

HARDIN COUNTY
APPRAISAL DISTRICT
REAPPRAISAL PLAN
2015-2016

INTRODUCTION

The Hardin County Appraisal District has always maintained a written reappraisal plan. The Texas legislature added the following provision to Section 6.05 of the Texas Property Tax Code in its last session. Senate Bill 1652 adds subsection (i) to require appraisal districts to develop a biennial written reappraisal plan and hold a public hearing to consider the plan. No later than September 15 of each even-numbered year, the appraisal district board must finally approve the reappraisal plan and distribute copies to the taxing units and the Comptroller within 60 days of board approval. The law is effective September 1, 2005, and affects appraisal districts and the Comptroller's Property Tax Division. This document serves as the biennial written reappraisal plan described above.

The Hardin County Appraisal District (HCAD) is responsible for the appraisal of all classes of taxable property located within its jurisdictional boundaries. The boundaries include all property located in Hardin County. HCAD is responsible for the appraisal of approximately 46,495 real/personal property parcels and 15,491 mineral/industrial accounts. The District serves 20 taxing units. Those taxing units consist of 6 independent school districts, 4 cities, 1 county, and 9 special use districts, such as municipal utility, drainage, water supply, and emergency services. HCAD employs an outside appraisal firm, Pritchard & Abbott, Inc. to appraise minerals, oil and gas, utilities, and various other complex properties. Pritchard & Abbott, Inc. appraisers are also guided by the principles set forth in USPAP.

In mass appraising property for the purpose of ad valorem taxation, HCAD subscribes to the Standards established by the International Association of Assessing Officers. In addition, HCAD is guided by the principles set forth in The Appraisal Foundation's "Uniform Standards of Professional Appraisal Practice" (USPAP). USPAP Standards and Statements are included in this Appraisal Plan. In appraising property for ad valorem tax purposes, the District employs generally accepted appraisal methods and techniques. Our analysts conduct mass appraisal utilizing the three approaches to value: the cost, market, and income approaches.

LEGAL REQUIREMENTS

The Texas Constitution contains the laws that form the foundation for the Texas Property Tax Code. The Tax Code provides an annotated and cross-referenced version of the tax laws that govern property tax administration in Texas. The provisions contained in the Texas Constitution, the Texas Property Tax Code, related case law, and Attorney General's opinions, serve as the primary sources of law that govern the activities of the HCAD. Further, in Texas, ad valorem tax administration is subject to all state, county, and municipal laws.

REAPPRAISAL

HCAD currently conducts annual reappraisals. All six independent school districts in the District are reappraised every year. The revaluation process includes the physical inspection of properties and the updating of all necessary information on the properties. In addition, HCAD appraisers inspect all new construction each year.

APPRAISAL RESOURCES

The HCAD staff consists of the chief appraiser, appraisal supervisor, office manager, appraisers, customer service, GIS, data processing, secretarial, and other support type personnel. HCAD currently employs four Registered Professional Appraisers and three Level 2 Appraisers. At this time HCAD does not provide collection services; however, the CAD does provide technical support to the taxing units it serves.

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

COMPUTER RESOURCES

Data is collected in the field and entered via Windows based workstations. The appraisal records are stored on an IBM iSeries mid-range database server. The tape based backup storage media is 3580 LTO cartridges. The District also employs the CD-ROM storage media on some projects. The HCAD appraisal software is a CAMA system (computer assisted mass appraisal). This system contains cost and depreciation schedules that utilize common data elements to assist in creating base values.

HCAD contracts with Pritchard & Abbott, Inc. for appraisal administration software. HCAD employs the use of a computer network with personal computers to form the CAD computer system. Further, the entire HCAD database is available to the public via the Internet at www.hardincountycad.org. This service provides instant access to individual property information including homestead, ownership, address, and all related appraisal data. This information includes square foot of living area, land size, age, class, construction type, and a variety of other useful information.

MAPPING RESOURCES

HCAD uses a Geographic Information System (GIS) for the purpose of providing an accurate mapping system. The GIS System consists of a server and 18 PC's. The Sidwell Company provides the GIS support (ESRI Software) and Pictometry is provided by Pictometry International Corporation.

INFORMATION SOURCES

HCAD appraisal staff and administration collect data on local and regional economic forces that may affect value. Locational forces are carefully observed as we find location to be the most significant factor in determining the market value of property in our geographic area. General trends in employment, interest rates, availability of vacant land, and new construction trends are closely monitored. HCAD obtains information from local realtors, mail surveys, brokers, appraisers, and a variety of other sources, such as Marshall & Swift.

WORK SCHEDULE

The Hardin County Appraisal District has a broad outline for its cycle of events in its “Reappraisal Plan for 2015-2016”. The outline is found under Planning and Organization and is titled “Calendar of Key Events (2015-2016)”.

Residential Appraisal started immediately after certification of the 2014 appraisal roll. Each appraiser started in the Hardin Jefferson ISD with a deadline to finish field work in Hardin Jefferson ISD by November 15, 2014. Once Hardin Jefferson ISD is completed each appraiser will work their own school district.

Pamela McCarty – Lumberton ISD and West Hardin CCISD

Arthur McInnis – Hardin Jefferson ISD

Karen Krnavek – Kountze ISD

Crystal Smith- Silsbee ISD & Warren ISD

County Permits were gathered for the non-incorporated areas of the county.

City Permits were obtained for the incorporated areas of the county.

A manufactured home installation report was printed for all homes (MHS) installed in the county for the past year.

A specific calendar is needed for residential property between January 01 and April 01 of each year.

01-01- Check permits, aerial photos (Pictometry) for new improvements. This would also include checking the Manufactured Home Installation Report.

01-01 to 01-15 Work all manufactured home parks.

01-15 Begin testing residential and land appraisal schedules using current sales data. Make necessary adjustments and test by neighborhood (subdivision, abstract, etc.) using the sales ratio studies.

02-01 thru 03-15 Appraisers utilize ownership maps and field cards to check areas for improvements that may have been missed. The ownership maps and field cards also help assure equality and uniformity in the assigned area.

03-15 thru 04-01 Analyze ratio studies to determine the level of appraisal. Any adjustments to the land schedule or improvement schedule will be made at this time if not already done. The adjustment may be a land schedule change, improvement schedule change, area factor, neighborhood factor, etc. to achieve uniformity and market value.

04-01 to 04-15 Last day or as soon thereafter for the Chief Appraiser to mail appraisal notices for single family residences.

PLANNING AND ORGANIZATION

CALENDAR OF KEY EVENTS (2015-2016)

(If deadline falls on a holiday/weekend the deadline will be extended to the next business day).

January

- 1 * Date that taxable value and qualification for certain exemptions determined for the tax year(except for inventories appraised September 1) (Sec. 11.42, 23.01,23.12).
- 2 * Date rendition period begins: continues through April 15 for those property owners not requesting a filing extension (Sec. 22.23).
- 31 * Last day for chief appraiser to deliver applications for agricultural designation and exemptions requiring annual applications (Sec. 11.44, 23.43).
 - Deadline for the Texas Comptroller to publish the preliminary Property Value Study (PVS) findings, certify findings to the Texas Education Commissioner, and deliver findings to each school district (Government Code Sec. 403.302)

February

- 1 * Date that taxes imposed the previous year become delinquent if bill was mailed on or before January 10 of the current year. (Sec 23.46, 23.55).
 - * Last day for Chief Appraiser to deliver applications for special appraisal and exemptions requiring annual applications (Sec. 11.44,23.43).
- 28 * Last day to request cooperative housing appraisal (Sec. 23.19).
(29 if a leap year)

March

- 10 * Deadline to file written appeal of PVS findings with Texas Comptroller (Government Code Sec. 403.303(d). (Petition must be filed within 40 calendar days after the Comptroller's office certifies preliminary findings of taxable value to the Commissioner of Education)

April

- 1 * Last day (or as soon as practicable thereafter) for chief appraiser to mail Notices of Appraised Value for single-residential homestead properties (25.19).
 - * Last day for the Chief Appraiser to notify the taxing units of the form in which appraisal roll will be provided to them (Sec. 26.01).
- 15 * Last day for property owners, or secured parties if applicable, to file renditions and property information reports unless they request a filing extension in writing (Sec. 22.23)

- 30 * Last day for Chief Appraiser to certify estimate of school district's taxable value for school district to use for publishing notice of budget and proposed tax rate and adopting its budget for a fiscal year that begins July 1. Chief Appraiser must also certify estimate of taxable value for county and cities unless the taxing units choose to waive the estimate (Sec. 26.01) (Not later than April 30)

May

- 1 * Last day (or as soon as practicable thereafter) for Chief Appraiser to mail Notices of Appraised Value for properties other than single-family residence homesteads (Sec. 25.19)
- 1-14 * Period that taxing units may file resolutions with chief appraiser to change CAD finance method. Three-fourths of taxing units must file for change to occur (Sec. 6.061).
- 1-15 * Period when chief appraiser must publish notice about taxpayer protest procedures in a local newspaper with general circulation (Secs. 41.41, 41.70).
- 15 * Last day for property owners to file renditions and property information reports if they requested in writing an extension. For good cause, Chief Appraiser may extend this deadline an additional 15 days (Sec. 22.23).
- * Date (or as soon as practicable) for chief appraiser to prepare appraisal records and submit to ARB (Sec. 25.01,25.22).
- 19 * Last day for Chief Appraiser to determine whether a sufficient number of eligible units filed resolutions to change CAD's finance method (Sec. 6.061).
- 24 * Last day for Chief Appraiser to notify taxing units of change in the CAD's finance method (Sec. 6.061).
- 31 * Last day for property owners to file protests with ARB (or by 30th day after Notice of Appraised Value is delivered, whichever is later) (Sec. 41.44)
- * Last day for taxing units to file challenges with ARB (or within 15 days after ARB receives appraisal records, whichever is later) (Sec. 41.04)
- * Last day for a religious organization that has been denied an 11.20 exemption because of the charter to amend the charter and file a new application or the 60th day after the date of notification of the exemption denial, whichever is later (Sec. 11.421).

June

- 14 * Last day for chief appraiser to submit proposed budget for next year to CAD board and taxing units (unless taxing units have changed CAD's fiscal year) (Sec. 6.06).
- 30 * Last day for CADs to report formation of reinvestment zones and tax abatement agreements to the Texas Comptroller (Sec. 312.005).

- * Last day for taxing units to adopt local option percentage homestead exemptions (Sec. 11.13)

July

- 1 * Last day for review and protests of appraisal of railroad rolling stock values (or as soon as practicable thereafter); once the appraised value is approved, the chief appraiser certifies to the Comptroller the allocated market value (Sec. 24.35, 24.36).
- 20 * Date ARB must approve appraisal records but may not do so if more than 5 percent of total appraised value remains under protest (Sec. 41.12).
- 25 * Last day for chief appraiser to certify appraisal roll to each taxing unit's assessor (Sec. 26.01)
- 31 * Last day for property owners to apply for September 1 inventory appraisal for next year. (Sec. 23.12).

August

- 14 * Last day for CAD Board to pass resolution to change CAD finance method, subject to taxing unit's unanimous consent (Sec 6.061).
- * Last day for CAD Board to pass resolution to change number of directors, method of appointing or both, and deliver to each taxing unit (Sec. 6.031).
- 31 * Last day for property owner to give correct address to CAD in writing for tax bill; penalties and interest waived if bill not sent to correct address 21 days before delinquency date (Sec. 33.011).
- * Last day taxing units may file resolution with the CAD Board to oppose proposed change in the CAD finance method (Sec. 6.061)

September

- 1 * Date that taxable value of inventories may be determined at property owner's written option (Sec. 23.12).
- 14 * Last day for CAD board to adopt CAD budget for the next year, unless district has changed its fiscal year (Sec. 6.06).
- * Last day for CAD Board to notify taxing units in writing if a proposal to change finance method by taxing units' unanimous consent has been rejected (Sec. 6.061).
- * Last day for CAD Board to notify taxing units in writing if a proposal to change the number or method of selecting CAD directors is rejected by a voting taxing unit (Sec. 6.031).

December

- 1-31 * Time when chief appraiser may conduct a mail survey to verify homestead exemption eligibility (Sec. 11.47).

THE DATABASE

The HCAD database was constructed from property data obtained originally from Hardin County in 1980. Data received was on-site field-inspected and revised to create the foundation for our current database. Since the inception of the HCAD, this data-base has been continually updated to recognize the current status of the property records. A variety of programs designed to discover changes that may occur to data elements are maintained. Property inspections or drive-outs occur as the result of information gathered during various forms of analysis. Building permits, field review, renditions, reports of value, local news publications, tax offices, and the public are but a few of the sources of information considered by staff analysts during the discovery phase of the appraisal process. Information from building permits is compiled from local taxing units, sorted, and keypunched into our computer-assisted building permit system.

Data collection in the field requires preparation of maps, computer generated appraisal cards, and coordination of staff. Properties are grouped by type, location, and neighborhood prior to the start of the fieldwork. State Property Tax Division (PTD) property types include Residential, Multi-Family, Commercial, Industrial, Farm and Ranch, Vacant Land and Acreage, Oil, Gas, and Mineral, Utilities, Business Personal Property, and other Special Inventory types.

Properties are also grouped by location within each of our five school districts. Within each school district are neighborhoods, defined by the IAAO as the environment of a subject property that has a direct and immediate effect on value. The neighborhood concept is used in the grouping of all taxable property located in HCAD with the exception of some special use properties.

DATABASE SUMMARY

The following information is found several times throughout the Reappraisal Plan. This information is summarized here merely for convenience:

1. Hardin CAD is current in processing deeds as they arrive at this office. These deeds are delivered on a CD to our office by the Hardin County Clerk's Office.
2. Hardin County has had Pictometry flown every three years. We use Pictometry for both discovery and inspections.
3. Hardin County Appraisal District uses City and County permits both for discovery and physical inspections.
4. The Appraisal District is very sensitive towards any changes or characteristics that affect property value. We are always reviewing property attributes, such as size, age or condition. With today's economic outlook we are especially sensitive in dealing with both legal and economic issues.

25.18 Periodic Reappraisals

The Hardin County Appraisal District does a complete reappraisal every year. Each property is physically inspected or inspected using Pictometry every year.

Hardin County is broken up into six (5) school districts and each is its own market:

Lumberton ISD is the population center. It is mainly high end residential properties.

Silsbee ISD is a combination of residential and commercial properties. All of the properties are old. There has been virtually no growth in the last twenty years.

Hardin Jefferson ISD is composed of very old buildings but is mostly all minerals.

Kountze ISD is a small community with no growth and mostly timber.

West Hardin CCISD is very rural. It is all timber with some minerals.

Warren ISD is mostly rural land with some older residential properties.

Each school district is a very distinct market.

5. The Appraisal District cost schedules are extreme in detail in order to address every possible characteristic change imaginable. The annual physical inspection is used to update any changes,
6. The Appraisal District uses ratio studies to identify problem areas. Ratio studies are conducted before, during, and after the inspection and analysis is completed. There is a final review done by the Appraisal Supervisor.
7. The standard procedure when working ratio studies is to exclude (throw out) outliers (very high or very low ratios).
8. The Appraisal District compares the property being appraised to the previous year, then compares it to similar properties to identify differences and maintain equal and uniform appraisals

APPROACHES TO VALUE

Value occurs in many different forms. Numerous and varied forces and influences combine to create, sustain, or destroy value. The appraiser must define the type of value sought in order to compile and analyze all relevant data, giving due consideration to all factors which may influence value. The appraisal is simply an opinion of value and the accuracy and validity of the opinion can be measured against the supporting evidence from which it was derived along with its accuracy against the actual behavior of the market. An appraiser must adequately and fully obtain, document, and then interpret the evidence into a final estimate of value.

Appraising real property is an exercise in reasoning. It is a discipline and, like any discipline, it is founded on fundamental economic and social principles. From these principles evolve certain premises which, when applied to the valuation of property, serve to explain the reaction of the market. This section concerns itself with those concepts and principles basic to the property valuation process. One cannot overstate the necessity of having a workable understanding of them.

The processing of data into a conclusion of value generally takes the form of three recognized approaches to value: the Cost, Market, and Income Approaches to Value. Underlying each approach is the principle that the justifiable price of a property is no more than the cost of acquiring and/or reproducing an equally desirable substitute property. The use of one or all three approaches in the valuation of a property is determined by the quantity, quality, and accuracy of the data available to the appraiser. Hardin County considers all three approaches to value, then uses the one that is the most appropriate.

Market Rents-Apartments:

1. Lumberton on the Lake complex at 187 S. LHS Drive in Lumberton, Texas has 1 BR units that rent for \$690/MO or \$0.78 SF/MO. These units have 883 SF. The 2 BR units rent from \$780-\$855/MO or \$0.73 SF/MO. These 2 BR units range in size from 1070 SF to 1160 SF. Rents were provided for a small number of units that range from \$990/MO to \$1195/MO. These units were exceptions (one had a garage and 5 units were rented MTM (month to month). The exceptions were not considered as market rents, but actual rents.
2. Autumn Trace Apartments located at 1300 Highway 327 West in Silsbee, Texas is an older complex but has had extensive updating in the past 5 years. The 1 BR units rent for \$571/MO and the 2 BR units rent for \$643/MO. The complex has a total of 58 units. Autumn Trace Apartments is located in a less desirable location than Lumberton on the Lake and a majority of the residents qualify for government assistance.
3. The Timberwood Apartments in Lumberton have 56 1 B/R units renting for \$400 to \$550 per unit or \$1.00 SF/MO. The 2 BR units (45 total units) rent for \$640 per unit or \$0.85 SF/MO. This is an older complex but is very well maintained. This complex is in a desirable part of Lumberton.
4. The Anderson Apartments at 115 N. LHS Drive in Lumberton is a 24 unit complex with all 2 BR units. They rent for \$725/MO or \$0.73/SF/MO.
5. Stage Coach West Apartments in Lumberton, Texas have a mix of 1 BR units and 2 BR units. Its 2 BR units rent for \$575/MO or \$0.72/SF/MO and the 1 BR units \$525/MO or \$0.84/SF/MO. This is an older apartment complex where average unit size is 725 SF.

Hardin CAD annually collects market rents. This is primarily done using mail out surveys. The CAD looks at the historical rents and any resulting trends. Even though the CAD has actual rents, the CAD prefers to use market rents. In analyzing the market rents all types of property characteristics have to be considered. Also considered are such factors that affect supply and demand as well as any anticipated event that would affect value.

In looking at market rents you are not only looking at realistic rents but projected and or expected expenses as well.

The Cost Approach to Value

The Cost Approach to Value is an appraisal analysis that is based on the economic principle of substitution that suggests that an informed purchaser would not pay more for a property than the cost of reproducing a substitute property with the same utility. The Cost Approach involves estimating the cost of the improvements new less all forms of depreciation (physical, functional, economic) plus the value of the site. If an improvement has no accrued depreciation, then and only then is cost equal to value.

Steps in the Cost Approach include:

1. Estimate the value of the site as if vacant

2. Estimate reproduction¹ (or replacement²) cost new of the improvements
3. Estimate accrued depreciation
4. Deduct the accrued depreciation from the reproduction (or replacement) cost new to obtain an estimate of the present worth of the improvements
5. Add the present worth to the site value to obtain the indicated value. The significance of the Cost Approach lies in its extent of application - it is the one approach that can be used on all types of properties. The cost approach is a starting point for appraisers and therefore a very effective "yardstick" in any equalization program for ad valorem taxes. Its widest application is in the appraisal of properties where lack of adequate market and income data preclude the reasonable application of the other two approaches to value.

¹ Reproduction cost is the cost to construct an exact duplicate at current prices.

² Replacement cost is the cost to construct a building of equal utility to the building being appraised but with modern materials and according to current standards.

The Market Approach to Value

The Market Approach to Value is an appraisal analysis that involves the compiling of sales and offerings of properties that are comparable to the property being appraised. The sales and listings are then adjusted for differences and a value range obtained. The Market Approach is reliable to the extent that the properties are comparable and the appraiser's judgment of property adjustments is sound. The procedure for utilizing this approach is essentially the same for all types of property with the only difference being the elements of comparison.

The significance of the Market Approach lies in its ability to produce estimates of value that directly reflect the attitude of the market. Application is contingent upon the availability of comparable sales, and therefore finds its widest range in the appraisal of vacant land and residential properties.

The Income Approach to Value

The Income Approach to Value is an appraisal technique that measures the present worth of the future benefits of a property by capitalization of the net income stream over the remaining economic life of the property.

The Income Approach involves making an estimate of "effective gross income" which is derived by deducting vacancy and collection losses from the estimated economic rent, as evidenced by comparable properties. Operating expenses, taxes and insurance, and reserves for replacements are deducted from the effective gross income. The resultant net income is capitalized into an indication of value.

The Income Approach obviously has its basic application in the appraisal of properties universally bought and sold for their ability to generate and maintain an income stream. The effectiveness of the approach lies in the appraiser's ability to relate to the changing economic environment and to analyze income yields in terms of their relative quality and durability.

In theory, the market value of a property should be equal to the present value of its future income. The simplest capitalization formula is $V = I/R$ (present value of the property = annual net income expected in the future divided by the rate [interest, risk, or discount rates]). For an asset that declines in value over time, the appropriate capitalization formula

is $V = (I/R) [1 - 1/(I + R)^N]$ where N equals the number of years that the asset will be in use. The resultant capitalization rate is the hoped-for or expected rate of return. It is the rate necessary to attract capital to the investment.

Section 23.012 of the Texas Property Tax Code (effective January 1, 2004) requires the chief appraiser, when using the income approach, to:

1. Analyze available comparable rental data or the potential earnings capacity of the property, or both, to estimate the gross income potential of the property;
2. Analyze available comparable operating expense data to estimate the operating expenses of the property;
3. Analyze available comparable data to estimate rates of capitalization or rates of discount; and
4. Base projections of future rent or income potential and expenses on reasonably clear and appropriate evidence.
5. In developing income and expense statements and cash-flow projections, the chief appraiser shall consider: (1) historical information and trends; (2) current supply and demand factors affecting those trends; and (3) anticipated events such as competition from other similar properties under construction.

INTERNAL CONTROL MECHANISM

The cost approach used in every property is constantly being reviewed by the Appraisal Supervisor. This review includes looking at cost and depreciation schedules, worksheets and final values.

All of the income approach values are meticulously reviewed for accuracy and uniformity. Special attention is paid to actual versus market information used.

The market analysis leans heavily on sales comparison versus the actual property being valued.

The appraiser considers all three approaches to determine value. He/she then selects the most appropriate approach to value.

The field work has a field work review and is followed by an office review.

VALUATION PROCESS

All taxable properties in the District are valued by the aforementioned cost schedule using a comparative unit method. HCAD schedules are constructed based on a schedule developed originally by The Property Tax Division (PTD), and periodically modified to reflect the current HCAD market place. The cost schedules are tested against commonly accepted sources of building cost information, such as Marshall & Swift, to determine accuracy and cost estimates are also compared to analysis of the local market to determine level of appraisal.

PROCEDURES FOR DETERMINING BENCHMARK PROPERTIES

When using the Cost Approach method on commercial properties you need to determine your benchmark properties. The following procedures can be used to determine these properties.

1. Take the Marshal and Swift Valuation Guide and find the type of properties to be appraised.

2. Once the type of property is found you get the preliminary price per square foot.
3. You make adjustments based on quality of construction, amenities, etc.
4. Once all adjustments are made you have a benchmark in which to value the subject property.
5. Use Marshal and Swift Commercial Estimator Seven to find the types of properties to be appraised.
6. The preliminary price per square foot is based on the type of properties selected.
7. Make adjustments based on quality of construction, exterior wall material, etc.
8. Once adjustments are made a benchmark is established to value the subject property and similar properties.

Similar steps can be used for the residential property:

1. Determine the median price per square foot for a class of improvement.
2. Make adjustments to the property based on characteristics of the improvement.
3. After all adjustments are made a benchmark is established and the market approach will prove the benchmark numbers.

RESIDENTIAL MARKET ANALYSIS

Market analysis is performed throughout the year. Both, general and specific data is collected and analyzed. There are a number of economic principles that relate to the market value of property. The principle of supply and demand is an important economic principle that must be considered by appraisers. There are a number of others including economic trends, national, regional, and local trends that affect the value of properties located in our various tax jurisdictions. An awareness of physical, economic, governmental, and social forces is essential in understanding, analyzing, and identifying local trends that affect the real estate market.

INTRODUCTION TO DATA COLLECTION

The purpose of this manual is to guide the appraiser through the process of appraising residential property in the Hardin County Appraisal District. This manual will contain all the most commonly accepted mass appraisal concepts and will comply with USPAP and State guidelines. The process will be discussed from the Property Data collection to Statistical Review.

Property Description

Uniform and accurate valuation of property requires correct, complete and up-to-date property data. The Hardin County Appraisal District continually strives to establish effective procedures for collecting and maintaining property data.

Discovery: Discovery is the process of adding property/value to the appraisal roll. The following are various tools of discovery.

Building permits, utility connections and mechanic's liens.

Collection Frequency: Permits and reports are collected monthly.

Receipt of permits and reports: when received, the Appraisal Supervisor determines which jurisdiction the permits fall and assigns them to the appraiser that works that jurisdiction.

Drive-Out: Each month the District is driven thoroughly. Appraisers have been assigned a school district as their area to work. They check for new improvements, burned or damaged improvements, improvements that have been demolished or removed, changes in land, or any other condition, which could possibly affect market value as of January 1st.

Split-Outs: when a deed is filed dividing a tract of land, the property is reviewed for land class, pricing, and new or existing improvements.

Data Collection: information collected for the specific purpose of valuing property.

Improvement Characteristics: Characteristics are recorded on the appraisal card for the purpose of valuing and describing improvements. Typical characteristics: improvement type, class, year built, and exterior wall construction.

Factors and Influence Value: Items that are noted in the data collection phase and influence value are location, age, condition, topographic characteristics, economic conditions, functional problems and neighborhood adjustments.

Property Owner: The owner of a property contributes to data collection by applications received for exemptions, AG/Timber applications, renditions and communications during the notice and protest period.

Appraisers: Information is shared with local appraisers and neighboring appraisal districts as to market trends as well as specific property information.

Highest and Best Use: The legal, physical use that will generate the greatest net return to the property.

Data collection in the field requires preparation of maps, computer generated appraisal cards, and coordination of appropriate staff members to begin the process. Properties are grouped by type, location, and neighborhood prior to the start of the fieldwork. This process requires coordination and supervision during all phases. Fieldwork is distributed to appraisers based on property type and location. Often, field appraisers are coordinated to work in areas in which they are experienced and familiar. The appraisers are trained in the techniques of listing, measuring, classifying, and appraising of property. Depreciation is also considered during the field inspection phase of the appraisal process.

Field Inspections: The field inspections for reappraisals are based on assigned areas of Hardin County Appraisal District. Field inspections are conducted on all real and personal properties in the cities, school districts, special district and county annually. This insures that all new property is discovered and listed on the appraisal roll and all additions or properties that have been removed are discovered and the records of Hardin County Appraisal District are correct. Uniform and accurate valuation of property requires correct, complete and up-to-date property data. The Hardin County Appraisal District has established effective procedures for collecting and maintaining data.

INSTRUCTIONS PROVIDED TO APPRAISERS FOR USE IN THE FIELD

Each appraiser is furnished a "think pad" for use in the field. The normal procedure is to assign a school district to each appraiser. There are six school districts in the appraisal district's jurisdiction, so everyone will help in some of the school districts.

Once the Appraisal Supervisor assigns the area to be worked by each appraiser a consistent schedule must be followed to ensure the appraisal field work (and data entry) is completed.

Each appraiser has the option of printing current appraisal cards for the area they are working or downloading the area to be worked on the laptops. The "think pads" have the most current data.

The appraisers try to be in the field by 9:00 a.m. Each gets an hour off for lunch.

The appraisers should already have the appraisal cards in working order once they reach their starting point.

At this time the appraisers follow this procedure.

1. Have your appraisal card or call the parcel up on the "think pad".
2. Click on the image tab or check the photo on the card. This ensures you are at the correct location. If there is no picture, then take a picture.
3. Click on the building tab or check your card to make sure the improvement (improvements) matches the layout of the improvement on the property.
4. Look at all improvements to make sure we have everything on the roll that is located on the parcel.
5. Check each building on the parcel and match them to what is physically on the property. If any structure has been added to, removed, or changed in any way, remeasure that structure.
6. Once all buildings are accounted for, check the depreciation according to their age (including economic age).
7. Look at the land value on the card or click on the land tab. If the land has ag or timber on it, make sure the property still qualifies. If the land no longer qualifies, make a note of the reason.. Once you are back at the office, send a certified letter to the property owner that the ag or timber exemption is being removed .
8. Click on the "notes" tab once you are finished with the parcel and note what you changed. (ie. ADM – OK- (date) 00-00-0000)
9. Click on the "general" tab and make sure you have the physical address. Add it if we do not have it.
10. If no changes are made, manually enter your initials in the blanks (Last Appraiser name and last date).
11. Move to your next parcel.

Various tools are used to aid the appraisers in their field inspections. These tools include building permits, utility connections, and mechanic's liens. The permits and utility connections are provided monthly.

The City of Lumberton, City of Silsbee, City of Kountze, and the City of Sour Lake all provide permits for the Hardin County Appraisal District. Hardin County provides permits for the non-incorporated areas of the county. Entergy furnishes the Hardin CAD with utility connections.

TDHCA (Texas Department of Housing and Community Affairs) provides Hardin County a monthly report of manufactured homes titled and /or installed in the county.

Hardin CAD also uses "Pictometry" for discovery of new property and new additions to existing property. Pictometry also allows the Hardin CAD to identify damaged or destroyed structures.

As previously stated, each appraiser is assigned a school district to work. The appraiser checks for new improvements, additions to existing structures, changes in condition to existing structures and land, and any other condition that could affect the market value of the particular parcel. The appraiser is responsible for all property within his or her assigned area.

If the appraiser discovers new utility properties such as pipelines, new producing well sites, or new communication towers (antenna), a note is made of the location. The appraiser gathers any information that is available. New gas or oil well sites will have a railroad commission number. Communication towers will have a FCC number. The situs address is noted and the location is identified on the Appraisal District map. Phone numbers and addresses for additional information are noted. The appraisers also visit with available employees of the utility site. The information, including identifying numbers (RRC #s, FCC #s, etc.), location, contacts, phone numbers, etc. is sent to Pritchard & Abbott, Inc. Pritchard & Abbott, Inc. appraises all mineral & industrial property for the Hardin County Appraisal District.

BASIC MEASURING PROCEDURES

In any reappraisal the foundation for the initial cost approach is the improvement sketch, appraisers are trained in the following way. Neatly draw an outline in the space provided on your field worksheet. Draw the improvement with the front of the structure toward you, or as it faces the street. Draw the improvement in approximate proportion to its size. Second floor drawings are drawn separate from the main level and noted appropriately.

Appraisers are trained to measure completely around the structure. They are then required to check the sums of overall measurements along the front with those in the rear and side-to-side. Appraisers start measuring at one corner of the structure; they are required to label areas accurately while in the field. Often used residential building terms and roof shapes are shown in the HCAD appraisal manual. The HCAD appraisal manual goes into greater detail in this important training task.

DEPRECIATION

HCAD depreciation tables are based on an extended life theory, which encompasses a remaining life and effective age approach. Further, the HCAD depreciation system also incorporates a CDU rating system. The CDU rating system provides a logical reasoning process by means of which normal age depreciation may be modified according to the appraiser's best determination of the relative loss of value in a structure as compared with the average loss that might be expected. Additional information may be found in the HCAD appraisal manual under the section entitled "Dwelling Depreciation (CDU Rating System)".

The extended life expectancy theory explains that the increased life expectancy due to seasoning and proven ability to exist will in fact increase the total life expectancy the longer it continues to exist. Since otherwise similar structures depreciate at lesser or more rapid rates than what is considered to be average, the combination of extended life expectancy and CDU (condition, desirability, and utility) rating system provide an accurate means to assign depreciation in a mass appraisal effort. The HCAD depreciation table is based on typical life expectancies, adjusted by CDU ratings, and is periodically tested using case studies. Information discovered during the field inspection process is listed on the appraisal card while the appraiser is at the subject property. Once the field inspection is complete,

the appraisal cards are returned to the office for quality control inspection, keypunch data entry, and verification.

Once the necessary data has been entered to the CAMA system, a computer driven mass appraisal cost system is activated and a base cost of replacement cost new, less depreciation is calculated. As such, the record is prepared for statistical analysis.

FIELD REVIEW

During all phases of the appraisal operation, analysis reveals properties that do not fit the necessary tolerance of the statistical profile. As such, the need arises for additional field inspection. As properties are identified, they are sorted, grouped, and prepared for additional field inspection to check for the accuracy of the data elements currently listed on the records. This process is ongoing throughout the year. At all times during the appraisal phase appraisers review subjective data, such as quality of construction, condition, and all projected forms of obsolescence. All field work is reviewed by the Appraisal Supervisor.

FIELD INSPECTION

The field inspections for reappraisals are based on assigned areas of Hardin County Appraisal District. Field inspections are conducted on all real and personal properties in the cities, school districts, special districts and county annually. This ensures that all new property is discovered and listed on the appraisal roll, all additions or properties that have been removed are discovered and the records of Hardin County Appraisal District are correct. Uniform and accurate valuation of property requires correct, complete and up-to-date property data. The Hardin County Appraisal District has established effective procedures for collection and maintaining property data.

These procedures include:

Field Inspections: Each appraiser is assigned a school district to work. The appraiser drives the assigned area with an up-to-date- appraisal card and a "Think Pad" which has the most up-to-date record of the property. They check for new improvements, damaged improvements, improvements that are no longer there, different improvements (a new manufactured home may have replaced an older manufactured home), changes in land or any other condition that could possible affect market value as of January 1st.

Various tools are used to aid the appraisers in their field inspections. These tools include building permits, utility connections, and mechanic's liens. The permits and utility connections are provided monthly.

The City of Lumberton, City of Silsbee, City of Kountze, and the City of Sour Lake all provide permits for the Hardin County Appraisal District. Hardin County provides permits for the non-incorporated areas of the county. Entergy furnishes the Hardin CAD with utility connections.

TDHCA (Texas Department of Housing and Community Affairs) provides Hardin County a monthly report of manufactured homes titled and/or installed in the county.

Hardin CAD also uses "Pictometry" for discovery of new property and new additions to existing property. Pictometry also allows the Hardin CAD to identify damaged or destroyed structures.

ROLL OF THE APPRAISAL SUPERVISOR

The following data is provided to the Hardin County Appraisal District via the Appraisal Supervisor on a monthly basis:

1. The three major cities provide building/addition permits.
2. The sole electric company provides listing of all electrical connections.
3. The county provides three things:
 - a.) Deeds and ownership papers.
 - b.) Building/Addition permits
 - c.) All buildings constructed and including non-permitted in the flood areas.
4. Appraisers are required to physically inspect all properties in their territories.
5. Appraisers are required to use Pictometry to assist in the physical inspection.
6. Appraisers are required to inspect all permits and connections each month as they are received.

The Appraisal Supervisor keeps track of all permits/connections received. She then assigns them to an appraiser and follows up to ensure that it all gets timely done.

The Appraisal Supervisor assigns a school district to each appraiser. She also assigns special projects to the Appraiser as they correspond to their assigned school.

The Appraisal Supervisor reviews all ratio studies to ensure uniformity for all properties assigned to the corresponding appraiser.

NEIGHBORHOOD ANALYSIS

Initially, property is considered based on its location within particular boundaries. The most common boundary used to define location is the school district boundary. In all types of property, valuation analysis and neighborhood analysis is conducted on school districts. The IAAO defines a neighborhood as the environment of a subject property that has a direct and immediate effect on value. For our purposes, the neighborhood boundary is the environment of the subject property. The neighborhood concept is used in the grouping of all taxable property located in HCAD with the exception of some special use properties.

LAND ANALYSIS

Land analysis is conducted generally by our senior land appraiser and other experienced analysts. Highest and best use determinations generally occur at this time. Base lot square footage rates, acreage rates, primary and residual price rates, and hard code unit prices are established during this phase of the appraisal operation. A computerized land table containing the necessary information by ISD and neighborhood, and any other pre-specified area, assist the analyst in consistently valuing land based on its location, size, configuration, and topography elements. When possible, the sales comparison approach is used to assist in the development of unit prices. The land appraisal techniques of allocation by abstraction and allocation by ratio are used to best reflect the value of the land as vacant in areas where build-out has occurred or in areas where vacant land sales are not available.

Land Classification:

1. AG---as a value classification of land considering the AG use to which the land is principally devoted.
 - a.) Irrigated cropland---there are no irrigated crops in Hardin County.
 - b.) Dry cropland---other than bailing grass, there are no dry crops in Hardin County.
 - c.) Improved Pasture----there are many improved pastures in Hardin County.
 - d.) Native Pasture---Hardin County has privately owned horses and a few cows for recreational purposes only.
 - e.) Orchard---Hardin County does not have any orchards.

Hardin County is timber country; the rest is mostly residential.

APPRAISAL OF RURAL LAND

This section provides general guidelines to assist appraisers in the market valuation of rural lands. Appraised values based on market valuation must be established for all taxable land in each taxing jurisdiction, regardless of whether the land qualified, or would qualify, for productivity valuation under either Article VIII, Section I-d of Section I-d-1 of the Texas Constitution. Market values so determined must be submitted to the Appraisal Review Board for determination of protests for all taxable land in each jurisdiction, including land that qualifies for productivity valuation. In addition, appraised values based on market valuation must be retained for land receiving productivity valuation for rollback purposes.

The rural land market can best be understood by dividing it into three distinct types of markets—the production, investment, and consumptive land markets--each based on the principal factor which influences value. Discussion of these market influences and common examples of each are presented below.

The Production Land Market

The principle factor influencing value of rural land in the production land market is the income potential associated with agricultural production. In the production land market, land values will reflect the productive capacity of soils, the availability of irrigation water, and the topographic features which influence the ability of a producer to use the land for agricultural purposes. Most areas of the Texas High Plains are still dominated by production-market influences.

The Investment Land Market

The principal factor influencing the market value of rural land in the investment land market is the appreciation potential of land investments. The investment land market is not composed strictly of speculators who purchase land with the intent to make a quick profit by resale, but also includes individuals who purchase land for conversion into subdivisions or for other types of development. In addition, the investment land market includes individuals who purchase land as a means of preserving their capital for a later use, or as a hedge against inflation. Although investment-market influences exist in all areas of the state, they are the principal market influences in suburban areas.

The Consumptive Land Market

The principal factor influencing the market value of rural land in the consumptive land market is the satisfaction that land ownership provides. The consumptive land market is often characterized by the purchase of small tracts of land to be used for recreational purposes. For instance, an individual who lives in a city or town may purchase a 10-acre tract of land in a rural area to visit on weekends with his family.

The most distinctive features of the rural land market are that all three types of market influences, in combination with supply, establish market values. For this reason, it is important that the appraiser be knowledgeable of the key factors that influence value and of the relative influence each of these factors has upon value when establishing procedures for the valuation of rural land in a jurisdiction.

Analysis of the Location Market

From a practical standpoint, using a fee-appraisal approach to appraise each individual tract of land in a jurisdiction is not possible. Fee appraisers make detailed appraisals of individual parcels by obtaining comparable sales of other land in the jurisdiction and adjusting each comparable sale to the subject property to estimate the value of the subject property. In this way, fee appraisers allow market transactions that have occurred regarding other properties to define the market value of the subject property. Common types of adjustments made by fee appraisers to comparables in estimating market values of subject properties include adjustments for date of sale, for size of tract, for productivity factors, for improvement value, and for special amenities.

Hardin County Appraisal District appraisers must also use market transactions to define factors that influence rural land values in their jurisdictions. However, unlike fee appraisers, these appraisers cannot compare each tract individually to each market transaction identified to make adjustments because of the volume of properties to be appraised. Appraisal office appraisers must, therefore, incorporate the factors indicated by market transactions into general standards or schedules of value. Such schedules are normally comprised of per acre prices that will be multiplied by the number of acres in an individual tract to develop an estimate of the value of the tract. Schedules of this kind should be divided into as many categories or classes as are necessary to reasonably reflect market values when applied to individual tracts of land found in the jurisdiction.

SALES ANALYSIS

The HCAD appraisers gather sales information. HCAD receives sales from a variety of sources including, but not limited to, field discovery, local realtors, appraisers, HCAD buyer and seller sales questionnaires, protest hearings, local builders, and sometimes from overlapping jurisdictions. Sales are reviewed for validity and field inspected for data accuracy. All sales are keypunched into our computer assisted mainframe sales system. The sales are classified to recognize their appropriate status, source, and confirmation codes.

OFFICE AUDIT

The sales ratio analysis and associated individual property value audit or review is conducted in the office on a year around basis. As stated above, properties that do not fit a homogenous statistical profile are set aside for review by a senior appraiser. In all classes of property a number of different reports are generated on our computer mainframe to provide information on statistical measures, i. e. percent of increase, increase from prior year, percent of change to land value, percent of change to improvement value, etc. This type of information along with the other forms of analysis described in this report often helps locate areas or property types in need of reappraisal.

MARKET ADJUSTMENT

The Ratio Study Procedures provide accurate information regarding the level of appraisal of the various classes and categories of properties. For the purpose of valuing residential property, the CAD approach to value is described by the IAAO as a hybrid cost-sales comparison approach. This commonly accepted mass appraisal technique considers local influences not always accounted for in the cost approach. The following equation explains this theory: $MV = MA (RCN - D) + LV$.

Where MV equates to market value, MA equals market adjustment, RCN-D is the replacement cost new of the dwelling, less depreciation, and LV is the estimate of land value based on highest and best use. Market value equals market adjustment times RCNLD + land.

In areas where the sales ratio indicates that the property located within a given neighborhood is not being appraised at the legally permissible level of appraisal, the market adjustment process described in the previous paragraph is conducted. Base cost estimates are compared to sales and a ratio is derived. The ratio is divided into a target ratio, and a neighborhood adjustment factor is determined. Each homogenous parcel in that given neighborhood is programmatically adjusted according to the factor derived from the process. This adjustment factor is keypunched to a mainframe computer program and each parcel is adjusted programmatically. Ongoing neighborhood analysis and delineation ensures the accuracy of this process.

COMMERCIAL PROPERTY VALUATION

The HCAD employs all three approaches to value when possible in valuing income-producing property. The primary approach used to initiate the valuation process is the cost approach to value. Each commercial property is listed according to its quantitative data elements. The data elements are keypunched to our computer mainframe and an initial cost value is calculated. The depreciation is calculated and assigned during this process so that an RCNLD of the improvements may be derived and this is added to an estimate of the land value.

The income and expense data of these types of properties is gathered and evaluated. When appropriate, one or more forms of the income approach to value are used. Information from a variety of sources is obtained and detailed analysis is undertaken. When possible, the commercial analyst uses the technique of direct capitalization to derive the income approach value. Further, during the establishment of the capitalization rate it is always important to estimate an appropriate amount of risk when building the capitalization rate. HCAD analyst prefer utilizing current market, sales, and income information to develop overall rates by class, use, location, and quality of commercial improvements.

The field inspection, valuation review, and performance analysis described throughout this report, apply to commercial as well as other types of properties. When available, the commercial analyst also uses the sales comparison approach to determine the fair market value of income-producing properties. In using the cost approach, however, it is sometimes necessary for the appraiser to utilize the unit in place, quantity survey, or historical cost method to derive accurate cost estimates.

PERSONAL PROPERTY VALUATION

All income-producing business personal property located within District boundaries is subject to tax. Business use vehicles are also listed in the appraisal records and subject to ad valorem taxation. Personal property schedules are used to value business furniture, fixtures, equipment, and inventory. Additionally, personal property values are obtained by some other sources.

Business owners are required by Texas Law to render their business personal property each year. The appraiser considers rendered values during the appropriate phase of valuation analysis. Rendered values are often used as the basis for the CAD value if the value rendered is reasonable for the type of business and within acceptable ranges when compared to the HCAD/PTD or Marshall & Swift personal property schedules. Should the property owner choose not to render the property, or if the rendered amount does not fit acceptable ranges, then the HCAD/PTD schedule or the Marshall & Swift schedule is used to value the property.

Depreciation of the property is determined by the age of the property and its expected life. Valuation and depreciation schedules are included in the HCAD appraisal manual. Business vehicles are valued based on NADA Used Car Guide trade-in value for the particular make, model, and age of the vehicle. The Appraisal District uses a report obtained from Texas Motor Vehicle Listings to determine ownership, make, model, and vehicle characteristics to determine NADA trade-in value. This report along with the aforementioned renditions and physical observations are used to discover and list vehicles that are taxable. When adverse factors, such as high mileage, are known, appropriate adjustments are made.

PROCEDURES FOR RATIO STUDIES

A ratio study is designed to evaluate appraisal performance through a comparison of appraised or assessed values for tax purposes with estimates of market value based on sales prices, and tested by measures of central tendency. The Hardin County Appraisal District will adhere to the IAAO Standards on ratio studies.

Steps in Ratio Studies

1. Definition of Purpose and Objectives

The HCAD will perform ratio studies in accordance with IAAO Standards on a periodic basis to evaluate the Appraisal District's overall level of appraisal. These studies will be used as performance analysis to determine whether value estimates are equitable and consistent with our local market place. The ratio studies performed by the Hardin County Appraisal District will also be used as a tool in determining when a type, area, or class of property should be reappraised. Further, the ratio study will assist in the analysis of appraisal schedules, so that the Appraisal District might recognize the need for adjustments to the schedule.

2. Collection and Preparation of Market Data

The HCAD's Special Projects staff and Appraisal Department appraisers will collect data from a variety of sources. These sources of market data include, but are not limited to real estate companies, HCAD sales information questionnaires (mailers), grantors, grantees, personal contact, field review, closing statements, or vendors of real estate sales information. Contiguous appraisal districts and local real estate appraisers also provide recent sales information.

3. Matching HCAD Appraisals and Market Data

District appraisal staff members will compare appraised values with sales prices on individual properties. Special care will be taken to identify a variety of non-arms length transactions. Sales between family members, estate sales, relocation sales, and a number of other non-arms length transactions are coded so that they may be set aside during the valuation phase of the appraisal process.

4. Stratification

The District performs stratification based on a variety of different criteria. Sales are stratified by school district, class, use, abstract, subdivision, or neighborhood. Analysis is performed to determine an adequate sample size for ratio studies.

5. Statistical Analysis

District appraisal staff members, with the assistance of the Chief Appraiser, will perform ratio studies on a periodic basis. Ratio studies will be performed after all appraisal schedule changes to evaluate performance. The median, weighted mean, coefficient of dispersion, price related differential, standard deviation, and range will be calculated on each applicable class, category, and subdivision of property. Further, statistical analysis will be performed to identify all forms of bias in the assessment process.

6. Evaluation and Use of Results

The Chief Appraiser and District appraisal staff will use the measures of central tendency, and the relative measures of dispersion, and all indications of variance to evaluate the District's overall level of appraisal. The general level of appraisal is judged and evaluated by the HCAD staff by observing all related data, including measures of central tendency. Appraisal quality within the class, category, subdivision, or

neighborhood will be judged based on the relative measures of dispersion. The results will then be used to evaluate appraisal data, current schedules, practices and procedures. Sales ratio analysis may indicate areas where appraisers need additional training to improve performance and to eliminate bias in the appraisal process. Real property appraisal plans are adjusted according to ratio study indications.

Measure of central tendency and variation relates to the overall level of appraisal. Listed are three measures of central tendency and two measures of variation.

1. *Median*, the middle ratio when the ratio is arrayed in order of magnitude. If there is an even number of ratios, the median is the average of the two middle ratios.
2. *Mean*, an arithmetic average of ratios.
3. *Weighted Mean**, a weighted average of the ratios. A weighted mean is more affected by ratios with high sales prices than by ratios with low sales prices.
4. *Coefficient of Dispersion*, measures the average percentage deviation of the ratios from the median ratio.
5. *Price Related Differential*, the mean divided by the weighted mean. This statistic has a slight upward bias. A PRD above 1.03 tends to indicate regressivity. A PRD below .98 indicates progressivity.

*A weighted mean ratio is determined by the following steps: (1) Sum the appraised values for the entire sample; (2) Sum the sales prices for the entire sample; (3) Divide the total of appraised values by the total of sales prices.

Adjustments for Date of Sale

HCAD will adhere to the following steps when considering adjustments to confirmed sales prices for the effects of time:

1. On-going tracking of sales and appraisal ratios over time;
2. Including the date of sale as a variable when observing monthly regression models;
3. Maintaining an ongoing analysis of re-sales;
4. Special Projects staff will compare per unit values over time in homogenous strata;
5. Observing the results and making necessary changes by isolating the effect of time through paired sales analysis.

HCAD monitors changes in price levels over time in ratio studies made for assessment purposes where the objective of the analysis is to estimate the level of appraisal as of the January 1 assessment date. If sales prices have generally been rising, ratios of sales that have occurred after the assessment date will tend to understate the overall level of appraisal. As such, HCAD will make necessary adjustments to reflect these trends. Similarly, ratios for sales that occurred before the January 1 assessment date will tend to overstate the level of appraisal. If prices are in decline, the opposite pattern would results. In each case, appropriate adjustments will be implemented to the appraisal schedules, or neighborhood adjustments will be properly modified. According to significant market trends where a sufficient number of sales indicate changes, price levels will be monitored and time adjustments made by area, class, or type of property. HCAD recognizes that property bases tend to change in value at different rates.

Adjustments for Financing

HCAD will adhere to the following steps when considering adjustments to confirmed sales prices for financing. Most sales transactions in Hardin County reflect prevailing market trends and typical interest rates. When our analyst discovers financing arrangements that do not represent prevailing conditions, appropriate adjustments will be implemented. The HCAD staff members will consider adjustments under the following conditions:

1. When the seller and lender are the same party and financing is not at market rates.
2. The buyer assumes an existing mortgage or lease at a non-market rate.
3. If the lenders charge the seller "points" (commonly referred to as a percentage of the loan amount) for making money available to the purchaser/borrower. Points paid by the buyer should be considered as part of the down payment and no adjustment will be implemented.

The HCAD will adjust for financing on an as needed basis by individual parcel. Adjustments are made as warranted either upward or downward. Our analyst will conduct the following computations when necessary. The amount of adjustment will be computed by capitalizing the difference between monthly payments based on the typical market interest rate and those based on the subject interest rate. Obviously the sale price may not reflect the full amount because of the uncertainty of the holding period, tax considerations, etc.

The HCAD will also conduct market analysis with paired sales and statistical techniques to assist in controlling such factors. When the seller pays points the sales price will be adjusted downward by the value of the points. When the sample size is adequate, such adjustments may be considered. However, adjustments for financing will only be considered when ample data on actual market interest rates is available. Understandably, obtaining and properly analyzing such data, as well as determining the extent to which the market actually capitalizes non-market financing is difficult and requires careful consideration by our staff.

In-House Ratio Study Plan

1. The Hardin County Appraisal District will perform quarterly ratio studies on vacant land and all improved property for all five (6) school districts.
2. The Hardin County Appraisal District will perform quarterly ratio studies on all residential appraisal neighborhoods in all five (6) school districts.
3. Ratio studies will be performed before all updates of appraised values.
4. Ratio studies will be performed after each update of appraised values.
5. Ratio studies will be performed on an as needed basis to verify the level of appraisal, vacant and/or improved property for specified areas, school district, or other natural, political, or man-made boundaries.

Property Tax Division Annual Ratio Studies

The Property Tax Division of the Texas Comptroller of Public Accounts performs annual ratio studies on all Texas school districts. Appraisal districts performance is judged by the results of these ratio studies. State law requires that appraisal districts appraise all taxable property at one hundred percent (100%) of market value (see the definition of market value on page 20 of this report).

Failure to appraise property within a confidence interval of 95% to 105% may result in diminished funding from the state to local school districts. Additionally, in circumstances where an appraisal district fails to appraise properties within the PTD's intervals for an extended period of time a master may be appointed to assume control of the appraisal districts operations.

CONTINUING EDUCATION

HCAD staff members undergo a variety of continuing education classes, USAP Standards training, various classes at TAAO and TAAD conferences, and real estate related classes.

EQUITY PROTEST

- Step 1: Determine the Market Value of the Subject.
- Step 2: Calculate the Subject Property's Appraisal Ratio.
- Step 3: Consider the Appraisal District's Ratio Study Evidence
 - Specific Category Ratio Study for the Neighborhood
 - Specific Category Ratio Study for the Appraisal District
 - Specific Category Ratio Study for the School District
 - Overall Ratio Study for the Appraisal District
 - Overall Ratio Study for the School District
- Step 4: Determine the Median Appraisal Ratio
- Step 5: Make the Final Determination for the Subject Property

RECENT UPDATES TO THE TEXAS PROPERTY TAX CODE

Section 6.05

S.B. 1652 adds subsection (i) to require appraisal districts to develop a biennial written reappraisal plan and hold a public hearing to consider the plan. No later than September 15 of each even-numbered year, the appraisal district board must finally approve the reappraisal plan and distribute copies to the taxing units and the Comptroller within 60 days of board approval. The law is effective September 1, 2005, and affects appraisal districts and the Comptroller's Property Tax Division.

Section 11.43

H.B. 2491 adds Subsection (l) and (m) to require a homestead exemption application form to include a space for the applicant to include his or her date of birth. A person who receives a general homestead exemption is entitled to receive an exemption for persons 65 years of age or older without applying for the exemption, if the person becomes 65 as shown by information in the appraisal

district records. The law is effective September 1, 2005, and affects homeowners and appraisal districts.

Section 22.28

H.B. 2491 amends Subsection (b) and adds Subsection (c) to require the chief appraiser to certify to assessors that the chief appraiser has imposed a rendition related penalty. The assessor must add the penalty to the original amount of tax on the property. A collector who collects a rendition related penalty must remit to the appraisal district imposing the penalty, 5 percent of the penalty amount collected. The law is effective September 1, 2005, and affects business owners, appraisal districts and all taxing units.

Section 23.51

H.B. 2491 and S.B. 760 amend Section 23.15 (3) to require chief appraisers to classify agricultural land, for purposes of appraisal, by category as irrigated cropland, dry cropland, improved pasture, native pasture, orchard and waste. In addition, the chief appraiser may establish additional categories. The chief appraiser is further required to divide each category according to soil type, soil type, soil capability, irrigation, general topography, geographical factors and other factors that influence the productive capacity of the category. H.B. 2491 is effective September 1, 2005, and S.B. 760 is effective January 1, 2006. Both laws affect farmers, rancher's appraisal districts and the Comptroller's Property Tax Division.

DEFINITIONS AND ECONOMIC PRINCIPLES

Arms-Length Transactions

An arms-length transaction is an exchange between unrelated buyers and sellers under no duress to buy or sell. Although the following are considered arms-length transactions, because they involve special circumstances, they should be excluded from analysis or used with caution:

1. Trades
2. Transactions involving partial interests
3. Land contracts, contracts-for-deed, and other installment purchase agreements
4. Incomplete or un-built property

The following types of transactions are not considered arms-length:

1. Sales involving courts, or in which government agencies or public utilities are principals
2. Sales in which charitable, religious, or educational institutions are principals
3. Sales in which a financial institution is the buyer and a lien-holder or the seller of property taken through foreclosure
4. Sales between relatives
5. Sales between corporate affiliates
6. Sales of convenience
7. Sales settling an estate
8. Forced sales
9. Sales of doubtful title

10. Auctions
11. Foreclosure sales, condemnation sales, or other sales which the price was not representative of market

Bundle of Rights Theory

The "Bundle of Rights Theory" asserts that owners have the right to occupy, use, sell, lease, bequeath, or lease their property as they choose. These beneficial interests or rights are guaranteed by law but subject to governmental and private regulations and restrictions.

Governmental regulations and restrictions include:

1. Taxation
2. Condemnation (for the benefit of the public providing that just compensation is made to the owner; also referred to as eminent domain)
3. Police power (enforcing regulations deemed necessary to promote the safety, health, morals, and general welfare of the public)
4. Provide for the reversion of ownership to the State in cases where a competent heir to the property cannot be ascertained (also called escheat).

Private restrictions imposed upon property are frequently found in the form of deed restrictions. Deeds spell out precisely which rights of the "total bundle" of rights the buyer is acquiring. Since value is related to each of these rights, the appraiser should know precisely which rights are involved in his valuation of the property. Appraisals for ad valorem tax purposes generally assume the property is owned in "fee simple" title, meaning that the total bundle of rights is considered intact.

Depreciation

Most simply put, depreciation is a loss in value from all causes and may be physical (wearing out of components), functional (improvement design), and/or economic (influences outside of the property).

Disposition Value

(According to the Appraisal Institute) Disposition Value is the most probable price that a specified interest in real property is likely to bring under all of the following conditions:

1. Consummation of a sale within a limited future marketing period specified by the client.
2. Current actual market conditions for the property interest appraised.
3. Buyer and seller each acting prudently and knowledgeably.
4. Seller under compulsion to sell.
5. Buyer typically motivated.
6. Both parties acting in what they consider their best interest.
7. Adequate marketing effort made for the limited time allowed for completion of a sale.
8. Payment made in cash in U. S. dollars or in terms of financial arrangements comparable thereto.
9. Price represents the normal consideration for the property sold, unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.

Fee Simple

"Unqualified ownership and power of disposition." An inherited or heritable estate in property. private ownership in which the owner has the right to control, use, and transfer property at will, subject to the limitations of eminent domain, escheat, police power, and taxation. (This information was obtained from the Appraisal Institute).

Liquidation Value

Liquidation Value is the most probable price that a specified interest in real property is likely to bring under all of the following conditions:

1. Consummation of a sale within a severely limited future marketing period specified by the client.
2. Current actual market conditions for the property interest appraised.
3. Buyer acting prudently and knowledgeably.
4. Seller under extreme compulsion to sell.
5. Buyer typically motivated.
6. Buyer acting in what he/she considers his/her best interests.
7. Limited marketing effort made and limited time allowed for completion of sale.
8. Payment made in cash in U. S. dollars or in terms of financial arrangements comparable thereto. Price represents the normal consideration for the property sold, unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.

Market Value Definitions

Tax Code Definition

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

Appraisal Institute Definition

Market Value is based on the concept of an open and competitive market in which transactions are free of duress or forced liquidation. It is the most probable price that a specified interest in real property is likely to bring under all of the following conditions:

1. Consummation of a sale as of a specified date.
2. Open and competitive market for the property interest appraised.
3. Buyer and seller each acting prudently and knowledgeably.
4. Price not affected by undue stimulus.
5. Buyer and seller typically motivated.

6. Both parties acting in which they consider their best interests.
7. Adequate marketing efforts made and a reasonable time allowed for exposure in the open market.
8. Payment made in cash in U. S. dollars or in terms of financial arrangements comparable thereto.
9. Price represents the normal consideration for the property sold, unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.

Definitions Implied By Supreme Court Rulings

Personal Property Market Value is the price that dealers in the goods are willing to receive and purchasers are willing to pay when goods are bought and sold in the ordinary course of trade.

Real Property Market Value is the amount of money that probably would be arrived at through fair negotiations between a willing seller and a willing buyer, taking into consideration the uses to which the property may be put.

Principle of Change

The impact of change on the value of real property manifests itself in the life cycle of a neighborhood, characterized by four stages of evolution: 1) development and growth evidenced by improving values; 2) leveling off evidenced by static values; 3) infiltration and decay evidenced by declining values; and 4) Revitalization as evidenced by rebuilding or restoration. The highest and best use today is not necessarily the highest and best use tomorrow. Highest and best use of land often lies in a succession of uses. A declining single-family residential neighborhood may be ripe for multi-family, commercial, or industrial development. Determination of change is dependent upon the relationship of present or anticipated future demand with existing supply.

In estimating value, the appraiser is obligated to reasonably anticipate the future benefits as well as the present benefits derived from ownership and to evaluate the property in light of the quality, quantity, and duration of these benefits. It should be noted that benefits referred to are likely benefits based on actual data as opposed to speculative or potential benefits that may or may not occur.

Principle of Highest and Best Use

Highest and best use for a property is that use which will produce the highest net return to the land for a given period of time within the limits of those uses which are economically feasible, probable, and legally permissible.

On a community-wide basis the major determining factor in highest and best use is the maximum quantity of land that can be devoted to a specific use and still yield a satisfactory return. Once a suitable basic use has been chosen for a specific property, each increment of capital investment to the existing or planned improvement will increase the net return to the land only up to a certain point. After this point is reached the net return to the land begins to diminish. This is the point at which the land is at its highest and best use.

Example: When planning a high-rise office building, each additional upper floor represents an extra capital expenditure that must yield a certain return to an investor. This return will be dependent upon the levels of economic rent the market will bear at that point in time. An optimum number of floors can be calculated above which the income yield requirements of additional expenditures will no longer be satisfactorily met. Notwithstanding the possibility of other considerations, this optimum return should determine the story height of the building.

Principle of Substitution

Buyers and sellers in the marketplace create value - demand is translated into a commodity of exchange. When the benefits and advantages derived from two properties are equal, the lowest price property received the greatest demand. An informed buyer is not justified in paying more for a property than it would cost to acquire an equally desirable substitute property.

Principle of Supply and Demand

Among the forces, which constantly operate to influence supply and demand, are population growth, new techniques in transportation, purchasing power, price levels, wage rates, taxation, governmental controls, and scarcity. A sudden population increase in an area would create an increase in demand for housing. If the demand increased at a higher rate than the supply, there could soon be a scarcity of housing. When demand is supported by purchasing power, rentals and sales prices tend to increase and ultimately reach a level that would stimulate more builders to compete for the potential profits and thus serve to increase the supply toward the level of demand. As the supply is increased, demand would begin to taper off. When builders, due to increases in labor and material rates, are no longer able to build at costs that meet new level of prices and rents, competition tends to taper and supply levels off. Balance occurs when reasonable competition serves to coordinate supply with demand. When competition continues unchecked to produce a volume that exceeds demand, net returns to investors are no longer adequate to pay the costs of ownership, resulting in loss rather than profit, and consequently a decline in values.

Real Estate

Generally, real estate is real or fixed improvements to land such as buildings and other appurtenances (storage sheds, fencing, etc.). An identified tract of land including improvements, if any.

Real Property

Real property encompasses all of the interests, benefits, and rights enjoyed due to ownership of real estate; the bundle of rights endowed to the owner.

Value

Value is the monetary worth of a commodity or service to buyers and sellers at a given point in time. Value is not a characteristic inherent in a commodity itself rather it is man-made, created by desire, modified by varying degrees of desire, and destroyed by lack of desire. One desires property because it is a useful commodity in that it has utility. Utility is a pre-requisite to value but does not alone cause value. If a great supply of a useful commodity exists (such as air), needs would automatically be satisfied, desire would not be aroused, and value therefore would not be created. Thus, in addition to utility, in order to effectively arouse desire, the commodity must also be scarce. A final component of value is the ability of a buyer to translate desire into a unit of exchange via purchasing power. When a commodity has utility, is relatively scarce, arouses desire, and may be traded for -- value is created.

An additional component for an appraiser when defining value is the purpose of the appraisal and the type of value being estimated. For ad valorem tax purposes, the value sought is generally market value, indicating activity of buyers and sellers.

Value-In-Use

When estimating the value of a special, highly unique property that is useful to the present owner but relatively less useful to typical buyers in the marketplace, the property is said to have a value in use. Value in use refers to the actual value of a commodity to a specific person.

Value In Exchange

Value in exchange refers to the dollar value of a commodity to buyers in the marketplace.

THE APPRAISAL FOUNDATION

The Appraisal Foundation is a non-profit educational organization established by the appraisal profession to foster professionalism by:

Establishing, improving, and promoting the Uniform Standards of Professional Appraisal Practice.

Establishing educational and experience qualification criteria for the licensing, certification, and recertification of appraisers.

Disseminating information on USPAP and Appraiser Qualification Criteria to the appraisal profession, governmental agencies, related industries, and the general public.

Sponsoring appropriate activities relating to Standards, qualifications, and issues of importance to appraisers and users of appraisal services.

The Appraisal Foundation seeks to attain these goals by serving as the parent organization for two independent boards – the Appraiser Qualifications Board and the Appraisal Standards Board. The Appraiser Qualifications Board (AQB) establishes criteria for the licensing, certification, and recertification of appraisers. The Appraisal Standards Board (ASB) promulgates rules (USPAP) for developing and reporting an appraisal. Sponsoring organizations include the following:

Appraisal Sponsors:

- American Association of Certified Appraisers
- American Society of Appraisers
- American Society of Farm Managers and Rural Appraisers
- Appraisal Institute
- International Association of Assessing Officers
- International Right-of-Way Association
- National Association of Independent Fee Appraisers
- National Association of Master Appraisers

Affiliate Sponsors:

- American Bankers Association
- American Real Estate & Urban Economics Association
- America's Community Bankers
- Farm Credit Council
- Mortgage Bankers Association
- Mortgage Insurance Companies of America
- National Association of Realtors
- Real Estate Educators Association

Corporate Sponsor:

- Mortgage Guaranty Insurance Corporation

New legislation suggests that many appraisal districts have not taken the time to relate the Uniform Standards of Professional Appraisal Practice (USPAP) to their appraisal operation. A review of the Standards and how they apply to appraisal districts is offered to assist the profession in improving performance.

UNIFORM STANDARDS OF PROFESSIONAL APPRAISAL PRACTICES

STANDARD 1: REAL PROPERTY APPRAISAL, DEVELOPMENT

In developing a real property appraisal, an appraiser must identify the problem to be solved and the scope of work necessary to solve the problem, and correctly complete research and analysis necessary to produce a credible appraisal.

Comment: This Standard is directed toward the substantive aspects of developing a competent appraisal of real property. The requirements set forth in this Standard follow the appraisal development process in the order of topics addressed and can be used by appraisers and the users of appraisal services as a convenient checklist.

Statement 1* On Appraisal Standards No. 1 (Smt-1) Retired September 15, 1999
(The * symbol next to the terms "Statement 1" is explained on the last page.)

STANDARD 2: REAL PROPERTY APPRAISAL, REPORTING

In reporting the results of a real property appraisal, an appraiser must communicate each analysis, opinion, and conclusion in a manner that is not misleading.

Comment: This Standard addresses the content and level of information required in a report that communicates the results of a real property appraisal. It does not dictate the form, format, or style of real property appraisal reports. The form, format, and style of a report are functions of the needs of users and appraisers. The substantive content of a report determines its compliance.

Statement 1* On Appraisal Standards No. 2 (Smt-2) Discounted cash flow (DCF) analysis is an accepted analytical tool and method of valuation within the income capitalization approach to value. DCF is not a new method, but it did not enjoy widespread use until modern computer technology enabled appraisers to automate the process. Because DCF analysis is profit oriented and dependent on the analysis of uncertain future events, it is vulnerable to misuse. What steps can the appraiser take to avoid misuse of DCF analysis?

- ♦ DCF analysis is an additional tool available to the appraiser and is best applied in developing value opinions in the context of one or more other approaches.
- ♦ It is the responsibility of the appraiser to ensure that the controlling input is consistent with market evidence and prevailing market attitudes.
- ♦ Market value DCF analyses should be supported by market-derived data and the assumptions should be both market- and property-specific
- ♦ If using commercial software the appraiser should cite the name and version of the software and provide a brief description of the methods an
- ♦ DCF accounts for and reflects those items and forces that affect the revenue, expenses, and ultimate earning capacity of real estate and represents a forecast of events that would be considered likely within a specific market.
- ♦ The results of DCF analysis should be tested and checked for errors and reasonableness.
- ♦ Standards Rule 1-1 states that the appraiser must not commit a substantial error of omission or commission that significantly affects the appraisal.

STANDARD 3: REAL PROPERTY AND PERSONAL PROPERTY APPRAISAL

REVIEW, DEVELOPMENT AND REPORTING

In performing an appraisal review assignment involving a real property or personal property appraisal, an appraiser acting as a reviewer must develop and report a credible opinion as to the quality of another appraiser's work and must clearly disclose the scope of work performed in the assignment.

Comment: Appraisal review is the act or process of developing and communicating an opinion about the quality of all or part of a completed work or service performed by another appraiser in a real property or personal property appraisal assignment. The reviewer's

opinion about quality must encompass the completeness, adequacy, relevance, appropriateness, and reasonableness of the work under review, developed in the context of the requirements applicable to that work.

Statement 1* On Appraisal Standards No. 3 (Smt-3) Two dates are essential to an appraisal report. Standards Rules 2-2 and 8-2 require that each appraisal report specify the effective date of the appraisal and the date of the report. The date of the report indicates the perspective from which the appraiser is examining the market. The effective date of the appraisal establishes the context for the value opinion. Three categories of effective dates, retrospective, current, or prospective, may be used, according to the purpose and function of the appraisal assignment. When a retrospective effective date is used, how can the appraisal be prepared and presented in a manner that is not misleading?

- ♦ A retrospective appraisal is complicated by the fact that the appraiser already knows what occurred in the market after the effective date of the appraisal.
- ♦ Data subsequent to the effective date may be considered in developing a retrospective value as a confirmation of trends.
- ♦ The appraiser should determine a logical cut-off.
- ♦ Use of direct excerpts from then-current appraisal reports prepared at the time of the retrospective effective date helps the appraiser and the reader understand market conditions as of the retrospective effective date.
- ♦ In the absence of evidence in the market that data subsequent to the effective date were consistent with and confirmed market expectations as of the effective date, the effective date should be used as the cut-off date.

STANDARD 4: REAL PROPERTY APPRAISAL CONSULTING, DEVELOPMENT

In developing a real property appraisal consulting assignment, an appraiser must identify the problem to be solved and the scope of work necessary to solve the problem, and correctly complete the research and analysis necessary to produce credible results.

Comment: Real property appraisal consulting assignments encompass a wide variety of problems to be solved. However, the purpose of an assignment under this Standard is always to develop, without advocacy, an analysis, recommendation, or opinion where at least one opinion of value is a component of the analysis leading to the assignment results. In some assignments, the opinion of value may originate from a source other than the consulting appraiser. In other assignments, the consulting appraiser may have to develop the opinion of value as a step in the analyses leading to the assignment results.

Statement 1* On Appraisal Standards No. 4 (Smt-4) Two dates are essential to an appraisal report. Standards Rules 2-2 and 8-2 require that each appraisal report specify the effective date of the appraisal and the date of the report. The date of the report indicates the perspective from which the appraiser is examining the market. The effective date of the appraisal establishes the context for the value opinion. Three categories of effective dates--retrospective, current, or prospective--may be used, according to the purpose and function of the appraisal assignment. When a prospective effective date is used, how can the appraisal be prepared and presented in a manner that is not misleading?

- ♦ Prospective value opinions, along with available factual data; are intended to reflect the current expectations and perceptions of market participants. They should be judged on the market support for the forecasts when made, not on whether specific items in the forecasts are realized.

- ♦ It is appropriate to study comparable projects for evidence of construction periods, development costs, income and expense levels, and absorption.
- ♦ Items such as rental concessions, commissions, tenant finish allowances, add-on factors, and expense pass-through must be studied to develop realistic income expectancy.
- ♦ All value conclusions should include reference to the time frame when the analysis was prepared to clearly delineate the market conditions and the point of reference from which the appraiser developed the prospective value opinion.
- ♦ It is essential to include a limiting condition citing the market conditions from which the prospective value opinion was made and indicating that the appraiser cannot be held responsible for unforeseeable events that alter market conditions prior to the effective date of the appraisal.

STANDARD 5: REAL PROPERTY APPRAISAL CONSULTING, REPORTING

In reporting the results of a real property appraisal consulting assignment, an appraiser must communicate each analysis, opinion, and conclusion in a manner that is not misleading.

Comment: This Standard addresses the content and level of information required in a report that communicates the results of a real property appraisal consulting assignment. An appraiser must explain logically and convincingly the reasoning that leads to his or her conclusions. The flow of information must be orderly and progressive. The level of information detail in the report must be sufficient to ensure the client and intended users of the report understand the appraisal consulting assignment results and are not misled. Standard 5 does not dictate the form, format, or style of real property appraisal consulting reports. The form, format, and style of a report are functions of the needs of users and appraisers. The substantive content of a report determines its compliance.

Statement 1* On Appraisal Standards No. 5 (Smt-5) Retired June 12, 2001 *Effective July 1, 2001

STANDARD 6: MASS APPRAISAL, DEVELOPMENT AND REPORTING

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.

Comment: Standard applies to all mass appraisals 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. Mass appraisals can be prepared with or without computer assistance. 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:

1. identifying properties to be appraised
2. defining market area of consistent behavior that applies to properties

3. identifying characteristics (supply and demand) that affect the creation of value in that market area
4. developing a model structure that reflects the relationship among the characteristics affecting value in the market area
5. calibrating the model structure to determine the contribution of the individual characteristics affecting value
6. applying the conclusions reflected in the model to the characteristics of the property or properties being appraised
7. reviewing the mass appraisal results

The JURISDICTIONAL EXCEPTION RULE may apply to several sections of this Standard because ad valorem tax administration is subject to various state, county, and municipal laws.

Standards Rule 6-1 (This Standards Rule contains binding requirements from which departure is not permitted.)

In developing a mass appraisal, an appraiser must:

- (a) be aware of, understand, and correctly employ those recognized methods and techniques necessary to produce a credible mass appraisal;

Comment: Mass appraisal provides for a systematic approach and uniform application of appraisal methods and techniques to obtain estimates of value that allow for statistical review and analysis of results.

This requirement recognizes that the principle of change continues to affect the manner in which appraisers perform mass appraisals. Changes and developments in the real property and personal property fields have a substantial impact on the appraisal profession. To keep abreast of these changes and developments, the appraisal profession is constantly reviewing and revising appraisal methods and techniques and devising new methods and techniques to meet new circumstances. For this reason it is not sufficient for appraisers to simply maintain the skills and the knowledge they possess when they become appraisers. Each appraiser must continuously improve his or her skills to remain proficient in mass appraisal.

- (b) not commit a substantial error of omission or commission that significantly affects a mass appraisal

Comment: In performing appraisal services, an appraiser must be certain that the gathering of factual information is conducted in a manner that is sufficiently diligent, given the scope of work as identified according to Standards Rule 6-2(c), to ensure that the data that would have a material or significant effect on the resulting opinions or conclusions are identified and, where necessary, analyzed. Further, an appraiser must use sufficient care in analyzing such data to avoid errors that would significantly affect his or her opinions and conclusions, and

- (c) not render a mass appraisal in a careless or negligent manner.

Comment: Perfection is impossible to attain, and competence. However, an appraiser must not render appraisal services in a careless or negligent manner. This rule requires an appraiser to use due diligence and due care.

Standards Rule 6-2 (This Standards Rule contains specific requirements from which departure is permitted. See the DEPARTURE RULE.)

In developing a mass appraisal, an appraiser must observe the following specific appraisal requirements:

- (a) identify the client and other intended users;
- (b) identify the purpose and intended use of the appraisal (see Statement* on Appraisal Standards No. 9 (SMT-9) on page 41)
- (c) identify the scope of work necessary to complete the assignment, including any special limiting conditions;

Comment: Constraints on the mass appraisal process must not limit the scope of work to such a degree that the mass appraisal results are not credible. The scope of work is acceptable when it is consistent with:

- ♦ the expectations of participants in the market for the same or similar appraisal services; and
- ♦ what the appraiser's peers' actions would be in performing the same or a similar assignment in compliance with USPAP.

An appraiser must have sound reasons in support of the scope-of-work decision and must be prepared to support the decision to exclude any information or procedure that would appear to be relevant to the client, an intended user, or the appraiser's peers in the same or a similar assignment.

An appraiser must not allow assignment conditions or other factors to limit the extent of research or analysis to such a degree that the resulting opinions and conclusions developed in an assignment are not credible in the context of the intended use of the appraisal.

- (d) identify any extraordinary assumptions and any hypothetical conditions necessary in the assignment;

Comment: An extraordinary assumption may be used in an assignment only if:

- ♦ it is required to properly develop credible opinions and conclusions;
- ♦ the appraiser has a reasonable basis for the extraordinary assumption;
- ♦ use of the extraordinary assumption results in a credible analysis; and
- ♦ the appraiser complies with the disclosure requirements set for hypothetical conditions.

- (e) identify the effective date of the appraisal;
- (f) define the value being developed; if the value opinion to be developed is market value, ascertain whether the value is to be the most probable price:
 - I. in terms of cash; or
 - II. in terms of financial arrangements equivalent to cash; or

III. in such other terms as may be precisely defined; and

IV. if the opinion of value is based on non-market financing or financing with unusual conditions or incentives, the terms of such financing must be clearly identified and the appraiser's opinion of their contributions to or negative influence on value must be developed by analysis of relevant market data;

Comment: For certain types of appraisal assignments in which a legal definition of market value has been established and takes precedence, the JURISDICTIONAL EXCEPTION RULE may apply.

(g) identify the characteristics of the properties that are relevant to the purpose and intended use of the mass appraisal, including:

- I. the group with which a property is identified according to similar market influence;
- II. the appropriate market area and time frame relative to the property being valued; and
- III. their location and physical, legal, and economic characteristics.

Comment: The properties must be identified in general terms, and each individual property in the universe must be identified, with the information on its identity stored or referenced in its property record.

(h) identify the characteristics of the market that are relevant to the purpose and intended use of the mass appraisal, including:

- I. location of the market area;
- II. physical, legal, and economic attributes;
- III. time frame of market activity; and
- IV. property interests reflected in the market.

(i) in appraising real property or personal property:

- I. identify and analyze whether an appraised physical segment contributes pro rata to the value of the whole; identify the appropriate market area and time frame relative to the property being valued;
- II. when the subject is real property, identify and consider any personal property, trade fixtures, or intangibles that are not real property but are included in the appraisal;
- III. when the subject is personal property, identify and consider any real property or intangibles that are not personal property but are included in the appraisal;
- IV. identify known easements, restrictions, encumbrances, leases, reservations, covenants, contracts, declarations, special assessments, ordinances, or other items of similar nature; and
- V. identify and analyze whether an appraised fractional interest, physical segment or partial holding contributes pro rata to the value of the whole;

Comment: The above requirements do not obligate the appraiser to value the whole when the subject of the appraisal is a fractional interest, physical segment, or a partial holding. However, if the value of the whole is not identified, the appraisal must clearly reflect that the value of the property being appraised cannot be used to develop the value opinion of the whole by mathematical extension.

- (j) in appraising real property, identify and analyze the effect on use and value of the following factors: existing land use regulations, reasonably probable modifications of such regulations, economic supply and demand, the physical adaptability of the real estate, neighborhood trends, and highest and best use of the real estate.

Comment: This requirement sets forth a list of factors that affect use and value. In considering neighborhood trends, an appraiser must avoid stereotyped or biased assumptions relating to race, age, color, gender, or national origin or an assumption that race, ethnic, or religious homogeneity is necessary to maximize value in a neighborhood. Further, an appraiser should avoid making an unsupported assumption or premise about neighborhood decline, effective age, and remaining life. In considering highest and best use, an appraiser must develop the concept to the extent required for a proper solution to the appraisal problem.

- (k) recognize that land is appraised as though vacant and available for development to its highest and best use and that the appraisal of improvements is based on their actual contribution to the site

Comment: This requirement may be modified to reflect the fact that, in various market situations, a site may have a contributory value that differs from the value as if vacant.

- (l) in appraising personal property: identify and analyze the effects on use and value of industry trends, value-in-use, and trade level of personal property. Where applicable, identify the effect of highest and best use by measuring and analyzing the current use and alternative uses to encompass what is profitable, legal, and physically possible, as relevant to the purpose and intended use of the appraisal. Personal property has several measurable marketplaces; therefore, the appraiser must define and analyze the appropriate market consistent with the purpose of the appraisal;

Comment: The appraiser must recognize that there are distinct levels of trade and each may generate its own data. For example, a property may have a different value at a wholesale level of trade, a retail level of trade, or under various auction conditions. Therefore, the appraiser must analyze the subject property within the correct market context.

- (m) analyze the relevant economic conditions at the time of the valuation, including market acceptability of the property and supply, demand, scarcity, or rarity.

Standards Rule 6-3 (This Standards Rule contains binding requirements from which departure is not permitted.)

In developing a mass appraisal, an appraiser must:

- (a) identify the appropriate procedures and market information required to perform the appraisal, including all physical, functional, and external market factors as they may affect the appraisal; Comment: Such efforts customarily include the development of Standardized data collection forms, procedures, and training materials that are used uniformly on the universe of properties under consideration.

- (b) employ recognized techniques for specifying property

Comment: The formal development of a model in a statement or equation is called model specification. Mass appraisers must develop mathematical models that, with reasonable accuracy, represent the relationship between property value and supply and demand factors, as represented by quantitative and qualitative property characteristics. The models may be specified using the cost, sales comparison, or income approaches to value. The specification format may be tabular, mathematical, linear, nonlinear, or any other structure suitable for representing the observable property characteristics. Appropriate approaches must be used in appraising a class of properties. The concept of recognized techniques applies to both real and personal property valuation models.

(c) employ recognized techniques for calibrating mass appraisal models.

Comment: Calibration refers to the process of analyzing sets of property and market data to determine the specific parameters of a model. The table entries in a cost manual are examples of calibrated parameters, as well as the coefficients in a linear or nonlinear model. Models must be calibrated using recognized techniques, including, but not limited to, multiple linear regression, nonlinear regression, and adaptive estimation.

Standards Rule 6-4 (This Standards Rule contains specific requirements from which departure is permitted. See DEPARTURE RULE.)

In developing a mass appraisal, an appraiser must observe the following specific requirements, when applicable:

(a) collect, verify, and analyze such data as are necessary and appropriate to develop, when applicable:

- I. the cost new of the improvements;
- II. accrued depreciation;
- III. value of the land by sales of comparable properties;
- IV. value of the property by sales of comparable properties;
- V. value by capitalization of income (i.e., rentals, expenses, interest rates, capitalization rates, and vacancy data;

Comment: This rule requires appraisers engaged in mass appraisal to take reasonable steps to ensure that the quantity and quality of the factual data that are collected are sufficient to produce credible appraisals. For example, in real property, where applicable and feasible, systems for routinely collecting and maintaining ownership, geographic, sales, income and expense, cost, and property characteristics data must be established. Geographic data must be contained in as complete a set of cadastral maps as possible, compiled according to current Standards of detail and accuracy. Sales data must be collected, confirmed, screened, adjusted, and filed according to current Standards of practice. The sales file must contain, for each sale, property characteristics data that are contemporaneous with the date of sale. Property characteristics data must be appropriate and relevant to the mass appraisal models being used. The property characteristics data file must contain data contemporaneous with the date of appraisal including historical data on sales, where appropriate and available. The data collection program must incorporate a quality control program, including checks and audits of the data to ensure current and consistent records.

(b) base estimates of capitalization rates and projections of future rental rates, expenses, interest rates, and vacancy rates on reasonable and appropriate evidence; Comment: This requirement calls for an appraiser, in developing income and expense statements

and cash flow 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.

- (c) identify and, as applicable, analyze terms and conditions of any available leases; and
- (d) identify the need for and extent of any physical inspection.

Standards Rule 6-5 (This Standards Rule contains specific requirements from which departure is permitted. See DEPARTURE RULE.)

In applying a calibrated mass appraisal model an appraiser must:

- (a) value improved parcels by recognized methods or techniques based on the cost approach, the sales comparison approach, and income approach, as applicable;
- (b) value sites by recognized methods or techniques; such techniques include but are not limited to the sales comparison approach, allocation method, abstraction method, capitalization of ground rent, and land residual technique;
- (c) when developing the value of a leased fee estate or a leasehold estate, analyze, as applicable, the effect on value, if any, of the terms and conditions of the lease;

Comment: In ad valorem taxation the appraiser may be required by rules or law to appraise the property as if in fee simple, as though unencumbered by existing leases. In such cases, market rent would be used in the appraisal, ignoring the effect of the individual, actual contract rents.

- (d) analyze the effect on value, if any, of the assemblage of the various parcels, divided interests, or component parts of a property; the value of the whole must not be developed by adding together the individual values of the various parcels, divided interests, or component parts;

Comment: When the value of the whole has been established and the appraiser seeks to value a part, the value of any such part must be tested by reference to appropriate market data and supported by an appropriate analysis of such data.

- (e) analyze the effect on value, if any, of anticipated public or private improvements, located on or off the site, to the extent that market actions reflect such anticipated improvements as of the effective appraisal date; appraise proposed improvements only after examining and having available for future examination:
 - I. plans, specifications, or other documentation sufficient to identify the scope and character of the proposed improvements;
 - II. evidence indicating the probable time of completion of the proposed improvements; and
 - III. reasonably clear and appropriate evidence supporting development costs, anticipated earnings, occupancy projections, and the anticipated competition at the time of completion.

Comment: Ordinarily, proposed improvements are not appraised for ad valorem tax purposes. Appraisers, however, are sometimes asked to provide opinions of value of proposed improvements so that developers can estimate future property tax burdens. Sometimes units in condominiums and planned unit developments are sold with an interest in unbuilt community property, the pro rata value of which, if any, must be considered in the analysis of sales data.

Development of a value opinion for a subject property with proposed improvements as of a current date involves the use of the hypothetical condition that the described improvements have been completed as of the date of value when, in fact, they have not.

The evidence required to be examined and maintained may include such items as contractors' estimates relating to cost and the time required to complete construction, market and feasibility studies; operating cost data, and the history of recently completed similar developments. The appraisal may require a complete feasibility analysis.

Standards Rule 6-6 (This Standards Rule contains binding requirements from which departure is not permitted.)

In reconciling a mass appraisal an appraiser must:

- (a) reconcile the quality and quantity of data available and analyzed within the approaches used and the applicability or suitability of the approaches used; and
- (b) employ recognized mass appraisal testing procedures and techniques to ensure that standards of accuracy are maintained.

Comment: It is implicit in mass appraisal that, even when properly specified and calibrated mass appraisal models are used, some individual value estimates will not meet Standards of reasonableness, consistency, and accuracy. However, appraisers engaged in mass appraisal have a professional responsibility to ensure that, on an overall basis, models produce value estimates that meet attainable Standards of accuracy. This responsibility requires appraisers to evaluate the performance of models, using techniques that may include but are not limited to, goodness-of-fit statistics, and model performance statistics such as appraisal-to-sale ratio studies, evaluation of hold-out samples, or analysis of residuals.

Standards Rule 6-7 (This Standards Rule contains binding requirements from which departure is not permitted.)

A written report of a mass appraisal must clearly communicate the elements, results, opinions, and value conclusions of the appraisal. Each written report of a mass appraisal must:

- (a) clearly and accurately set forth the appraisal in a manner that will not be misleading;
- (b) contain sufficient information to enable the intended users of the appraisal to understand the report

Comment: When any portion of the work involves significant mass appraisal assistance, the appraiser must describe the extent of that assistance. The signing appraiser must also state the name(s) of those providing the significant mass appraisal assistance in the certification, in accordance with SR 6-8. Documentation for a mass appraisal for ad valorem taxation may be in the form of (1) property records, (2) sales ratios and other statistical studies, (3)

appraisal manuals and documentation, (4) market studies, (5) model building documentation, (6) regulations, (7) statutes, and (8) other acceptable forms.

- (c) clearly and accurately disclose any extraordinary assumptions, hypothetical conditions, or limiting conditions that directly affect the appraisal and indicate its impact on value.

Comment: Examples of extraordinary assumptions or hypothetical conditions might include items such as the execution of a pending lease agreement, atypical financing, and a known but not yet quantified environmental issue, or completion of onsite or offsite improvements. In a written report the disclosure is required in conjunction with statements of each opinion or conclusion that is affected.

- (d) state the identity of the client and any intended users, by name and type;

- (e) state the purpose and intended use of the appraisal;

- (f) disclose any assumptions or limiting conditions that result in deviation from recognized methods and techniques or that affect analyses, opinions, and conclusions;

Comment: One limiting condition that must be disclosed is whether or not any physical inspection was made.

- (g) set forth the effective date of the appraisal and the date of the report;

Comment: In ad valorem taxation the effective date of the appraisal may be prescribed by law. If no effective date is prescribed by law, the effective date of the appraisal, if not stated, is presumed to be contemporaneous with the data and appraisal conclusions.

The effective date of the appraisal establishes the context for the value opinion, while the date of the report indicates whether the perspective of the appraiser on the market or property use conditions as of the effective date of the appraisal was prospective, current, or retrospective.

Reiteration of the date of the report and the effective date of the appraisal at various stages of the report in tandem is important for the clear understanding of the reader whenever market or property use conditions on the date of the report are different from such conditions on the effective date of the appraisal.

- (h) define the value, including the type and definition and its source;

- (i) identify the properties appraised including the property rights;

Comment: The report documents the sources for location, describing and listing the property. When applicable, include references to legal descriptions, addresses, parcel identifiers, photos, and building sketches. In mass appraisal this information is often included in property records. When the property rights to be appraised are specified in a statute or court ruling, the law must be referenced.

- (j) describe sufficient information to disclose to the client and any intended users of the appraisal the scope of work used to develop the appraisal;

Comment: This requirement is to ensure that the client and intended users whose expected reliance on an appraisal may be affected by the extent of the appraiser's investigation are

properly informed and are not misled as to the scope of work. The appraiser has the burden of proof to support the scope of work decision and the level of information included in a report. When any portion of the work involves significant mass appraisal assistance, the appraiser must describe the extent of that assistance. The signing appraiser must also state the name(s) of those providing the significant mass appraisal assistance in the certification, in accordance with SR 6-8.

- (k) describe and justify the model specification(s) considered, data requirements, and the model(s) chosen;

Comment: The user and affected parties must have confidence that the process and procedures used conform to accepted methods and result in credible value estimates. In the case of mass appraisal for ad valorem taxation, stability and accuracy are important to the credibility of value opinions. The summary report must include a discussion of the rationale for each model, the calibration techniques to be used, and the performance measures to be used.

- (l) describe the procedure for collecting, validating, and reporting data;

Comment: The summary report must describe the sources of data and the data collection and validation processes. Reference to detailed data collection manuals must be made, as appropriate, including where they may be found for inspection.

- (m) describe calibration methods considered and chosen, including the mathematical form of the final model(s); describe how value estimates were reviewed; and, if necessary, describe the availability of individual value estimates;

- (n) in the case of real property, discuss how highest and best use was determined;

Comment: The mass appraisal summary report must reference case law, statute, or public policy that describes highest and best-use requirements. When actual use is the requirement, the report must discuss how use-value opinions were developed. The appraiser's reasoning in support of the highest and best use opinion must be provided in the depth and detail required by its significance to the appraisal.

- (o) identify the appraisal performance tests used

- (p) provide any additional information necessary to explain the appraisal more fully, including departures permitted by the DEPARTURE RULE; and

- (q) include a signed certification in accordance with Standards Rule 6-8.

Standards Rule 6-8 (This Standards Rule contains binding requirements from which departure is not permitted.)

Each written mass appraisal report must contain a signed certification that is similar in content to the following form:

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) present or prospective interest in the property that is the subject of this report, and I have no (or the specified) 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 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. performance measures attained;
- ♦ 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) made a personal inspection of the properties that are the subject of this report. (If more than one person signs the report, this certification must clearly specify which individuals did and which individuals did not make a personal inspection of the appraised property.)
- ♦ no one provided significant mass appraisal assistance to the person signing this certification. (If there are exceptions, the name of each individual providing significant mass appraisal assistance must be stated.)

Comment: The above certification is not intended to disturb an elected or appointed assessor's work plans or oath of office. A signed certification is an integral part of the appraisal report. An appraiser, who signs any part of the mass appraisal report, including a letter of transmittal, must also sign this certification.

Any appraiser who signs a certification accepts full responsibility for all elements of the certification, for the assignment results, and for the contents of the appraisal report.

When a signing appraiser has relied on work done by 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 their work is credible.

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 their assistance be contained in the certification, but disclosure of their assistance is required in accordance with SR 6-7(b).

Statement 1* On Appraisal Standards No. 6 (Smt-6)

In USPAP, the Comment to Standards Rules 1-2 and 7-2 states: When the purpose of an assignment is to develop an opinion of market value, the appraiser must also develop an opinion of reasonable exposure time linked to the value opinion. The Comment to Standards Rules 2-2 and 8-2 states: Stating the definition of value requires the definition itself, an appropriate reference to the source of the definition, and any comments needed to clearly indicate to the reader how the definition is being applied. How is the opinion of reasonable exposure time developed? Is it presumed to occur prior to or starting from the effective date of the appraisal?

- ♦ The reasonable exposure time inherent in the market-value concept is always presumed to precede the effective date of the appraisal.
- ♦ Exposure time is different for various types of property and under various market conditions.
- ♦ The answer to the question "what is reasonable exposure time?" should always incorporate the answers to the question "for what kind of property at what value range?" rather than appear as a statement of an isolated time period.

STANDARD 7: PERSONAL PROPERTY APPRAISAL, DEVELOPMENT

In developing a personal property appraisal, an appraiser must identify the problem to be solved and the scope of work necessary to solve the problem and correctly complete research and analysis necessary to produce a credible appraisal.

Comment: This Standard is directed toward the substantive aspects of developing a competent appraisal of personal property. The requirements set forth in this Standard follow the appraisal development process in the order of topics addressed and can be used by appraisers and the users of appraisal services as a convenient checklist.

Statement 1* on Appraisal Standards No. 6 (Smt-7)

When is it appropriate to invoke the DEPARTURE RULE in performing real property and personal property appraisals, and what are the reporting requirements when the DEPARTURE RULE is utilized?

- ♦ Appraisers are trained and qualified to identify when a Limited Appraisal is appropriate. At the same time, appraisers must adhere to USPAP in the performance of all types of assignments.
- ♦ As long as the appraiser determines that the request for something less than or different from a Complete Appraisal would result in opinions and conclusions that are credible, then the DEPARTURE RULE can be invoked and the assignment can be accepted and performed.
- ♦ To make the initial determination that the requested Limited Appraisal is appropriate, the appraiser must at least know the level of understanding that the client has of the type of real estate and market conditions involved and the intended use of the appraisal.
- ♦ It is not always appropriate to expect a single point opinion of value when a Limited Appraisal is authorized and performed. The resulting opinion of value may be expressed as a single point value opinion, a range in value, or a value relationship (e.g., not less than, not more than) from a previous value opinion or established benchmark (e.g., assessed value, collateral value).
- ♦ Standards Rules 2-2 and 8-2 set forth three options for any written report (Self Contained Appraisal Report, Summary Appraisal Report, or Restricted Use Appraisal Report) and specify content items for each option.

- ♦ Although no appraisal conclusion is a guarantee, USPAP allows for different levels of reliability in real property and personal property appraisal assignments. The highest level of reliability is a Complete Appraisal performed without invoking the DEPARTURE RULE.
- ♦ Limited Appraisals performed under and resulting from invoking the DEPARTURE RULE have varying levels of reliability.
- ♦ Both appraisers and users of appraisal services must realize that as the degree of departure increases, the corresponding level of reliability of the Limited Appraisal decreases and the user of the appraisal service accepts a higher level of risk.
- ♦ The reliability of the results of a Complete Appraisal or a Limited Appraisal developed under STANDARD 1 or 7 is not affected by the type of appraisal report prepared under STANDARD 2 or 8, respectively. The extent of the appraisal process performed under STANDARD 1 or 7 is the basis for the reliability of the value conclusion.
- ♦ When reporting the result of a Limited Appraisal, the appraiser must disclose permitted departures in compliance with Standards Rule 2-2(a), (b), or (c) in a written real property appraisal report and Standards Rule 8-2(a), (b), or (c) in a written personal property appraisal report; this is so that the client and intended users of the report can understand the level of reliability of the Limited Appraisal.

STANDARD 8: PERSONAL PROPERTY APPRAISAL, REPORTING

In reporting the results of a personal property appraisal, an appraiser must communicate each analysis, opinion, and conclusion in a manner that is not misleading.

Comment: This Standard addresses the content and level of information required in a report that communicates the results of a personal property appraisal. STANDARD 8 does not dictate the form, format, or style of personal property appraisal reports, which are functions of the needs of users and appraisers. The substantive content of a report determines its compliance.

Statement 1* on Appraisal Standards No. 8 (Smt-8) Retired June 12, 2001

STANDARD 9: BUSINESS APPRAISAL, DEVELOPMENT

In developing a business or intangible asset appraisal, an appraiser must identify the problem to be solved and the scope of work necessary to solve the problem and correctly complete the research and analysis steps necessary to produce a credible appraisal.

Comment: This Standard is directed toward the substantive aspects of developing a competent business or intangible asset appraisal. The requirements of this Standard apply when the specific purpose of an assignment is to develop an appraisal of a business or intangible asset.

Statement 1* On Appraisal Standards No. 9 (Smt- 9) An appraiser must identify and consider the client's intended use of the appraiser's reported opinions and conclusions in order to properly define the problem under study and to understand his or her development and reporting responsibilities in an appraisal, appraisal review, or appraisal consulting assignment. An appraiser must state the client's intended use of the appraisal opinions and conclusions in an appraisal report. What kind of information must an appraiser identify and consider regarding the client's intended use of an appraisal, appraisal review, or appraisal consulting report in the course of accepting and completing an assignment, and how much of that information must an appraiser include in the report?

- ♦ An appraiser must identify the client and, to the extent practical, other intended users as part of the process of identifying the client's intended use of an appraisal, appraisal review, or appraisal consulting report, by communication with the client prior to accepting the assignment.
- ♦ An appraiser should use care when identifying the client to ensure a clear understanding and to avoid violations of the Confidentiality section of the ETHICS RULE.
- ♦ The appraiser's obligations to the client are established in the course of considering and accepting an assignment.
- ♦ The appraiser's obligation to intended users other than the client is limited to addressing their requirements as identified by the client at the time the appraiser accepts the assignment.
- ♦ Identification of the client's intended use of the report is one of the essential steps in defining the appraisal, appraisal review, or appraisal-consulting problem.
- ♦ An appraiser identifies the client's intended use of an appraisal, appraisal review, or appraisal consulting report by communicating with the client before accepting an assignment.
- ♦ Appraisers can avoid misleading parties in possession of a report by clearly identifying the client's intended use in the report and stating that other uses are not intended by the appraiser.
- ♦ Except when specifically requested not to do so as part of the agreement with the client, an appraiser must disclose the identity of the client and, to the extent practical, any other intended users of an appraisal report in the report to (1) ensure that all intended users recognize their relationship to the assignment and report and (2) ensure unintended users will not be misled by notifying them that they are neither the client nor an intended user.
- ♦ If the client's identity is omitted from an appraisal report, the appraiser must (1) document the identity of the client and the identities of any other intended users in the work file, and (2) provide a notice in the appraisal report that the identity of the client has been omitted in accordance with the client's request and that the report is intended for use only by the client and any other intended users.

STANDARD 10: BUSINESS APPRAISAL, REPORTING

In reporting the results of a business or intangible asset appraisal, an appraiser must communicate each analysis, opinion, and conclusion in a manner that is not misleading. Comment: This Standard addresses the content and level of information required in a report that communicates the results of a business or intangible asset appraisal developed under STANDARD 9. STANDARD 10 does not dictate the form, format, or style of business or intangible asset appraisal reports, which are functions of the needs of users and providers of appraisal services. The substantive content of a report determines its compliance.

- Statements on Appraisal Standards are authorized by the by-laws of The Appraisal Foundation and are specifically for the purposes of clarification, interpretation, explanation, or elaboration of the Uniform Standards of Professional Appraisal Practice (USPAP). Statements have the full weight of a Standards Rule and can be adopted by the Appraisal Standards Board only after exposure and comment.

CAD Plan for Periodic Reappraisal of Utility, Railroad and Pipeline Property

Subsections (a) and (b), Section 25.18, Tax Code:

- (a) CAD shall implement the plan for periodic reappraisal of property approved by the Board of Directors under Section 6.05 (i).
- (b) The plan provides for annual reappraisal of all utility, railroad and pipeline property appraised by the CAD. The CAD has a professional services contract with Pritchard & Abbott, Inc. to appraise these properties for the CAD.
 - (1) Identifying properties to be appraised: Utility, railroad and pipeline properties that are susceptible to inspection and identified by inspection. The appraiser may also refer to other documents, both public and also confidential to assist in identification of these properties.
 - (2) Identifying and updating relevant characteristics of each property in the appraisal records: The appraiser identifies and updates relevant characteristics through data collected as part of the inspection process and through later submissions by the property owner, sometimes including confidential rendition. Additional data are obtained through public sources, regulatory reports and through analysis of comparable properties.

- (3) Defining market areas in the district: Market areas for utility, railroad and pipeline property tend to be regional or national in scope. Financial analyst and investor services reports are used to help define market areas.
- (4) Developing an appraisal approach that reflects the relationship among property characteristics affecting value and determines the contribution of individual property characteristics: For all three types of property, the appraiser must first form an opinion of highest and best use. Among the three approaches to value (cost, income and market), pipeline value is calculated using a replacement/reproduction cost new less depreciation model [RCNLD]. In addition to the RCNLD indicator, a unit value model may also be used if appropriate data are available. Utility and railroad property are appraised in a manner similar to pipeline except that the RCNLD model is not used.
- (5) Comparison and Review: The appraiser considers results that best address the individual characteristics of the subject property when multiple models are used. Year-to-year property value changes for the subject property are examined using computer-assisted statistical review. Periodic reassignment of properties among appraisers or the review of appraisals by a more experienced appraiser also contributes to the review process. These types of property are also subject to review by the Property Tax Division of the Texas Comptroller's Office through their annual Property Value Study.

CAD Plan for Periodic Reappraisal of Industrial Property

Subsections (a) and (b), Section 25.18, Tax Code:

- (a) CAD shall implement the plan for periodic reappraisal of property approved by the Board of Directors under Section 6.05 (i)
- (b) The plan provides for annual reappraisal of selected industrial property appraised by the CAD. The CAD has a professional services contract with Pritchard & Abbott, Inc. to appraise these properties for the CAD.

- (1) Identifying properties to be appraised: Industrial properties are identified as part of the appraiser's physical inspection process each year and through submitted data by the property owner. The appraiser may also refer to legal documents, photography and other descriptive items.
- (2) Identifying and updating relevant characteristics of each property in the appraisal records: The appraiser identifies and updates relevant characteristics through the inspection process. Confidential rendition, assets lists and other confidential data also provide additional information. Subject property data is verified through previously existing records and through published reports.
- (3) Defining market areas in the district: Market areas for industrial properties tend to be regional, national and sometimes international. Published information such as prices, financial analysis and investor services reports are used to help define market area.
- (4) Developing an appraisal approach that reflects the relationship among property characteristics affecting value and determines the contribution of individual property characteristics: Among the three approaches to value (cost, income and market), industrial properties are most commonly appraised using replacement/reproduction cost new less depreciation models because of readily available cost information. If sufficient income or market data are available, those appraisal models may also be used.
- (5) Comparison and Review: The appraiser considers results that best address the individual characteristics of the subject property and that are based on the most reliable data when multiple models are used. Year-to-year property value changes for the subject property are examined using computer-assisted statistical review. Periodic reassignment of properties among appraisers or the review of appraisals by a more experienced appraiser also contributes to the review process.

CAD Plan for Periodic Reappraisal of Industrial Personal Property

Subsections (a) and (b), Section 25.18, Tax Code:

- (a) CAD shall implement the plan for periodic reappraisal of property approved by the Board of Directors under Section 6.05 (i).

- (b) The plan provides for annual reappraisal of all industrial personal property appraised by the CAD. The CAD has a professional services contract with Pritchard & Abbott, Inc. to appraise these properties for the CAD.
- (1) Identifying properties to be appraised: Through inspection the appraiser identifies personal property to be appraised. The appraiser may also refer to other documents, both public and also confidential, to assist in identification of these properties. Such documents might include but are not limited to the previous year's appraisal roll, vehicle listing services and private directories.
 - (2) Identifying and updating relevant characteristics of each property in the appraisal records: Data identifying and updating relevant characteristics of the subject properties are collected as part of the inspection process through directories and listing services as well as through later submissions by the property owner, sometimes including confidential rendition. These data are verified through previously existing records and through public reports.
 - (3) Defining market areas in the district: Market areas for industrial personal property are generally either regional or national in scope. Published price sources are used to help define market areas.
 - (4) Developing an appraisal approach that reflects the relationship among property characteristics affecting value and determines the contribution of individual property characteristics. Personal property is appraised using replacement/reproduction cost new less depreciation models. Income approach models are used when economic and/or subject property income is available, and a market data model is used when appropriate market sales information is available.
 - (5) Comparison and Review: The appraiser reconciles multiple models by considering the model that best addresses the individual characteristics of the subject property. Year-to-year property value changes for the subject property are examined using computer assisted statistical review. Periodic reassignment of properties among appraisers or the review of appraisals by a more experienced appraiser also contributes to the review process.

CAD Plan for Periodic Reappraisal of Oil and Gas Property

In accordance with Section 25.18 of the Tax Code:

- (a) CAD shall implement the plan for periodic reappraisal of property as approved by the Board of Directors under Section 6.05 (i).
- (b) The plan provides for annual reappraisal of all oil and gas property appraised by the CAD. The CAD has a professional services contract with Pritchard & Abbott, Inc. to appraise these properties for the CAD.

- (1) Identification of new property and its situs. As subsurface mineral properties lie within the earth, they cannot be physically identified by inspection like other real property. However, the inability to directly inspect does not appreciably affect the ability to identify and appraise these properties. To identify new properties, Pritchard & Abbott, Inc. obtains monthly oil and gas lease information from the Railroad Commission of Texas [RRC] to compare against oil and gas properties already identified. The situs of new properties is determined using plats and W-2/G-1 records from the RRC, as well as Pritchard & Abbott's in-house map resources.
- (2) Identifying and updating relevant characteristics of all oil and gas properties to be appraised. Relevant characteristics necessary to estimate value of remaining oil or gas reserves are production volume and pattern, product prices, expenses borne by the operator of the property, and the rate at which the anticipated future income should be discounted to incorporate future risk. Pritchard & Abbott, Inc. obtains information to update these characteristics annually from regulatory agencies such as the RRC, the Comptroller of Public Accounts, submissions from property owners and operators, as well as from published investment reports, licensed data services, service for fee organizations and through comparable properties, when available.
- (3) Defining market areas in the district and identifying property characteristics that affect property value in each market area. Oil and gas markets are regional, national and international. Therefore they respond to market forces beyond defined market boundaries as observed among more typical real properties.
- (4) Developing an appraisal approach that best reflects the relationship among property characteristics affecting value and best determines the contribution of individual property characteristics. Among the three approaches to value (cost, income and market), the income approach to value is most commonly used in the oil and gas industry. Through use of the discounted cash flow technique in particular, the appraiser is able to bring together relevant characteristics of production volume and pattern, product prices, operating expenses and discount rate to determine an estimate of appraised value of an oil or gas property.
- (5) Comparison and Review. Use of the income approach is the first step in determining an estimate of market value. After that the appraiser reviews the estimated market value compared to its previous certified value and also compares it to industry expected payouts and income indicators. The appraiser examines the model's value with its previous year's actual income, expecting value to typically vary within in a range of 2-5 times actual annual income, provided all appropriate income factors have been correctly identified. Finally, periodic reassignment of properties among appraisers and review of appraisals by a more experienced appraiser further expand the review process.