,399,090	\$19,980,380	\$8,736,240	\$14,532,830	\$337,208,840	\$207,271,800	\$1,082,794,780	N/A
2010	\$2,052,875,760	\$294,663,760	\$275,936,180	\$881,507,160	\$460,499,250	\$133,008,690	\$67,778,290	\$30,488,420	\$28,343,040	\$19,705,170	\$10,036,540	\$15,710,060	\$346,213,040	\$478,630,450	\$885,628,080	\$354,055,170
2011	\$1,896,443,240	\$226,410,390	\$293,520,290	\$811,675,670	\$388,964,530	\$136,279,380	\$67,212,690	\$30,825,750	\$25,814,970	\$18,753,370	\$13,726,750	\$14,470,690	\$356,516,180	\$389,617,480	\$810,343,640	\$389,018,270
2012	\$1,776,508,670	\$213,181,520	\$343,355,070	\$763,780,570	\$281,432,600	\$129,529,500	\$67,606,690	\$31,302,380	\$26,023,770	\$19,757,890	\$14,347,810	\$17,259,100	\$408,298,400	\$271,117,690	\$787,710,990	\$317,156,640
2013	\$1,769,873,890	\$311,801,980	\$424,840,950	\$703,780,040	\$238,639,950	\$53,341,970	\$71,801,220	\$32,824,370	\$25,274,290	\$20,595,170	\$13,096,430	\$15,559,690	\$482,700,880	\$234,885,680	\$726,196,030	\$353,305,770
2014	\$1,652,299,935	\$361,641,157	\$461,856,887	\$727,207,713	\$217,523,748	\$45,425,495	\$77,356,802	\$35,436,250	\$25,204,840	\$20,593,270	\$13,096,430	\$12,357,140	\$521,895,097	\$206,957,090	\$752,734,965	\$371,064,185
2015	\$1,845,419,800	\$341,489,090	\$396,937,700	\$744,109,830	\$242,637,270	\$45,746,990	\$83,614,220	\$38,367,480	\$27,868,510	\$23,448,620	\$14,202,880	\$10,897,440	\$470,576,430	\$228,005,980	\$789,997,280	\$335,837,990
2016	\$1,676,307,700	\$328,837,040	\$313,615,670	\$680,633,110	\$223,616,190	\$48,851,630	\$89,214,660	\$40,936,250	\$27,432,190	\$22,808,580	\$11,113,760	\$10,837,440	\$399,650,100	\$202,423,600	\$727,925,240	\$343,362,570
2017	\$1,658,399,949	\$317,956,800	\$311,586,198	\$657,330,811	\$229,129,800	\$65,942,560	\$86,731,470	\$43,180,200	\$29,299,150	\$23,969,150	\$12,880,020	\$12,379,690	\$391,890,409	\$206,966,830	\$706,576,020	\$349,788,920
2018	\$1,737,176,181	\$337,947,970	\$306,767,230	\$705,974,601	\$241,042,350	\$69,530,830	\$103,974,340	\$46,371,040	\$36,375,990	\$23,606,810	\$13,007,180	\$13,007,180	\$390,431,521	\$217,943,010	\$757,691,210	\$370,007,590
2019	\$2,044,654,570	\$399,586,729	\$374,990,660	\$848,564,351	\$265,254,215	\$80,234,420	\$112,873,339	\$51,442,960	\$40,157,070	\$25,552,560	\$13,850,140	\$16,151,520	\$476,819,991	\$238,991,280	\$900,096,090	\$427,564,939
2020	\$2,138,913,271	\$415,216,130	\$411,991,490	\$867,300,261	\$283,302,140	\$85,471,660	\$109,855,880	\$52,919,270	\$40,411,970	\$28,038,150	\$13,798,610	\$16,026,050	\$514,994,671	\$262,024,720	\$923,741,930	\$435,668,920
2021	\$2,194,847,458	\$443,665,833	\$427,033,990	\$869,967,195	\$291,213,350	\$88,533,510	\$113,239,423	\$56,243,990	\$40,720,015	\$24,271,740	\$13,886,920	\$16,506,720	\$531,529,350	\$270,034,300	\$935,721,405	\$456,803,147

**ADDENDUM D
PRITCHARD & ABBOTT,
INC. 2021 MASS
APPRAISAL REPORT**



**THE APPRAISAL OF
MINERAL, INDUSTRIAL, UTILITY, PERSONAL PROPERTY
AND
RESIDENTIAL REAL ESTATE
AS PER
UNIFORM STANDARDS OF
PROFESSIONAL APPRAISAL PRACTICE
(USPAP)**

**Effective January 1, 2020
(Applicable for Tax Years 2020, 2021, 2022, and 2023*)**

**On August 11, 2022, for the second consecutive year, The Appraisal Foundation's Appraisal Standards Board (ASB) announced that the current edition of the Uniform Standards of Professional Appraisal Practice (USPAP) would be extended by one additional year. Therefore, the 2020-2021 USPAP will now be effective until December 31, 2023.*

Includes, in part, the Written Mass Appraisal Report and Certification as promulgated by USPAP Standards 6-1 through 6-3. This report was assembled in part with direct reference to the 2020-2021 Edition of USPAP as published by the Appraisal Standards Board of The Appraisal Foundation, authorized by United States Congress as the Source of Appraisal Standards and Appraiser Qualifications.

This report is intended to satisfy the requirements of S.B. 841, enacted by Acts 1997, 75th Leg., ch. 1039, § 22, effective January 1, 1998; amended by Acts 1999, 76th Leg., ch. 1295 (S.B. 1641), § 1, effective January 1, 2000, when performing mass appraisals for ad valorem (property) tax purposes. This report is a work product of Pritchard & Abbott, Inc., Valuation Consultants (P&A), developed on behalf of, and for exclusive use by, P&A's valuation clients. Written permission must be obtained before reproduction of these contents or distribution to outside parties.

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POLICY STATEMENT OF PRITCHARD & ABBOTT, INC., ON THE UNIFORM STANDARDS OF PROFESSIONAL APPRAISAL PRACTICE

Pritchard & Abbott, Inc., (P&A), a privately held company engaged primarily, but not wholly, in the ad valorem tax valuation industry endorses Uniform Standards of Professional Appraisal Practice (USPAP) as the basis for the production of sound appraisals. Insofar as the statutory requirement to appraise groups (or a “universe”) of real and personal property within an established period of time using standardized procedures—and subjecting the resulting appraisals to statistical measures—is the definition of mass appraisal, P&A subscribes to USPAP Standards 5 and 6 (Mass Appraisal, Development and Reporting) whenever applicable in the development and defense of values. When circumstances clearly dictate the use of single property appraisal procedures, P&A adheres to the spirit and intent of the remaining USPAP Standards within all appropriate, practical, and/or contractual limitations or specifications.

This “USPAP Report” provides general information about the rather comprehensive USPAP Scope of Work rule, as well as the specific steps P&A takes in the actual appraisal of various property types per our contractual obligations. This report, as well as the Biennial Reappraisal Plan that P&A provides our clients before the appraisal season, should not be confused or conflated with an “appraisal manual” or other “how-to” guide which may or may not exist within P&A for any particular property type we appraise.

This report discusses all additional USPAP rules that interact with the Scope of Work Rule, such as the Ethics Rule, the Competency Rule, the Record Keeping Rule, and Jurisdictional Exception Rule, as well as USPAP Definitions. This report, and specifically the certification page at the end, is meant to accompany our appraisals and supporting documentation provided to clients per Property Tax Code, Sec. 25.01(c) at the completion of each tax year. An appraisal season thus begins with an appraisal plan (approved by the CAD’s Board of Directors) and ends with appraisal reports. Providing these reports is definitely part of the plan. Likewise, much of the verbiage in this “USPAP report” is a reiteration of the Biennial Reappraisal Plan.

USPAP defines “appraisal” as the act or process of developing an opinion of value or pertaining to appraising and related functions such as appraisal practice or appraisal services. Valuation services is defined as services pertaining to an aspect of property value, regardless of the type of service and whether it is performed by appraisers or by others. The USPAP definition of “appraiser” is one who is expected to perform valuation services competently and in a manner that is *independent, impartial, and objective*. USPAP Advisory Opinion 21: *USPAP Compliance* states that this expectation (by clients and intended users of appraisal reports) is the basis that creates an ethical obligation to comply with USPAP, even if not legally required. Advisory opinions do not establish new standards or interpret existing standards, but instead are issued to illustrate the applicability of appraisal standards in specific situations.

The majority of property types that P&A typically appraises for ad valorem tax purposes are categorized as unique, complex, and/or “special purpose” properties (mineral interests, industrial, utility, and related personal property). These categories of properties do not normally provide sufficient market data of reliable quality and/or quantity to support the rigorous use of all USPAP-prescribed mass appraisal development mandates (Standard 5: Mass Appraisal, Development), particularly with regards to some, but not all, of the *model calibration* and *statistical performance testing* confines. However, P&A does strive to employ all or most elements of mass appraisal techniques with regards to the *definition* and *identification of property* characteristics and *model specification* and application.

Per USPAP Advisory Opinion 32: *Ad Valorem Property Tax Appraisal and Mass Appraisal Assignments*, in the interests of equity, the scope of work in mass appraisal assignments for ad valorem taxation can include consideration of appraisal level (the overall proximity between appraised values and actual prices) and the uniformity of property values (equity within groups of like properties). The appraiser is responsible for

recognizing when the concepts of appraisal level and appraisal uniformity are necessary for credible assignment results in a mass appraisal assignment for ad valorem taxation.

Residential real estate property appraisers most frequently apply mass appraisal methods within the sales comparison (market) approach to value. Through the use of standardized data collection (i.e., actual market sales), specification and calibration of mass appraisal models, tables, and schedules are possible. Through ratio study analysis and other performance measures, a cumulative summary of valuation accuracy can thus be produced in order to calibrate the appraisal model(s). Where sufficient data of reliable quality exists, mass appraisal is also used for other types of real estate property such as farms, vacant lots, and some commercial uses (e.g., apartments, offices, and small retail).

Regarding mass appraisal reports due the client and other intended users per USPAP (Standard 6 (Mass Appraisal, Reporting), a written report of the mass appraisal as described in Standards 6-2 is not provided for each individual property. An individual property record or worksheet may describe the valuation of the specific property after the application of the mass appraisal model. To understand the individual property result developed in a mass appraisal requires the examination of all the information and analysis required by Standards 6-2.

P&A will clearly state or otherwise make known all extraordinary assumptions, hypothetical conditions, limitations imposed by assignment conditions, and/or jurisdictional exceptions in its appraisal reports as they are conveyed to our clients. *Intended users of our reports are typically the client(s) for which we are under direct contract.* Although taxpayers or their agents who own and/or represent the subject property being appraised often receive these reports either by law or as a courtesy of the client or P&A, this receipt does not mean these parties automatically become Intended Users as defined by USPAP. *A party receiving a copy of a report in order to satisfy disclosure requirements does not become an intended user of the appraisal or mass appraisal unless the appraiser specifically identifies such party as an intended user.* Potential other users include parties involved in adjudication of valuation disputes (review board members, lawyers, judges, etc.), governmental agencies which periodically review our appraisals for various statutory purposes (such as the Texas Comptroller's Office) and private parties who may obtain copies of our appraisals through Open Records Requests made to governmental agencies.

USPAP does not currently address communications of assignment results prior to completion of the assignment, thus such communications have no requirements other than to comply with the general requirements in the Ethics Rule, the Competency Rule, and the Jurisdictional Exception Rule. The client and all intended users should be aware that mass appraisals, as opposed to most "fee" appraisals, are somewhat inherently "limited" versus "complete" and that appraisal reports, unless otherwise contracted for by the client, will most often be of a "restricted" nature whereas explanations of appraisal methods and results are more concise versus lengthy in order to promote brevity, clarity, and transparency to the intended user(s).

Per USPAP, the appropriate reporting option and level of information in a report are dependant on the intended use and the intended users. Although the reporting verbiage in USPAP Standard 6 does not specifically offer or promulgate a "Restricted Appraisal Report" such as in Standard 2 (Real Property Appraisal, Reporting) and Standard 8 (Personal Property Appraisal, Reporting), it should be noted that: a) all mass appraisals and mass appraisal reports deal with real and personal property in some form or fashion; and b) P&A is a private consulting firm, a fact which may necessitate the withholding of certain data and/or appraisal models/techniques which are deemed confidential, privileged and/or proprietary in nature. The use of "limited" appraisals in conjunction with "restricted" reports in no way implies non-compliance with USPAP. *The substantive content of a report determines its compliance.*

P&A believes that, with its vast experience and expertise in these areas of appraisal, all concluded values and reports thereof are credible, competent, understandable, uniform and consistent; and most importantly for ad valorem tax purposes, accomplished in a cost-efficient and timely manner.

Per previous ASB comments under Standard 6-2(b) [*scope of work... special limiting conditions*]:

“Although appraisers in ad valorem taxation should not be held accountable for limitations beyond their control, they are required by this specific requirement to identify cost constraints and to take appropriate steps to secure sufficient funding to produce appraisals that comply with these standards. Expenditure levels for assessment administration are a function of a number of factors. Fiscal constraints may impact data completeness and accuracy, valuation methods, and valuation accuracy. Although appraisers should seek adequate funding and disclose the impact of fiscal constraints on the mass appraisal process, they are not responsible for constraints beyond their control.”

In any event, however, it is not P&A’s intent to allow constraints, fiscal or otherwise, to limit the scope of work to such a degree that the mass appraisal results provided to our clients are not credible within the context of the intended use(s) of the appraisal.

CHANGES FROM 2018-19 EDITION OF USPAP

The Appraisal Foundation, through its Appraisal Standards Board, constantly seeks to clarify and improve where possible the previously published edition of USPAP. Below is a summary of the changes applicable to the current edition as they apply to P&A's mass appraisal assignments and reports:

Revisions to the Standards regarding reporting options and Comments in Standards Rules

The Board adopted revisions to permit additional intended users besides the client for Restricted Appraisal Reports, as long as the other intended users are named in the report (i.e., not merely identified "by type"). The second adopted change for Restricted Appraisal Reports is a simplification of warning language that will no longer include a reference to the appraiser's workfile.

Revision of SCOPE OF WORK RULE

The Board adopted revisions to add language to the Disclosure Obligations section of the SCOPE OF WORK RULE to address the flexibility afforded the appraiser in the disclosure of scope of work.

Revisions to COMPETENCY RULE

The Board revised the "Perfection is impossible to attain..." Comment in Standards Rules 1-1, 3-1, 5-1, 7-1, and 9-1, and moved it into the COMPETENCY RULE. Moving the Comment into the COMPETENCY RULE reduces duplication and, at the same time, broadens the applicability since the COMPETENCY RULE applies to both development and reporting in all disciplines.

Revisions to DEFINITIONS

The Board adopted some modifications and additions to the DEFINITIONS in order to help readers better understand USPAP. The Board adopted changes to the definitions of APPRAISAL, APPRAISAL PRACTICE, APPRAISAL REVIEW, APPRAISER, ASSIGNMENT CONDITIONS, ASSIGNMENT RESULTS, CLIENT, COST, EXPOSURE TIME, MARKET VALUE, PERSONAL PROPERTY, REAL PROPERTY, VALUATION SERVICE, VALUE and WORKFILE. The Board also adopted new definitions for the terms ASSIGNMENT ELEMENTS, EFFECTIVE DATE, MISLEADING, PERSONAL INSPECTION, PHYSICAL CHARACTERISTICS, and RELEVANT CHARACTERISTICS, to help clarify how each term is used in USPAP.

Other Edits to Improve Clarity and Enforceability of USPAP

The Board adopted changes related to the phrases "accept an assignment" and "intangible items." The edits are intended to improve clarity and consistency.

Revisions to ADVISORY OPINION 1, Sales History

The Board adopted revisions to Advisory Opinion 1, Sales History, to provide additional detail and illustrations related to an appraiser's obligation to analyze the listing, contract, and sales history of the subject property.

Revisions to ADVISORY OPINION 2, Inspection of Subject Property

The Board adopted revisions to Advisory Opinion 2, Inspection of Subject Property, to provide guidance and illustrations reflecting changes in the marketplace related to an appraiser's inspection of a property.

Revisions to ADVISORY OPINION 28, Scope of Work Decision, Performance, and Disclosure

The Board adopted revisions to Advisory Opinion 28, Scope of Work Decisions, Performance, and Disclosure, including a new Illustration 2 regarding a scope of work problem related to tangible personal property, and adding an additional illustration regarding a scope of work problem related to real property.

Revisions to ADVISORY OPINION 31, Assignments Involving More than One Appraiser

The Board adopted revisions to Advisory Opinion 31, Assignments Involving More than One Appraiser, to help

clarify guidance related to significant appraisal assistance and Standards Rules 2-3, 4-3, 6-3, 8-3, and 10-3.

Revisions to ADVISORY OPINION 32, Ad Valorem Property Tax Appraisal and Mass Appraisal Assignments

The Board adopted revisions to Advisory Opinion 32, Ad Valorem Property Tax Appraisal and Mass Appraisal Assignments, that adds a new Illustration 5 on the topic of an appraiser's obligations regarding the quantity and quality of factual data collected in a mass appraisal assignment.

Revisions to ADVISORY OPINION 36, Identification and Disclosure of Client, Intended Use, and Intended Users

The Board adopted revisions to Advisory Opinion 36, Identification and Disclosure of Client, Intended Use, and Intended Users, to clarify an appraiser's requirement to make a proper disclosure of the client and any other intended users in an Appraisal Report or Restricted Appraisal Report, particularly in cases where the client has requested anonymity in the report.

Creation of ADVISORY OPINION 38, Content of an Appraisal Report and Restricted Appraisal Report

The Board adopted newly-created Advisory Opinion 38, Content of an Appraisal Report and Restricted Appraisal Report. The new Advisory Opinion compares the reporting requirements under the revised Appraisal Report and Restricted Appraisal Report options, and replaces the prior guidance offered in Advisory Opinions 11 and 12.

Retirement of ADVISORY OPINION 4, Standards Rule 1-5(b); ADVISORY OPINION 11, Content of the Appraisal Report Options of Standards Rules 2-2, 8-2, and 10-2; and ADVISORY OPINION 12, Use of the Appraisal Report Options of Standards Rules 2-2, 8-2, and 10-2

The Board adopted the retirement of Advisory Opinions 4, 11, and 12. Advisory Opinion 4 was narrowly-focused, and was more appropriately housed where it also currently exists in the USPAP Frequently Asked Questions. As stated above, Advisory Opinions 11 and 12 have been replaced with the newly-created Advisory Opinion 38, Content of an Appraisal Report and Restricted Appraisal Report.

Additional administrative edits will be made to other Advisory Opinions and FAQs for consistency with the adopted changes.

DEFINITIONS

For the purpose of *Uniform Standards of Professional Appraisal Practice*, the following definitions apply:

APPRAISAL: (noun) the act or process of developing an opinion of value; an opinion of value. (adjective) of or pertaining to appraising and related functions such as appraisal practice or appraisal services.

Comment: An appraisal is numerically expressed as a specific amount, as a range of numbers, or as a relationship (e.g., not more than, not less than) to a previous value opinion or numerical benchmark (e.g., assessed value, collateral value).

APPRAISAL PRACTICE: valuation services performed by an individual acting as an appraiser, including but not limited to appraisal or appraisal review.

Comment: Appraisal practice is provided only by appraisers, while valuation services are provided by a variety of professionals and others. The terms appraisal, appraisal review, and appraisal consulting are intentionally generic and are not mutually exclusive. For example, an opinion of value may be required as part of an appraisal review assignment.

APPRAISAL REVIEW: the act or process of developing and communicating an opinion about the quality of another appraiser's work (i.e., a report, part of a report, a workfile, or some combination of these), that was performed as part of an appraisal or appraisal review assignment; (adjective) of or pertaining to an opinion about the quality of another appraiser's work that was performed as part of an appraisal or appraisal review assignment.

APPRAISER: one who is expected to perform valuation services competently and in a manner that is independent, impartial, and objective.

APPRAISER'S PEERS: other appraisers who have expertise and competency in a similar type of assignment.

ASSIGNMENT: a valuation service that is provided by an appraiser as a consequence of an agreement with a client.

ASSIGNMENT CONDITIONS: Assumptions, extraordinary assumptions, hypothetical conditions, laws and regulations, jurisdictional exceptions, and other conditions that affect the scope of work.

ASSIGNMENT ELEMENTS: Specific information needed to identify the appraisal or appraisal review problem: client and any other intended users; intended use of the appraiser's opinions and conclusions; type and definition of value; effective date of the appraiser's opinions and conclusions; subject of the assignment and its relevant characteristics; and assignment conditions.

ASSIGNMENT RESULTS: An appraiser's opinions or conclusions, not limited to value, that were developed when performing an appraisal assignment, an appraisal review assignment, or a valuation service other than an appraisal or appraisal review.

Comment: Physical characteristics are not assignment results.

BIAS: a preference or inclination that precludes an appraiser's impartiality, independence, or objectivity in an assignment.

BUSINESS ENTERPRISE: an entity pursuing an economic activity.

BUSINESS EQUITY: the interests, benefits, and rights inherent in the ownership of a business enterprise or a part thereof in any form (including but not limited to capital stock, partnership interests co-operatives, sole proprietorships, options, and warrants).

CLIENT: the party or parties (i.e., individual, group, or entity) who engage, an appraiser by employment or contract in a specific assignment whether directly or through an agent.

CONFIDENTIAL INFORMATION: information that is either: (a) identified by the client as confidential when providing it to an appraiser and that is not available from any other source; or (b) classified as confidential or private by applicable law or regulation.*

*Notice: For example, pursuant to the passage of the Gramm-Leach-Bliley Act in November 1999, some public agencies have adopted privacy regulations that affect appraisers. The Federal Trade Commission issued two rules. The first rule (16 CFR 313) focused on the protection of “non-public personal information” provided by consumers to those involved in financial activities “found to be closely related to banking or usual in connection with the transaction of banking.” These activities include “appraising real or personal property.” The second rule (16 CFR 314) required appraisers to safeguard customer non-public personal information. Significant liability exists for appraisers should they fail to comply with these FTC rules.

COST: the actual or estimated amount required to create, reproduce, replace, or obtain a property.

CREDIBLE: worthy of belief.

Comment: Credible assignment results require support, by relevant evidence and logic, to the degree necessary for the intended use.

EFFECTIVE DATE: the date to which an appraiser’s analyses, opinions, and conclusions apply; also referred to as date of value.

EXPOSURE TIME: an opinion, based on supporting market data, of the length of time that the property interest being appraised would have been offered on the market prior to the hypothetical consummation of a sale at market value on the effective date of the appraisal.

EXTRAORDINARY ASSUMPTION: an assignment-specific assumption as of the effective date that is used in an analysis despite indications that the assumption could be false, and which, if found to be false, could alter the appraiser’s opinions or conclusions.

Comment: Extraordinary assumptions presume as fact otherwise uncertain information about physical, legal, or economic characteristics of the subject property; or about conditions external to the property, such as market conditions or trends; or about the integrity of data used in an analysis.

FEASIBILITY ANALYSIS: a study of the cost-benefit relationship of an economic endeavor.

HYPOTHETICAL CONDITION: a condition, directly related to a specific assignment, which is contrary to what is known by the appraiser to exist on the effective date of the appraisal results, but is used for the purpose of analysis.

Comment: Hypothetical conditions assume conditions contrary to known facts about physical, legal, or economic characteristics of the subject property; or about conditions external to the property, such as market conditions or trends, or about the integrity of data used in an analysis.

INTANGIBLE PROPERTY (INTANGIBLE ASSETS): non-physical assets, including but not limited to franchises, trademarks, patents, copyrights, goodwill, equities, mineral rights, securities, and contracts, as distinguished from physical assets such as facilities and equipment.

INTENDED USE: the anticipated use(s) of assignment results as identified by the appraiser based on communication with the client.

INTENDED USER: the client and any other party as identified, by name or type, as users of the appraisal or appraisal review report by the appraiser based on communication with the client.

Per Advisory Opinion 32: In ad valorem taxation assignments, the client is typically the government or taxing authority that engages the appraiser. As defined in USPAP, the client is an intended user. Through communication with the client, the appraiser may identify other intended users. A party [such as a taxpayer] receiving a copy of a report in order to satisfy disclosure requirements does not become an Intended user of the appraisal or mass appraisal unless the appraiser specifically identifies such party as an intended user.

JURISDICTIONAL EXCEPTION: an assignment condition established by applicable law or regulation, which precludes an appraiser from complying with a part of USPAP.

MARKET VALUE: a type of value, stated as an opinion, that presumes the transfer of a property (i.e., a right of ownership or a bundle of such rights), as of a certain date, under specific conditions set forth in the value definition that is identified by the appraiser as applicable in an appraisal.

Comment: Appraisers are cautioned to identify the exact definition of market value, and its authority, applicable in each appraisal completed for the purpose of market value.

MASS APPRAISAL: the process of valuing a universe of properties as of a given date utilizing standard methodology, employing common data, and allowing for statistical testing.

MASS APPRAISAL MODEL: a mathematical expression, tool, or formula that describes how supply and demand factors interact in a market.

MISLEADING: Intentionally or unintentionally misrepresenting, misstating, or concealing relevant facts or conclusions.

PERSONAL INSPECTION: a physical observation performed to assist in identifying relevant property characteristics in a valuation service.

Comment: An appraiser's inspection is typically limited to those things readily observable without the use of special testing or equipment. Appraisals of some types of property, such as gems and jewelry, may require the use of specialized equipment. An inspection by an appraiser is not the equivalent of an inspection by an inspection professional (e.g., a structural engineer, home inspector, or art conservator).

PERSONAL PROPERTY: Any tangible or intangible article that is subject to ownership and not classified as real property, including identifiable tangible objects that are considered by the general public as being "personal," such as furnishings, artwork, antiques, gems and jewelry, collectibles, machinery and equipment; and intangible

property that is created and stored electronically such as plans for installation art, choreography, emails, or designs for digital tokens.

PHYSICAL CHARACTERISTICS: attributes of a property that are observable or measurable as a matter of fact, as distinguished from opinions and conclusions, which are the result of some level of analysis or judgment.

PRICE: the amount asked, offered, or paid for a property.

Comment: Once stated, price is a fact, whether it is publicly disclosed or retained in private. Because of the financial capabilities, motivations, or special interests of a given buyer or seller, the price paid for a property may or may not have any relation to the value that might be ascribed to that property by others.

REAL ESTATE: an identified parcel or tract of land, including improvements, if any.

REAL PROPERTY: the interests, benefits, and rights inherent in the ownership of real estate.

RELEVANT CHARACTERISTICS: features that may affect a property's value or marketability such as legal, economic, or physical characteristics.

REPORT: any communication, written or oral, of an appraisal or appraisal review that is transmitted to the client or a party authorized by the client upon completion of an assignment.

SCOPE OF WORK: the type and extent of research and analysis in an appraisal or appraisal review assignment.

SIGNATURE: personalized evidence indicating authentication of the work performed by the appraiser and the acceptance of the responsibility for content, analyses, and the conclusions in the report.

VALUATION SERVICE: a service pertaining to an aspect of property value, regardless of the type of service and whether it is performed by appraisers or by others.

VALUE: the monetary relationship between properties and those who buy, sell, or use those properties.

Comment: Value expresses an economic concept. As such, it is never a fact but always an opinion of the worth of a property at a given time in accordance with a specific definition of value. In appraisal practice, value must always be qualified - for example, market value, liquidation value, or investment value.

WORKFILE: documentation necessary to support an appraiser's analysis, opinions, and conclusions.

PREAMBLE

The purpose of USPAP is to establish requirements and conditions for ethical, thorough, and transparent property valuation services. Valuation services pertain to all aspects of property value and include services performed by appraisers and other professionals including attorneys, accountants, insurance estimators, auctioneers, or brokers. Valuation services include appraisal, appraisal review, and appraisal consulting. The primary intent of these Standards is to promote and maintain a high level of public trust in professional appraisal practice.

It is essential that professional appraisers develop and communicate their analyses, opinions, and conclusions to intended users of their services in a manner that is meaningful and not misleading. The importance of the role of the appraiser places ethical obligations upon those who serve in this capacity. These USPAP Standards reflect the current standards of the appraisal profession.

These Standards are for both appraisers and users of appraisal services. To maintain a high level of professional practice, appraisers observe these Standards. However, these Standards do not in themselves establish which individuals or assignments must comply. The Appraisal Foundation nor its Appraisal Standards Board is not a government entity with the power to make, judge, or enforce law. Compliance with USPAP is only required when either the service or the appraiser is obligated to comply by law or regulation, or by agreement with the client or intended users. When not obligated, individuals may still choose to comply.

USPAP addresses the ethical and performance obligations of appraisers through Definitions, Rules, Standards, Statements (if any), and Advisory Opinions. USPAP Standards deal with the procedures to be followed in performing an appraisal or appraisal review and the manner in which each is communicated. A brief description of the USPAP Standards are as follows:

- **Standards 1 and 2:** establish requirements for the development and communication of a real property appraisal.
- **Standards 3 and 4:** establishes requirements for the development and communication of an appraisal review.
- **Standards 5 and 6:** establishes requirements for the development and communication of a mass appraisal.
- **Standards 7 and 8:** establish requirements for the development and communication of a personal property appraisal.
- **Standards 9 and 10:** establish requirements for the development and communication of a business or intangible asset appraisal.

Section 23.01(b) [Appraisals Generally] of the Texas Property Tax Code states:

“The market value of property shall be determined by the application of generally accepted appraisal methods and techniques. If the Appraisal District determines the appraised value of a property using mass appraisal standards, the mass appraisal standards must comply with the Uniform Standards of Professional Appraisal Practice....” (underline added for emphasis)

Consequently, USPAP Standards 5 and 6 are assumed to be the applicable standard for ad valorem tax purposes in Texas, if mass appraisal practices are in fact being used to appraise the subject property. USPAP Advisory Opinion 32 suggests several USPAP standards other than Standards 5 or 6 can apply in ad valorem tax work. It appears that an appraiser engaged in ad valorem tax work in Texas is not specifically required by law to follow these USPAP standards if in fact mass appraisal practices have not been used to appraise the subject property. In this case it could be deemed appropriate to invoke the Jurisdictional Exception Rule which is applicable when there is a contradiction between the requirements of USPAP and the law or regulation of a jurisdiction. Please

see the P&A Policy Statement on USPAP as provided elsewhere in this report for a more detailed discussion regarding this matter.

ETHICS RULE

Because of the fiduciary responsibilities inherent in professional appraisal practice, the appraiser must observe the highest standards of professional ethics. This Ethics Rule is divided into three sections:

- Conduct;
- Management;
- Confidentiality.

This Rule emphasizes the personal obligations and responsibilities of the individual appraiser. However, it should be noted that groups and organizations *which are comprised of individual appraisers engaged in appraisal practice* effectively share the same ethical obligations. To the extent the group or organization does not follow USPAP Standards when legally required, individual appraisers should take steps that are appropriate under the circumstances to ensure compliance with USPAP.

Compliance with these Standards is required when either the service or the appraiser is obligated by law or regulation, or by agreement with the client or intended users, to comply. *Compliance is also required when an individual, by choice, represents that he or she is performing the service as an appraiser.*

An appraiser must not misrepresent his or her role when providing valuation services that are outside of appraisal practice.

Honesty, impartiality, and professional competency are required of all appraisers under USPAP Standards. To document recognition and acceptance of his or her USPAP-related responsibilities in communicating an appraisal or appraisal review completed under USPAP, an appraiser is required to certify compliance with these Standards.

CONDUCT

An appraiser must perform assignments with impartiality, objectivity, and independence, and without accommodation of personal interests.

An appraiser:

- must not perform an assignment with bias;
- must not advocate the cause or interest of any party or issue;
- *must not accept an assignment that includes the reporting of predetermined opinions and conclusions;*
- must not misrepresent his or her role when providing valuation services that are outside of appraisal practice;
- must not communicate assignment results with the intent to mislead or to defraud;
- must not use or communicate a report or assignment results known by the appraiser to be misleading or fraudulent;
- must not knowingly permit an employee or other person to communicate a report or assignment results that are misleading or fraudulent report;
- must not use or rely on unsupported conclusions relating to characteristics such as race, color, religion, national origin, gender, marital status, familial status, age, receipt of public assistance income, handicap, or an unsupported conclusion that homogeneity of such characteristics is necessary to maximize value;
- must not engage in criminal conduct;
- must not willfully or knowingly violate the requirements of the RECORD KEEPING RULE; and must not perform an assignment in a grossly negligent manner.

If known prior to accepting an assignment, and/or if discovered at any time during the assignment, an appraiser must disclose to the client, and in each subsequent report certification:

- any current or prospective interest in the subject property or parties involved; and
- any services regarding the subject property performed by the appraiser within the three year period immediately preceding acceptance of the assignment, as an appraiser or in any other capacity.

The appraiser can agree with the client to keep the mere occurrence of a prior appraisal assignment confidential. If an appraiser has agreed with the client not to disclose that he or she has appraised a property, the appraiser must decline all subsequent assignment that fall with the three year period. In assignments in which there is no report, only the initial disclosure to the client is required.

Presumably all parties in ad valorem tax appraisal will be aware of the ongoing yearly nature of the appraisal assignments performed by valuation consulting firms like Pritchard & Abbott, Inc.—i.e., it will not be confidential—so that this particular conduct instruction is more or less a moot point (regarding the three year period discussed) if the prior service is in fact the ad valorem tax appraisals performed in previous tax years.

MANAGEMENT

The payment of a fee, commission, or a thing of value by the appraiser in connection with the procurement of an assignment must be disclosed. This disclosure must appear in the certification and in any transmittal letter in which conclusions of value are stated; however, the disclosure of the amount paid is not required. Intra-company payments to employees of groups or organizations involved in appraisal practice for business development do not require disclosure.

It is unethical for an appraiser to accept compensation for performing an assignment when it is contingent upon the reporting of a *predetermined result, a direction in assignment results that favors the cause of the client, the amount of a value opinion, the attainment of a stipulated result*, or the occurrence of a subsequent event directly related to the appraiser's opinions and specific to the assignment's purpose.

Advertising for or *soliciting assignments in a manner that is false, misleading, or exaggerated* is unethical. Decisions regarding finder or referral fees, contingent compensation, and advertising may not be the responsibility of an individual appraiser, but for a particular assignment it is the responsibility of the individual appraiser to ascertain that there has been no breach of ethics, that the assignment consulting assignment has been prepared in accordance with USPAP Standards, and that the report can be properly certified when required by USPAP Standards 2-3, 4-3, 6-3, 8-3, or 10-3.

An appraiser must affix, or authorize the use of, his or her signature to certify recognition and acceptance of his or her USPAP responsibilities in an appraisal or appraisal review assignment. An appraiser may authorize the use of his or her signature only on an assignment-by-assignment basis.

In addition, an appraiser must not affix the signature of another appraiser without his or her consent. An appraiser must exercise due care to prevent unauthorized use of his or her signature. However, an appraiser exercising such care is not responsible for unauthorized use of his or her signature.

CONFIDENTIALITY

An appraiser must protect the confidential nature of the appraiser-property owner relationship.

An appraiser must act in good faith with regard to the legitimate interests of the client in the use of confidential information and in the communication of assignment results.

An appraiser must be aware of, and comply with, all confidentiality and privacy laws and regulations applicable in an assignment.

An appraiser must not disclose confidential factual data obtained from a property owner to anyone other than:

1. The client;
2. Parties specifically authorized by the client;
3. State appraiser regulatory agencies;
4. Third parties as may be authorized by due process of law; or
5. A duly authorized professional peer review committee except when such disclosure to a committee would violate applicable law or regulation.

An appraiser must take reasonable steps to safeguard access to confidential information and assignment results by unauthorized individuals, whether such information or results are in physical or electronic form. In addition, an appraiser must ensure that employees, coworkers, subcontractors, or others who may have access to confidential information or assignments results, are aware of the prohibitions on disclosure of such information or results.

It is unethical for a member of a duly authorized professional peer review committee to disclose confidential information presented to the committee.

When all confidential elements of confidential information are removed through redaction or the process of aggregation, client authorization is not required for the disclosure of the remaining information, as modified.

RECORD KEEPING RULE

An appraiser must prepare a workfile for each appraisal or appraisal review assignment. A workfile must be in existence prior to the issuance of any report or other communication of assignment results. A written summary of an oral report must be added to the workfile within a reasonable time after the issuance of the oral report.

The workfile must include the name of the client and the identity, by name or type, of any other intended users, and true copies of all written reports, documented on any type of media. (A true copy is a replica of the report transmitted to the client. A photocopy or an electronic copy of the entire report transmitted to the client satisfies the requirement of a true copy.) A workfile must contain summaries of all oral reports or testimony, or a transcript of testimony, including the appraiser's signed and dated certification; and all other data, information, and documentation necessary to support the appraiser's opinions and conclusions and to show compliance with USPAP, or references to the location(s) of such other data, information, and documentation.

A workfile in support of a Restricted Appraisal Report or an oral appraisal report must be sufficient for the appraiser to produce an Appraisal Report. A workfile in support of an oral appraisal review report must be sufficient for the appraiser to produce an Appraisal Review Report.

An appraiser must retain the workfile for a period of at least *five years after preparation* or at least two years after final disposition of any judicial proceeding in which the appraiser provided testimony related to the assignment, whichever period expires last.

An appraiser must have custody of the workfile, or make appropriate workfile retention, access, and retrieval arrangements with the party having custody of the workfile. This includes ensuring that a workfile is stored in a medium that is retrievable by the appraiser throughout the prescribed record retention period. An appraiser having custody of a workfile must allow other appraisers with workfile obligations related to an assignment appropriate access and retrieval for the purpose of:

- submission to state appraiser regulatory agencies;
- compliance with due process of law;
- submission to a duly authorized professional peer review committee; or
- compliance with retrieval arrangements.

A workfile must be made available by the appraiser when required by a state appraiser regulatory agency or due process of law.

An appraiser who willfully or knowingly fails to comply with the obligations of this Record Keeping Rule is in violation of the Ethics Rule.

COMPETENCY RULE

An appraiser must: (1) be competent to perform the assignment; (2) acquire the necessary competency to perform the assignment; or (3) decline or withdraw from the assignment. In all cases, the appraiser must perform competently when completing the assignment.

BEING COMPETENT

The appraiser must determine, prior to agreeing to perform an assignment, that he or she can perform the assignment competently. Competency requires:

- the ability to properly identify the problem to be addressed;
- the knowledge and experience to complete the assignment competently; and
- the recognition and compliance with all laws and regulations that apply to the appraiser or the assignment.

Competency applies to factors such as, but not limited to, an appraiser's familiarity with a specific type of property, a market, a geographic area, or an analytical method. The background and experience of appraisers varies widely, and a lack of knowledge or experience can lead to inaccurate or inappropriate appraisal practice. *The Competency Rule requires an appraiser to have both the knowledge and the experience required to perform a specific appraisal service competently.* If an appraiser has been deemed to not have the required competency, the following steps must be taken in acquiring competency in order for that appraiser to perform the assignment under USPAP requirements.

For assignments with retrospective opinions and conclusions (which are allowed under certain prescribed circumstances in property tax work), the appraiser must meet the requirements of this Competency Rule at the time the assignment is performed, rather than the effective date of the appraisal.

ACQUIRING COMPETENCY

If an appraiser determines he or she is not competent prior to accepting an assignment, the appraiser must:

- disclose the lack of knowledge and/or experience to the client before accepting the assignment;
- take all steps necessary or appropriate to complete the assignment competently; and
- describe, in the report, the lack of knowledge and/or experience and the steps taken to complete the assignment competently.

Competency can be acquired in various ways, including, but not limited to, personal study by the appraiser, association with an appraiser reasonably believed to have the necessary knowledge and/or experience, or retention of others who possess the necessary knowledge and/or experience.

In an assignment where geographic competency is required (certainly useful if not outright necessary in property tax appraisal assignments), an appraiser who is not familiar with the relevant market characteristics must acquire an understanding necessary to produce credible assignment results for the specific property type and market involved. Pritchard & Abbott, Inc., takes great pride in assigning and retaining appraisers who gain and then employ local knowledge and geographic competency in their appraisal assignments.

When an appraiser determines in the course of the assignment that he or she lacks the required knowledge and/or experience to complete the assignment competently, the appraiser must:

- notify the client;
- take all steps necessary or appropriate under the circumstances to complete the assignment competently;
and
- describe, in the report, the lack of knowledge and/or experience and the steps taken to complete the assignment competently.

LACK OF COMPETENCY

If the appraiser cannot complete the assignment competently, the appraiser must decline or withdraw from the assignment.

SCOPE OF WORK RULE

For each appraisal or appraisal review assignment, an appraiser must:

1. Identify the problem to be solved;
2. Determine and perform the scope of work necessary to develop credible assignment results; and
3. Disclose the scope of work in the report.

An appraiser must properly identify the problem to be solved in order to determine the appropriate scope of work. The appraiser must be prepared to demonstrate that the scope of work is sufficient to produce credible assignment results.

Scope of work includes, but is not limited to:

- the extent to which the property is identified;
- the extent to which tangible property is inspected;
- the type and extent of data researched; and
- the type and extent of analyses applied to arrive at opinions or conclusions.

Appraisers have broad flexibility and significant responsibility in determining the appropriate scope of work for an appraisal or appraisal review assignment. Credible assignment results require support by relevant evidence and logic. *The credibility of assignment results is always measured in the context of the intended use.*

PROBLEM IDENTIFICATION

An appraiser must gather and analyze information about those assignment elements that are necessary to properly identify the appraisal, appraisal review or appraisal consulting problem to be solved. The assignment elements necessary for problem identification are addressed in the Standard 6-2:

- client and any other intended users;
- intended use of the appraiser's opinions and conclusions;
- type and definition of value;
- effective date of the appraiser's opinions and conclusions;
- subject of the assignment and its relevant characteristics; and
- assignment conditions.

This information provides the appraiser with the basis for determining the type and extent of research and analyses to include in the development of an appraisal. Similar information is necessary for problem identification in appraisal review and appraisal consulting assignments. Assignment conditions include:

- assumptions;
- extraordinary assumptions;
- hypothetical conditions;
- laws and regulations;
- jurisdictional exceptions; and
- other conditions that affect the scope of work.

SCOPE OF WORK ACCEPTABILITY

The scope of work must include the research and analyses that are necessary to develop credible assignment results. The scope of work is acceptable when it meets or exceeds:

- the expectations of parties who are regularly intended users for similar assignments; and
- what an appraiser's peers' actions would be in performing the same or a similar assignment.

Determining the scope of work is an ongoing process in an assignment. Information or conditions discovered during the course of an assignment might cause the appraiser to reconsider the scope of work. An appraiser must be prepared to support the decision to exclude any investigation, information, method, or technique that would appear relevant to the client, another intended user, or the appraiser's peers.

An appraiser must not allow assignment conditions to limit the scope of work to such a degree that the assignment results are not credible in the context of the intended use. In addition, the appraiser must not allow the intended use of an assignment or a client's objectives to cause the assignment results to be biased.

DISCLOSURE OBLIGATIONS

The report must contain sufficient information to allow intended the client and other intended users to understand the scope of work performed. Proper disclosure is required because clients and other intended users may rely on the assignment results. Sufficient information includes disclosure of research and analyses performed or not performed. *The information disclosed must be appropriate for the intended use of the assignment results.*

Sufficient information includes disclosure of research and analyses performed and might also include disclosure of research and analyses not performed. *The appraiser has broad flexibility and significant responsibility in the level of detail and manner of disclosing the scope of work in the appraisal report or appraisal review report.* The appraiser may, but is not required to, consolidate the disclosure in a specific section or sections of the report, or use a particular label, heading or subheading. An appraiser may choose to disclose the scope of work as necessary throughout the report.

JURISDICTIONAL EXCEPTION RULE

If any applicable law or regulation precludes compliance with any part of USPAP, only that part of USPAP becomes void for that assignment. When compliance with USPAP is required by federal law or regulation, no part of USPAP can be voided by a law or regulation of a state or local jurisdiction. *When an appraiser properly follows this Rule in disregarding a part of USPAP, there is no violation of USPAP.*

In an assignment involving a jurisdictional exception, an appraiser must:

- identify the law or regulation that precludes compliance with USPAP;
- comply with that law or regulation;
- clearly and conspicuously disclose in the report the part of USPAP that is voided by that law or regulation; and
- cite in the report the law or regulation requiring this exception to USPAP compliance.

The purpose of the Jurisdictional Exception Rule is strictly limited to providing a saving or severability clause intended to preserve the balance of USPAP if one or more of its parts are determined as contrary to law or public policy of a jurisdiction. By logical extension, there can be no violation of USPAP by an appraiser who disregards, with proper disclosure, only the part or parts of USPAP that are void and of no force and effect in a particular assignment by operation of legal authority.

It is misleading for an appraiser to disregard a part or parts of USPAP as void and of no force and effect in a particular assignment without identifying the part or parts disregarded and the legal authority justifying this action in the appraiser's report.

"Law" includes constitutions, legislative and court-made law, and administrative rules (such as from the Office of the Texas Comptroller of Public Accounts) and ordinances. "Regulations" include rules or orders having legal force, issued by an administrative agency. *Instructions from a client or attorney do not establish a jurisdictional exception.*

A jurisdictional exception prevalent in Texas is that appraisers are seeking to establish "fair market value" as defined by the Texas Property Tax Code instead of "market value" as found in the USPAP definitions section.

USPAP STANDARDS 5 AND 6: MASS APPRAISAL, DEVELOPMENT AND REPORTING (General Discussion)

In developing a mass appraisal, an appraiser must be aware of, understand, and correctly employ those recognized methods and techniques necessary to produce and communicate credible mass appraisals.

Standards 5 and 6 apply to all mass appraisals of real and personal property regardless of the purpose or use of such appraisals. It is directed toward the substantive aspects of developing and communicating competent analyses, opinions, and conclusions in the mass appraisal of properties, whether real property or personal property. Standard 5 is directed toward the substantive aspects of developing credible analyses, opinions, and conclusions in the mass appraisal of properties, while Standard 6 addresses the content and level of information required in a report that communicates the results of a mass appraisal. The reporting and jurisdictional exceptions applicable to public mass appraisals prepared for purposes of ad valorem taxation do not apply to mass appraisals prepared for other purposes.

A mass appraisal includes:

- identifying properties to be appraised;
- defining market areas of consistent behavior that applies to properties;
- identifying characteristics (supply and demand) that affect the creation of value in that market area;
- developing (specifying) a model structure that reflects the relationship among the characteristics affecting value in the market area;
- calibrating the model structure to determine the contribution of the individual characteristics affecting value;
- applying the conclusions reflected in the model to the characteristics of the properties being appraised; and
- reviewing the mass appraisal results.

The Jurisdictional Exception Rule may apply to several sections of Standards 5 and 6 because ad valorem tax administration is subject to various state, county, and municipal laws.

As previously stated in the P&A Policy Statement (page 2), it may not be possible or practicable for all the mass appraisal attributes listed above to be rigorously applied to the many types of complex and/or unique properties that P&A typically appraises. Often there are contractual limitations on the scope of work needed or required. More prevalently, these types of properties do not normally provide a reliable database of market transactions (or details of transactions) necessary for statistically supportable calibration of appraisal models and review of appraisal results. Generally these two functions are effectively accomplished through annual extended review meetings with taxpayers (and clients) who provide data, sometimes confidentially, that allows for appraisal models to be adjusted where necessary. Nevertheless, and notwithstanding whether P&A implicitly or explicitly employs or reports all attributes listed above, in all cases P&A at the minimum employs tenants of “generally accepted appraisal methods” which are the genesis of USPAP Standards.

Per USPAP guidelines, P&A will make known all departures and jurisdictional exceptions when invoked (if an appraisal method or specific requirement is applicable but not necessary to attain credible results in a particular assignment).

The various sections of Standard 5 (development of mass appraisal) and Standard 6 (communication of the mass appraisal results) are briefly summarized below:

- **Standard 5-1:** Establishes the appraiser's technical and ethical framework. Specifically, appraisers must recognize and use established principles, methods and techniques of appraisal in a careful manner while not committing substantial errors of fact or negligence that would materially affect the appraisal results and not give a credible estimate of fair market value. To this end appraisers must continuously improve his or her skills to maintain proficiency and keep abreast of any new developments in the real and personal property appraisal profession. This Standards does not imply that competence requires perfection, as perfection is impossible to attain. Instead, it requires appraisers to employ every reasonable effort with regards to due diligence and due care.
- **Standard 5-2:** Defines the introductory framework requirements of developing a mass appraisal, focusing on the identification and/or definition of: client(s), intended users, effective date, appraisal perspective, scope of work, extraordinary assumptions, hypothetical conditions, the type and definition of value being developed (typically "fair market value" for ad valorem tax purposes), characteristics of the property being appraised in relation to the type and definition of value and intended use, the characteristics of the property's market, the property's real or personal attributes, fractional interest applicability, highest and best use analysis along with other land-related considerations, and any other economic considerations relevant to the property.
- **Standard 5-3:** Defines requirements for developing and specifying appropriate mass appraisal data and elements applicable for real and personal property. For real property, the data and elements include: existing land use regulations, reasonably probable modification of such regulations, economic supply and demand, the physical adaptability of the real estate, neighborhood trends, and highest and best use analysis. For personal property, the relevant data and elements include: identification of industry trends, trade level, highest and best use, and recognition of the appropriate market consistent with the type and definition of value.
- **Standard 5-4:** Further defines requirements for developing mass appraisal models, focusing on development of standardized data collection forms, procedures, and training materials that are used uniformly on the universe of properties under consideration. This rule specifies that appraisers employ recognized techniques for specifying and calibrating mass appraisal models. Model specification is the formal development of a model in a statement or mathematical equation, including all due considerations for physical, functional, and external market factors as they may affect the appraisal. These models must accurately represent the relationship between property value and supply and demand factors, as represented by quantitative and qualitative property characteristics. Models must be calibrated using recognized techniques, including, but not limited to, multiple linear regression, nonlinear regression, and adaptive estimation. Models may be specified incorporating the income, market, and/or cost approaches to value and may be tabular, mathematical, linear, nonlinear, or any other structure suitable for representing the observable property characteristics such as adaptive estimation. Model calibration refers to the process of analyzing sets of property and market data to determine the specific parameters of a model.
- **Standard 5-5:** Defines requirements for collection of sufficient factual data, in both qualitative and quantitative terms, necessary to produce credible appraisal results. The property characteristics collected must be contemporaneous with the effective date of the appraisal. The data collection program should incorporate a quality control procedure, including checks and audits of the data to ensure current and consistent records. This rule also calls for calls for an appraiser, in developing income and expense statements and cashflow projections, to weigh historical information and trends, current market factors affecting such trends, and reasonably anticipated events, such as competition from developments either planned or under construction. Terms and conditions of any leases should be analyzed, as well as the need for and extent of any physical inspection of the properties being appraised.

- **Standard 5-6:** Defines requirements for application of a calibrated model to the property being appraised. This rule calls for: the appraiser to recognize methods or techniques based on the cost, market, and income approaches for improved parcels; the appraiser to value sites by recognized methods or techniques such as allocation method, abstraction method, capitalization of ground rent, and land residual; the appraiser to develop value of leased fee or leasehold estates with consideration for terms and conditions of existing leases, and, when applicable by law, as if held in fee simple whereas market rents are substituted for actual contract rents; the appraiser to analyze the effect on value, if any, of the assemblage of the various parcels, divided interests, or component parts of a property; the appraiser to analyze anticipated public or private improvements located on or off the site, and analyze the effect on value, if any, of such anticipated improvements to the extent they are reflected in market actions.
- **Standard 5-7:** Defines the reconciliation process of a mass appraisal. Specifically, appraisers must analyze the results and/or applicability of the various approaches used while ensuring that, on an overall basis, standards of reasonableness and accuracy are maintained with the appraisal model selected (underline added for emphasis). It is implicit in mass appraisal that, even when properly specified and calibrated models are used, some individual value conclusions will not meet standards of reasonableness, consistency, and accuracy. Appraisers have a professional responsibility to ensure that, on an overall basis, models produce value conclusions that meet attainable standards of accuracy.
- **Standard 6-1:** Defines general requirements of a mass appraisal written report by addressing the level of information required that will allow the report to be non-misleading, clearly understood, and sufficiently qualified with any assumptions and conditions (elements of which are further detailed in the next three sections of this report that discuss P&A appraisal procedures with regards to specific categories of property).
- **Standard 6-2:** Defines specific content required to be included in a mass appraisal written report.
- **Standard 6-3:** Defines the certification of the mass appraisal written report.

The following sections of this report discuss in more detail the various elements of the development of P&A's mass appraisals and associated written reports as required by USPAP Standards 5 and 6, with regards to P&A appraisal of Mineral Interests, Industrial, Utility, Related Personal Property, and Real Estate.

USPAP STANDARDS 5, 6-1, 6-2: MASS APPRAISAL OF MINERAL INTERESTS

Note: This section, in conjunction with any attached or separately provided P&A-generated appraisal reports specific to the subject property or properties, constitutes the "mass appraisal written report" as required by USPAP Standards 6-1 and 6-2. For mass appraisal, a written report is not provided for each individual property. An individual property record or worksheet may describe the valuation of a specific property after the application of the mass appraisal model. USPAP Standards 6-3 (certification) can be found at the end of this report. USPAP Standards 5-1 through 5-7 (instructions and explanations regarding the development, application, and reconciliation of mass appraisal values), as they apply to P&A mass appraisal procedures, are discussed below. USPAP DOES NOT DICTATE THE FORM, FORMAT, OR STYLE OF APPRAISAL REPORTS, WHICH ARE FUNCTIONS OF THE NEEDS OF USERS AND PROVIDERS OF APPRAISAL SERVICES. USPAP ALSO DOES NOT MANDATE THAT EACH APPRAISAL REPORT BE LENGTHY AND FULL OF DISCLAIMERS. Readers should note that all P&A reports, unless stated otherwise, are of a "restricted" nature whereas additional documentation and detail may be available per certain Texas Property Tax Code provisions.

INTRODUCTION

Definition of Appraisal Responsibility (Scope of Effort): The Mineral Valuation Department of Pritchard & Abbott, Inc. ("P&A" hereinafter), is responsible for developing credible values for mineral interests (full or fractional percentage ownership of oil and gas leasehold interest, the amount and type of which are legally and/or contractually created and specified through deeds and leases, et.al.) associated with producing (or capable of producing) leases. Mineral interests are typically considered real property because of their derivation from the bundle of rights associated with original fee simple ownership of land. Typically all the mineral interests that apply to a single producing lease are consolidated by type (working vs. royalty) with each type then appraised for full value which is then distributed to the various fractional decimal interest owners prorata to their individual type and percentage amount.

P&A's typical client is a governmental entity charged with appraisal responsibility for ad valorem tax purposes, although other types of clients (private businesses, individuals, etc.) occasionally contract for appraisal services which are strictly for various non-ad valorem tax purposes so that no conflicts of interest are created with P&A's core ad valorem tax work.

P&A hereby makes the **assumption** that, in all appraisal assignments performed for governmental entities in satisfaction of contractual obligations related to ad valorem tax, the client does not wish to or cannot legally request the appraisal report not identify the client.

Intended users of our reports are typically the client(s) for which we are under direct contract. Although taxpayers or their agents who own and/or represent the subject property being appraised often receive these reports either by law or as a courtesy of the client or P&A, this receipt does not mean these parties automatically become Intended Users as defined by USPAP. **A party receiving a copy of a report in order to satisfy disclosure requirements does not become an intended user of the appraisal or mass appraisal unless the appraiser specifically identifies such party as an intended user.** Potential other users include parties involved in adjudication of valuation disputes (review board members, lawyers, judges, etc.), governmental agencies which periodically review our appraisals for various statutory purposes (such as the Texas Comptroller's Office) and private parties who may obtain copies of our appraisals through Open Records Requests made to governmental agencies.

This section of P&A's USPAP report is not applicable to any mineral or mineral interest property that an appraisal district appraises outside of P&A's appraisal services, in which case the appraisal district's overall USPAP report should be referenced.

P&A makes the **Extraordinary Assumption** that all properties appraised for ad valorem tax purposes are marketable whereas ownership and title to property are free of encumbrances and other restrictions that would affect fair market value to an extent not obvious to the general marketplace. If and/or when we are made aware of any encumbrances, etc., these would be taken into account in our appraisal in which case the extraordinary assumption stated above would be revoked.

P&A is typically under contract to determine current market value or "fair market value" of said mineral interests. Fair market value is typically described as the price at which a property would sell for if:

- exposed in the open market with a reasonable time for the seller to find a purchaser;
- both the buyer and seller know of all the uses and purposes to which the property is, or can be, adapted and of the enforceable restrictions on its use; and
- both the buyer and seller seek to maximize their gains and neither is in a position to take advantage of the exigencies of the other. [Exigencies are pressing or urgent conditions that leave one party at a disadvantage to the other.]

For ad valorem tax purposes the effective date is usually legislatively specified by the particular State in which we are working - for example, in Texas the lien date is January 1 per the Texas Property Tax Code. For ad valorem tax purposes, the date of the appraisals and reports are typically several months past the effective date, thereby leaving open the possibility that a retrospective approach is appropriate under limited and prescribed circumstances (information after the effective date being applicable only if it confirms a trend or other appraisal condition that existed and was generally known as of the effective date).

P&A believes this section of this report, in conjunction with any attached or separately provided P&A-generated report(s), meets the USPAP definition of "typical practice"; i.e., it satisfies a level of work that is consistent with:

- the expectations of participants in the market for the same or similar appraisal services; and
- what P&A's peers' actions would be in performing the same or similar appraisal services in compliance with USPAP.

Legal and Statutory Requirements: In Texas, the provisions of the Texas Property Tax Code and other relevant legislative measures involving appraisal administration and procedures control the work of P&A as an extension of the Appraisal District. Other states in which P&A is employed will have similar controlling legislation, regulatory agencies, and governmental entities. P&A is responsible for appraising property on the basis of its fair market value as of the stated effective date (January 1 in Texas) for ad valorem tax purposes for each taxing unit that imposes ad valorem taxes on property in the contracted Appraisal District. All mineral properties (interests) are reappraised annually. The definition of Fair Market Value is provided and promulgated for use in ad valorem tax work in Texas by the Texas Property Tax Code, and therefore as a **Jurisdictional Exception** supercedes the definition of "market value" as found in USPAP definitions.

NOTE: IN TEXAS, P&A BELIEVES THE PROPERTY BEING APPRAISED AND PLACED ON THE TAX ROLL IS THE INTEREST AND NOT THE OIL OR GAS MINERAL ITSELF, PER PROPERTY TAX CODE SECTION 1.04(2)(F). WHILE OIL AND GAS RESERVES CERTAINLY HAVE VALUE, THE FACT IS THAT IT IS THE INTERESTS IN THESE MINERALS THAT ARE BOUGHT AND SOLD, NOT THE MINERALS THEMSELVES. THE SALE OF MINERALS AS THEY ARE EXTRACTED FROM THE SUBSURFACE OF THE LAND WHERE THEY RESIDE AS MINERALS IN PLACE "MONETIZES" THE INTEREST AND THUS GIVES THE INTEREST ITS VALUE. WHENEVER P&A REFERS TO

"MINERAL PROPERTIES" IN THIS REPORT OR IN ANY OTHER SETTING, IT IS THE MINERAL INTEREST, AND NOT THE MINERAL ITSELF, THAT IS THE SUBJECT OF THE REFERENCE.

Administrative Requirements: P&A follows generally accepted and/or recognized appraisal practices and when applicable, the standards of the International Association of Assessing Officers (IAAO) regarding its appraisal practices and procedures. P&A, when applicable, also subscribes to the standards promulgated by the Appraisal Foundation known as the Uniform Standards of Professional Appraisal Practice (USPAP). In all cases where IAAO and/or USPAP requirements cannot be satisfied for reasons of practicality or irrelevancy, P&A subscribes to "generally accepted appraisal methods and techniques" so that its value conclusions are credible and defensible. P&A submits annual or biannual contract bids to the Office of the Chief Appraiser and is bound to produce appraisal estimates on industrial, utility and personal properties within the cost constraints of said bid. Any appraisal practices and procedures followed by P&A not explicitly defined through IAAO or USPAP requirements are specified by the Texas Property Tax Code and/or at the specific request or direction of the Office of the Chief Appraiser.

Appraisal Resources

Personnel: The Mineral Valuation Division staff consists of competent Petroleum Engineers, Geologists, and Appraisers. All personnel are Registered Professional Appraisers with the State of Texas, or are progressing towards this designation within the allowable time frames prescribed by the Texas Department of Licensing and Regulation (TDLR) and/or other licensing and regulatory agencies as applicable.

Data: For each mineral property a common set of data characteristics (i.e. historical production, price and expense data) is collected from various sources and entered into P&A's mainframe computer system. Historical production data and price data is available through state agencies (Texas Railroad Commission, Texas Comptroller, et al.) or private firms who gather, format and repackage such data for sale commercially. Each property's characteristic data drives the computer-assisted mass appraisal approach to valuation.

Information Systems: The mainframe systems are augmented by the databases that serve the various in-house and 3rd-party applications on desktop personal computers. In addition, communication and dissemination of appraisals and other information is available to the taxpayer and client through electronic means including internet and other phone-line connectivity. The appraiser supervising any given contract fields many of the public's questions or redirects them to the proper department personnel.

VALUATION APPROACH (MODEL SPECIFICATION)

Concepts of Value: The valuation of oil and gas properties is not an exact science, and exact accuracy is not attainable due to many factors. Nevertheless, standards of reasonable performance do exist, and there are usually reliable means of measuring and applying these standards.

Petroleum properties are subject to depletion, and capital investment must be returned before economic exhaustion of the resource (mineral reserves). The examination of petroleum properties involves understanding the geology of the resource (producing and non-producing), type of reservoir energy, the methods of secondary and enhanced recovery (if applicable), and the surface treatment and marketability of the produced petroleum product(s).

Evaluation of mineral properties is a continuous process; the value as of the lien date merely represents a "snapshot" in time. The potential value of mineral interests derived from sale of minerals to be extracted from the ground change with mineral price fluctuation in the open market, changes in extraction technology, costs of extraction, and other variables such as the value of money.

Approaches to Value for Petroleum Property

Cost Approach: The use of cost data in an appraisal for market value is based upon the economic principle of substitution. The cost approach typically derives value by a model that begins with replacement cost new (RCN) and then applies depreciation in all its forms (physical depreciation, functional and economic obsolescence). This method is difficult to apply to oil and gas properties since lease acquisition and development may bear no relation to present worth. Though very useful in the appraisal of many other types of properties, the cost approach is not readily applicable to mineral properties. [Keep in mind that the property actually being appraised is the mineral interest and not the oil and gas reserves themselves. Trying to apply the cost approach to evaluation of mineral interests is like trying to apply the cost approach to land; it is a moot point because both are real properties that are inherently non-replaceable.] **As a general rule, and for the reasons stated above, Pritchard & Abbott, Inc., does not employ the cost approach in the appraisal of mineral interests.**

Market Approach: This approach may be defined as one which uses data available from actual transactions recorded in the market place itself; i.e., sales of comparable properties from which a comparison to the subject property can be made. Ideally, this approach's main advantage involves not only an opinion but an opinion supported by the actual spending of money. Although at first glance this approach seems to more closely incorporate the aspects of fair market value per its classical definition, there are two factors that severely limit the usefulness of the market approach for appraising oil and gas properties. First, oil and gas property sales data is seldom disclosed (in non-disclosure states such as Texas); consequently there is usually a severe lack of market data sufficient for meaningful statistical analysis. Second, all conditions of each sale must be known and carefully investigated to be sure one does have a comparative indicator of value per fair market value perquisites.

Many times when these properties do change hands, it is generally through company mergers and acquisitions where other assets in addition to oil and gas reserves are involved; this further complicates the analysis whereby a total purchase price must be allocated to the individual components - a speculative and somewhat arbitrary task at best. In the case of oil and gas properties, a scarcity of sales requires that every evidence of market data be investigated and analyzed. Factors relative to the sale of oil and gas properties are:

- current production and estimated declines forecast by the buyer;
- estimated probable and potential reserves;
- general lease and legal information which defines privileges or limitation of the equity sold;
- undeveloped potential such as secondary recovery prospects;
- proximity to other production already operated by the purchaser;
- contingencies and other cash equivalents; and
- other factors such as size of property, gravity of oil, etc.

In the event that all these factors are available for analysis, the consensus effort would be tantamount to performing an income approach to value (or trying to duplicate the buyer's income approach to value), thereby making the market approach somewhat moot in its applicability. **As a general rule, and for the reasons stated above, Pritchard & Abbott, Inc., rarely employs a rigorous application of the market approach in the appraisal of mineral interests.**

Income Approach: This approach to value most readily yields itself to the appraisal of mineral interests. Data is readily available whereby a model can be created that reasonably estimates a future income stream to the property. This future income may then be converted (discounted) into an estimate of current value. Many refer to this as a capitalization method, because capitalization is the process of converting an income stream into a capital sum (value). As with any method, the final value is no better than the reliability of the input data. The underlying assumption is that people purchase the property for the future income the property will yield. If the land or improvements are of any residual value after the cessation of oil and gas production, that value should also be included (if those components are also being appraised).

The relevant income that should be used is the expected future net income. Assumptions of this method are:

- Past income and expenses are not a consideration, except insofar as they may be a guide to estimating future net income.
- That the producing life as well as the reserves (quantity of the minerals) are estimated for the property.
- Future income is less valuable than current income, and so future net income must be discounted to make it equivalent to the present income. This discount factor reflects the premium of present money over future money, i.e., interest rate, liquidity, investment management, and risk.

As a general rule, and for the reasons stated above, Pritchard & Abbott, Inc., relies predominantly on the income approach to value in the appraisal of mineral interests.

DATA COLLECTION/VALIDATION

Sources of Data: The main source of P&A's property data is data from the Railroad Commission of Texas as reported by operators. As a monthly activity, the data processing department receives data tapes or electronic files which have updated and new well and production data. Other discovery tools are fieldwork by appraisers, financial data from operators, information from chief appraisers, tax assessors, trade publications and city and local newspapers. Other members of the public often provide P&A information regarding new wells and other useful facts related to property valuation.

Another crucial set of data to obtain is the ownership of these mineral interests. Typically a mineral lease is fractionated and executed with several if not many owners. This information is typically requested (under a promise of confidentiality concerning owners' personal information) from pipeline purchasers and/or other entities (such as operators) who have the responsibility of disbursing the income to the mineral interest owners. Another source of ownership information is through the taxpayers themselves who file deeds of ownership transfer and/or correspond with P&A or the appraisal district directly.

Data Collection Procedures: Electronic and field data collection requires organization, planning and supervision of the appraisal staff. Data collection procedures for mineral properties are generally accomplished globally by the company; i.e., production and price data for the entire state is downloaded at one time into the computer system. Appraisers also individually gather and record specific and particular information to the appraisal file records, which serves as the basis for the valuation of mineral properties. P&A is divided into four district offices covering different geographic areas. Each office has a district manager, appraisal and ownership maintenance staff, and clerical staff as appropriate. While overall standards of performance are established and upheld for the various district offices, quality of data is emphasized as the goal and responsibility of each appraiser.

VALUATION ANALYSIS (MODEL CALIBRATION)

Appropriate revisions and/or enhancements of schedules or discounted cash flow software are annually made and then tested prior to the appraisals being performed. Calibration typically involves performing multiple discounted cash flow tests for leases with varying parameter input to check the correlation and relationship of such indicators as: Dollars of Value Per Barrel of Reserves; Dollars of Value Per Daily Average Barrel Produced; Dollars of Expense Per Daily Average Barrel Produced; Years Payout of Purchase Price (Fair Market Value). In a more classical calibration procedure, the validity of values by P&A's income approach to value is tested against actual market transactions, if and when these transactions and verifiable details of these transactions are disclosed to P&A. Of course these transactions must be analyzed for meeting all requisites of fair market value definition. Any conclusions of this analysis are then compared to industry benchmarks for reasonableness before being incorporated into the calibration procedure.

INDIVIDUAL VALUE REVIEW PROCEDURES

Individual property values are reviewed several times in the appraisal process. P&A's discounted cashflow software dynamically generates various benchmark indicators that the appraiser reviews concurrent with the value being generated. These benchmarks often prompt the appraiser to reevaluate some or all of the parameters of data entry so as to arrive at a value more indicative of industry standards. Examples of indicators are dollars of value per barrel of oil reserve, years payout, etc. In addition to appraiser review, taxpayers are afforded the opportunity to review the appraised values, either before or after Notices of Appraised Value are prepared. Operators routinely meet with P&A's appraisers to review parameters and to provide data not readily available to P&A through public or commercial sources, such as individual lease operating expense and reserve figures. And of course, all property values are subject to review through normal protest and Appraisal Review Board procedures, with P&A acting as an extension of the Office of the Chief Appraiser.

PERFORMANCE TESTS

An independent test of the appraisal performance of properties appraised by P&A is conducted by the State of Texas Comptroller's Office through the annual Property Value Study for school funding purposes. This study determines the degree of uniformity and the median level of appraisal for mineral properties. School jurisdictions are given an opportunity to appeal any preliminary findings. After the appeal process is resolved, the Comptroller publishes a report of the findings of the study, including in the report the median level of appraisal, the coefficient of dispersion around the median level of appraisal and any other standard statistical measures that the Comptroller considers appropriate.

USPAP STANDARDS 5, 6-1, 6-2: MASS APPRAISAL OF INDUSTRIAL, UTILITY AND RELATED PERSONAL PROPERTY

Note: This section, in conjunction with any attached or separately provided P&A-generated appraisal reports specific to the subject property or properties, constitutes the "mass appraisal written report" as required by USPAP Standards 6-1 and 6-2. For mass appraisal, a written report is not provided for each individual property. An individual property record or worksheet may describe the valuation of a specific property after the application of the mass appraisal model. USPAP Standard 6-3 (certification) can be found at the end of this report. USPAP Standards 5-1 through 5-7 (instructions and explanations regarding the development, application, and reconciliation of mass appraisal values), as they apply to P&A mass appraisal procedures, are discussed below. USPAP DOES NOT DICTATE THE FORM, FORMAT, OR STYLE OF APPRAISAL REPORTS, WHICH ARE FUNCTIONS OF THE NEEDS OF USERS AND PROVIDERS OF APPRAISAL SERVICES. USPAP ALSO DOES NOT MANDATE THAT EACH APPRAISAL REPORT BE LENGTHY AND FULL OF DISCLAIMERS. Readers should note that all P&A reports, unless stated otherwise, are of a "restricted" nature whereas additional documentation and detail may be available per certain Texas Property Tax Code provisions.

INTRODUCTION

Definition of Appraisal Responsibility (Scope of Effort): The Engineering Services Department of Pritchard & Abbott, Inc. (P&A) is responsible for developing fair and uniform market values for industrial, utility and personal properties.

P&A's typical client is a governmental entity charged with appraisal responsibility for ad valorem tax purposes, although other types of clients (private businesses, individuals, etc.) occasionally contract for appraisal services which are strictly for various non-ad valorem tax purposes so that no conflicts of interest are created with P&A's core ad valorem tax work.

P&A hereby makes the **assumption** that, in all appraisal assignments performed for governmental entities in satisfaction of contractual obligations related to ad valorem tax, the client does not wish to or cannot legally request the appraisal report not identify the client.

Intended users of our reports are typically the client(s) for which we are under direct contract. Although taxpayers or their agents who own and/or represent the subject property being appraised often receive these reports either by law or as a courtesy of the client or P&A, this receipt does not mean these parties automatically become Intended Users as defined by USPAP. **A party receiving a copy of a report in order to satisfy disclosure requirements does not become an intended user of the appraisal or mass appraisal unless the appraiser specifically identifies such party as an intended user.** Potential other users include parties involved in adjudication of valuation disputes (review board members, lawyers, judges, etc.), governmental agencies which periodically review our appraisals for various statutory purposes (such as the Texas Comptroller's Office) and private parties who may obtain copies of our appraisals through Open Records Requests made to governmental agencies.

This section of P&A's USPAP report is not applicable to any Industrial, Utility, or related Personal Property that an appraisal district appraises outside of P&A's appraisal services, in which case the appraisal district's overall USPAP report should be referenced.

P&A makes the **Extraordinary Assumption** that all properties appraised for ad valorem tax purposes are marketable whereas ownership and title to property are free of encumbrances and other restrictions that would affect fair market value to an extent not obvious to the general marketplace. If and/or when we are made aware of any encumbrances, etc., these would be taken into account in our appraisal in which case the extraordinary assumption stated above would be revoked.

P&A is typically under contract to determine current market value or “fair market value” of said industrial, utility, and related personal property. Fair market value is typically described as the price at which a property would sell for if:

- exposed in the open market with a reasonable time for the seller to find a purchaser;
- both the buyer and seller know of all the uses and purposes to which the property is, or can be, adapted and of the enforceable restrictions on its use; and
- both the buyer and seller seek to maximize their gains and neither is in a position to take advantage of the exigencies of the other. [Exigencies are pressing or urgent conditions that leave one party at a disadvantage to the other.]

For ad valorem tax purposes the effective date is usually legislatively specified by the particular State in which we are working - for example, in Texas the lien date is January 1 per the Texas Property Tax Code. For ad valorem tax purposes, the date of the appraisals and reports are typically several months past the effective date, thereby leaving open the possibility that a retrospective approach is appropriate under limited and prescribed circumstances (information after the effective date being applicable only if it confirms a trend or other appraisal condition that existed and was generally known as of the effective date).

P&A believes this section of this report, in conjunction with any attached or separately provided P&A-generated report(s), meets the USPAP definition of “typical practice”; i.e., it satisfies a level of work that is consistent with:

- the expectations of participants in the market for the same or similar appraisal services; and
- what P&A’s peers’ actions would be in performing the same or similar appraisal services in compliance with USPAP.

Legal and Statutory Requirements: The provisions of the Texas Property Tax Code and relevant legislative measures involving appraisal administration and procedures control the work of P&A as a subcontractor to the Appraisal District. P&A is responsible for appraising property on the basis of its market value as of January 1 for ad valorem tax purposes for each taxing unit that imposes ad valorem taxes on property in the contracted Appraisal District. All industrial, utility and personal properties are reappraised annually. The definition of Fair Market Value is provided and promulgated for use in ad valorem tax work in Texas by the Texas Property Tax Code, and therefore as a **Jurisdictional Exception** supercedes the definition of “market value” as found in USPAP definitions.

Administrative Requirements: P&A follows generally accepted and/or recognized appraisal practices and when applicable, the standards of the International Association of Assessing Officers (IAAO) regarding its appraisal practices and procedures. P&A, when applicable, also subscribes to the standards promulgated by the Appraisal Foundation known as the Uniform Standards of Professional Appraisal Practice (USPAP). In all cases where IAAO and/or USPAP requirements cannot be satisfied for reasons of practicality or irrelevancy, P&A subscribes to “generally accepted appraisal methods and techniques” so that its value conclusions are credible and defensible. P&A submits annual or biannual contract bids to the Office of the Chief Appraiser and is bound to produce appraisal estimates on industrial, utility and personal properties within the cost constraints of said bid. Any appraisal practices and procedures followed by P&A not explicitly defined through IAAO or USPAP

requirements are specified by the Texas Property Tax Code and/or at the specific request or direction of the Office of the Chief Appraiser.

Appraisal Resources

Personnel: The Engineering Services Department and P&A's appraisal staff consists of appraisers with degrees in engineering, business and accounting. All personnel are Registered Professional Appraisers with the State of Texas, or are progressing towards this designation as prescribed by the Texas Department of Licensing and Regulation (TDLR).

Data: A set of data characteristics (i.e. original cost, year of acquisition, quantities, capacities, net operating income, property description, etc.) for each industrial, utility and personal property is collected from various sources. This data is maintained in either hard copy or computer files. Each property's characteristic data drives the appropriate computer-assisted appraisal approach to valuation.

Information Systems: P&A's mainframe computer system is composed of in-house custom software augmented by schedules and databases that reside as various applications on personal computers (PC). P&A offers a variety of systems for providing property owners and public entities with information services.

VALUATION APPROACH (MODEL SPECIFICATION)

Concepts of Value: The valuation of industrial, utility and personal properties is not an exact science, and exact accuracy is not attainable due to many factors. These are considered complex properties and some are considered Special Purpose properties. Nevertheless, standards of reasonable performance do exist, and there are reliable means of measuring and applying these standards.

The evaluation and appraisal of industrial, utility and personal property relies heavily on the discovery of the property followed by the application of recognized appraisal techniques. The property is subject to inflation and depreciation in all forms. The appraisal of industrial and personal property involves understanding petroleum, chemical, steel, electrical power, lumber and paper industry processes along with a myriad of other industrial processes. Economic potential for this property usually follows either the specific industry or the general business economy. The appraisal of utility properties involves understanding telecommunications, electrical transmission and distribution, petroleum pipelines and the railroad industry. Utility properties are subject to regulation and economic obsolescence. The examination of utility property involves the understanding of the present value of future income in a regulated environment.

The goal for valuation of industrial, utility and personal properties is to appraise all taxable property at "fair market value". The Texas Property Tax Code defines Fair Market value as the price at which a property would transfer for cash or its equivalent under prevailing market conditions if:

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

Approaches to Value for Industrial, Utility, and Personal Property

Cost Approach: The use of cost data in an appraisal for market value is based upon the economic principle of substitution. This method is most readily applicable to the appraisal of industrial and personal property and some utility property. Under this method, the market value of property equals the value of the land plus the current cost of improvements less accrued depreciation. An inventory of the plant improvements and machinery and equipment is maintained by personally inspecting each facility every year. **As a general rule, and for the reasons stated above, Pritchard & Abbott, Inc., relies predominantly on the cost approach to value in the appraisal of industrial, utility, and personal property.**

Market Approach: This approach is characterized as one that uses sales data available from actual transactions in the market place. There are two factors that severely limit the usefulness of the market approach for appraising industrial, utility and personal properties. First, the property sales data is seldom disclosed; consequently there is insufficient market data for these properties available for meaningful statistical analysis. Second, all conditions of sale must be known and carefully investigated to be sure one does have a comparative indicator of value. Many times when these properties do change hands, it is generally through company mergers and acquisitions where other assets and intangibles in addition to the industrial, utility and personal property are involved. The complexity of these sales presents unique challenges and hindrances to the process of allocation of value to the individual components of the transaction.

In the case of industrial, utility and personal properties, a scarcity of sales requires that all evidence of market data be investigated and analyzed. Factors relative to the sale of these properties are:

- plant capacity and current production; terms of sale, cash or equivalent;
- complexity of property;
- age of property;
- proximity to other industry already operated by the purchaser; and
- other factors such as capital investment in the property.

As a general rule, and for the reasons stated above, Pritchard & Abbott, Inc., rarely employs a rigorous application of the market approach in the appraisal of industrial, utility, and personal property.

Income Approach: This approach to value most readily yields itself to all income generating assets, especially utility properties. Data for utility properties is available from annual reports submitted to regulatory agencies whereby future income may be estimated, and then this future income may be converted into an estimate of value. The valuation of an entire company by this method is sometimes referred to as a Unit Value. Many refer to this as a capitalization method, because capitalization is the process of converting an income stream into a capital sum (value). As with any method, the final value estimate is no better than the reliability of the input data. The underlying assumption is that people purchase the property for the future income the property will yield.

The relevant income that should be used in the valuation model is the expected future net operating income after depreciation but before interest expense (adjustments for Federal Income Taxes may or may not be required). Assumptions of this method are:

- Past income and expenses are a consideration, insofar as they may be a guide to future income, subject to regulation and competition.
- The economic life of the property can be estimated.
- The future production, revenues and expenses can be accurately forecasted. Future income is less valuable than current income, and so future net income must be discounted to make it equivalent to the present income. This discount factor reflects the premium of present money over future money, i.e., interest rate, liquidity, investment management, and risk.

As a general rule, and for the reasons stated above, Pritchard & Abbott, Inc., employs the income approach in the appraisal of industrial and utility property only when quantifiable levels of income are able to be reliably determined and/or projected for the subject property. P&A does not employ the income approach in the appraisal of personal property.

DATA COLLECTION/VALIDATION

Sources of Data: The main source of P&A's property data for industrial and personal property is through fieldwork by the appraisers and commercially/publicly available schedules developed on current costs. Data for performing utility appraisals is typically provided by the taxpayer or is otherwise available at various regulatory agencies (Texas Railroad Commission, Public Utilities Commission, FERC, et. al.). Other discovery tools are financial data from annual reports, information from chief appraisers, renditions, tax assessors, trade publications and city and local newspapers. Other members of the public often provide P&A information regarding new industry and other useful facts related to property valuation.

Data Collection Procedures: Electronic and field data collection requires organization, planning and supervision of the appraisal staff. Data collection procedures have been established for industrial and personal properties. Appraisers gather and record information in the mainframe system, where customized programs serve as the basis for the valuation of industrial, utility and personal properties. P&A is divided into multiple district offices covering different geographic zones. Each office has a district manager and field staff. While overall standards of performance are established and upheld for the various district offices, quality of data is emphasized as the goal and responsibility of each appraiser. Additionally, P&A's Engineering Services Department provides supervision and guidance to all district offices to assist in maintaining uniform and consistent appraisal practices throughout the company.

VALUATION ANALYSIS (MODEL CALIBRATION)

The validity of the values by P&A's income and cost approaches to value is tested against actual market transactions, if and when these transactions and verifiable details of the transactions are disclosed to P&A. These transactions are checked for meeting all requisites of fair market value definition. Any conclusions from this analysis are also compared to industry benchmarks before being incorporated in the calibration procedure. Appropriate revisions of cost schedules and appraisal software are annually made and then tested for reasonableness prior to the appraisals being performed.

INDIVIDUAL VALUE REVIEW PROCEDURES

Individual property values are reviewed several times in the appraisal process. P&A's industrial, utility, personal property programs and appraisal spreadsheets afford the appraiser the opportunity to review the value being generated. Often the appraiser is prompted to reevaluate some or all of the parameters of data entry so as to arrive at a value more indicative of industry standards. Examples of indicators are original cost, replacement cost, service life, age, net operating income, capitalization rate, etc. In addition to appraiser review, taxpayers are afforded the opportunity to review the appraised values either before or after Notices of Appraised Value are prepared. Taxpayers, agents and representatives routinely meet with P&A's appraisers to review parameters and to provide data not readily available to P&A through public or commercial sources, such as investment costs and capitalization rate studies. And of course, all property values are subject to review through normal protest and Appraisal Review Board procedures, with P&A acting as a representative of the Office of the Chief Appraiser.

PERFORMANCE TESTS

An independent test of the appraisal performance of properties appraised by P&A is conducted by the State of Texas Comptroller's Office through the annual Property Value Study for school funding purposes. This study determines the degree of uniformity and the median level of appraisal for utility properties. School jurisdictions are given an opportunity to appeal any preliminary findings. After the appeal process is resolved, the Comptroller publishes a report of the findings of the study, including in the report the median level of appraisal, the coefficient of dispersion around the median level of appraisal and any other standard statistical measures that the Comptroller considers appropriate.

USPAP STANDARDS 5, 6-1, 6-2: MASS APPRAISAL OF RESIDENTIAL REAL ESTATE

Note: This section, in conjunction with any attached or separately provided P&A-generated appraisal reports specific to the subject property or properties, constitutes the "mass appraisal written report" as required by USPAP Standards 6-1 and 6-2. For mass appraisal, a written report is not provided for each individual property. An individual property record or worksheet may describe the valuation of a specific property after the application of the mass appraisal model. USPAP Standard 6-3 (certification) can be found at the end of this report. USPAP Standards 5-1 through 5-7 (instructions and explanations regarding the development, application, and reconciliation of mass appraisal values), as they apply to P&A mass appraisal procedures, are discussed below. USPAP DOES NOT DICTATE THE FORM, FORMAT, OR STYLE OF APPRAISAL REPORTS, WHICH ARE FUNCTIONS OF THE NEEDS OF USERS AND PROVIDERS OF APPRAISAL SERVICES. USPAP ALSO DOES NOT MANDATE THAT EACH APPRAISAL REPORT BE LENGTHY AND FULL OF DISCLAIMERS. Readers should note that all P&A reports, unless stated otherwise, are of a "restricted" nature whereas additional documentation and detail may be available per certain Texas Property Tax Code provisions.

INTRODUCTION

Definition of Appraisal Responsibility (Scope of Effort): The Residential Division of Pritchard & Abbott, Inc. ("P&A" hereinafter), is responsible for developing fair and uniform market values for real estate parcels within certain Appraisal Districts. P&A contractually provides a wide degree of professional services depending upon each contract requirement.

P&A's typical client is a governmental entity charged with appraisal responsibility for ad valorem tax purposes, although other types of clients (private businesses, individuals, etc.) occasionally contract for appraisal services which are strictly for various non-ad valorem tax purposes so that no conflicts of interest are created with P&A's core ad valorem tax work.

P&A hereby makes the assumption that, in all appraisal assignments performed for governmental entities in satisfaction of contractual obligations related to ad valorem tax, the client does not wish to or cannot legally request the appraisal report not identify the client.

Intended users of our reports are typically the client(s) for which we are under direct contract. Although taxpayers or their agents who own and/or represent the subject property being appraised often receive these reports either by law or as a courtesy of the client or P&A, this receipt does not mean these parties automatically become Intended Users as defined by USPAP. **A party receiving a copy of a report in order to satisfy disclosure requirements does not become an intended user of the appraisal or mass appraisal unless the appraiser specifically identifies such party as an intended user.** Potential other users include parties involved in adjudication of valuation disputes (review board members, lawyers, judges, etc.), governmental agencies which periodically review our appraisals for various statutory purposes (such as the Texas Comptroller's Office) and private parties who may obtain copies of our appraisals through Open Records Requests made to governmental agencies.

This section of P&A's USPAP report is not applicable to any real estate property that an appraisal district appraises outside of P&A's appraisal services, in which case the appraisal district's overall USPAP report should be referenced.

P&A makes the **Extraordinary Assumption** that all properties appraised for ad valorem tax purposes are marketable whereas ownership and title to property are free of encumbrances and other restrictions that would affect fair market value to an extent not obvious to the general marketplace. If and/or when we are made aware of any encumbrances, etc., these would be taken into account in our appraisal in which case the extraordinary assumption stated above would be revoked.

P&A is typically under contract to determine current market value or “fair market value” of residential real estate. Fair market value is typically described as the price at which a property would sell for if:

- exposed in the open market with a reasonable time for the seller to find a purchaser;
- both the buyer and seller know of all the uses and purposes to which the property is, or can be, adapted and of the enforceable restrictions on its use; and
- both the buyer and seller seek to maximize their gains and neither is in a position to take advantage of the exigencies of the other. [Exigencies are pressing or urgent conditions that leave one party at a disadvantage to the other.]

For ad valorem tax purposes the effective date is usually legislatively specified by the particular State in which we are working - for example, in Texas the lien date is January 1 per the Texas Property Tax Code. For ad valorem tax purposes, the date of the appraisals and reports are typically several months past the effective date, thereby leaving open the possibility that a retrospective approach is appropriate under limited and prescribed circumstances (information after the effective date being applicable only if it confirms a trend or other appraisal condition that existed and was generally known as of the effective date).

P&A believes this section of this report, in conjunction with any attached or separately provided P&A-generated report(s), meets the USPAP definition of “typical practice”; i.e., it satisfies a level of work that is consistent with:

- the expectations of participants in the market for the same or similar appraisal services; and
- what P&A’s peers’ actions would be in performing the same or similar appraisal services in compliance with USPAP.

Legal and Statutory Requirements: The provisions of the Texas Property Tax Code and relevant legislative measures involving appraisal administration and procedures control the work of P&A as an extension of the Appraisal District. P&A is responsible for appraising property on the basis of its market value as of January 1 for ad valorem tax purposes for each taxing unit that imposes ad valorem taxes on property in the contracted Appraisal District. The definition of Fair Market Value is provided and promulgated for use in ad valorem tax work in Texas by the Texas Property Tax Code, and therefore as a **Jurisdictional Exception** supercedes the definition of “market value” as found in USPAP definitions.

Administrative Requirements: P&A follows the standards of the International Association of Assessing Officers (IAAO) regarding its appraisal practices and procedures. P&A also subscribes to the standards promulgated by the Appraisal Foundation known as the Uniform Standards of Professional Appraisal Practice (USPAP). P&A submits annual or biannual contract proposals to the Office of the Chief Appraiser and is bound to produce mass appraisal estimates on real estate properties within the cost constraints of said proposals. Any appraisal practices and procedures followed by P&A not explicitly defined through IAAO or USPAP requirements are specified by the Texas Property Tax Code or at the specific request or direction of the Office of the Chief Appraiser.

Appraisal Resources

Personnel: The Real Estate staff consists of licensed Registered Professional Appraisers through the Texas Department of Licensing and Regulation (TDLR), and are qualified to provide the complete range of professional appraisal services required.

Data: Common data characteristics (within each county) for each property are collected in the field and entered into each respective district's computer data base. This property data drives the computer-assisted mass appraisal (CAMA) approach to valuation.

Information Systems: The mainframe systems are augmented by the databases that reside as various applications on personal computers (PC). P&A offers a variety of systems for providing property owners and public entities with information services. The appraiser supervising any given contract fields many of the public's questions or redirects them to the proper division.

VALUATION APPROACH (MODEL SPECIFICATION)

Area Analysis: Data involving economic forces such as demographic, patterns, employment and income patterns, trends in real estate property prices and rents, interest rates, availability of property, economic and climatic factors that may affect production of rural lands, are collected from various sources. Any information particular to a given region or appraisal district helps the appraisal staff determine market conditions or trends that may affect market value.

Neighborhood and Market Analysis: Neighborhood analysis involves the examination of how physical, economic, governmental and social forces and other influences affect property values. The effect of these forces are also used to identify, classify, and organize comparable properties into smaller, manageable subsets of the universe of properties known as neighborhoods. A neighborhood is defined by natural, man-made, or political boundaries and is established by a commonality based on land users, types and age of buildings or population, the desire for homogeneity, or similar factors.

Each neighborhood may be characterized as being in a stage of growth, stability, or decline. The growth period is a time of development and construction. In the period of stability, or equilibrium, the forces of supply and demand are about equal. The period of decline reflects diminishing demand or desirability. During decline general property use may change. Declining neighborhoods may become economically desirable again and experience renewal, reorganization, rebuilding, or restoration, marked by modernization and increasing demand. The appraisal staff must analyze whether a particular neighborhood is in a period of growth, stability, or decline and predict changes that will affect future use and value. In mass appraisal applications the information can be useful for comparing or combining neighborhoods or for developing neighborhood ratings, which are introduced as adjustments in mass appraisal models.

Site descriptions and analysis provide a description of the subject property and an analysis of factors that affect the market value of the site. Site analysis also provides a basis for allocating values to land and improvements, for analyzing comparable sales to determine the highest and best use of the site, and for estimating locational obsolescence. A description of the subject building and other improvements provides a basis for analysis of comparable sales and rents; for the development of capitalization rates or multipliers; for highest and best use analysis of the site as improved; and for estimation of reproduction or replacement cost new and physical and functional depreciation. The analysis should show how the factors relate to the utility and marketability of the subject property, and, ultimately, its market value. The improvement analysis and the neighborhood analysis

focus on similar considerations; for example, whether the improvements represent highest and best use and conform to the neighborhood.

The improvement analysis describes relationships among items and compares them to those in competing properties and to neighborhood standards. Items that will be treated as functional obsolescence in the cost approach need through analysis. The condition of building components is particularly important because it provides the basis for estimates of effective age and remaining economic life.

Currently P&A provides most of its real estate appraisal services in primarily rural areas. The ability to perform detailed neighborhood and market analysis is somewhat limited in these areas where the necessary data is sometimes nonexistent.

Highest and Best Use Analysis: Highest and best use analysis is the culmination of regional, neighborhood, and site analysis. All three are used to help the appraisal staff understand the factors affecting property values in the market being analyzed and the most probable use of the site in long-run economic equilibrium. Highest and best use is the reasonable and probable use that supports the highest present value as of the date of the appraisal. The highest and best use must be physically possible, legal, financially feasible, and productive to the maximum, that is, highest and best use. The analysis should be done as of the date of appraisal. Just as real estate values change, the highest and best use of a property may change over time.

DATA COLLECTION/VALIDATION

Data Collection Manuals: Appraisal manuals are developed and distributed to all appraisers involved in the appraisal and valuation of real estate properties. The appraisal manual is reviewed and revised to meet the changing requirements of field data collection.

Sources of Data: Each District's appraisal manual and schedules are adopted and maintained by the P&A appraisal staff. Data used to perform appraisals are generally collected with a joint effort among appraisers and Appraisal District staff. Physical inspections are performed by the appraisers for various situations whether it be a normal reappraisal, a reinspection requested by the District, working building permits, etc.

Data Collection Procedures: Field data collection is coordinated and organized by the field appraisers to insure uniformity in appraisal technique. The staff conducts field inspections and record information on a particular property field worksheet. This data is entered into the respective computer database and serves as the basis for the valuation.

VALUATION ANALYSIS

Cost Schedules: P&A generally adopts existing cost schedules within each Appraisal District in which we provide appraisal services. These schedules are maintained and adjusted as needed to reflect the current market value conditions that are present in each respective district.

Sales Information: Sales are generally collected by the Appraisal District staff and provided to P&A appraisal personnel for sales ratio analysis.

Statistical Analysis: Appraisers perform statistical analysis annually to evaluate whether values are equitable and consistent with market conditions. Appraisal statistics, central tendency and dispersion generated from sales are available for each class of property. These summary statistics include mean and median ratios, standard deviation,

and coefficient of dispersion. They provide the analysis information to determine both the level and uniformity of the appraised values involved in the study.

Market Adjustment: Depending upon the data provided by the sales ratio analysis, market value tables may be adjusted accordingly to reflect accurate market values within a particular class of property.

INDIVIDUAL VALUE REVIEW PROCEDURES

Field Review: P&A provides field inspections depending upon the contractual arrangement with the appraisal district. In most cases field inspections are done within the outline of the respective Appraisal District's Reappraisal Plan.

PERFORMANCE TESTS

An independent test of the appraisal performance of properties appraised by P&A is conducted by the State of Texas Comptroller's Office through the annual Property Value Study for school funding purposes. This study determines the degree of uniformity and the median level of appraisal for real estate properties. School jurisdictions are given an opportunity to appeal any preliminary findings. After the appeal process is resolved, the Comptroller publishes a report of the findings of the study, including in the report the median level of appraisal, the coefficient of dispersion around the median level of appraisal and any other standard statistical measures the Comptroller considers appropriate.

USPAP STANDARD 6-3: CERTIFICATION

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 analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are my personal, impartial, and unbiased professional analyses, opinions, and conclusions.
- I have no (or the specified below) present or prospective interest in the property that is the subject of this report, and I have no (or the specified below) personal interest with respect to the parties involved.
- I have performed no (or the specified below) services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment.
- I have no bias with respect to any property that is the subject of this report or the parties involved with this assignment.
- My engagement in this assignment was not contingent upon developing or reporting predetermined results.
- My compensation for completing this assignment 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 opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
- My analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the *Uniform Standards of Professional Appraisal Practice*.
- I have (or have not, if specified below) made a personal inspection of the properties that are the subject of this report. (Any other signatories to this report have either made or not made a personal inspection of the properties as noted below.)
- No one provided significant mass appraisal assistance to the person signing this certification. (The name of each individual providing significant mass appraisal assistance, if any, is stated below.)

	Inspected Property?	Provided Significant Appraisal Assistance?
_____ <i>Appraiser (a)</i> <i>Date</i>	_____ <i>Yes / No</i>	_____ <i>Yes / No</i>
_____ <i>Appraiser (b)</i> <i>Date</i>	_____ <i>Yes / No</i>	_____ <i>Yes / No</i>
_____ <i>Supervising Appraiser / Dept. Manager</i> <i>Date</i>	_____ <i>Yes / No</i>	_____ <i>Yes / No</i>
_____ <i>District Manager</i> <i>Date</i>	_____ <i>Yes / No</i>	_____ <i>Yes / No</i>

List of other individuals who provided significant mass appraisal assistance and/or personal inspection statement of any signatories:

A signed certification is an integral component of the appraisal report.

- **When a signing appraiser has relied on work done by appraisers and others who do not sign the certification, the signing appraiser is responsible for the decision to rely on their work. The signing appraiser is required to have a reasonable basis for believing that those individuals performing the work are competent and that the work of those individuals is credible.**
- **An appraiser who signs any part of the mass appraisal report, including a letter of transmittal, must also sign this certification. This certification applies to all assignment results and well as all contents of the appraisal report(s).**
- **The names of individuals providing significant mass appraisal assistance who do not sign a certification must be stated in the certification. It is not required that the description of this assistance be contained in the certification, but disclosure of their assistance is required in accordance with Standards 6-2(g).**
- **The above certification is not intended to disturb an elected or appointed assessor's work plans or oaths of office.**