

STERLING COUNTY APPRAISAL DISTRICT
APPRAISAL MANUAL

Table of Contents

1. Introduction
2. General Procedures
 - Residential Valuation
 - Business Personal Property Valuation
 - Agricultural Valuation
 - Discovery
 - Field Protocols
 - Measuring Procedures
 - Appraisal (Valuation) Techniques
3. Jurisdiction, Road & Utility Codes
4. Exemption Codes
5. Category Codes
6. Depreciation Desc & Table
7. Building Codes & Descriptions
8. Percentage of Completion
9. Residential Property Schedules
10. Rural Building Descriptions and Schedules
11. Commercial Property Schedules
12. Manufactured Home Schedules
13. Land Codes, Descriptions, & Schedules
14. Agricultural Productivity Valuation & Guidelines
15. Procedures for Developing a Mass Appraisal
 - Overview & Sales Data Collection
 - Ratio Study Procedures & Application

16. Value Defense

Introduction

One of the oldest and most firmly established forms of taxation as well as a principal source of income for the counties, cities and school districts of the State is that of ad valorem or property taxation.

Chapter 6, Subsection 6.01 of the Texas Property Tax Code provides for the establishment of an appraisal district in each county and further states that the district is responsible for appraising property in the district for ad valorem tax purposes of each taxing unit that imposes ad valorem taxes on property in the district.

Ad valorem taxes are imposed upon specific properties in this State, at a rate of 100% of the market value of the said properties.

Section 1.04 (7) of the Texas Property Tax Code defines “market value” as the price at which a property would transfer for cash or its equivalent under prevailing market conditions if:

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

Taxable properties are set out by the Texas Property Code, and defined under Section 1.04 as follows:

- (1) “Property means any matter or thing capable of private ownership.
- (2) “Real property” means:
 - [a] land
 - [b] an improvement
 - [c] a mine or quarry
 - [d] a mineral in place
 - [e] standing timber
 - [f] an estate or interest, other than a mortgage or deed of trust creating a lien on property or an interest securing payment or performance of an obligation, in a property enumerated in Paragraph 2 [a] through 2[e].
- (3) “Improvement” means;
 - [a] a building, structure, fixture, or fence erected on or affixed to land
 - [b] a transportable structure that is designed to be occupied for residential or business purposes, whether or not it is affixed to land, if the owner of

the structure owns the land on which it is located, unless the structure is unoccupied and held for sale or normally located at a particular place only temporarily.

[c] for purposes of an entity created under Section 52, Article III, or Section 59, Article XVI, Texas Constitution, the

[i] subdivision of land by plat

[ii] installation of water, sewer, or drainage lines

[iii] paving of undeveloped land

- (4) "Personal property" means property that is not real property
- (5) "Tangible personal property" means personal property that can be seen, weighed, measured, felt, or otherwise perceived by the senses, but does not include a document or other perceptible object that constitutes evidence of a valuable interest, claim, or right and has negligible or no intrinsic value
- (6) "Intangible personal property" means a claim, interest, right, or other thing that has value but cannot be seen, felt, weighed, measured, or otherwise perceived by the senses, although its existence may be evidenced by a document (i.e.: a stock, bond, note or account receivable, franchise, license or permit, demand or time deposit, certificate of deposit, share account, share certificate account, share deposit account, insurance policy, annuity, pension, cause of action, contract, and goodwill).

This Appraisal Manual was developed with data gathered from Sterling County market research and appraisal publications. The purpose of this manual is to guide and assist Sterling County Appraisal District staff in appraising more efficiently and with greater overall consistency. It is important to bear in mind, when using this manual, that it is only a guide for reference.

Article VIII, Section 1 of the Texas Constitution requires that all property shall be assessed equally and uniformly. It is the belief of the Sterling County Appraisal District that this fundamental principle is the cornerstone and foundation upon which all properly administered tax rolls rest. Such mandatory requirements must be met in order to ensure the safety of the tax rolls of each taxing jurisdiction from lateral attack.

The primary purpose of this manual and its main objective is to provide uniform methods of appraisal to establish equitable market values of various properties throughout the district.

The instructions on the following pages are designed to serve as a guide for measuring property components, obtaining information on each parcel of property, and classifying each property. The information recorded on the field work sheet is extremely important. For this reason, the field appraiser must use extreme care in recording data accurately and completely.

Even though the appraisal employs a mass appraisal approach to value, each property must be approached as an individual parcel.

Conceptual Overview

The system outlined in this manual is based on the following market value equations:

1. Market Value of Residential Property =
Replacement Cost New X Total Percent Good + Depreciated Additive Values + Land Value
(Adjusted by Market Indicators as determined by Sales Data, as available)
2. Market Value of Commercial Property =
Replacement Cost New X Total Percent Good + Depreciated Additive Values + Land Value
(Adjusted by Market Indicators as determined by Sales Data, as available)
3. Market Value of Manufactured Housing =
Replacement Cost New X Total Percent Good + Depreciated Additive Values
4. Market Value of Commercial Personal Property =
Units x (Price/Unit of Inventory) + Units x (Price/Unit of FFE x Percent Good) + Additive Values
(Verified and adjusted by yearly Personal Property Renditions)
5. Market Value of Vacant Lots or Acreage =
Units x Price/Unit
(As determined by Market Transactions)
6. 1-d-1 Special Use Valuation (Ag Value) =
Units x Value per Acre of Agricultural Use
(As determined by Net Income per Acre/State Mandated Cap Rate)

General Procedures

Residential Valuation

In accordance with Sec: 11.01 of the Texas Property Tax Code, the Sterling County Appraisal District strives to discover, appraise, and assess all taxable property within the jurisdictions served by the Appraisal District.

Each parcel shall be appraised including all determinable improvements, factors, and conditions affecting the value of the property as a whole.

Improvements, as defined in Sec. 1.04 (3), includes any structures affixed to the land that is not readily, reasonably, and immediately portable. As such, the structure adds value to the property and would be typically included in any sale of the property as a whole. This application includes, but is not limited to:

1. Above ground swimming pools,
2. Patios,
3. And storage buildings or units, regardless of its permanent attachment, or lack thereof, to the land by means of metal tie-downs, or anchorage to a foundation.

Mobile or Manufactured Homes can be either Real Estate or Tangible Personal Property depending on the ownership of the land to which the structure is affixed, and/or the status of the Title or the Statement of Location as determined by the Texas Department of Housing and Community Affairs. In either case, Mobile or Manufactured Homes are taxable under Sec. 11.14 of the Texas Property Tax Code. With proper proof of ownership, Mobile or Manufactured Homes are eligible to apply for Residential Homestead Exemption.

Fences, residential, commercial, or agricultural, are considered appurtenances to the land and are included in the value of the site.

Square foot measurements of each type of building are based on the perimeter measurements of that building. Schedule values are originally based on locally modified construction cost, adjusted over time by market conditions determined by sales. Therefore, a buildings value per square foot applies not to useable area (space) but constructed area.

Using the building code descriptions and schedules, each structure is assigned an undepreciated value per square foot. Depreciation (physical, functional, and economic) factors are applied to each structure as is necessary.

Land values are determined from available information and applied using the appropriate basis (square footage, front footage, acreage, etc.). Land within Sterling County that is appraised as “flat value” is being reappraised as front foot method or the appropriate method.

Business Personal Property Valuation

Tangible personal property, used in the operation of a commercial business and not exempt by application or statute, is appraised for each tax year. Personal Property Renditions begin the yearly process for existing accounts. Being familiar with the local market and businesses, each rendition is evaluated for accuracy and reasonableness. A rendition that indicates significant variation is further investigated for accuracy. Office discussions, telephone calls and inspections are used to resolve the suspected variances. As the renditions are processed, the declared property is depreciated as necessary and the information recorded in the appraisal records.

Each year, some personal property accounts fail to be rendered. The same procedure for suspect renditions is followed. Office discussion, to see if someone has any information pertaining to the business, telephone calls and/or inspections are conducted to determine if the business is closed or to input a proper appraised value with the appropriate penalty.

Agricultural (1-d-1) Valuation

Land qualified for special use valuation (1-d-1) is appraised and two distinct values are recorded: market value, based on the analysis of current market groups, and agricultural value. Each appraisal begins with the 1-d-1 application. The specific agricultural use, and location, indicates the proper agricultural classification. Periodic inspections, through reappraisal, recheck, and diligent notice while on other projects, are used to verify current use or initiate further contact with the land owner as to current use.

If an inspection raises a question about a property's current status as 1-d-1 qualified, the Chief Appraiser may direct the Appraisal District staff to send a new 1-d-1 application to the land owner. This process will cull out many unnecessary Ag denials due to a misinterpretation of inspection details.

Landowners receive an Ag Use Questionnaire periodically. The CAD uses the gathered information in its analysis of Agricultural income and expenses used in the yearly calculation of Ag Values. As directed by the Property Tax Code, typical and reasonable income and expenses are evaluated to arrive at typical operating income for each agricultural classification. The current Capitalization Rate converts the calculated income per acre to a value per acre.

Discovery

Field inspections remain the primary method of discovery and verification of appraisal records. The Sterling CAD Reappraisal Plan calls for examination of all real property in

a 3-year cycle. During each check, all aspects of the property are inspected and any pertinent changes are noted. These changes may affect value, ownership, or identification and include, but are not limited to: measurements, additions, new construction, demolition, renovation, deterioration, rehabilitation, occupation, abandonment, etc. Inspections will also note changes, or perceived changes in ownership or property use, for further investigation by the CAD office. For example, new or different occupation may indicate a sale or a change in homestead status. For commercial property, real estate inspections provide opportunity for personal property verification and contact with the owner. Business names and preliminary personal property assessments are noted at each commercial property real estate inspection. This information is then compared to the Business Personal Property Renditions. When a new business is identified, extra care is taken to speak with the owner and explain Personal Property taxation and the rendition procedure.

As noted earlier, 1-d-1 status is verified with field inspections in both the reappraisal and rechecks. Properties identified as receiving the special valuation are confirmed and properties that could qualify, but currently do not and properties exhibiting a “change of use” are noted for further contact by the CAD office.

Whereas field inspections are the primary method of discovery, other indicators are also utilized. Official public records list deeds of trust, mechanic’s liens, and changes of ownership. Any of these documents can, and often do, indicate that current value needs to be verified. Building and demolition permits from the municipalities also require reinspection. When available, county septic and/or development permits are used.

Third party information is also useful to indicate changes in value, or the need to verify existing records. Insurance agents, fee appraisers, bank officials, interested neighbors, and “gossip” often provide information, although these sources are often suspect.

Sales tax listings, telephone number listings, and various advertising methods provide additional information for the discovery of business personal property.

Field Protocols for Real Estate Appraisals

The field appraiser is a very important person in the Ad Valorem tax system. Their appearance, attitude, and appraisal skills have a strong influence on the public's perception of the entire Ad Valorem tax system. Since the field appraiser makes contact where the taxpayer lives and works, and is often the only contact the taxpayer has with the tax system, it is important that appraisers and appraisal district staff conduct ourselves at all times in a way that will favorably impress the public. The following suggestions should be reviewed and followed:

1. We should dress appropriately for the type appraisal we are conducting. Our appearance should be neat, clean, and fitting the circumstances, whether we are working in town or on rural properties.
2. Everyone that we come in contact with should be treated with dignity and respect. We should be courteous and friendly at all times.
3. The field appraiser will often be on a taxpayer's property when no one else is present. We must be careful to be perfectly trustworthy, being careful to leave things as they were when we arrived, such as closed gates, etc., and never disturbing the property we are appraising. Our ethical conduct should always be above reproach.
4. It may be desirable to have a sign on your vehicle, plainly identifying it as a CAD vehicle.
5. We should always have identification with us and carry our TDLR registration card when we are appraising.
6. You should always be prepared to present a business card to occupants when they are present, or leave a card in an appropriate place when no one else is on the property and you need to make further contact with the occupant or the owner.
7. As you approach the property, note the external features, such as road topography and access, neighborhood, and conformity of improvements to the area. Also note roof type, roofing material, foundation, siding, story height, condition, maintenance level, and other details needed for your appraisal.
8. Go directly to the front door and knock or ring the doorbell. Do not aggravate the occupants by prolonged, excessive ringing or knocking. If a minor answers the door, ask to speak to an adult. If no adult is available, leave a business card and leave the premises immediately.

9. Greet the occupant and explain your purpose in a brief and courteous manner. For example, you might say “Good Morning. I am John Doe from the Sterling County Appraisal District. We are conducting a general reappraisal of the property in the county. I need to verify the measurements of the outside of this house and any out buildings.” Then proceed with questions needed to complete your work.
10. Care should be taken when asking any of the following questions, since the owner or occupant may consider much of the information personal and private. Never push an owner, taxpayer, or occupant to answer questions if the situation becomes uncomfortable. The first question you always ask is: “To make sure we have everything correct, do you mind if I ask you a few questions about this property?” If the response is favorable, you may proceed.
11. Sample questions you may need to ask the occupant:
 - What is the property owner’s name?
 - What is the property owner’s mailing address?
 - What is the physical address of this property?
 - If this is a recent purchase, do you mind sharing the price with us?
 - How old is the house/structure?
 - How many baths does the house have?
 - Does the house have central heat and air?
 - Do you have sewer services or a septic system?
 - Do you have public water, community water, or a water well?
 - If acreage: How is the land use divided (pasture, cropland, wildlife management, etc.)?
 - If acreage: Are there any other structures not located at this site?
12. After you have finished with your questions, thank them for their assistance and tell them, “We will only be here for a few more minutes, to check the measurements of your improvements.” It is best to avoid unnecessary gossip or discussion of taxes and values. If the owner or occupant inquires about property values or confidential information, the appraiser must firmly, but politely, state that the purpose of the visit is to gather specific information on that property, and that values will be determined at a later date once all specific property information is gathered. However, please take the time to answer simple procedural questions and general taxation inquiries. Establish a good rapport with the taxpayers.
13. Remember to use “please” and “thank you” as often as appropriate, and don’t hesitate in your conversation. The owner/occupant needs to be confident in your presentation and capabilities.

14. If the owner/occupant is uncooperative, rude, obnoxious, or asks you to leave, don't argue or lose your temper. Move to a safe distance and estimate the structure size, then draw a sketch on your worksheet/card. Be sure to note that the owner/occupant refused to let you measure and inspect the property. Initial and date the worksheet along with noting any and all property characteristics apparent. Anytime an appraiser documents a change of any kind on a property card that is based on estimation, that fact MUST be noted on the property record.
15. If you encounter locked gates, bad dogs, or "No Trespassing" signs, follow the same procedure explained above. If no improvements are visible but reasonably suspected from what you see (road traffic, power lines, etc.) leave a business card with a note to contact the appraisal district for access.
16. In addition to the primary task of collecting and verifying data and property characteristics, there will often be secondary projects for which data will need to be collected. These projects are designed to make subsequent appraisals and inspections easier and more efficient for each following year or appraisal cycle. Updating addresses, specific location notes, and public relations suggestions are continuing secondary field concerns. Field staff is directed to note and inform the CAD office of any concerns relating to CAD administration and resources, such as any corrections or modifications to the existing mapping system, areas of new development, or field perceptions of existing or potential market areas. Further, a major (strategic) goal may be incorporated to each reappraisal cycle and noted in the current Reappraisal Plan. As directed by the Chief Appraiser, this goal, developed with the purpose of increasing accuracy, efficiency, and ease of appraisal operations, is a primary focus of the CAD staff during the current reappraisal cycle. Please consult the Chief Appraiser or Appraisal supervisor for any additional requirements of the reappraisal inspections.
17. Questions to ask yourself before leaving:
 - Did I leave a business card?
 - Do I have readable sketches, notes, and classifications?
 - Did I take a photograph of the improvements?
 - Do the dimensions of the improvements close or balance?
 - Is all necessary information recorded on the card or worksheet, i.e. Classification, Condition, Effective Year, and any notes on each and every structure, attachment, and out building?
 - Is there anything I need to note and discuss with my supervisor?
 - Did I initial and date the worksheet?
 - Did I collect secondary or additional information as requested for this reappraisal's goals?

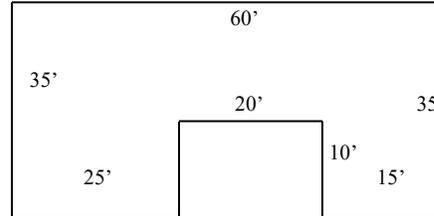
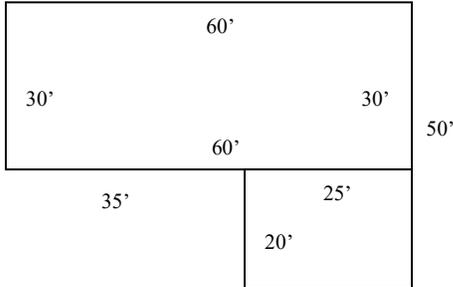
18. Mobile Homes: The same general procedures apply when appraising a mobile home site. All structures need to be measured and classed. However, additional information needs to be gathered to complete the process.
- Note Manufacturer and Model.
 - Note color scheme: Main color(s)/Trim color.
 - Note HUD Label number. If the HUD number is not available due to repainting or residing or age, be sure to note that fact.
 - Try to get ownership info at inspection. Mobile homes often have different ownership than the land on which they are located. Also, the purchaser may not have changed the title, in which case, the possessor may not be the official owner listed in the Department of Housing and Community Affairs records. All of these ownerships are important for the appraisal records.

Measuring Procedures

Basic Procedures:

1. Neatly draw the outline of the improvements on the worksheet or property card with the front of the improvement toward you, or as it faces the street.
2. If there are multiple buildings, draw the sketches on the card as you see them on the property, in relation to each other. If there are more buildings than will fit on one page of records, group the drawings with the primary building of the property on the first page and then progress logically so that in subsequent inspections another appraiser can easily identify any changes that may have occurred.
3. Try to draw the improvement in approximate proportions to the size of the structure. If the improvement is 30' wide and 60' long, draw the outline with its length double its width.
4. Measurements should be written horizontally opposite the line representing the measurement. Outside measurements should be written on the outside, and inside measurements on the inside. The placement of measurements on the drawing should clearly indicate the wall measured on the structure. When taking secondary measurements, such as overall length and/or width, that may include more than one class of structure (garages, carports, porches along with living area), these measurements should be distinct from measurements of the individually classed structures.
5. Be sure to draw the second story of a structure separately from the main body.
6. Be sure to note any changes in construction type (frame to brick, etc.).
7. Begin at one corner and measure completely around the building (note: If you are entering data into the computer, some computer systems require that you draw in a specific pattern. Check with your supervisor or CAD staff to see if this applies in your case.) Check the sum of overall measurements along the front of the improvement against the overall measurements of the rear. Then check the measurements along one side with that of the other side. The opposite wall measurements must balance for the drawing to be correct.

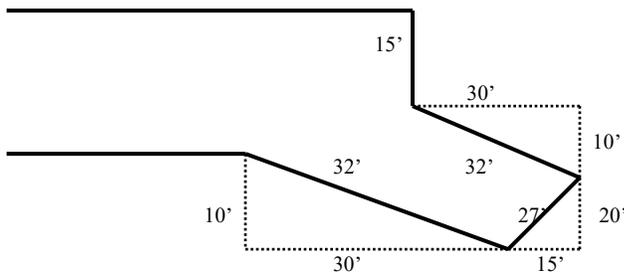
Examples:



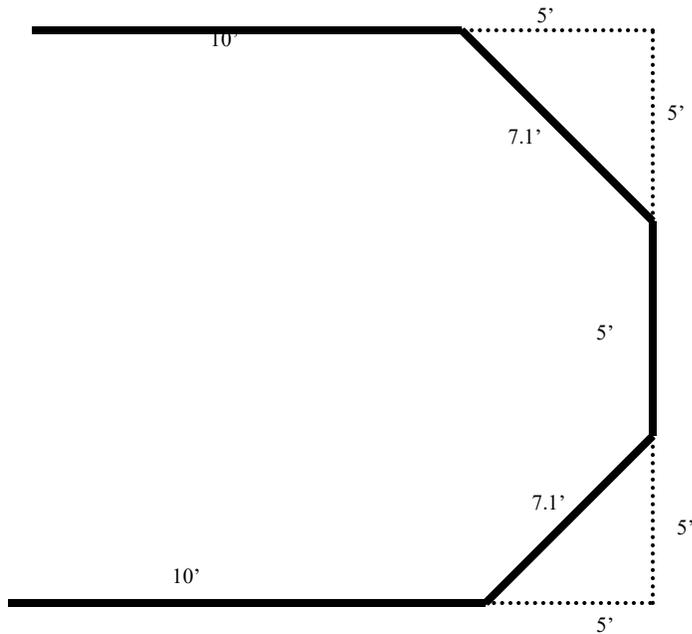
35' & 50' are outside measurements
All others are measurements of those individual parts.

$$\text{Front} = \text{Rear } 25+20+15=60$$

8. Angled Structures: When measuring angled structures, we need additional measurements to square the angled portions. While some computer drawing programs will draw angles for calculation of square footage, those angles are ultimately based on the “offsets” (up & over) from the base drawing. Measuring the angled wall itself may be helpful, but the other two measurements of the “triangle” are more important. This applies to odd shaped houses as well as bay windows. See the following examples.



In this example, the angled measurements of 32', 27', and 32', while informative, are not as important as the offset measurements indicated by the dotted lines. The offset measurements are the two “missing” measurements of a right triangle.



As in the previous example, the 7.1' measurements are not as important as the 5' "offset" measurements.

Appraisal (Valuation) Techniques

In any determination of value, data is sought in the local market on such factors as sales and offerings of similar properties and tracts of vacant land; current costs of reproduction of the improvements; rentals of similarly improved properties; and the current rate of return on investments and comparable properties. From this data, a value can be developed for both the land and the property as a whole. For the latter, several methods may be used: the cost approach, the income approach, and the market data approach.

Land Value

Land is valued as if vacant and available for the highest and best use. Similar land recently sold or offered for sale is analyzed and comparisons made for such factors as size, time, location, and physical characteristics. Land that is appraised within Sterling County as "flat value" is being reappraised as front foot method or the appropriate method that applies.

Cost Approach to Value

In this method of valuation, an estimate is made of current costs of reproduction (or replacement) of the improvements. This amount is adjusted to reflect depreciation resulting from physical deterioration and obsolescence and is then added to the value of the land.

Income Approach to Value

In this method of valuation, estimates are made of the gross income that might be expected from rentals and other sources, and of the expenses that might be incurred in operating the property. Resulting net income is then capitalized into an indication of value.

Market Data Approach to Value

In this method of valuation, similar properties recently sold in the current market are analyzed and compared with the property being appraised. Adjustments are made for differences in such factors as time of sale, location, type, age, and condition of the improvements, and prospective use.

The following value schedules are originally based on the cost to construct the typical building types found in Sterling County. Over time and as market sales indicate, these values are adjusted to give an undepreciated value per square foot. This value, applied to the square footage calculated for that building type and then appropriately depreciated, gives a value for the particular structure. Adding all contributory buildings, additives, and land values creates the total value for the subject property.

Sterling CAD attempts to include pertinent information from all three approaches to value. Each approach has inherent benefits and limitations. And in some cases, one particular approach will be more indicative of the value of a property than the other approaches.

Cost approach provides the basis for the value schedules that follow. Unique properties, or properties that are not typical to the general market for any reason, are often valued with the cost approach.

Market approach is used to adjust the value schedules yearly. When market transactions indicate a general market change to typical properties, the adjusted mass schedules are used to apply changes to the records as a whole.

Income approach is utilized mainly as a verification or second opinion of commercial property, or for certain properties where the income approach is required by statute. Often insufficient data is available to develop typical schedules based on income information, with the exception of 1-d-1 values. However, the income approach is often

the primary approach on some commercial property where market (sales) information is lacking and the cost approach cannot completely address the issues affecting the property within the current market conditions, and the necessary income information is readily available through governmental or industry publications. In cases where the income approach is utilized, accurate and typical income and expense data must be collected, and scrutinized by the appraiser to make sure the data accurately reflects the potential of the property. The income and expenses must be attributable to the ownership and operation of the property, not the business, for it to be considered in the calculation. Once expenses are deducted from income, and a Net Operating Income is determined, the property value is determined by dividing the Net Operating Income by an appropriate Capitalization Rate. Industry, financial, and market publications are researched yearly to determine the appropriate Capitalization Rate for that particular property for that year. The process is the same as that taught in the "Income Approach to Value" course and reference is made here to that course for further instructions and details. Finally, the value derived for the property based on an income approach necessarily includes any personal property associated with the operation of that property. Great care should be taken then to ensure that the included personal property is not double assessed.

As previously stated, this income approach to value is based on the value of anticipated income or profit an owner can derive from the property. Simply put, "What would a prudent investor pay to acquire a given income stream over a set period of time or as of a set date?" The same economic principles, namely supply and demand, substitution, competition, and anticipation, affecting the cost and market approaches, influence the income approach as well. However, since the income approach is based on the value of a cash flow over time, the primary focus of the procedure is the quantification, not just influence, of the principal of anticipation.

The formula for the income approach is expressed as $\text{Value} = \text{Income}/\text{Rate}$. Here value expresses the final result, or value of the property. Income is the Net Operating Income or Gross Income less allowed expenses. Rate represents a capitalization rate. Expressed

as a decimal, the Cap Rate converts an income to value by incorporating previously mentioned principles of economics, as gleaned from the market, for a typical and prudent investor.

The data collected for use of the income approach must be sufficient, complete, and reliable. The typical investor's intent and goals within the current market must be apparent. Sources used to gather this data include but are not limited to investment surveys, the Texas Comptroller's website, and the annual Texas Hotel/Motel Factbook. In cases where the income approach is utilized, accurate and typical income and expense data must be collected and scrutinized by the appraiser to make sure the data accurately reflects the potential of the property. The income and expenses must be attributable to the ownership and operation of the property, not the business, for it to be considered in the calculation. Once expenses are deducted from income, and a Net Operating Income (NOI) is determined the property value is calculated by dividing the NOI by an appropriate CAP Rate. Industry, financial, and market publications are researched

annually to determine appropriate CAP Rates for particular property types in that year. The CAP Rate used in local valuation is derived from this research and adjusted by the Appraisal Supervisor and/or Chief Appraiser for local conditions. The process is the same as that taught in “The Income Approach to Value” course and reference is made here to that course for further instructions and details. Finally, the value derived for the property based on the income approach necessarily includes personal property associated with the operation of that property. Care should be taken to ensure that the personal property is not double assessed.

DATA COLLECTION

The three main types of data necessary for use in the income approach are property income, expenses related to the operation of the real estate and economic/market information related to real estate investment in the local market. Interviews with property owners or managers are the primary collection tool. Property owners and managers consider their income and expense information confidential, and oftentimes refuse to provide the information. Further, property owners and managers may not fully comprehend the economic and market forces at work in their own financial decisions. Therefore, information collected to determine Capitalization Rates may be incomplete or misleading.

Income data – At each interview, record all income sources to the property. This includes both primary sources, the use of the building (rents, leases, etc.) and secondary sources such as parking, vending, and service income. As an adjustment to income, record vacancy and collection loss information.

Expense data – At each interview, record typical, prudent and necessary expenses for the operation of the property. Some owners and managers may not fully understand the difference between allowable and non-allowable expenses. In the appraisal of real estate, only expenses necessary and reasonable for the operation and maintenance of the Real Estate are allowable. Expenses attributable to the business or ownership are not allowable. Examples include:

Allowable Expenses

- Maintenance and Repair
- Property Insurance
- Janitorial
- Grounds Maintenance
- Legal Fees
- License Fees
- Salaries and Wages
- Office Expenses
- Supplies
- Utilities/Internet/Telephone
- Management
- Accounting Fees

- Advertising Fees
- Property Taxes
- Reserves for Replacement
- Non-Allowable Expenses
- Capital Expenditures
- Income Taxes of the business or owner
- Loan fees
- Mortgage Interest and Debt Service
- Depreciation
- Non-typical expenses (repairs due to accident or calamity)

Market (Capitalization Rate) Data – At each interview, record the owner’s expected or anticipated return. Take note of intensions and motivations, as they often will reflect on the financial decision made, and whether the decision was influenced by considerations beyond the scope of market value. These considerations may include historical value, consumptive value, philanthropic motivations, intangible value, or unrealistic expectations.

Industrial or Governmental Data – The secondary, and often more reliable and obtainable, data collection tool is reports from outside sources, including industrial publications and governmental reports. Lacking local cooperation from property owners, these reports are often the only source of the necessary data.

Development of Market Income and Expenses

The collection of sufficient, reliable, and complete income and expense data for typical properties allows the development of market incomes and expenses, in other words “market norms” for the property types. These “market norms” can then be applied to similar properties to calculate a typical value that will be both accurate and uniform across the market. Equality and uniformity among similar properties and within property classes is assured by using the market derived income and expenses. These market norms should be used, when and if calculated, unless using the actual income and expenses for that property are required by statute. Using each property where data was collected, determine the typical income per unit of measure (i.e. square foot, cubic foot, rental unit, etc.) for that property type. Then, determine the typical vacancy or collection loss adjustment for the property type. Next, calculate the allowable expenses for each property sampled. Market expenses are usually calculated as a percentage of the potential income and expressed as Expense Ratios. Comparing the various expense ratios within the property type allows the determination of the typical market expense. Variances within both the income and expense data in the sample should be addressed. No two properties are exactly the same. Any differences in amenities, location, or other factors affecting either the income or expenses of a particular property may necessitate the adjustment of the individual income or expenses prior to the determination of the market norm. These adjustments are applied at the discretion of the Chief Appraiser or the Appraisal Supervisor.

Subtracting the typical allowable expense ratio from the typically adjusted income per unit leaves the Net Operating Income (NOI) per unit. Capitalization of the typical NOI produces the typical value per unit for the property type. This typical value per unit can then be applied to similar properties. Adjustments for size, condition, or other economic factors can then be applied on a case by case basis. These adjustments are applied at the discretion of the Chief Appraiser or the Appraisal Supervisor.

In a mass appraisal system, these calculations are extremely important. Individual properties will display variances from typical, but it is essential that the CAD determine what is typical within the local market and use the typical “market norm” to reflect highest and best use of the property. Many of the variances can be explained by poor Management, bad financial decisions, or owner apathy which would have little effect on the market value of the real estate.

Development of a Capitalization Rate

The Capitalization Rate used to convert the typical NOI of a property must also be typical for the market. There are three methods of determining the typical Capitalization Rate for the Reagan CAD. The preferred method is the first one.

1. Market Determination – Using the sale price of a property and the calculated typical NOI of that property, the $\text{Income} = \text{Value} / \text{Rate}$ formula can be used to determine the Capitalization rate inherent in that transaction. Comparing multiple transactions, a typical Capitalization Rate becomes apparent.
2. Built-up (Summation) Method – Lacking the sales necessary to do the aforementioned calculation, a Capitalization Rate can be developed by determining the local, typical values of each of the four components of a Capitalization Rate, the Safe Rate, the Risk Rate, the Non-Liquidity Rate, and the Management Rate. This method adds up the four components of the overall rate individually. The Safe Rate is the rate that could be gained on a riskless investment in an alternative venture, such as Certificates of Deposits or guaranteed government bonds. The next portion of the overall rate is the Risk Rate. This portion is the additional return one must expect in order to reasonably make the investment. The third part of the calculation is the Non-Liquidity Rate. This rate corresponds to the return one would expect to offset the day-to-day consequence in having a substantial part of one’s assets tied up in a long-term investment and the costs (both in time and money) associated with liquidating the asset. The last part of the overall rate is the return one would reasonably expect in managing an investment of this size in this location. Each portion of the Capitalization Rate must be determined by in-depth research in the local market. Local financial consultants, bankers, real estate investors provide the most accurate data.

3. Financial and Investment Publications – Many financial and investment organizations publish their own determinations of typical Capitalization Rates.

Different property types will require different Capitalization Rates. Just as the different property types will have unique typical income and expense ratios, the Capitalization Rate for each property type will vary due to investor expectations due to risk, economic outlook, supply and demand, etc. The Capitalization Rate may also be affected within property types. Just as location, age, amenities, and other factors may affect both income and expenses, the same factors can also affect the Capitalization Rate for that particular property. The typical Capitalization Rate may need adjustments based on the particulars of the individual property being appraised. These adjustments are applied at the discretion of the Chief Appraiser or the Appraisal Supervisor.

The collection of data, including income and expenses, establishment of market income and expenses, and the development of property type Capitalization Rates must be done annually.

Discounted Rates

Discounted Cash Flow calculations offer an alternative method of income approach valuation. Rather than taking a “snap shot” of one year’s income and expenses for the subject property, this method takes into account an investor’s holding period and the estimated changes in the property’s cash flow over that holding period. The DCF approach requires more in-depth research into the local markets. The discount rate, used to convert future income to present value, is primarily based on prevailing interest rates. The determination of the discount rate to be used in a local evaluation is heavily influenced by information provided by local investors and industry publications. The Chief Appraiser or the appraisal supervisor makes the final determination for the discount rate to be used on any DCF valuation.

Property Types

Income, expense, and Capitalization information must be grouped by property type in order to appropriately apply the conclusions in a mass appraisal system. Once grouped, the information provides benchmarks to estimate the market value of specific properties, as well as providing standards for the adjustment of individual property’s data during collection. If the market and economy of Loving CAD changes and income property is introduced into the county a listing of the types of income producing properties will be generated at that time.

Income Approach Examples

Scenario 1: Valuation of a strip mall. Market data is insufficient to establish typical incomes, expenses, and there are no sales available to determine a market derived Capitalization Rate.

General Procedures:

1. On or around January 1st, information is gathered by checking prior year's tax roll. Additional information is obtained through newspapers, and radio/TV advertisements. This may discover new businesses as well as expansions. Also, the telephone directory yellow pages are scanned to discover new businesses and expansions, and the County is driven to look for new businesses. A list is maintained throughout the year of new business and businesses that have been closed. As mentioned earlier, inspections of commercial real estate offer a perfect opportunity to re-evaluate and verify business personal property, not to mention contact business operators and/or owners. New businesses are specifically targeted for personal visitation by appraisers, usually during other property rechecks. Time is set aside to compile the necessary information to set up the Personal Property account, to discuss the rendition process, and to make preliminary accounting of the Personal Property involved.
2. Rendition of Business Personal Property are due beginning January 1st of each year. Also, a list, from the Office of the Comptroller, of active sales tax permit holders is examined and forms mailed to each new business listed.
3. Compare renditions as received to the information obtain during the field inspection
4. As renditions are received the records are coded, and a 10% penalty is assessed to any business that did not render by April 15th unless an extension was received.

Personal Property such as Machinery, Equipment, Vehicles, and Furniture and Fixtures are normally valued using replacement cost less depreciation. Inventories are valued as of January 1st each year at the cost of goods on hand as of January 1st.

Sterling CAD strives to choose the most appropriate method of appraisal for each property, ever mindful to maintain fairness and equality with in the local general market.

Jurisdiction Codes

Jurisdictions are usually political sub-divisions of the State with the power to levy and collect property taxes. Jurisdictions are specifically delineated areas. Each property parcel is coded for each and all Jurisdictions that have authority over that parcel. Jurisdiction codes may also be used to define certain areas that may not levy taxes.

Sterling CAD uses the following Jurisdiction Codes.

Jur #	Jurisdiction Name	Comptroller's PTAD Taxing Unit ID #
CAD	Sterling County Appraisal District	
431	Sterling County	216-000-00
1C	City of Sterling City	216-101-03
1S	Sterling City ISD (for M&O)	216-901-02
1SIS	Sterling City ISD (for I&S)	216-901-02
WW	Sterling County Water Conservation District	216-201-23

These codes are assigned to each parcel in accordance to its location within the Sterling County Appraisal District and are found listed on both the parcel records in the computer system and on the property appraisal card. During inspection, the Jurisdiction Codes should be verified for each parcel.

Homestead Exemption Codes

As authorized by the Texas Property Tax Code, various homestead exemptions can be applied to qualifying properties as determined by the Chief Appraiser. As each property is inspected, note whether an exemption is in place on the property records, and try to verify with the occupancy of the property. Record on the property card and report to the Chief Appraiser any discrepancies in exemption status that may be discovered during a property inspection, including improperly granted homesteads, property that could qualify for homestead, and changes in the homeowner's status that could change the homestead qualified for.

Homestead CAP- As authorized by the Texas Property Tax Code^{23.23}, various homestead exemptions can be applied to qualifying properties as determined by the Chief Appraiser. As each property is inspected, note whether an exemption is in place on the property records, and try to verify with the occupancy of the property. Record on the property card and report to the Chief Appraiser any discrepancies in exemption status that may be discovered during a property inspection, including improperly granted homesteads, property that could qualify for homestead, and changes in the homeowner's status that could change the homestead qualified for. Article VIII, Sec.1 (i) of the Texas constitution allows the legislature to limit the annual percentage increase in the appraised value of a residence homestead to 10% under certain circumstances. This limitation is commonly referred to as the Homestead "Capped Value." The limited increase to value begins in the second year the property owner qualifies for a residential homestead exemption.

The appraised value of a qualified residential homestead will be the lesser of the:
 The market value or preceding year's appraised value: Plus 10% or
 The market value or the preceding year's appraised value: Plus 10% Plus the value of any new improvements that were added.

An improvement made to the property that would otherwise constitute a new improvement is not treated as such if it is a replacement of a structure that became unusable by a casualty such as wind, fire, or water damage.

The limited appraised value must be recomputed annually. The appraised value of the homestead increases annually or until the appraised value is equal to the market value.

For Example: Market Value = \$150,000

Appraised Value = \$90,000

The appraised value will increase by 10% annually until it reaches \$150,000.

If a “capped” property sells, the cap will expire on January 1st of the year following the sale of the property.

Sterling CAD’s appraisal software automatically calculates the homestead cap for qualifying properties: therefore, great care is taken during data entry. However, assemblage (inclusion in the legal description of land not included in the previous year) must be calculated by hand and the computer updated by staff when a New Homestead Form is processed.

HS Code	Description	C	Widow Homestead-SCH
B	Disability Homestead	0	Over 65 only
F	Disabled Widow	1	Disabled Vet/Homestead
H	General Homestead	2	Disabled Vet/Disabled
P	Percent Only	3	Disabled Vet/Over 65
S	Over 65 Homestead		
U	Widow Homestead		

Property Category Codes: Each property is described with Category Codes (formerly known as TEA Codes). These codes allow the CAD to separate properties individually and in groups for a multitude of purposes, not the least of which is reporting to the State Comptroller’s office. All properties will fall within one of the following categories.

Cat Code	Description	Cat Code	Description
A1	Single Family Residential	J8A	Separ. Htr Trtr, Gylcol Units
A2	Mobile Homes w/ Land (Designated as Real Estate)	J8B	Salt Water Disposal Wells- Util
B1	Multi-Family Residential (Apartments)	J9	Rolling Stock
B2	Multi-Family Residential (Duplex)	L1	Commercial Personal Property
C1	Vacant Lot Res-in Town Less than 5 ac	L1G	Comm. – Machinery & Equipment

C1I	C1 w/ non-Res Imp	L1H	Comm. – Leased Equipment
C2	Vacant Lot Commercial Less than 5 ac	L1K	Comm. – Heavy Constr. Equip.
C2I	C2 w/ non-Comm Imp	L1L	Comm. – Storage Tanks
C3	Vacant Lot Rural Less than 5 ac	L1M	Commercial Boats
C6	Sub-Divisions	L1P	Commercial Aircraft
D1	Qualified Ag Land	L2	Industrial Personal Property
D2	Non-Qualified Ag Land	L2A	Indus. – Vehicles, 1 ton & over
E1	Farm or Ranch Improvements	L2C	Indus. – Inventory & Materials
E11	HS on Ranchland over 5 ac	L2D	Indus. – Trailers
E12	HS on Timberland over 5 ac	L2F	Indus. – Drilling Rigs
E13	HS on Farmland over 5 ac	L2G	Indus. – Machinery & Equipment
E21	HS Mobile Home on Ranchland	L2H	Indus. – Leased Equipment
E22	HS Mobile Home on Timberland	L2J	Indus. – Furniture & Fixtures
E23	HS Mobile Home on Farmland	L2K	Indus. – Heavy Constr. Equip.
E3	Farm/Ranch Imp-Non-Qual Land	L2L	Indus. – Storage Tanks
F1	Commercial Real Property	L2M	Indus. – Vehicles to 1 ton
F1I	Commercial Improvement Only	L2N	Indus. – Underground Storage LPG
F2	Industrial Real Property	L2P	Indus. – Radio Towers
G1	Oil, Gas & Mineral Reserves	M1	Mobile Homes (Personal Property)
G3A	Min. – Non-Producing Oil & Gas	M2	Other Personal
J1	Real & Tang PP – Util & H@O	O1	Vacant Real Property/Inventory
J2	Gas Companies	O2	Real Prop w/ Imp/Inventory
J3	Electric Companies	XA5	Exempt Property
J4	Telephone Companies	XC5	Exempt – Vacant less than 5 ac
J5	Railroads	XD5	Exempt – Over 5 ac
J6	Pipelines	XD6	Exempt – Under Water
J7	Cable Companies	XF5	Exempt – Commercial Property
J8	Other	XJ7	Other Exempt
		XL5	Exempt Business Personal

Depreciation

Over time, all structures will lose value as compared to newly constructed buildings of comparable use. This loss in value is referred to as depreciation. The three main types of depreciation, physical, functional, and economic, must be considered and estimated (if appropriate) to each property inspected. Physical depreciation is the loss of value from natural aging and deterioration. Functional depreciation is value lost to a particular property due to market pressures in the form of buyer's tastes and preferences, and how they have changed over time. These effects are normally specific to the market area and include, but are not limited to: unusual floor plans, second floors, basements, and marked, specific deterioration of the structure or its components beyond the scope of overall physical depreciation. Economic depreciation refers to value lost to a specific property (or group of properties) due to effects outside the property itself. Most often caused by location, a property's value can be affected by where it is or what surrounds it.

- **Physical Depreciation** – Over time, a structure loses value due to the wasting away of materials, and this may be accelerated by deferring necessary maintenance. Expressed as a condition grade and a building age, all properties have their physical depreciation estimated at inspection. The combination of the condition grade and age gives a “percent good” reflecting the remaining value of the structure.
- **Functional Depreciation** – Oftentimes a property will exhibit characteristics that will affect its value, either positively or negatively, when compared to the typical format for that particular structure. These characteristics need to be addressed when estimating the market value. A few examples will be helpful.
 1. Second floors are less functional and often less desirable to buyers. Therefore, the living area on a second floor has less value per square foot than the corresponding living area on the first floor.
 2. Enclosed garages, porches, or additions often have less utility than the original living area due to the quality or completeness of the renovation.
 3. Room arrangements that are obviously poorly planned creating flow problems and inconveniences will affect the marketability of a property.
 4. Structures that have extra amenities, such as more than typical insulation, superior air conditioning systems, intricate water filtration systems, specialty fixtures, custom cabinetry, etc., can all increase the value of a structure when compared to typical.
- **Economic Depreciation** – If a property’s value is affected by conditions or situations outside the property itself, the result is economic depreciation. As with physical depreciation, the result can be either positive or negative. Although logical and often easy to imagine, economic depreciation is the most difficult adjustment to estimate because it is the most difficult to prove within the given market conditions. As such, adjustments for economic depreciation should be approached very carefully and only in situations where the estimated affect is obvious and significant. Examples are:
 1. Residential property located in areas that are not primarily residential in nature.
 2. Homes that are significantly larger (or smaller) than the typical home in a given neighborhood.
 3. Commercial property subject to excessive regulation, or to income-limiting contracts.

All forms of depreciation should be considered when inspecting a property. Functional and economic depreciation may not be appropriate for a given structure, but details affecting the decision to apply must be noted and justified during inspection.

In that the Sterling CAD estimates values from a statistical model (mass appraisal), the functional and economic factors discussed above are deviations from the market norm for a particular property. Consequently, both functional and economic adjustments can be either positive or negative depending on the specific attributes of the property inspected.

Physical Depreciation is estimated using the descriptions and table listed below to determine an appropriate Percent Good (value remaining or the inverse of Depreciation).

Superior maintenance or appearance (condition) and below-average maintenance or appearance (condition) affect the loss in value over time and must be noted in order to apply depreciation appropriately in comparison to like properties. Either the built year (if known) or an “effective” year must be determined at inspection. The “effective” year gives the relative age of the structure given its level of maintenance. The useful life of residential and commercial structures is approximately 50 years. Beyond that age, utility and function are limited such that the building is no longer enhancing the value of the property. The structure may have limited value and use, but could be feasibly replaced with a new structure. The life of a structure can be extended if maintenance issues are addressed as they arise. A house that has been properly maintained over its life, i.e. roof repairs/replacement, painting, foundation repairs, wiring/plumbing modernization, renovation, etc., can have an effective age of 20 years when its actual age may be in excess of 100 years. In other words, protecting or enhancing the investment in your property extends its life and extends its value over time. Effective age is determined by estimating the remaining life of a structure. For example, a residence could be in excess of 100 years of actual age. However, with timely repair, rehabilitation, or renovation, the structure may be comparable to a residence of only 10-20 years of age. Physical depreciation is based on the effective age, in conjunction with the observed condition of the structure.

CDU Rating Guide
Condition, Desirability, and Utility

CDU Rating	Code Used	Definition and Description
Excellent	EX	Building is in perfect condition-very attractive and highly desirable
Very Good	VG	Very slight evidence of deterioration-still attractive and quite desirable
Good	GD	Minor deterioration is visible-slightly less attractive and desirable, but very useful
Average	AV	Only normal wear and tear is apparent- average attractiveness and desirability
Fair	FA	Marked deterioration-but quite usable, rather unattractive and undesirable
Poor	PO	Definite deterioration is obvious-definitely undesirable but moderately useful
Very Poor	VP	Condition approaches unsound-extremely undesirable and barely usable
Unsound	US	Building is unusable, not repairable, and practically unfit for use

% Good Table

Residential, Class D, 55 Year Life

CDU Condition Rating

Effective Age	EX	VG	GD	AV	FA	PO	VP	US
1	1	1	0.99	0.94	0.89	0.84	0.74	0.64
2	1	1	0.98	0.93	0.88	0.83	0.73	0.63
3	1	1	0.98	0.93	0.88	0.83	0.73	0.63
4	1	1	0.97	0.92	0.87	0.82	0.72	0.62

5	1	0.99	0.96	0.91	0.86	0.81	0.71	0.61
6	1	0.98	0.95	0.9	0.85	0.8	0.7	0.6
7	1	0.97	0.94	0.89	0.84	0.79	0.69	0.59
8	0.99	0.96	0.93	0.88	0.83	0.78	0.68	0.58
9	0.98	0.95	0.92	0.87	0.82	0.77	0.67	0.57
10	0.97	0.94	0.91	0.86	0.81	0.76	0.66	0.56
11	0.96	0.93	0.9	0.85	0.8	0.75	0.65	0.55
12	0.95	0.92	0.89	0.84	0.79	0.74	0.64	0.54
13	0.94	0.91	0.88	0.83	0.78	0.73	0.63	0.53
14	0.93	0.9	0.87	0.82	0.77	0.72	0.62	0.52
15	0.91	0.88	0.85	0.8	0.75	0.7	0.6	0.5
16	0.9	0.87	0.84	0.79	0.74	0.69	0.59	0.49
17	0.89	0.86	0.83	0.78	0.73	0.68	0.58	0.48
18	0.87	0.84	0.81	0.76	0.71	0.66	0.56	0.46
19	0.86	0.83	0.8	0.75	0.7	0.65	0.55	0.45
20	0.85	0.82	0.79	0.74	0.69	0.64	0.54	0.44
21	0.84	0.81	0.78	0.73	0.68	0.63	0.53	0.43
22	0.83	0.8	0.77	0.72	0.67	0.62	0.52	0.42
23	0.82	0.79	0.76	0.71	0.66	0.61	0.51	0.41
24	0.8	0.77	0.74	0.69	0.64	0.59	0.49	0.39
25	0.79	0.76	0.73	0.68	0.63	0.58	0.48	0.38
26	0.77	0.74	0.71	0.66	0.61	0.56	0.46	0.36
27	0.75	0.72	0.69	0.64	0.59	0.54	0.44	0.34
28	0.73	0.7	0.67	0.62	0.57	0.52	0.42	0.32
29	0.72	0.69	0.66	0.61	0.56	0.51	0.41	0.31
30	0.7	0.67	0.64	0.59	0.54	0.49	0.39	0.29
31	0.68	0.65	0.62	0.57	0.52	0.47	0.37	0.27
32	0.66	0.63	0.6	0.55	0.5	0.45	0.35	0.25
33	0.64	0.61	0.58	0.53	0.48	0.43	0.33	0.23
34	0.62	0.59	0.56	0.51	0.46	0.41	0.31	0.21
35	0.6	0.57	0.54	0.49	0.44	0.39	0.29	0.19
36	0.59	0.56	0.53	0.48	0.43	0.38	0.28	0.18
37	0.57	0.54	0.51	0.46	0.41	0.36	0.26	0.16
38	0.55	0.52	0.49	0.44	0.39	0.34	0.24	0.14
39	0.53	0.5	0.47	0.42	0.37	0.32	0.22	0.12
40	0.51	0.48	0.45	0.4	0.35	0.3	0.2	0.1
41	0.49	0.46	0.43	0.38	0.33	0.28	0.18	0.1
42	0.47	0.44	0.41	0.36	0.31	0.26	0.16	0.1
43	0.45	0.42	0.39	0.34	0.29	0.24	0.14	0.1
44	0.44	0.41	0.38	0.33	0.28	0.23	0.13	0.1
45	0.42	0.39	0.36	0.31	0.26	0.21	0.11	0.1
46	0.41	0.38	0.35	0.3	0.25	0.2	0.1	0.1
47	0.39	0.36	0.33	0.28	0.23	0.18	0.1	0.1

48	0.38	0.35	0.32	0.27	0.22	0.17	0.1	0.1
49	0.36	0.33	0.3	0.25	0.2	0.15	0.1	0.1
50	0.35	0.32	0.29	0.24	0.19	0.14	0.1	0.1
51	0.33	0.3	0.27	0.22	0.17	0.12	0.1	0.1
52	0.32	0.29	0.26	0.21	0.16	0.11	0.1	0.1
53	0.3	0.27	0.24	0.19	0.14	0.09	0.1	0.1
54	0.31	0.28	0.25	0.2	0.15	0.1	0.1	0.1
55	0.29	0.26	0.23	0.18	0.13	0.1	0.1	0.1
56	0.28	0.25	0.22	0.17	0.12	0.1	0.1	0.1
57	0.28	0.25	0.22	0.17	0.12	0.1	0.1	0.1
58	0.27	0.24	0.21	0.16	0.11	0.1	0.1	0.1
59	0.27	0.24	0.21	0.16	0.11	0.1	0.1	0.1
60	0.26	0.23	0.2	0.15	0.1	0.1	0.1	0.1

Personal Property Depreciation

The following table illustrates the percent good factors applied to discovered and rendered Business Personal Property. Sterling County Appraisal District lacks sufficient information to develop typical schedules for business types. Owner Renditions and/or appraiser inspections determine Personal Property valuation. Individual assets are depreciated from original cost by the actual or effective age.

Personal Property Depreciation Guide
Furniture, Fixtures, Machinery, and Equipment

Economic Life
Percent Good Table

Effective Age	Index	2		Comp<\$100K		Comp>\$100K		Economic Life					
						5	8	10	12	15	20	30	
1	1.000		40	68	75	85	90	91	93	95	96	97	
2	1.016		20	44	55	70	80	82	86	90	92	94	
3	1.032		10	28	40	55	70	73	79	85	88	91	
4	1.069			10	25	40	60	64	72	80	84	88	
5	1.099			5	15	25	50	55	65	75	80	85	
6	1.120			2	10	10	40	46	58	70	76	83	
7	1.134				5		30	37	51	65	72	81	
8	1.157				2		20	28	44	60	68	79	
9	1.187						10	19	37	55	64	77	
10	1.252							10	30	50	60	75	
11	1.260								23	45	56	73	
12									16	40	52	71	
13									10	35	48	69	
14										30	44	67	
15										25	40	65	
16										20	36	63	
17											32	61	
18											28	59	
19											27	57	
20											26	55	
21											25	53	
22												51	
23												49	
24												47	
25												45	
26												43	
27												41	
28												39	
29												37	
30												35	
31												33	

Economic Life for Example Property Types

- 2 - Video Tapes, DVD's, Players
- 5 - Electronic Equipment, Security Equipment, Electric Gas Pumps
- 8 - Office Equipment, Fast-food Restaurant FFE, Convenience Store FFE, Most Retail FFE
- 10 - Mechanical Gas Equip, Carwash Equip, Some Retail FFE
- 12 - Forklifts, Warehouse Equip, Construction Equip
- 15 - Industrial Equip, Excavation Equip, Heavy Equip
- 20 - Tanks, Piping
- 30 - Sign Poles, Billboards, Vaults, Safes

Building Codes & Descriptions

Residential

Building Type	Description
CPT	Carport
DECK	Open topped construction
GAR ATT	Attached Garage or Storage/Utility Rooms
GAR DET	Detached Garage or Storage/Utility Rooms
MH SPACE	Site improvements for Mobile Home
MH	Mobile or Manufactured Housing
PCH	Porch or Patio
RES	Residential Structure
SCN PCH	Screen Porch
SLAB	Open Concrete area
STG	Storage building – move in, kit, or simple construction
SWIM POOL	Swimming Pool

These Type codes are then followed by a classification code indicating the materials and quality of the construction. The codes are as follows, in ascending quality order: BR2/2+, BR 3/3+, BR4/4+, BR5/5+, BR6/6+ for Brick or Masonry Construction; FR1/1+, FR2/2+, FR3/3+, FR4/4+, FR5/5+, FR6/6+, for Frame Construction.

As with Residential property, Commercial Type codes are followed by a classification code indicating the form of construction and its quality.

Percentage of Completion

As the target date of appraisals is January 1st, and some properties may be under construction, use the following table to estimate existing value.

LOT	0.0	
PRELIMINARY PLANS PERMITS ETC.	1.0	
FOOTINGS & FOUNDATION	2.0	
PLUMBING ROUGH-IN	4.0	
SLAB	6.0	
EXTERIOR WALL FRAMING	6.0	
INTERIOR WALL FRAMING	4.0	
CEILING JOISTS	2.5	
WALL SHEATHING	1.5	
ROOF FRAMING	2.5	
ROOF SHEATHING	3.0	
PLUMBING STACK OUT	2.8	
FINISH ROOFING	4.5	
WINDOWS SET	2.5	
ELECTRIC ROUGH-IN	2.5	
EXTERIOR DOORS & GARAGE DOORS	1.7	
INSULATION-WALLS & CEILING	1.0	
BRICK & WOOD TRIM	10.0	
SHEETROCK TAPE & TEXTURE	4.5	
TRIM PANELING & CABINETS	6.0	
FIREPLACE	1.0	
INTERIOR DOORS	2.5	
SHOWER STALL & CERAMIC TILE	1.5	
HEATING & PLUMBING FIXTURES	5.4	
CABINET TOPS	1.0	
EXTERIOR PAINTING	1.0	
INTERIOR PAINTING & DECORATING	3.5	
ENTRY FLOOR COVER	0.5	
CARPET & OTHER FINISH FLOORS	5.0	
LIGHT FIXTURES	1.2	
KITCHEN APPLIANCES	1.8	
AIR CONDITIONING	2.8	
PORCHES PATIOS WALKS & DRIVE	2.0	
FENCE	1.8	
EXTRAS & COMPLETION	1.0	
PERCENTAGE OF COMPLETION	100.0%	

RESIDENTIAL CLASSES AND DESCRIPTIONS

BR6



Identification Characteristics

This house has been erected with the best possible materials throughout especially designed by an architect to meet the builder's or owner's requirements. It will contain many amenities or special features and the components will be of the best quality. The house will have been built under architectural supervision by a good general contractor. Large size or more expensive, special items are characteristic of this class.

Standard Specifications

Construction	Best available
Foundation	Concrete
Exterior	Brick or stone veneer
Interior	Meticulous attention to details
Roofing	Wood shake shingles, slate, clay tile, copper, or heavy gauge metal
Flooring	Expensive carpet, Terrazzo, stained and etched concrete
Electrical	Top-quality standard fixtures
Plumbing	Quality fixtures, 1 bath per 2 bedrooms, or more
Heating/Cooling	Central, may have multiple compressors, heat pump
Typical Features	Two to four car garage, built-ins, solid wood panel doors, unique roof design, one to two fireplaces.

Designate as Class **BR6+** those residences of this type that exhibit slightly more overall quality, sturdier roof structure (i.e. hip), or irregular shape.

BR5



Identification Characteristics

This type of residence has been especially designed by an architect to meet the builder's requirements and will contain several special features. It is not a luxury house but the components used are of the best quality. The house will have been built under strict supervision by a good general contractor using the most skilled labor available.

Standard Specifications

Construction	Select Quality
Foundation	Concrete
Exterior	Brick or Stone veneer
Interior	Excellent Finish, some ornamentation
Roofing	Heavy cedar shakes, tile, #1 cedar shingles, or good quality composition shingle, heavy gauge metal
Flooring	High quality carpet, tile, stained and etched concrete
Electrical	Good quality fixtures
Plumbing	1 baths per 2 bedrooms
Heating/Cooling	Central, may have two or more compressors
Typical Features	Two or three car garage, one or more fireplaces, interior brick or stone work, side or rear entry garage, spacious rooms, quality built-ins, special features.

Designate as Class **BR5+** those residences of this type that exhibit slightly more overall quality, sturdier roof structure (i.e. hip), or irregular shape

BR4



Identification Characteristics

The better homes built by a good contractor are in this classification. The grade of construction shows good materials and workmanship and room sizes are generous and well finished. Interior and exterior finish will have special features and details and the normal compliment of built-in features will also be found. Houses built prior to 1950 may have less than 1,600 square feet or only one bath but, because of better quality materials and workmanship, they can still meet this class category.

Standard Specifications

Construction	Good quality
Foundation	Concrete slab or pier and beam
Exterior	Brick (or stone) veneer over frame or masonry, some trim
Interior	Better finished
Roofing	Good grade composition or cedar shingles, metal
Flooring	Good carpet, tile, stained concrete
Electrical	Adequate for good building codes
Plumbing	Adequate for good building codes, with laundry facilities
Heating/Cooling	Central Heat and air
Typical Features	Two-car attached garage, fireplace and interior brickwork, average built-in appliances. The interior and exterior may have one or two special features such as: entry foyer, front porch and covered rear porch.

Designate as Class **BR4+** those residences of this type that exhibit slightly more overall quality, sturdier roof structure (i.e. hip), or irregular shape.

BR3



Identification Characteristics

This class of residence is usually in newer, yet affordable subdivisions. Although many are built from stock plans, their visual appeal is attractive and individual. These homes are generally the better FHA homes equipped with built-in features. Houses built prior to 1950 may have less than 1,200 or only one bath but, because of good quality materials and workmanship, they can still meet this class category.

Standard Specifications

Construction	Standard FHA
Foundation	Concrete slab, or pier and beam in older homes
Exterior	Brick (or stone) veneer, may have little wood trim
Interior	Standard finish
Roofing	Good grade composition or built-up tar and gravel, some may have wood shingles, metal
Flooring	Carpet, tile, hardwood
Electrical	Average fixtures
Plumbing	Adequate standard with laundry facilities
Heating/Cooling	Central heat and air
Typical Features	Two-car garage. May have average quality built-ins such as: range/oven, disposal, fireplace, etc.

Designate as Class **BR3+** those residences of this type that exhibit slightly more overall quality, sturdier roof structure (i.e. hip), or irregular shape.

BR2



Identification Characteristics

The brick project homes built for HUD and FMHA programs by speculative builders for resale are generally in this class and these houses are normally built from stock plans. Materials, workmanship and structural design are sufficient to meet minimum to average requirements of local building codes.

Standard Specifications

Construction	Minimum FHA
Foundation	Concrete
Exterior	Brick veneer
Interior	Average finish
Roofing	Medium pitch with medium grade composition shingles or built-up tar and gravel, metal
Flooring	Cheap hardwood, tile, low grade carpet
Electrical	Minimum outlets, builder's fixtures
Plumbing	Minimum standard, cheap fixtures
Heating/Cooling	Panel heat or central heat, with window A/C, later conversion to central air
Typical Features	One-car garage, recent construction has trended toward two-car garage with reduced living area, basic rectangular shape with minimum built-ins.

Designate as Class **BR2+** those residences of this type that exhibit slightly more overall quality, sturdier roof structure (i.e. hip), or irregular shape.

FR6



Identification Characteristics

The better homes of frame or stucco construction, which are often custom built, are in this category. They have been built from good architectural plans by a good contractor with very good materials and workmanship evident. This type of residence is may be in the better subdivisions where areas are controlled by zoning laws and deed restrictions.

Standard Specifications

Construction	Good
Foundation	Slab foundation or pier and beam in older homes
Exterior	Best available grade exterior wood, stucco, EIFS, or hardy board siding, wall insulation, or a good cedar siding painted, may have brick trim
Interior	Finished
Roofing	Good grade composition, metal or cedar shingle cover, with large boxed eaves
Flooring	Good quality hardwood, carpet, tile
Electrical	More than ample, top quality standard fixtures
Plumbing	1 bath per 2 bedrooms typical with laundry facilities
Heating/Cooling	Central heat and air, heat pump
Typical Features	Two-car garage, fireplace, ample closets and cabinets. May have brick trim.

Designate as Class **FR6+** those residences of this type that exhibit slightly more overall quality, sturdier roof structure (i.e. hip), or irregular shape.

FR5



Identification Characteristics

The better frame or stucco homes that are termed “individual built” are in this class. The buildings have been constructed from good plans. The grade of construction shows good or better quality in both material and workmanship. These buildings can generally be found in the better type subdivisions which may be controlled by building restrictions.

Standard Specifications

Construction	FHA or better
Foundation	Pier and beam in older homes, concrete slab in newer homes
Exterior	Wood frame or good grade painted siding, good cedar shakes, or hardy board, EIFS
Interior	Finished, some ornamentation
Roofing	Medium pitch, good grade composition shingles, metal or built-up tar and gravel
Flooring	Hardwood, tile, carpet
Electrical	More than ample
Plumbing	Usually 1 bath per 2 bedrooms, with laundry facilities
Heating/Cooling	Central Heat and air
Typical Features	Adequate built-ins, two car garages. May have offset or reset entry way and covered rear porch.

Designate as Class **FR5+** those residences of this type that exhibit slightly more overall quality, sturdier roof structure (i.e. hip), or irregular shape.

FR4



Identification Characteristics

In this class is the typical move-up type of development. Material and workmanship exceed the average or minimum requirements of city building codes.

Standard Specifications

Construction	Exceeds minimum FHA/VA. Higher quality mass produced or lower quality custom construction.
Foundation	Concrete slab or pier and beam foundation
Exterior	Average stucco or siding, EIFS, some trim
Interior	Finished, no or very little ornamentation
Roofing	Medium pitch, good composition, metal or tar and gravel
Flooring	Hardwood, carpet, vinyl tile
Electrical	Builder's fixtures, adequate outlets
Plumbing	Adequate per good building codes
Heating	Forced air or central units
Typical features	Front and rear porch, one-car garage or carport, usually has one offset in front and a straight back.

Designate as Class **FR4+** those residences of this type that exhibit slightly more overall quality, sturdier roof structure (i.e. hip), or irregular shape.

FR3



Identification Characteristics

In this class is the typical mass-produced house built to minimum FMHA, FHA, and VA standards. Material and workmanship are sufficient to meet the average or minimum requirements of city building codes. Designs are simple, sash and doors are few and low cost, roof lines are plain. Minimum ornamentation such as shutters, brick skirts, or window boxes are not uncommon.

Standard Specifications

Construction	Minimum FHA/VA
Foundation	Concrete slab or pier and beam foundation
Exterior	Painted wood frame, wood sheathing, low cast cedar shakes, stucco, or low-grade siding
Interior	Finished, no ornamentation
Roofing	Medium pitch, light composition, metal or tar and gravel
Flooring	Hardwood, carpet, vinyl tile
Electrical	Builder's fixtures, adequate outlets
Plumbing	One bath, shower over tub usual
Heating	Gas outlets, panel heating or floor furnace, later conversion to central unit
Typical features	Front and rear porch, one-car garage or carport, usually has one offset in front and a straight back.

Designate as Class **FR3+** those residences of this type that exhibit slightly more overall quality, sturdier roof structure (i.e. hip), or irregular shape.

FR2



Identification Characteristics

Houses of this class are built to barest minimum building code requirements; yet fail to meet minimum FMHA, FHA, or VA standards. Class is usually evident by poor workmanship with the cheapest grade of material used throughout.

Standard Specifications

Construction	Economy
Foundation	Concrete block, piers, or wood sills on concrete
Exterior	Low-grade lumber or siding and batten cover, stucco, or vinyl, few windows
Interior	Minimum finish
Roofing	Low pitch, wood frame, roll roofing, light metal or light composition shingle cover, undersized or over spaced rafters not uncommon
Flooring	Pine, #2 hardwood, linoleum
Electrical	Few outlets, few fixtures
Plumbing	Usually one bath, cheap fixtures
Heating	Gas stoves, electrical space heaters, window units
Typical Features	One small porch, no or small detached garage or carport.

Designate as Class **FR2+** those residences of this type that exhibit slightly more overall quality, sturdier roof structure (i.e. hip), or irregular shape

FR1



Identification Characteristics

This Class of house provides only minimum shelter and, in most cases, these houses will be in the older, lower priced section of town or adjoining the city limits where building codes are not required. These houses may be identified by the substandard qualities of basic construction with substandard material and workmanship and usually built prior to code enforcement or in small towns and in areas where there is no building code.

Standard Specifications

Construction	Substandard
Foundation	Concrete block, brick, post or stone piers
Exterior	Light stud wood frame or box construction, siding may be covered with tar paper or low-grade composition siding or stucco
Interior	Semi-finished
Roofing	Low pitch. wood frame, rolled, tin or composition roofing
Flooring	Single soft wood, minimum joists, low quality slab
Electrical	Sub-standard, few outlets, minimal fixtures
Plumbing	Sub-standard small bath
Heating	Generally gas outlets only, electric space heaters
Typical features	One outside door, no garage or porch. This house is usually square to slightly rectangular in shape.

Designate as Class **FR1+** those residences of this type that exhibit slightly more overall quality, sturdier roof structure (i.e. hip), or irregular shape

MULTI-STORY RESIDENCE CALCULATION
(BASED ON FIRST FLOOR AREA)

Where actual measurements of second floor is not known:

Full 2 Story	FC% = 1.75
1 ¾ Story	FC% = 1.55
1 ½ Story	FC% = 1.375
1 1/3 Story	FC% = 1.25
1 ¼ Story	FC% = 1.19

Where actual measurements of second floor is known:

$$1.00 + [(\text{upper floor area}/\text{lower floor area}) \times .75] = \text{FC\%}$$

Example: A residence with a 1500 sq ft first floor and a 946 sq ft second floor.

$$1.00 + [(946/1500) \times .75] = 1.47$$

A FC% of 1.47 is applied to the calculation of the first floor to account for the second floor with out having to draw it separately.

STERLING COUNTY APPRAISAL DISTRICT
Frame/ Brick Residential Schedule
2019 - 2020

Frame	FR1	FR1+	FR2	FR2+	FR3	FR3+	FR4	FR4+	FR5	FR5+	FR6	FR6+
400	14.71	16.08	35.46	36.36	40.56	41.78	45.28	50.82	53.35	56.76	62.76	65.31
600	14.08	15.45	33.94	34.96	38.83	40.15	45.28	50.82	53.35	56.76	62.76	65.31
800	13.66	15.03	32.92	34.00	37.65	39.06	45.28	50.82	53.35	56.76	62.76	65.31
1000	13.33	14.70	32.11	33.27	36.73	38.20	45.28	50.82	53.35	56.76	62.76	65.31
1200	13.08	14.44	31.51	32.68	36.04	37.54	44.64	50.82	52.60	56.76	61.87	65.31
1400	12.85	14.23	30.96	32.20	35.41	36.99	44.13	50.82	52.00	56.76	61.17	65.31
1600	12.67	14.05	30.54	31.78	34.93	36.52	43.66	50.82	51.45	56.76	60.52	65.31
1800	12.51	13.89	30.16	31.41	34.50	36.07	43.23	50.43	50.95	56.32	59.92	64.80
2000	12.37	13.74	29.80	31.09	34.09	35.71	42.90	50.04	50.55	55.89	59.46	64.30
2400	11.92	13.50	28.75	30.54	32.88	35.08	42.25	49.41	49.80	55.18	58.57	63.49
2800	11.76	13.30	28.33	30.09	32.40	34.57	41.79	48.93	49.24	54.64	57.93	62.88
3200	11.61	13.14	27.97	29.71	31.99	34.12	41.32	48.45	48.69	54.10	57.27	62.25
3600	11.47	12.97	27.66	29.35	31.63	33.72	40.98	48.06	48.28	53.67	56.80	61.75
4000	11.35	12.85	27.36	29.07	31.30	33.39	40.63	47.71	47.89	53.29	56.32	61.32
4400	11.25	12.73	27.10	28.81	31.00	33.10	40.30	47.43	47.49	52.96	55.86	60.94
4800		12.63		28.56		32.80	40.05	47.13	47.19	52.65	55.50	60.57
5200		12.54		28.36		32.58	39.79	48.24	46.89	52.38	55.15	60.25
5600		12.45		28.14		32.32	39.57	46.65	46.63	52.09	54.85	59.95
6000		12.36		27.96		32.11	39.36	46.41	46.38	51.82	54.55	59.64
6400							39.15	46.21	46.14	51.61	54.27	59.38
6800							38.98	46.02	45.93	51.40	54.03	59.14

Brick			BR2	BR2+	BR3	BR3+	BR4	BR4+	BR5	BR5+	BR6	BR6+
400			36.18	36.84	41.02	46.41	51.24	55.30	59.10	62.88	68.52	73.02
600			34.63	35.41	39.28	44.61	51.24	55.30	59.10	62.88	68.52	73.02
800			33.58	34.44	38.10	43.38	51.24	55.30	59.10	62.88	68.52	73.02
1000			32.77	33.70	37.17	42.45	51.24	55.30	59.10	62.88	68.52	73.02
1200			32.14	33.12	36.46	41.71	50.52	55.30	58.26	62.88	67.56	73.02
1400			31.59	32.62	35.82	41.10	49.93	55.30	57.60	62.88	66.78	73.02
1600			31.17	32.20	35.34	40.56	49.41	55.30	56.98	62.88	66.07	73.02
1800			30.76	31.81	34.90	40.08	48.93	54.88	56.43	62.40	65.43	72.45
2000			30.40	31.50	34.48	39.67	48.54	54.46	55.99	61.92	64.92	71.89
2400			29.32	30.94	33.27	38.97	47.82	53.70	55.15	61.14	63.96	70.99
2800			28.90	30.49	32.77	38.40	47.29	53.25	54.54	60.54	63.24	70.30
3200			28.54	30.10	32.37	37.92	46.75	52.72	53.94	59.94	62.53	69.60
3600			28.21	29.74	31.99	37.47	46.38	52.30	53.49	59.46	62.02	69.04
4000			27.91	29.46	31.66	37.09	45.99	51.93	53.04	59.04	61.50	68.56
4400			27.66	29.19	31.36	36.76	45.60	51.61	52.60	58.68	60.99	68.14
4800				28.93		36.45	45.31	51.30	52.27	58.32	60.60	67.72
5200				28.74		36.19	45.03	51.03	51.93	58.02	60.22	67.38
5600				28.51		35.91	44.79	50.77	51.66	57.72	59.89	67.03
6000				28.32		35.67	44.55	50.50	51.37	57.42	59.58	66.67
6400							44.31	50.29	51.10	57.18	59.25	66.40
6800							44.11	50.08	50.88	56.94	58.99	66.12

Additives

Cent Air \$2.00/sqft

Tile Roof \$1.00/sqft

Fireplaces: Double Masonry or Metal Core

\$1.75/sqft

Single Masonry Core: Class Amount

Single Metal Core: Class Amount

E \$500
D \$1130
C \$1360
B \$1610
A \$1850
AA \$2000
3A \$2580

E \$820
D \$1000
C \$1150
B \$1560
A \$1820

Adjustments

For Garages (Storages), Carports, Porches, & Screen Porches (or any ancillary building where one would expect a concrete floor) that have only a dirt, caliche, or gravel floor, deduct \$1.50 per square foot on that structure.

SWIMMING POOLS
(SWIM POOL)

AREA	CLASS	VALUE (flat total)
1	1	\$6,000
1	2	\$9,000
1	3	\$12,000
1	4	\$15,000
1	5	\$3,000

DECK
(DECK)

AREA	CLASS	VALUE
9999	1	3.00
9999	2	5.00
9999	3	8.00

METAL STORAGE BUILDINGS
(STG)

AREA	CLASS	VALUE
9999	1	\$2.50 ["SEARS/CORR IRON"]
9999	2	\$5.00 [GD PIPE FRM/MTL COVER]
9999	3	\$7.50 ["UNIVERSAL"/PRE-FAB/" MORGAN"]

TENNIS COURTS
(TC)

AREA	CLASS	VALUE
9999	1	2.40

SLAB
(SLAB)

AREA	CLASS	VALUE
9999	1	1.38

CONCRETE
(CONCRETE)

AREA	CLASS	VALUE
9999	1	2.10

RURAL BUILDINGS

RURAL BUILDINGS DESCRIPTIONS

BARN refers to an older (or older design) structure of general, livestock utility. All four sides should be enclosed, and may have internal divisions for feed/equipment storage, and/or livestock working or holding. Concrete flooring, wash racks or general plumbing, and electrical supply are additives.

FARM BLDG refers to a farm or ranch structure of non-specific, general utility. Typically, fully enclosed but without internal divisions. Usually has an open interior for equipment or feed storage and workspace. Concrete flooring, wash racks or general plumbing, and electrical supply are additives.

PE = pre-engineered. Construction steel framework, good metal siding and roof.

STL = steel or pipe framework. May be owner constructed.

WOOD = lumber framework.

POLE = creosote post/telephone pole framework.

QUONSET = Quonset style barn construction. Measurements are taken of the floor area. Concrete flooring, wash racks or general plumbing, and electrical supply are additives.

SHED POLE refers to open sheds of “telephone pole” framework. Concrete flooring and electrical supply are additives.

OP1 = open on one (or two) sides.

OP4 = open on three sides or completely open such as a canopy.

SHED WOOD refers to open sheds of lumber framework. Concrete flooring and electrical supply are additives.

OP1 = open on one (or two) sides.

OP4 = open on three sides or completely open such as a canopy.

SHED STEEL refers to open sheds of metal or pipe framework. Concrete flooring and electrical supply are additives.

OP1 = open on one (or two) sides.

OP4 = open on three sides or completely open such as a canopy.

FARM WHSE refers to a farm or ranch structure of newer design and construction for general use. Construction is similar to a commercial warehouse. Framework is usually structural steel with metal covering and roofing. Some concrete flooring and basic electrical service (110V with 220V for equipment) is typical. Installed equipment, such as lifts, hoists, etc. are additives. Classes range from 1 to 4 based on level of amenities (electrical, plumbing, insulation, etc.)

STERLING COUNTY APPRAISAL DISTRICT
RURAL BUILDINGS

TYPE	CLASS	AREA	VALUE
BARN	1	1000	5.10
		2000	4.70
		3000	4.30
		5000	3.90
		999999	3.50
FARM BLDG	PE	999999	11.17
	STL	999999	6.29
	WOOD	999999	5.13
	POLE	999999	3.58
QUONSET	QUO	999999	6.04
SHED POLE	OP1	999999	2.29
	OP4	999999	1.90
SHED WOOD	OP1	999999	3.15
	OP4	999999	2.52
SHED STEEL	OP1	999999	4.33
	OP4	999999	3.34
FARM WHSE	1	999999	15.00
	2	999999	12.50
	3	999999	10.50
	4	999999	8.50

Adjustments

For Barns, Sheds, and Farm Buildings, where concrete flooring is not typical, add \$1.50 per square foot for an area with concrete flooring. Some concrete is expected in the Farm Warehouse. Add for more than typical concrete area.

FARM WHSE: *Class 1 = Excellent Construction Quality*

Class 2 = Good Construction Quality

Class 3 = Average Construction Quality

Class 4 = Low Construction Quality

Commercial Property Value Schedule

Description	Bldg Type	Brick On Studs or Block				Frame Stucco, Wood, Asbestos, etc				Structural Steel Painted Metal, SI Glass Curtain				Pole Utility Pole, Raw Wood			
		Class B_				Class F_				Class S_				Class P_			
		B1	B2	B3	B4	F1	F2	F3	F4	S1	S2	S3	S4	P1	P2	P3	P4
Apartments	AP	24.38	21.38	18.30	15.56	23.48	20.56	17.50	14.87								
Barber/Beauty Shop	BB	25.22	19.67	15.34	11.97	23.03	17.96	14.01	10.93	22.58	17.61	13.74	10.72				
Bank/Savings & Loan	BK	100.53	75.69	69.50	44.18												
Country Club	CC	70.80	51.89	43.79	33.84	67.45	52.37	41.08	31.45								
Church	CH		59.16	43.33	31.51		55.21	40.29	29.21	55.65	39.64	27.95	21.16				
Canopy	CN	14.50	11.18	8.12	6.34	13.49	10.52	7.76	6.05	14.05	10.44	7.32	5.71	4.50	3.50	2.50	1.50
Cold Storage	CS						27.79	23.82	19.20		30.16	25.86	20.83				
Day Care	DA	40.19	30.39	23.10	17.56	37.22	28.29	21.50	16.34	36.19	27.50	20.90					
Fast Food Restaurant	FF	76.32	58.36	44.70	31.90	73.54	55.34	41.77	29.10		55.10	41.14	28.35				
Fraternal Building	FT	42.54	31.06	22.67		39.70	29.09	21.24		39.21	27.74	19.70					
Green House	GH					5.00	3.50	2.00	1.00								
Grocery Store	GR		29.30	23.44	18.76		25.61	21.69	17.35		26.80	24.45	17.16				

Asphalt \$0.92 /sq ft

Concrete \$2.10 /sq ft

This schedule represents per square foot value of new construction. Depreciation factors should be applied, depending on age, condition, and circumstances.

Class _1 - Excellent Construction Quality
 Class _2 - Good Construction Quality
 Class _3 - Average Construction Quality
 Class _4 - Low Construction Quality

Basements:
 Unfinished 25%
 Part Finished 45%
 Finished 75%

Commercial Property Value Schedule

Description	Bldg Type	Brick On Studs or Block				Frame Stucco, Wood, Asbestos, etc				Structural Steel Painted Metal, SI Glass Curtain				Pole Utility Pole, Raw Wood			
		Class B_				Class F_				Class S_				Class P_			
		B1	B2	B3	B4	F1	F2	F3	F4	S1	S2	S3	S4	P1	P2	P3	P4
Aircraft Hangar	HG									19.67	13.04	8.98	6.53		20.70	16.56	
Lumber Shed	LS						10.04	6.85	4.68		10.17	6.89	4.68				
Laundromat	LW		28.29	22.07	17.21		25.92	20.22	15.77		25.40	19.81	15.45				
Office Building	OF	35.99	24.51	17.40	12.35	32.84	23.26	16.51	11.72	32.07	22.30	15.83					
Retail Store	RL	36.26	27.94	20.31	15.02	33.73	26.30	19.40	14.35	35.13	26.09	18.29					
Restaurant	RS	53.75	41.61	29.75		50.91	38.77	27.11		49.42	37.27	25.70					
School Building	SB	48.65	37.20	29.08	21.78	45.82	34.87	27.24	20.33	45.64	33.87	25.79	18.77				
Auto/Service Garage	SG	31.58	25.45	20.54		28.72	22.98	14.82		27.67	22.14	17.43					
Mini/Self Storage	SM		17.07	14.51			15.61	13.27			16.21	13.78	9.50	10.92	9.28	7.89	
Repair Shop	SR	27.09	18.85	13.59		22.58	16.24	12.16		22.60	15.92	11.69			12.72	9.15	

Asphalt \$0.92 /sq ft

Concrete \$2.10 /sq ft

This schedule represents per square foot value of new construction. Depreciation factors should be applied, depending on age, condition, and circumstances.

Class _1 - Excellent Construction Quality
 Class _2 - Good Construction Quality
 Class _3 - Average Construction Quality
 Class _4 - Low Construction Quality

Basements:
 Unfinished 25%
 Part Finished 45%
 Finished 75%

Commercial Property Value Schedule

Description	Bldg Type	Brick On Studs or Block				Frame Stucco, Wood, Asbestos, etc				Structural Steel Painted Metal, SI Glass Curtain				Pole Utility Pole, Raw Wood			
		Class B_				Class F_				Class S_				Class P_			
		B1	B2	B3	B4	F1	F2	F3	F4	S1	S2	S3	S4	P1	P2	P3	P4
Service Station	SS	41.50	32.37	25.25		36.18	28.35	21.32		34.44	26.06	20.95					
Telephone Building	TB	56.09	38.56	27.31						48.08	35.56	25.53					
Warehouse 12-16' Walls	WH	15.49	13.31	11.13	8.34	13.55	11.70	9.85	7.38	13.25	11.29	9.33	7.00	7.45	5.58	4.19	3.14
Warehouse 16-20' Walls	WS	16.82	14.45	12.08	9.05	14.71	12.70	10.69	8.01	14.38	12.26	10.13	7.60	8.09	6.05	4.55	3.41
Warehouse 20-30' Walls	WW	19.06	16.38	13.70	10.26	16.68	14.40	12.12	9.08	16.31	13.89	11.48	8.61	9.17	6.86	5.15	3.86

Asphalt \$0.92 /sq ft

Concrete \$2.10 /sq ft

This schedule represents per square foot value of new construction. Depreciation factors should be applied, depending on age, condition, and circumstances.

Class _1 - Excellent Construction Quality
 Class _2 - Good Construction Quality
 Class _3 - Average Construction Quality
 Class _4 - Low Construction Quality

Basements:
 Unfinished 25%
 Part Finished 45%
 Finished 75%

COMMERCIAL STORAGE-ATTACHED OR DETACHED (COM STG)

COM STG	1	999999	5.00
	2	999999	7.50
	3	999999	10.00
	4	999999	12.00
	5	999999	13.50
	6	999999	15.00

Mobile & Manufactured Homes Property Value Schedule
(MH)

Local Modifier= .45

Single Wide

SQ/FT	MH1	MH2	MH3	MH4	MH5	MH6
0-500	\$16.67	\$18.08	\$21.67	\$26.42	\$29.84	\$29.84
501-600	\$15.92	\$17.31	\$20.79	\$25.89	\$28.76	\$28.76
601-700	\$15.33	\$16.69	\$20.08	\$25.42	\$27.87	\$27.87
701-800	\$14.83	\$16.18	\$19.49	\$24.59	\$27.48	\$27.48
801-900	\$14.41	\$15.74	\$18.77	\$23.90	\$27.11	\$27.11
901-1000	\$14.22	\$15.55	\$18.56	\$23.30	\$26.77	\$26.77
1001-1100	\$14.05	\$15.36	\$18.36	\$23.04	\$26.45	\$26.45
1101-1200	\$13.89	\$15.02	\$17.33	\$22.78	\$26.15	\$26.15

Local Modifier=.45

Double Wide

SQ/FT	MHDW1	MHDW2	MHDW3	MHDW4	MHDW5	MHDW6
0-500	\$21.81	\$22.73	\$25.07	\$26.85	\$29.99	\$35.41
501-800	\$18.83	\$20.88	\$21.80	\$25.90	\$28.16	\$33.44
801-1000	\$16.87	\$19.47	\$20.63	\$25.06	\$26.69	\$31.85
1001-1200	\$15.45	\$18.34	\$19.64	\$23.64	\$26.06	\$31.15
1201-1400	\$14.37	\$17.40	\$16.86	\$22.48	\$25.47	\$30.51
1401-1600	\$13.50	\$16.85	\$15.89	\$21.50	\$24.93	\$29.92
1601-1800	\$12.78	\$16.60	\$15.09	\$21.06	\$24.42	\$29.36
1801-9999	\$12.17	\$16.25	\$14.10	\$20.66	\$23.96	\$28.85

This schedule is based on Marshall Valuation Manual and NADA Mobile Home Guide and represents per square foot value of new construction of average housing adjusted over time for local market conditions.

Add 25% (1.25 Factor) to higher quality manufactured housing. Add 10-30% (1.10 – 1.30 Factor) to structures with widths greater than represented on the table.

Furniture not included. Depreciation Factor to be applied, depending on age and condition (MHSP column on Depreciation Table).

For Personal Property Manufactured Housing (Category M1), apply improvement value to the Real Estate Account for site improvements (Electrical, Septic, etc).

<u>Type</u>	<u>Class</u>	<u>Value</u>
RV Spot	Low	\$1500
RV Spot	Avg.	\$2500

*Class is based on quality of construction, locality, and available amenities. Will be listed as a FVO (Flat Value). Income approach is another available valuation method.

Land Classification Schedule

<u>AG CLASS</u>	<u>AG COST</u>	<u>LAND TYPE</u>
AG-RB2-D1	\$15.00	NATP
AG-RB3-D1	\$15.00	NATP
AG-RN1-D3	\$18.00	NATP
AG-RN2-D1	\$18.00	NATP
AG-RN3-D1	\$16.00	NATP
AG-RN4-D1	\$13.00	NATP
AG-TD1-D3	\$56.00	NATP
AG-TD2-D3	\$47.00	NATP
AG-TD3-D3	\$44.00	NATP
AG-TI1-D3	\$53.00	NATP
AG-TI2-D3	\$46.00	NATP
AG-TI3-D3	\$39.00	NATP
AG-Z-D1	\$3.00	BRNW

TD1-D3	\$277.00	DLCP
TD2-D3	\$258.00	DLPC
TD3-D3	\$240.00	DLCP
TI1-D3	\$390.00	IMPR
TI2-D3	\$315.00	IMPR
TI3-D3	\$277.00	IMPR
Z-D1	\$50.00	BRNW

<u>LAND CLASS</u>	<u>LAND MARKET COST</u>
FF140	\$30.00
RB2-D1	\$230.00(NATP)
RB3-D1	\$224.00(NATP)
RN1-D3	\$245.00(NATP)
RN2-D1	\$245.00(NATP)
RN3-D1	\$230.00(NATP)
RN4-D1	\$190.00(NATP)

ST1	\$1815.00
ST10	\$1815.00
ST11	\$1650.00
ST12	\$1530.00
ST13	\$1455.00
ST14	\$1365.00
ST15	\$1275.00
ST16	\$1185.00

ST17	\$1095.00
ST18	\$1005.00
ST20	\$715.00
ST21	\$645.00
ST22	\$610.00
ST23	\$575.00
ST24	\$540.00
ST25	\$505.00

ST26	\$470.00
ST27	\$435.00
ST28	\$400.00
ST30	\$213.12

AGRICULTURAL PRODUCTIVITY VALUATION AND GUIDES

Introduction

A publication manual by the State Comptroller's Office entitled *Guidelines for the Valuation of Open-Space Land* gives suggested guidelines pursuant to the Texas Constitution, Article VIII, Section 1-d and 1-d-1.

This manual is an official administrative rule that has the force of law, and has been adopted by the State Comptroller's office and approved by a committee composed of the Governor, the Comptroller, the Attorney General, the Agricultural Commissioner, and the General Land Office Commissioner.

Suggestions from this publication set the basic procedural guidelines for determination of agricultural use values set forth in this report.

Purpose

The purpose of this section of the appraisal manual is to explain the agricultural productive valuation of land in the Sterling County Appraisal District.

Assumptions and Limiting Conditions

Appraisals for ad valorem tax purposes require assumptions and generalizations on land categories. The inherent nature of ad valorem tax appraisals prohibits each parcel of land from being individually and extensively analyzed.

This appraisal is conducted for the purpose as stated, and should not be used for any other purpose.

Land Categorization System

In mass appraisal for ad valorem tax purposes, the derivation of value on an individual basis is not practical or advisable. For this reason, a system of land categorization is utilized that enables homogeneous land types to fall into a land category or classification.

The development of a workable and comprehensive land categorization system is an important phase in an agricultural use evaluation. The land categorization system must adjust for physical, legal, and economic factors relative to agricultural use. The land categorizations system must also be harmonious with the market value categorization system to allow for the rollback provisions of the Texas Constitution. This co-ordination of agricultural categories and market categories facilitates the efficient use of personnel in the tax equalization process and in tax administration.

Land Productivity Valuation

Two amendments to the Texas Constitution permit agricultural and open-space land to be taxed generally on its agricultural-use or productivity value. This means that taxes would be assessed against the productive value of the land instead of the selling price of the land in the open market. This permits the land to be taxed in proportion to its ability to produce agricultural products and not based on the land's value to society in general.

The legal basis for special land appraisal is found in the Texas Constitution in Article VIII, Sections 1-d and 1-d-1. The two types of land valuation are commonly called "ag-use" or "1-d" and "open-space" or "1-d-1". The corresponding provisions of the Texas Property Tax Code are Sections 23.41 through 23.46, Agriculture Land and Sections 23.51 through 23.57, Open-space Land.

The purposes of the provisions are similar. Under both provisions, the land must be in agricultural use and is valued in the same manner. However, there are differences in the qualifications that must be met in order to receive the productivity valuation.

1. Ag-use or 1-d qualifications:

- a. The land must be owned by a natural person (partnerships, corporations, or organizations may not qualify.)
- b. The land must have been in agricultural use for three (3) years prior to claiming this valuation. The owner must apply for the designation each year and file a sworn statement about the use of the land.
- c. The agricultural business must be the landowner's primary occupation and source of income.

2. Open-space or 1-d-1 qualifications:

- a. The land may be owned by an individual, corporation, or partnership.
- b. The land must be currently devoted principally to agricultural use to the degree of intensity that is common for the area.
- c. The land must have been devoted to a qualifying agricultural use for at least five (5) of the past even (7) years.
- d. Agricultural business need not be the principle business of the owner.
- e. Once an application for 1-d-1 is filed and approved, a landowner is not required to file again as long as the land qualifies unless ownership changes or the chief appraiser requests another application to confirm current qualification.

The possibility for a "rollback tax" exists under either form of special-use land appraisal.

This liability for additional tax is created under 1-d valuation by either sale of the land or a change in use of the land. It extends back to the three years prior to the year in which the sale or change occurs.

Under 1-d-1, a rollback is triggered by a change in use to a non-agricultural purpose that would not qualify for productivity valuation. Taxes are rolled back or recaptured for the five years preceding the year of the change.

The additional tax is measured by the difference between taxes paid under productivity valuation provisions and the taxes that would have been paid if the land had been put on the tax roll at market value.

These provisions are effective only if applications are filed with the appraisal district office in a timely manner. Applications should be filed between January 1 and May 1. Applications received after May 1 and until the appraisal records are approved by the ARB are subject to a penalty for late filing. Applications may not be filed after the records are approved for that tax year by the ARB.

The manual for the Appraisal of Agricultural Land defines "change of use" as a physical change in the use of the land to a non-ag use. Non-use, leaving the land idle beyond a typical period, or letting the land revert to its natural state without ag use or participation in a government program requiring non-use, is considered a change of use and will

trigger rollback procedures. Changes of use, verified through inspection, can be determined at any time during the tax year. Typically, CRANE CAD will try to contact the owner by mail informing them that a recent inspection has raised questions about the qualification as 1-d-1 land. The owner is requested to reapply and contact the appraisal district with any questions or concerns.

Once the change of use is verified, the owner is notified that his/her property no longer qualifies for ag appraisal. The notice will include rollback value information for the preceding five (5) years. The denial of Agricultural Appraisal can be protested before the ARB. The appraisal roll for that year is changed and the taxable values are sent to the appropriate tax offices for assessment and collection.

Property can also be denied agricultural appraisal for the current tax year if the degree of intensity of use does not meet local standards. Under-utilization causes the ag appraisal to be denied, but it does not initiate roll back procedures since the use did not change, only the intensity. Prudent management often will necessitate changes in intensity. Rotational grazing, crop rotation, natural disaster, climactic variations are examples that may justify intensity variances. Before any ag denials are issued these will be investigated.

Classifications

It is the opinion of the Sterling County Appraisal District that the attached land descriptions and classification guidelines are valid for mass appraisal purposes and can be applied uniformly throughout the appraisal district.

It should be noted that these guidelines are to be used as general guide for qualifying agricultural land. Exceptions to the general rule will be handled on a case-by-case basis.

STERLING COUNTY APPRAISAL DISTRICT

Land Classifications Descriptions Tillable Lands

IRCP- Irrigated Cropland:

Land that is cultivated on a regular basis and seeded into annual crops, which are artificially watered on a systematic basis. May have some usage restrictions and moderate to severe erosion or soil limitations.

DLCP- Dryland Cropland

Drylands that are cultivated on a regular basis and seeded into annual crops. These lands may vary with land that have few limitations to restrict their usage and with land that have moderate to extreme limitations that restrict their usage due to factors such as moderate to notable erosion of soil limitations.

Pasture and Rangelands

IMPR-Improved Pastureland:

Improved Pastures are composed of relatively level to moderately sloping to rolling pastures, having a majority of their grasses introduced and which are artificially watered on a systematic basis.

NATP- Native Pastureland:

Pasture and Rangeland are composed of relatively level to gently or moderately sloping to rolling pastures, having both native and introduced grasses along with occasional scattered brush. These lands have characteristics that warrant their continued use as grasslands

BRNW- Barren Waste Land

Agricultural Land Qualification Policy Statement

The general policy of the Sterling County Appraisal District is in accordance with the State Property Tax Code's qualification guidelines for agricultural use. The district's policy is that in order for ag-use valuation to be applied, the land must:

1. Be utilized to the "degree of intensity" generally accepted in Sterling County.
2. Be managed in a "typically prudent manner".
3. Be a substantial tract of land.

In accordance to the State Property Tax Code guidelines, the net-to-land is based on a five-year average of the years preceding the year of the appraisal. This five-year average tends to remove fluctuations in value because of varying prices, yields, weather conditions, and costs. Only the factors associated with the land's capacity to produce marketable agricultural and recreational (hunting) products are considered in estimating the productivity values.

Only typical cash leases are used for this estimation of productivity values.

Definitions of Key Words and Phrases

Prudent: Capable of making important management decisions, shrewd in the management of practical affairs. Specifically, the law states that the land must be

utilized, as would an ordinary and prudent manager in the area of the taxing unit. Normally, prudent farm or ranch managers are ordinary farmers in terms of acres farmed as well as management ability. Given that all other factors remain constant, the number of acres farmed determines the farmer's capital structure. It is assumed that prudent farm or ranch managers in a given area are assumed to have similar equipment of similar value and utility.

Substantial: Ample to satisfy; considerable in quantity. Specifically, the law states that the agricultural land must be an identifiable and substantial tract of land. This means that the tract must be of adequate size to be economically feasible to farm or ranch.

Typically: exhibiting the essential characteristics of a group. Specifically, the law states that ag land will be utilized, as would a typical or ordinary prudent manager. Statistically, a typically prudent manager is the median farmer or rancher.

Agricultural use to the degree of intensity generally accepted in the area: farming or ranching to the extent that the typically prudent manager in the area of the taxing unit would farm or ranch on an identifiable and substantial tract of land when the tract is devoted principally to agricultural use. The farming and ranching practices (cropping patterns, planting rates, fertilization methods, harvesting and marketing techniques, etc.) are those of a typically prudent farm or ranch manager.

Area: that land that is located inside the jurisdictional boundaries of the Sterling County Appraisal District.

Principally: the more important use in comparison with other uses to which the land is put.

Market and Productivity Schedules

Qualified agricultural land is taxed on its productivity value. To determine that value, the CAD first must calculate the typical property owner's income that is generated by the land after certain expenses have been paid—commonly known as net-to-land. The Property Tax Code then requires the CAD to divide the average net-to-land for a five-year period by the annual cap rate to arrive at the land's productivity value.

Procedures for Developing a Mass Appraisal

Mass Appraisal

What is Mass Appraisal?

Mass appraisal is the process of valuing a universe (a large number) of properties as of a given date, using standardized procedures, in a manner that allows for statistical testing.

As of a Given Date:

The Texas Constitution and the Texas Property Tax Code require that taxable property be appraised at its market value on January 1 of a given tax year, even though the physical examination of the property may be done on an earlier or later date.

Using Standardized Procedures:

The law requires the appraiser to use recognized appraisal techniques, and to use the same or similar techniques in appraising the same or similar properties.

Allows for Statistical Testing:

Statistical testing techniques are widely used in mass appraisal. They help produce better and more consistent value estimates. They allow the appraisal district and the taxpayer to evaluate the results of the mass appraisal.

Summary:

To summarize, in a mass appraisal system the appraisal district first collects detailed descriptions of each taxable property in the district. It then classifies properties according to a variety of factors, such as size, use and construction types. Using data from recent property sales and construction costs to replace the improvements at the same level of utility. With the help of modifiers that compensate for minor differences between individual properties, such as differences in age or location, the appraisal uses typical properties as benchmarks, or reference points, to appraise all the properties in each classification. Lastly, the computer is used in mass appraisal to make the process more efficient and the results more uniform.

Overview & Sales Data Collection

In order to evaluate the accuracy of the schedule values, property sales information is collected throughout the year. Each property buyer receives a sales letter along with any other necessary forms as soon as the CAD office updates the ownership in the appraisal records. When the sales letter is returned, the sale amount and any other pertinent information are recorded within that parcel's sales records. Information is gathered also from real estate offices, other appraisers, other appraisal districts, and state reviewers. All credible information is included in the sales records and confirmation is attempted

through additional sales letters (to buyers and sellers as necessary) or other personal contact. Given that the State of Texas is a non-disclosure state, and that the information needed by the Appraisal District is often confidential in nature, the market analysis performed is limited by the availability of pertinent and complete data, including sales prices, sales conditions and circumstances, income and expense data, etc. The Sterling County Appraisal District attempts to define market areas within the county. To date the only discernable market areas are the city of Sterling City and the rural area (county) outside of Sterling City. If and when sales data allows for the identification of other areas, they will be analyzed accordingly.

Each sale is analyzed to determine the conditions of the sale. All sales included in the study must be a “market value” transaction, as defined in the Texas Property Tax Code, Section 1.04(7), and quoted earlier in this manual. Any sale determined to not be an “arms length” transaction is then omitted from the final study. Several criteria are also considered when determining if each sales price needs any adjustment including, but not limited to: date of sale (in comparison to date of appraisal), special or unusual financing terms, inclusion of personal property, inclusion of intangible value, and significant variances between the market value and the sale price due to physical changes to the property that cannot be accounted for due to the January 1 target date. If adjustments can be made to the sales price to show a current, “arms length” value (including time and financing adjustments), the adjusted value is used in the ratio study. Any adjustments to reported sales prices must be discussed, debated, and approved by the appraisal supervisor and the Chief Appraiser.

Sales used to determine real estate value should not include value that can be attributed to personal property or intangible value. For example, if a home sells, and the transaction included personal property (vehicles, boats, furniture, free-standing appliances, tools, etc.), the value associated with that personal property should be deducted from the reported sales price. The resulting, adjusted sales price is then used in the ratio study. Likewise, commercial property transactions often include both personal property and intangible value. For example, if a motel sells and the buyer purchased the motel franchise along with the real estate, the value of the franchise (being intangible) should be deducted from the sales price before being used in any market study. Determining the value of any intangibles in any transactions can be problematic and will require research into the industry and the local and similar markets. Although suspected by the appraisal staff, and often reported by buyers, adjustment for intangibles requires confirmation from outside sources and the seller.

Financing adjustments occur rarely. Typically, prudent buyers will strive to acquire the most reasonable financing available, and then purchase the property of their choice using that same financing. Atypical financial arrangements usually accompany transactions that would not be considered “arms length” and would therefore be omitted from the ratio study.

Time adjustments are adjustments to the reported sales price of the property that are made when and if it can be proven that the general market trend in an area is changing over a

given time period. While relatively simple to calculate in the abstract, time adjustments are extremely difficult to quantify without substantial data, especially in small, rural markets. If a typical property transfers more than one time in a given time period (ideally no more than 1 year), each time being an arms-length transaction, with typical financing, and without physical changes to the property, the difference in the sales prices can be attributed to the general market. This difference, expressed as a positive or negative percentage per month, can then be applied to other property's sales prices to adjust the price to a standard date, usually January 1st of the appraisal year. For example, a residence may sell for \$50,000 on June 1st and then sell again October 1st (5 months later) for \$55,000. The difference of \$5,000 (or 10% of the original sales price) is allocated as a market increase of 2% per month. A market Decrease is calculated in the same way. If this was an arms-length transaction of a typical property, that same percentage of increase or decrease can be used on other sales to adjust their sales prices to the January 1 target date.

A statistical analysis of each class of property is conducted using the available, credible, and adjusted sales information. Within each class of property, the appraisal district looks for not only an acceptable median value, but also a reasonable COD. Each of these values is considered when determining whether to adjust a class schedule, and by how much. The sample size of each class analysis is also a major consideration. Classes that exhibit little or slow activity are allowed a larger variance due to the fact that minimal data sets (small samples) may tend to give incomplete analysis or biased results for an entire statistical population.

Once a median value indicates that a particular property type or class needs adjustment, and the COD value reflects a consistent result, schedule values are recalculated to produce a revised analysis. The resulting median ratio should indicate that the adjusted appraised values of property more closely matches the current market value, as tested by the sales used in the analysis. The appraised values of all properties, sold and unsold, within that type or class are then recalculated, using the increase or decrease indicated by the ratio study, and submitted for notification.

A similar process is used to determine whether any neighborhood factors are needed by analyzing sales within a specific area (market segments) in comparison to the overall general market. These areas could be neighborhoods, cities, school districts or any other definable area within the appraisal district that displays market trends or values differing from the trends or values derived from the market as a whole. Any significant and quantifiable differences then need to be addressed with economic adjustments to the properties within the pertinent area.

Ratio Study Procedures

I. Collect and Post Sales Data

- A. Solicit sales information from all new property owners through sales letters and/or personal contact

- B. Collect sales information from outside appraisers and from fee appraisals presented
- C. Utilize sales information from Comptrollers office.
- D. Post sales information to the sales database
 - 1. Record actual sale price
 - 2. Note unusual financing
 - 3. Note non-arm length participants
 - 4. Adjust sales price for inclusion of personal property or intangible value
 - 5. Initiate frozen characteristics/partial sale codes if necessary
 - a) Imminent construction/renovation can bias any later analysis by including values not part of the original transaction
 - b) Sale including only a portion of the property described can also produce skewed results

II. Preliminary Analysis

- A. Run sales analysis (by type, group, or class) which includes any and all sales collected to date
- B. Note median result and COD
- C. Examine each sale included
 - 1. Compare sale ratio to median result
 - 2. Ratios substantially higher or lower than the median result (outliers) are singled out for further, in-depth analysis
 - a) Note seller-financial institutions, known real estate opportunists, probates, known persons who finance their own transactions
 - b) Note buyer-financial institutions, known real estate opportunists, and re-location companies
 - c) Examine deed records to confirm “arms length” violations not evident from examination of buyer and seller
 - i) contract for deed
 - ii) assumption of previous note
 - iii) atypical financing
 - d) Re-inspect properties to rule out any physical differences from the current property records
 - e) Outlier sales that cannot be excluded or adjusted due to the reasons given above are nonetheless included in the subsequent analysis
- D. Adjust original data set
 - 1. Omit sales that are not arms length
 - 2. Adjust sales values for time or financing if necessary and possible
 - 3. Adjust appraisal values for physical differences if applicable

III. Secondary Analysis

- A. Run sales analysis (by type, group, or class) utilizing information from preliminary analysis
 - B. Note median result and COD
 - 1. Median value may or may not change significantly
 - 2. COD value should improve
 - C. Note sample size
 - 1. Compare number of sales within the class to the perceived number of total properties within the class
 - 2. From experience and discussion among the appraisal staff, determine whether any median result different from 1.00 is significant
 - D. Attempt to increase sample size—if necessary
 - 1. Utilize time adjustments if determinable
 - 2. Keep in mind marketing time for local market and any trends
 - 3. Be careful to not include more sales just for sales sake
 - 4. Changing markets and trends cannot be reflected in sales that are too old without accurate time adjustments.
 - E. Apply results of analysis to current records
 - 1. Any class whose median value is **NOT SIGNIFICANTLY** different from 1.00 does not require adjustment.
 - 2. Any class whose median value indicates that an adjustment is necessary should be analyzed
 - a) Look at typical depreciation (age/condition) for that class as reflected in the sales analysis
 - b) Calculate increase necessary to raise the individual ratios to produce a median result of 1.00 (keeping in mind that because of depreciation, the percentage increase required is going to be necessarily larger than the difference in percentage points needed to reach a 1.00 result)
 - c) Apply the calculated increase to the database
 - 3. Repeat procedure for all classes determined to need adjustment
 - F. Run analysis again to test results
- IV. Examine results to identify neighborhoods that need adjustment
- A. As individual sales are examined, note any areas/neighborhoods/subdivisions that consistently show ratios significantly different from the median result
 - B. Run analysis excluding the area in question
 - C. Run analysis including only the neighborhood in question
 - D. Check for significant variance between the two results
 - E. Apply neighborhood factor to correct variance

Value Defense

Evidence to be used by the appraisal district to meet its burden of proof for market value and equity in both informal and formal appraisal review board hearings is contained

within the Mass Appraisal Report for the current appraisal year. Specifically, appraisal cards, sales ratio studies and results, and individual sales records make up the foundation of any value defense. Other information, such as maps, photographs, and specific property comparisons can be produced depending on the specific concerns of the taxpayer. Taxpayers have the option to present their concerns and evidence informally to the chief appraiser, or by appointment with the Pritchard & Abbott staff. Should an understanding not be reached informally, the taxpayer may present their arguments to the Appraisal Review board as a formal appeal. The appraisal staff provided by Pritchard & Abbott Inc. defends the position of the chief appraiser before the ARB. The Appraisal District has the burden of proof for the value as notified. Evidence for further consideration by the CAD or the ARB should be presented by the taxpayer.

Informal Meetings: Any informal meeting with a taxpayer should be utilized as an opportunity for civil discussion and education for both the taxpayer and the CAD staff. After careful consideration of the taxpayer's concerns, the appraiser must explain the methods, procedures, and information used to arrive at the taxable value of the property in question. An outline follows.

1. The taxpayer presents their questions, concerns, or disagreements with the action of the CAD.
2. The appraiser responds with an explanation of the property card, market analysis, and/or situation that produced the taxable value.
3. The appraiser fully considers any additional evidence presented by the taxpayer that may have a bearing on the taxable value. If testimony is given of pertinent details, not accounted for in the current value, an inspection of the property is suggested to verify and quantify the suggested problem.
4. After careful and complete consideration of the evidence presented and verified testimony, a revised taxable value may be suggested to the taxpayer. As a general rule, the appraisal supervisor or Chief Appraiser must approve any suggested changes that result from the following.
 - a. A change in Building Class of more than one grade (+ and – steps included).
 - b. A change in Effective Year of more than 10 years.
 - c. A change in Condition Rating of more than one grade.
 - d. Any Functional Depreciation adjustment of more than 5%.
 - e. Any inclusion of Economic Obsolescence.
 - f. Any change in Exemption or Special Valuation Status.
5. Once an adjusted value is agreed upon, the appraiser or CAD staff must retain any evidence supporting the change and/or note the results of any inspection in the appraisal records.

Formal ARB Hearings: Formal ARB hearings are scheduled and held when no informal meeting is requested, or after no informal agreement can be reached. Following the posted ARB Procedures, the Chief Appraiser (or their designee) presents the justification of the current taxable value. An outline follows.

1. The taxpayer presents their questions, concerns, or disagreements with the action of the CAD to the ARB.
2. Addressing the specific concerns protested by the taxpayer and noted on the protest form, the Chief Appraiser (or their designee) responds with an explanation of the property card, market analysis, and/or situation that produced the taxable value.
3. An in-depth analysis of the market and how the subject property fits into the market analysis is prepared and presented to the ARB.
4. Once the ARB rules, any changes in value are recorded in the appraisal records and noted as an ARB decision.