



PROFESSIONAL **CONSULTING SERVICES** OF IAAO, LLC

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Final Report
Sedgwick County – Operational Audit

of the
County Appraiser’s Office

Commented Review

of

Business Processes and Valuation Practices

February 28, 2020

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Introduction:

The Board of County Commission (BOCC) in the State of Kansas appoints the County Appraiser as is the case for Sedgwick County. Appointments are made for a four-year term prescribed by law to begin July 1 and each fourth year thereafter, beginning in 1993. The next appointment cycle is July 1, 2021. Should a vacancy occur prior to the next designated cycle the BOCC may appoint a successor to fill the unexpired term or may appoint an interim appraiser for a period not to exceed six months. Mark Clark, AAS, Chief Deputy Appraiser, was appointed Interim County Appraiser by the BOCC and served in that capacity from September 1, 2018 to March 1, 2019. Since Kansas law does not provide for the reappointment of an interim county appraiser, the BOCC contracted with the Kansas Department of Revenue, Division of Property Valuation for the Division to provide an Acting County Appraiser to serve until the currently vacant county appraiser position is filled on or before September 1, 2019, whichever occurs first. Raelane Schnacker RMA, has been appointed Acting County Appraiser.

The primary functions of the county appraiser are to discover, list, and value all property within the county (jurisdiction) in accordance with Kansas law which includes Kansas statutes (K.S.A.) as well as Kansas appellate court decisions. The county appraiser's office performs its duties under the directions of the property valuation director (PVD) for the state of Kansas.

The Sedgwick County website video for the Appraiser's Office does a good job of explaining their responsibilities at <https://www.sedgwickcounty.org/appraiser/>. The Mission, as stated on the website: **"To annually produce a fair and equitable appraisal roll used in formulating the funding for quality public services in our community"** is also a reflection of the legal and constitutional requirements of the office. Fairness in application of appraisal methods and techniques along with adherence to legislative mandates ultimately results in an equitable treatment of property owners/taxpayers. To be clear, "funding" in this case is the apportionment of the property tax burden based on value so that each taxpayer is paying their fair share of the total property tax burden. This tax apportionment is also known as "Ad Valorem" or according to value.

Sedgwick County deploys the use of "Mass Appraisal" methods to achieve measurable applications of "fairness and equality." Mass Appraisal requires the same appraisal process as prescribed for private sector appraisers. What is different is the Scope of Work, and the specialized skills using quantitative methods, exploratory data analysis, and proprietary Computer Assisted Mass Appraisal systems (aka, CAMA). Also required are individual skills and efforts to adapt common software, MS Excel, Adobe Acrobat, and custom programs to the functionality of the state mandated CAMA package to produce credible results. Credible results can be measured via several performance methods as mandated by law, standards or best practices. The following analysis, discussion, and comments examine and compare the operations, procedures, and processes used by the appraiser's office in accordance with industry standards, best practices, appraisal theory, and adherence to Kansas law, and mandated regulations from the PVD of the State of Kansas.

Audit Plan and Scope of Work Statement

At the request of the Sedgwick County Board of Commissioners, the International Association of Assessing Officers, hereafter (IAAO) entered into a contract for professional services to conduct an audit of the county appraiser's processes and valuation practices. The IAAO has engaged Michael Ireland, RES, CAE the retired elected assessor in Bloomington, IL as the principle consultant. Assisting Mr. Ireland in matters relating to IAAO's interest as project director is Larry Clark, CAE, Director of Strategic Initiatives for the IAAO. The resumes of Mr. Ireland and Mr. Clark are available in the report's supplemental resources at the end of the report.

Scope of Work

Prior to engaging the Professional Consulting Services of IAAO, a Scope of Work document was prepared by Mr. Larry Clark and sent for review of content, and proposed services to be provided by PCSIAAO. This document was review by Ms. Patricia J. Parker, AAS, Assistant County Counselor, and Mr. Mark Clark, AAS as interim County Appraiser for comment, additions, time tables, and expected deliverables. Requirements from the county included as primary are:

- All valuation units of the Appraiser's Office and their associated property types, e.g. commercial, residential, personal property, etc.
- The audit will encompass review of current operational practices related to:
 - All resources required for various major property types within each valuation unit.
 - Sales validation process and methodology.
 - Sales ratio study methodology and use with the valuation creation through value defense processes.
 - Appraiser to property ratio (number of properties assigned to each appraiser).
 - Reliance on technology for value creation through reconciliation for the creation of the final appraisal roll.
 - Final review process.

From the above submissions a Scope of Work plan was developed as follows:

- Management Practices:
 - Quality control procedures for property types identified for data collection and business processes.

- Current sales validation process.
- Staff allocation and quantity related to workflow and property type allocation.
- Final value selection for Appraisal Roll (Full Market Value).
- Staff Qualifications for Property Types Assigned:
 - Review current job descriptions with designation requirements versus existing staff qualifications.
 - Property type assignment in staff job descriptions versus property type valuations performed by appraisal staff.
- Appraisal Roll, full market value ratio study program, and performance results for all properties identified within the SOW.
 - Sales ratio study practices and how the results are being used.
- Valuation model procedures and methodologies development for all valuation approaches used to develop full market value for all property types identified and valued by the Sedgwick County Appraiser's Office. Also included is the appraiser review of model generated (CAMA system) values for the Appraisal Roll.
- Final Review Process:
 - Final Value Review Process currently implemented by the Sedgwick County Appraiser's Office from model developed value through to appeal defense.
 - Review documented standard operating procedures and training related to the Final Review Process.

The audit focused on property class found in the table below and separated by property class. Some properties have multiple classes.

Class	Description	Class Count	Land Value	Improvement Value	Total Value
R	Residential Including Apartments	170,552	3,877,381,800	18,745,713,385	22,623,095,185
F	Residences on Farm Home sites	3,426	67,757,300	501,988,040	569,745,340
A*	Agricultural Use Land & Improvements	16,825	91,607,700	50,878,410	142,486,110
C	Commercial & Industrial	13,837	1,339,939,280	4,527,446,480	5,867,385,760
V	Vacant Lots	13,297	240,820,800	0	240,820,800
	Personal Property		NA	NA	
	Appeals				

* Counts are based on economic neighborhood groupings.

Deliverables

IAAO's Assessment Practices Self Evaluation Guide and Technical Standards are the basis for the operational audit. Kansas law, including PVD's legal and technical requirements and USPAP are also taken into consideration in the audit. The audit process includes analysis of strengths and weaknesses measured using the various IAAO technical standards on assessment practices and an internal evaluation based on a series of questions presented and answered by the jurisdiction using the Assessment Practices Self Evaluation Guide. Included was an on-site visit by the consultant (three days) to interview staff members, review processes in the working environment, and to collect additional information regarding inputs and outputs. The on-site visit also provided the consultant with live demonstrations of functional operations used within the appraiser's office. Following is a list of information and data collected from the questionnaire and on-site visit.

- ❖ Conducted in-person interviews with available staff to (1) ensure PSCIAAO consultants have the appropriate documentation both in paper and electronic data file form and (2) understand the current status, systems and methodologies being employed by the Sedgwick County Appraiser's Office.
- ❖ Reviewed Orion and other Computer Assisted Mass Appraisal System (CAMA) capabilities from the perspective of how they are currently being used considering their capabilities for use in model development and Final Review process.
- ❖ Reviewed current data collection processes for all the Property Classes identified within the scope of work requirements section, including field sheets (manual or electronic) and any mailer type collection forms for all three approaches to value utilized: cost, market and income approaches.

- ❖ Reviewed sales verification procedures and accompanying analysis programs for model development and / or valuation table rates contained within CAMA.
- ❖ Reviewed quality control procedures for data collection, data entry, valuation table rate adjustments and ratio studies for the properties identified within the requirements section.
- ❖ Reviewed staff expertise and capabilities/qualifications related to the valuation of properties assigned from a mass appraisal perspective. Current job descriptions are used as the source information for comparison of staff qualifications and experience to industry standards for work assigned to be performed.
- ❖ Reviewed the defense of value procedures and programs currently being used.
- ❖ Developed a Report with recommendations based on the above requirements and deliverables such as:
 - Resource requirements including organization and management.
 - Valuation procedures, internal controls, data acquisition, data adequacy, data storage, and data retrieval.
 - Quality control procedures and programs to measure performance of the Appraisal Roll based on IAAO industry standards and the requirements of PVD.

Audit and Results

Audit results are reported using the IAAO Self-Evaluation Guide for progression through the topics. The general topic theme is presented for each topic being reviewed. Strengths are summarized with comments, followed by a discussion of topics that need to be addressed for improvement, where current technology, statutory mandates, or PVD guidelines inhibit a process, progression, or practice. The format follows the questionnaire, stating the question, followed by the “Response” from Sedgwick County, “Response” from the consultant, and “**RECOMMENDATIONS**” from consultant. Each section ends with a “Conclusion” summarizing the full analysis of the section from the consultant.

Practices and Procedures Questionnaire

Operating Environment

This section covers the overall operating context in which the Sedgwick County appraiser's office operates and is mandated to carry out the appraisal and assessment processes, adhering to comprehensive and complex laws, rules, and procedures as prescribed by Kansas property tax law, with oversight by the Kansas Property Valuation Division. The fundamental demographics of the Sedgwick County property inventory is as follows:

1. Basic Data	Real Estate Type	Numeric Summary
Population		513,678 - 2017
Parcel Counts *	Residential	181,343 - 2018
	Commercial	22,904 - 2018
	Industrial	746 - 2018
	Agricultural	16,728 - 2018
	Total	221,721 - 2018
Typical Sales Per Year	Residential (AVG)	10,165 - 2015-2018
	Commercial (AVG)	1070 - 2015-2018
	Industrial (AVG)	17 - 2015-2018
	Agricultural (AVG)	876 - 2015-2018
	Total (AVG)	56,915 - 2015-2018
Typical Appeals Per Year	Residential (AVG)	2,274 - 2015-2018
	Commercial (AVG)	1,494 - 2015-2018
	Industrial (AVG)	88 - 2015-2018
	Agricultural (AVG)	276 - 2015-2018
	Total (AVG)	16,506 - 2015-2018
Total Land Area		1,008 SQ/Miles
Total Taxable Real Estate Value	215,067 parcels - 2018	\$4,384,591,850 (Assessed)
Personal Property Accounts		35,281 - 2018
Appraisal Date		1/1/of Tax Year

*Not all "A" class properties are valued at fair market value and have an assessment rate of 25%. Land devoted to ag use is classified as "A" and has an assessment rate of 30%.

Question #2: Where are the following functions performed? e.g. field data collections, valuation modeling, value generation, value review, building permit review, sales data collection, sales data review, and statistical analysis.

Response by the Jurisdiction: All the above functions are a requirement of the appraisal process in order to generate value estimates that are deemed credible. The appraiser's office response to completing each function is: "This process is performed by the office." Some functions are completed in the office, and others in the field. An entire section is dedicated to the specifics of data collection. A detail audit of each process will be vetted during review of the Property Data Collection and Maintenance section.

Questions #3 & #4: Do the governing statutes contain?

- **Market Value requirement**
- **Ratio Study Mandate**
- **Revaluation and reinspection mandate**
- **Disclosure of sale price**
- **Taxpayer to provide income and expense statement**
- **Special treatment of classes, e.g. fractional assessment, exemptions, use value, TIF's, valuation caps etc.**

Response by the Jurisdiction: All the above have been affirmed as being statutory requirements and with references given to Kansas statutory law. Many of the statutory mandates covering property tax assessment are found in Chapter 79 of the Kansas Statutes.

The issue of the taxpayer providing an income and expense statement goes to the status of burden of proof. By law the burden of proof rests on the county appraiser, however regarding leased commercial and industrial property the burden shifts to the taxpayer unless the county appraiser is furnished an income and expense statement for the three years preceding the year of appeal. This applies to informal appeals, as well as small claims if the statement is not provided within 30 days after the informal meeting.

- **Statutes connected with education aid payments**

Response by the Jurisdiction: The Kansas legislature exempted \$20,000 appraised value from properties used for residential purposes. Rather than deducting \$20,000 from the 100% appraised value of residential properties, the County applies a tax credit on the tax bill. This law is enacted for 2017 and 2018 only.

Assistant County Counselor Response: In practice this exemption is applied as a tax credit on the tax bill. (\$20,000 appraised value x 11.5% residential assessment ratio = \$2,300 assessed value x 20 mils=\$46.00)

- **Statutes limiting assessor discretion to use generally accepted valuation methodology, or mandates to use only current use value?**

Response by Jurisdiction: This is not a direct statutory mandate, but the Orion CAMA system has been limited in its capability to value multi-parcel economic units using the sales comparison and income approaches. The income approach and sales comparison approach for all commercial properties are generated outside of the Orion CAMA. Only the cost approach is

performed in Orion CAMA on commercial property. Afterwards, these estimates are entered into Orion.

RECOMMENDATION #1: The chief deputy county appraiser, and assistant county counselor responded that Tyler Technologies, producer of the Orion CAMA system, has recently deployed within Orion a multi-parcel valuation application software solution. Without this Orion work around, the current CAMA system will not allow the county appraiser's office to produce a sales comparison or income approach value for multi-parcel properties. While the current proprietary system is familiar to the commercial staff, it was stated during the on-site visit the external system was at times temperamental. While no major upgrades to the Economic Unit Summary (EUS) are available, the appraiser's office yearly works with Sedgwick County IT staff to populate the application with current model data and ensures the application is working.

I recommend the county appraiser begin a migration to the "multi-parcel valuation" application now available in the Orion system. This process can begin with a period of learning and testing the system in a beta fashion. Workout the difficulties, with possible suggestions to Tyler on improvements and updates. In the future working within the Orion system will save time. It was stated that current multi-parcel valuation takes a lot of time to complete.

SECOND LEVEL RECOMMENDATION #2: It is also revealed that the county clerk invokes all property boundary changes regarding splits, and combinations. This puts an elected official and an appointed official in a position of needing to work together for the greater good of the taxpayer. I recommend the county clerk and appraiser work together to reduce the number of multi-parcel economic units by combining these multi-parcels into single parcels. Sedgwick county staff states, "They have more multi-parcels than any county in the state of Kansas". Cooperation to reduce the number of multi-parcels would reduce the work loads of both departments, save time, effort, and complexity. It is a common and best practice in most jurisdictions to allow multiple parcels to be combined. Benefits include single tax bills, reduced parcel mapping maintenance, improvement of valuation, better comprehension on appeal to make sure all parcels are included in the value and the appeal, and owners could not circumvent the tax payment system of being delinquent of a single parcel of the economic unit without facing the threat of a tax sale.

Should a cooperative effort to complete this recommendation proceed, I also recommend the property owner be notified as a courtesy and provide permission to combine parcels. Communication with the property owner will also allow the county to determine if combining the parcels would create a problem and if so, how can the county help resolve the problem. A cost benefit study is another option to consider. Reducing the number of multi-parcel units would be beneficial to reducing the cost and time to implement the first recommendation.

During this audit process, the office of the PVD has provided this option: that in cases where you have one owner of multiple parcels within the same legal description, the county can on its own, combine those parcels into one parcel, without permission from the property owner. This option provides a step in the right direction to solving the multi-parcel dilemma.

- **Classified property tax system? See Table below**

Assessment Rates from Article 11 § 1 Kansas Constitution					
Class 1	Type	Level	Class 2 PP	Type	Level
1	Residential	11.5%	1	Mobile Home	11.5%
2**	Land AG use	30%	2	Oil and Gas	30%
3	Vacant Lots	12%	3	Public Utility PP	33%
4	RP, IRC 501 (c)	12%	4	Motor Vehicles	30%
5	Public Utility RP	33%	5	C & I M&E	25%
6	Commercial RP + AG Land	25%	6	All Other	30%
7	All Other	30%			

** Not valued based on the fair market value of the property as defined by K.S.A 79-503a

- **Limit on how much appraised value can be changed?**

Response by Consultant: *K.S.A 79-1460 addresses value change as follows, the valuation for all real property shall not be increased unless the record of the latest physical inspection was reviewed by the county or district appraiser, and documentation exists to support such increase in valuation in compliance with the directives and specifications of the director of property valuation, and such record and documentation is available to the affected taxpayer. For the next two taxable years following the taxable year that the valuation for commercial real property has been reduced due to a final determination made pursuant to the valuation appeals process, the county appraiser shall review the computer-assisted mass-appraisal of the property and if the valuation in either of those two years exceeds the value of the previous year by more than 5%, excluding new construction, change in use or change in classification, the county appraiser shall either: (1) Adjust the valuation of the property based on the information provided in the previous appeal; or (2) order an independent fee simple appraisal of the property to be performed by a Kansas certified real property appraiser.*

The Kansas Supreme Court in *Bd. Of Cnty. Comm’rs v. Jordan*, 303 Kan. 844 (2016) ruled that K.S.A. 2014 Supp. 79-1460 (a) (2) and (c) were unconstitutional as they violated Article 11, § 1 of the Kansas Constitution which provides that the legislature shall provide for a "uniform and equal basis

of valuation and rate of taxation of all property subject to taxation”. The opinion provided for revaluation under certain changes in market conditions.

Question #5: Does the property tax system have measures that ensure that the jurisdiction has the capacity to perform its assessment functions effectively?

- **Jurisdictional support at the county or state level**
- **Ability for counties to coop or merge assessment district**
- **Lack of reliance on property tax results in improper funding for completing assessment function**
- **Fiscal importance of assessment function results in lack of full resources to complete the assessment function as statutorily mandated.**

Response by Jurisdiction: The topic of resources as related to funding the assessment function is a concern to the county appraiser. The appraisal/assessment process is very labor intensive even with the use of technology. When any taxable property or portion thereof is omitted from the tax roll a shift in the burden of payment occurs by causing those paying taxes to also pay the portion for the omitted property. Lack of funding for appropriate staff levels is one concern that requires continued monitoring. Staffing levels are a current concern regarding discovery and listing of new property and maintaining accuracy of existing parcels. Further discussion on staffing is provided in the next chapter topic, “Management and Staffing”.

Not every legal mandate or administrative rule the county appraiser is obligated to follow has been covered in this Section. The operating environment is highlighted to set the stage for future chapters that cover details involving:

- Management & Staffing
- Technology
- Mapping -GIS
- Sales Data, Ratio Studies
- Data Collection
- Land Values
- Residential Value
- Commercial Values
- Value Defense
- Personal Property Value

Review and evaluation of these specific topics will examine additional mandates, and adherence to regulations promulgated by the PVD in completing the appraisal and assessment process.

Management and Staffing

This chapter reviews compliance regarding laws, and PVD regulations and directives as they relate to the management functions for the appraiser's office. Included is a review of resources with a primary focus on staffing. As in the previous section the primary question is presented with paraphrased sub-questions, followed by comments and recommendations as needed.

Question #1: Does the jurisdiction keep abreast of changes in laws, regulations, and court decisions?

- **access to an up-to-date compilation of property tax laws and regulations**
- **ready access to, a service that reports property tax cases**
- **regularly monitors news of legal developments**
- **regularly briefs the staff (and other interested parties) on recent legal developments**
- **actively participates in current legislation and in the development of legislative proposals**
- **meets with and participates in groups concerned with improved legislation**

Response by Jurisdiction: The county appraiser tracks and monitors legislative changes and changes in rules, and regulations using several methods. Membership in professional organizations like the IAAO, Kansas County Appraisers Association, and continuous contact with assistant county counselor all assist in this effort. Constant monitoring is required at many levels. The IAAO provides court decisions from any state that recently experienced a court challenge to a specific property tax law. The county appraiser's association has a committee assigned to keep abreast of changes to laws in Kansas and can work with the PVD to also provide participation when required to improve a proposed law, or to lobby. The assistant county counselor keeps track of updates to current laws, Board of Tax Appeal decisions, and helps with interpretation of laws for implementation.

Question #2: Does the jurisdiction regularly monitor the local economy, development patterns, and property market trends?

Response by Jurisdiction: Monitoring is done through periodicals and local economists at Wichita State University. Real estate trends are also derived using sales transactions for each property type, as well as rents and income statements submitted for apartments and commercial properties. The appraiser's office has also used the outside services of a consultant to conduct a capitalization rate study and a benchmark study. Every other year the appraiser's office, along with

other jurisdictions, obtains a hotel/motel cap rate study. Such studies provide insight into the expectations of investors.

Question #3: Does the jurisdiction engage in formal planning?

Response by Jurisdiction: Each department develops their annual work plan for data collection, sale validation, valuation of all property types, e.g. residential, commercial, agriculture, personal property, and appeals. All plans must provide for the fulfillment of statutory requirements:

- A county appraiser must annually appraise each parcel of property as of January 1. K.S.A. 79-1412a; K.S.A. 79-1455.
- A county appraiser must view and inspect all the property in his or her jurisdiction once every six years. K.S.A. 79-1476
- Comply with rules, directives, and regulations as promulgated by the PVD

Question #4. Has the jurisdiction prepared a written estimate of necessary human resources?

Question #5. Has the jurisdiction prepared an estimate of necessary physical resources?

Question #6. Does the budgeting process employed by the jurisdiction explicitly consider outputs in addition to inputs so that the prospects of obtaining adequate funding are improved?

Comment by Consultant: The three questions above are interrelated. The county responses have been combined for clarity and convenience. An overview of data collection workflow is required.

Response by the Jurisdiction: Various exhibits and continuous discussion were provided to the consultant by the appraiser’s office. The 2020 budget preparation is currently in progress. Mark Clark is requesting six new staff members for fiscal year 2020 and considering another six in fiscal 2021. The table below was provided in response to the questionnaire as a breakdown of how the office is currently staffed.

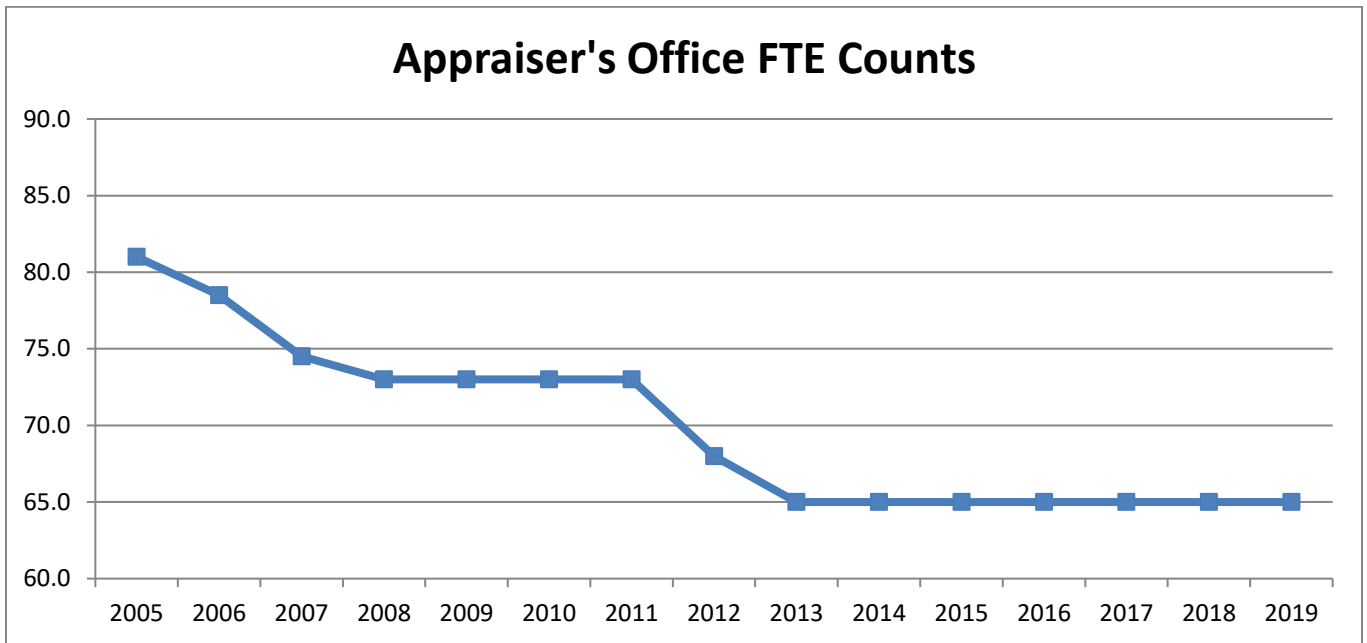
Staff Assignments Report		Future Staff Needs
Function	Current Staff	Needed (IN ADDITION TO)
Field Data Collection	Residential/Ag 9; Commercial 5	Residential/Ag 5; Commercial 5
Building Permit Review	Residential/Ag10; Commercial 2	<i>Above staff would aid in this process.</i>
Sales Verification	Residential/Ag 5; Commercial 3	Residential/Ag 2; Commercial 2
Income/expense Analysis	Residential/Ag 0; Commercial 1	Residential/Ag 0; Commercial 1
Valuation Modeling	Residential/Ag 1; Commercial 1	Residential 1; Commercial 1
Statistical Analysis	Residential/Ag 1; Commercial 1	Residential/Ag 1; Commercial 1
Personal Property Valuation	Personal Property 6	Personal Property 1
Personal Property Auditing	Personal Property 0	Personal Property 0

Appraisal Support (AS) - Data Entry	Data Entry 11	Data Entry 2
AS – Technology	Technology 2	Technology 1
AS – Mapping	Mapping 2	Mapping 1
Administration	Administration 3	Administration 1

The request for 2020 includes the following additions to staff:

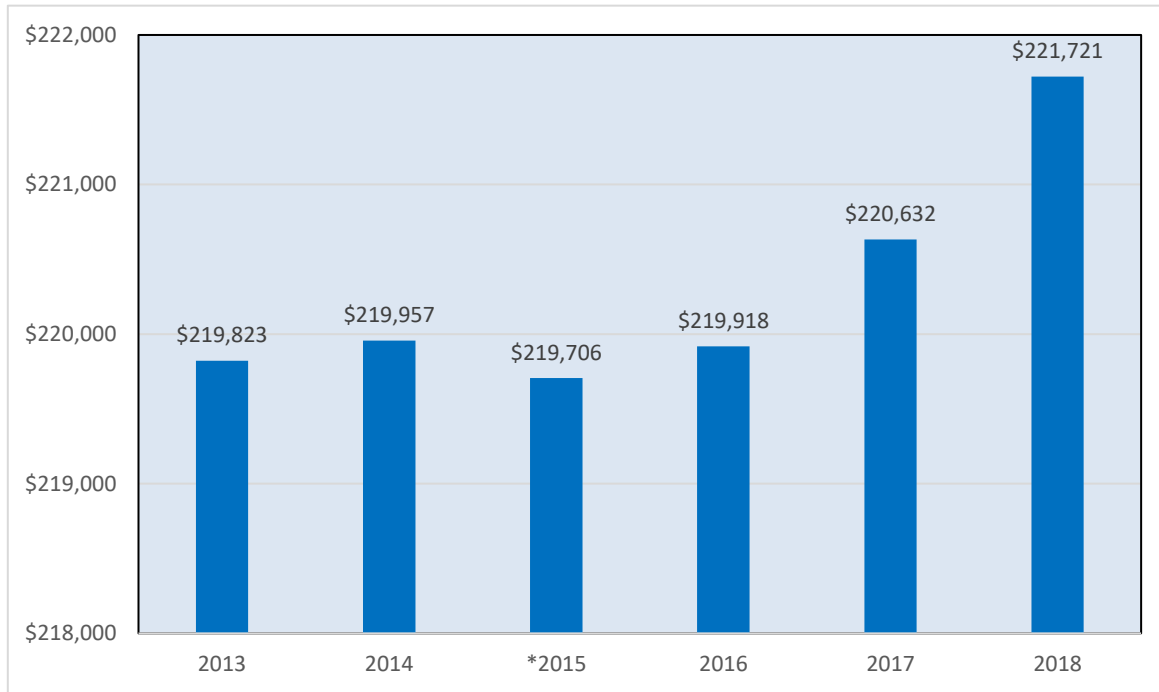
- Personal Property Appraiser (1)
- Appraisal Support (1)
- Residential Appraiser (2)
- Commercial Appraiser (2)

The chart below shows changes in staff level over the past fifteen years;



	2005	2019	Change
Administration	16.0	3.0	-13
Commercial	11.0	13.0	2
Residential & Agriculture	20.0	18.0	-2
Special Use Property	19.0	12.0	-7
Support Staff	15.0	19.0	4
Total	81.0	65.0	-16

Parcel Growth in Sedgwick County



*2015 was the year the appraiser’s office cleaned up right-of -ways (ROWs) parcels.

The graph above depicts a growth in parcels of 1,898 or just shy of one-percent (0.09%). Much of this growth comes from new construction.

Returning to **Question #3** regarding planning and the statutory requirement, K.S.A. 79-1412a requires the county appraiser to “Annually, as of January 1, supervise the listing and appraisal of all real estate and personal property in the county subject to taxation except state-appraised property.” Each parcel requires a staff member to touch it in some manner. K.S.A. 79-1476 provides that “Commencing in 2000, every parcel of real property shall be actually viewed and inspected by the county or district appraiser once every six years.” This process is referred to as, “17% rule”, ($1/6 = .1667$, or 17%). This process is initiated first using technology in the office to digitally measure two sides of each structure and compare to measurements on the sketch. Exterior property attributes are also checked using oblique aerial high-resolution photos to view all sides of the improvements on the property. Standards for the seventeen percent property review are also mandated via a directive from PVD, with Directive #11-043. When any property review falls outside the standards quoted in the directive, an actual physical inspection is required including a new measuring of the improvement in question.

The county appraiser's office also enforces a 2% error rate in all data captures. This is completed with an iterative process of random checks by a supervisor to make sure data approvals and changes are consistent from property to property and validated by a second review. These secondary reviews are tracked and recorded. Whenever the review supervisor makes a correction, the initial data collector can track reasons and type of change made by the supervisor.

Question #7: Is the jurisdiction well-organized?

Question #8: Is staff well-managed?

- **Job descriptions for every position?**
- **there a current procedures manual?**
- **current written personnel policy?**
- **regular performance reviews performed?**

Response by Jurisdiction: The jurisdiction responded "Yes" to all the above questions and has provided examples of manuals. County policy states that performance reviews are to be conducted quarterly with a final annual performance review completed after October 31st. The supervisor and employee are present during the review.

Response by Consultant: The jurisdiction provided documentation in support of the above questions. The overall complexity of and interrelationships of the operations and procedures mandated by law require maximum levels of organization and planning. The PVD guideline on Procedural Compliance provides the details mandated including a calendar of milestone dates set forth by Kansas law. The compliance guideline uses a 100-point credit system to measure and assign a value to operational compliance. The 2018 Compliance Review document awarded 95.8 points to the county appraiser's office. During operation, the jurisdiction also tracks and reports their progress status to the PVD. When any item has not met its standard, the expected standard points are deducted. The county experienced deduction for a not commenting on changes, and lack of analysis documentation to the PVD.

Question #9: Do the members of the staff have the right set of skills and experience?

Question #10: Are salaries and benefits competitive?

- **Are there salary incentives for professional certifications or designations?**

Response by Jurisdiction: The county answered “Yes” regarding skill sets for the staff. This is driven primarily from the fact that staff members attend courses sponsored by the IAAO, PVD, and other providers of appraisal education. They also provided a list of staff members who have earned one or more designations.

Appraisal Institute	International Assn. Assessing Officers	Kansas Property Valuation Division
1 – SRA, MAI	3 RES	14 RMA
	7-AAS	
	1 CAE	
<p>Key:</p> <ul style="list-style-type: none"> SRA = Residential Specialty MAI = Specialty in all property types AAS = Assessment Administration Specialist RES = Residential Evaluation Specialist CAE = Certified Assessment Evaluation RMA = Registered Mass Appraiser 		

In all, twenty-five (25) staff members hold a designation. In addition to meeting educational and experience requirements of a designation, designees are also required to meet continuing education requirements as a maintenance provision to their designation. The Appraisal Institute, and IAAO require members and designees to keep up on revisions to USPAP, and standards of conduct through code of ethics, and conduct courses.

New hires work with experienced staff members through a process of shadowing, emulating, and then supervised independent application of the training. This is primarily for data collectors and support staff. New staff members are also enrolled in PVD courses and workshops including a course that covers the property tax laws in Kansas.

Typically, if budget provides, employees earning a PVD designation receive a \$1,000 salary increase and employees earning an IAAO designation receive a \$2,000 salary increase.

Regarding salaries and benefits being competitive, the jurisdiction used an IAAO Salary survey and an “Evergreen Study” as the basis to indicate compensation in the appraiser’s office is below competitive market levels.

Response by Consultant: Other states provide designation incentives, making the proposal by the appraiser’s office a reasonable request. There is a difference between skills and education. Education provides a knowledge and understanding of concepts and techniques. Skills are more of an application of knowledge and competency of the knowledge. IAAO and other professional

appraisal organizations test for knowledge and understanding with courses and examinations covering course content. They also test competency using requirements to produce demonstration appraisals, pass case study exams, and meet experience requirements. Adherence to standards is also required. After successful completion of all the previous requirements a designation is awarded.

RECOMMENDATION #3: The IAAO has produced a set of eight knowledge areas to be used for development of staff in the appraiser's office. Also, the IAAO has added the Mass Appraisal Specialist (MAS) designation. This designation puts a specific focus on methods and techniques used to attain the USPAP standard "credible Mass Appraisal results." It is recommended the Sedgwick County Appraiser provide for and encourage existing and new staff to pursue a MAS designation. There is no doubt, skills required to completing credible mass appraisals are only taught in the IAAO courses.

Question #11: Are skills in procurement and contract management sufficient?

Response by Jurisdiction: "The office manager has the responsibility of preparing and overseeing the annual budget, purchases and contract management. Contracts are approved/reviewed through OnBase with oversight by the County Counselor's Office and Division of Purchasing."

Response by Consultant: The audit scope of work is primarily targeted at the operations within the purview and control of the county appraiser's office. The appraiser's office does not directly engage in the procurement of contracts, and secures outside contractors. The county counselor's office oversees and prepares contracts for outside services. This does not mean the appraiser's office does not participate in defining needs for contractual services in cooperation with the counselor's office. The contract for this audit with the IAAO is an example of how the counselor's office and appraiser's office worked together.

The budget and planning process are also part of the contracting for services assignment. Any expected expenditure of funds for contractual services should be specifically identified during the budget approval process.

RECOMMENDATION #4: The IAAO does have a written Standard for Contracting Services, 2008. I would recommend the appraiser's office staff along with the county counselor review this standard for advisory compliance when developing proposals for contracted services. This standard is helpful with developing specific appraisal related concepts that are needed for assistance in developing values, data collection, software upgrades etc. One such discussion during the on-site interview is the need for a new capitalization rate study. Those needing the contract services should also be involved in providing needs of deliverables, justification of

needs, e.g. time saving, meeting legal and directive mandates, cost benefit analysis, etc. are examples.

Question #12: Are exemption and other property tax reduction measures well-managed, etc.?

Response by Jurisdiction: Yes.

Response by Consultant: The research and discussion with staff during the on-site visit confirmed that exemptions are controlled and managed through compliance with statutory mandates. K.S.A. 79-201 et seq., a majority of which covers the topic of exemptions in the state of Kansas. The PVD directive #92-025 also directs the specifics of how a property exemption process is implemented.

Question #13: Is the quality assurance program of the jurisdiction adequate?

- **Staff is required to adhere to ethical standards. The office provides needed guidance and deals promptly and effectively with ethical problems**
- **The office's organization reinforces quality assurance**
- **The office's computer system design reinforces quality assurance**
- **Standards of performance are formalized & procedures are documented**
- **Data maintenance programs reinforce quality assurance**
- **Valuation accuracy is monitored regularly using a flexible ratio study program**
- **Management communicates quality assurance expectations**
- **Management takes appropriate corrective action when potential or actual quality problems surface**
- **Management periodically commissions procedural audits**

Response by Jurisdiction: The jurisdiction considers the quality control checks to be in a state of general compliance, but also foresees that some specific areas of data production, data quality, and valuation results for market value property classes could be improved. The jurisdiction provided a thirty (30) page document used to control the sales validation process, and proper use and review of the "Kansas Real Estate Sales Validation Questionnaire." All property characteristics for valid sales are compared to third party sources, in addition to desktop review and field review. All changes are documented and attached as documented sources to the property record for viewing when required.

The PVD Procedural Guideline 2019, p 13, sites USPAP Standard Rule 5-7 “requires statistical testing of models.” In reconciling a mass appraisal, an appraiser must:

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

K.S.A. 79-1476 is a reference to the PVD Directive #11-043. Directive #11-043 provides tools and methods for attaining and maintaining data quality. The appraiser’s office is required to track all re-inspections and new inspections and include a history record of changes. Random sampling is completed on at least 1% of parcels inspected, and a reviewer will recollect the data again. Thorough quality checks are completed on all models, e.g. land, improvements, residential, commercial, agriculture, manufactured homes, depreciation schedules etc. Multiple regression model values are compared to adjusted comparable sales and where the variance is greater than 10% additional explanatory notes are required.

K.S.A. 79-1485, K.S.A. 79-1444, and K.S.A. 79-1445 are statutory mandates for completing a sales ratio analysis. The PVD must publish the results of the ratio analysis and provide each county their results. The PVD will notify the county of “substantial compliance” on meeting the requirements of law to appraise taxable property at fair market value. The PVD relies on the IAAO standard of ratio studies (2013) as the guideline for appraised values to sales price ratios.

Response by Consultant: A review of the quality assurance and appraisal performance statistics has been conducted. Using the staff resource table presented in section 1 of this report, approximately fifty-percent (50%) of staff is dedicated to quality control of data. At the on-site interview staff members demonstrated examples of their daily on-going procedures. data collecting, model building, (residential and other), sales verification, data entry, and statistical analysis were all demonstrated. Staff members work daily to ensure any data they touch is of the highest quality. Every effort is made to ensure all review standards and statistical standards mandated by law or PVD directive are acceptable and within tolerances stated in a standard.

Topics of concern expressed and related to data and statistical quality are as follows:

- o Growth in parcel counts per person has put pressure on the ability to satisfy production and reporting deadlines going forward.
- o Experienced and knowledgeable staff members that work with data and the data products at the highest levels, e.g. model development, statistical analysis, economic unit

assignment, sales validation, are also staff members who are nearing retirement. When experienced staff retire a considerable amount of intellectual property (knowledge and experience) leave the building.

- o Senior staff members expressed concern that a succession plan was not in place. Retirement of experienced appraisal staff is an industry wide problem both in the private and public sector.

USPAP Standard 5 states: “In developing a mass appraisal, an appraiser must be aware of, understand, and correctly employ those recognized methods and techniques necessary to produce and communicate credible mass appraisals.” The awareness and understanding of the process is learned in the classroom. Correct application of these methods and techniques comes from years of application of the methods and techniques, in addition to understanding the relationship that each data attribute has toward producing credible mass appraisal values. As recently as February 22, 2019 the PVD issued Directive #19-051, directing county appraisers as follows: “For the 2019 and 2020 valuation years, the county or district appraiser shall perform all appraisal functions in conformity with Uniform Standards of Professional Appraisal Practice (USPAP), 2018-2019 Edition.”

Competency Rule: I bring this discussion to the forefront because according to USPAP competency requires: “#2. The knowledge and experience to complete the assignment competently.” The accompanying Comment goes onto say: “competency may apply to factors such as: Familiarity with specific type of property; assets; a market; a geographic area; specific laws and regulations; analytical methods.” These are all appraisal concepts previously presented by the county as part of the overall quality assurance program. K.S.A. 79-505(a) requires PVD adopt rules and regulations or directives prescribing appropriate standards for the performance of appraisals. Directive #19-051 directs county appraisers, for 2019 and 2020 valuation years, to perform all appraisal functions in conformity with USPAP, 2018-2019 Edition. Like the law, USPAP is not severable, other than by Jurisdictional Exception where a law or regulation precludes compliance with any part of USPAP, and should that happen only that part of USPAP becomes void for that assignment.¹

RECOMMENDATION - Discussion: The previous discussion that covers the questions regarding quality control checks, resources to achieve and maintain adequate quality control have been presented with details. For the purpose of providing insight into the required use of human resources, and to be complying within quality control standards as mandated requires further discussion before a complete RECOMMENDATION is made on this section. Collecting

¹ Jurisdictional Exception Rule, eUSPAP 2018-19 Addn. Appraisal Foundation

and maintaining data requires more resources manpower and financial than any other function or process, required to be completed by the appraiser's office. Response from the jurisdiction is their recommendation when they evaluate all the mandated requirements including a very robust time-line to meet required statutory dates is, "We need more staff." As mentioned previously until all chapters have been through the audit process no recommendation for increasing staff will be provided.

As the consultant/auditor I will commend the staff members of the appraiser's office on their exemplary efforts toward attaining standards of quality. They say, "quality control could be improved/enhanced with more staff. Lack of resources for adequate quality control." Recommendations for this chapter address other areas that can lead to improvement of "quality control."

RECOMMENDATION #5: In part, the IAAO standard on Professional Development, 2013 is used as a compliance measurement relating to staff skills and development. USPAP Standard 5 and the Competency Rule are used also. Staff skills and compensation are inter-related and must be considered together. The staff skill level is very high as it must be in order to meet the compliance requirements. The question is, Is it high enough? Most of those holding designations are Registered Mass Appraisers, (RMA) and Assessment Administration Specialists (AAS). The education requirements for the RMA designation emulates the course requirements for the IAAO's RES, and includes Kansas specific courses on personal property and the property tax law course. The requirements for the RMA provide a good education nucleus of knowledge and understanding.

IAAO recently introduced a new designation Mass Appraisal Specialist, (MAS) to recognize competency in a wide range of mass appraisal theories, techniques and applications. While the Appraisal Process remains intact, the "Scope of Work" required to complete a mass appraisal differs considerably from "fee or single property "appraisal." The MAS designation is designed to recognize this difference in application of the appraisal process.

The required course list includes four of the same courses required for the RMA designation. see MAS education requirements as listed:

1. IAAO Course 101: Fundamentals of Real Property Appraisal
2. IAAO Course 102: Income Approach to Valuation
3. IAAO Course 300: Fundamentals of Mass Appraisal
4. IAAO Course 331: Mass Appraisal Practices and Procedures
5. IAAO Course 332: Modeling Concepts
6. IAAO Course 333: Residential Model Building

7. IAAO Workshop 171 Standards of Professional Practices and Ethics or IAAO online Standards of Practice.

Courses 331, 332, 333, and now 334 [Commercial Model Building] have all come on-line beginning in 2013. Course 300 remains, but courses 311, and 312 are being converted into a combined course to be offered online soon.

To address issues in chapter 2, e.g. staff skills, and begin a progression to a succession plan to replace and update knowledge backed by experience when retirement of senior staff members occurs, the following steps are recommended solutions:

1. The appraiser's office begins developing a succession plan to fill positions when senior experienced staff members retire. The plan should follow the general steps of:
 - a. Think in terms of a five-year plan, beginning with the end in mind.
 - i. What should the departments look like five years later?
 - ii. Create a vision identifying potential future directors of the various staff operations. Consider leadership skills in addition to technical skill.
 - iii. Share the succession plan concept with HR. as they may provide you with helpful information.
 - iv. Share the plan concept with the board of county commissioners. Keep them updated on the progress at least semi-annually. If additional funding is needed you want them to buy in.
 - v. Keep stake-holders involved in the process.
 1. Consider using performance evaluations to identify potential candidates for vacated positions.
 2. Provide for mentoring relationships when possible.
 3. Provide for additional education to update candidates' skills and knowledge levels.
 4. Update job descriptions to meet the future skills required to meet needed and desired improved level of compliance with the law and prescribed standards of practice.

- vi. Embrace the idea that succession planning will be an on-going process. This provides for a continued progression and motivation of subordinate staff members to enhance their skills and abilities should an opportunity to advance come available.
 - b. Why is succession planning important? A major finding in the IAAO 2016 Salary Survey reveals 48% of respondents plan to retire in the next nine years, and 23% in five years or less. Current appraiser's office staff members expressed similar concerns among their own ranks.
2. Current staff members holding the RMA designation should enroll as candidates for the IAAO designation of [MAS²](#). (click on link for all qualification requirements)
 - a. Those designated as AAS, RES, and CAE may also benefit from the hands-on course work conveyed by IAAO courses 331, 332, 333, and 334.
 - i. These courses build on applying actual mass appraisal concepts useful for understanding and application. Courses 331 and 332 use MS Excel, and 333, 334 teach modeling using SPSS.
 - b. The IAAO has recently published a [Body of Knowledge³](#) (BOK), that captures the expertise required to effectively work in the assessment profession. (IAAO BOK available on www.amazon.com , search IAAO)
 - c. The BOK not only describes key knowledge areas but also provides for levels of competency of knowledge as it pertains to a specific knowledge area. (a USPAP requirement)
 - d. Using the BOK provides for better structuring of targeted education for staff.
3. Competitive salary and compensation are considered by the appraiser's office as not competitive based on an IAAO survey. The IAAO has published many salary surveys with recent ones in 2016 and 2017. I recommend the appraiser's office purchase one or both surveys and complete a salary and compensation analysis using the data and conclusions from the survey to support their claim of non-competitive compensation. When completed the analysis should be shared with HR, with their recommendations. Such might include:

² https://www.iaao.org/wcm/Education/IAAO_Designations/CAE/wcm/Designations_Content/MAS.aspx

³ <https://www.iaao.org/media/pubs/Apendium.pdf>

- a. Review of all job descriptions to verify the current and recommended new salary classification for positions where the salary is based on outdated job requirements, skills and required education.
- b. One finding of the 2016 survey is IAAO designated members median base salary of \$63,000 was \$2,400 higher than non-designated staff.
 - i. Review of the surveys would provide details on salary increments for various designations.
 - ii. Interview other jurisdictions of similar parcel mixes (on a percentage basis) in Kansas for information on salary increments for designated staff.
- c. Complete a fully documented and comprehensive salary review document. Work with HR to adjust salary classes based on job requirements and updated job descriptions, provide for competitive compensation in the next budget presented for approval.

Conclusion on Operating Staffing and Budget: Staffing, budgeting, and quality control are all interrelated, in terms of the appraiser's office ability to meet all legal and directive mandates. The staff is in place as is the budget for 2018. The appraiser's office advocates for an increased staff size in the 2020 fiscal year. This impacts the budget for the office. Using 2018 documents provided, personnel costs (staff) are 93% of the total amounts budgeted for the appraiser's office. As recognized in the discussions presented, the work produced requires considerable human resources. At the current budgeted staff level, 65 employees work on completing the annual appraisal/assessment process. Each section of this report addresses efficiencies of staff processes. Due to the current workload there are no staff members specifically assigned to researching and developing more efficient procedures either by changes in workloads, or implementation of new advanced technologies. Gains in efficiency of procedures requires time and staff to research what processes need updating most.

The assessment process itself is not only rigorous but the time-line is demanding. Completing appraisals, appeals, issuing tax bills within a ten-month time frame on nearly 222,000 real property accounts, 35,000 plus personal property accounts and maintaining compliance with the many laws, regulations, and directives is commendable. Quality control is discussed and evaluated based on regulations from the PVD that are specific regarding compliance to data error rates and the methods used to assure quality data. The data quality is backed-up statistically during the valuation cycle and completion of the appraisal process using measures

of appraised value to sale price, as a ratio of the two (appraised value / sale price = ratio). The IAAO standard on Sales Ratio Study, provides the quality Standards see table below:

Type of property	Measure of central tendency	COD	PRD*
Single-family residential			
Newer, more homogenous	0.90-1.10	10.0 or less	0.98-1.03
Older, heterogeneous areas	0.90-1.10	15.0 or less	0.98-1.03
Rural residential and seasonal	0.90-1.10	20.0 or less	0.98-1.03
Income-producing properties	0.90-1.10		
Larger, urban jurisdictions	0.90-1.10	15.0 or less	0.98-1.03
Smaller, rural jurisdictions	0.90-1.10	20.0 or less	0.98-1.03
Vacant land	0.90-1.10	20.0 or less	0.98-1.03
Other real and personal property	0.90-1.10	Varies with local conditions	0.98-1.03

The 2018 Compliance report confirms the ratio standard on residential property meets compliance. For commercial real property the standard does not provide a definable line as to “Larger, Smaller” urban jurisdictions. The Sedgwick County jurisdiction is larger than the average size jurisdiction in the United States. In Kansas only Johnson County is larger than Sedgwick County. Commercial overall ratio is 90.5% with a COD of 22.2%, the COD falling outside of both large and small measure based on the standard. Recommendation for improving commercial ratio standards will be provided in Commercial Values Section. The overall Residential measures are within the Ratio Standard requirements.

2018 Compliance Review	RATIO	CONFIDENCE
MEASURE	STUDY	RANGE
a. RESIDENTIAL		
LEVEL: MEDIAN RATIO	90.1	IN (87.9, 91.8)
UNIFORMITY: COD	10.6	IN (9.7, 11.7)
b. COMMERCIAL/INDUSTRIAL		
LEVEL: MEDIAN RATIO	90.9	IN (86.2, 94.9)
UNIFORMITY: COD	22.2	IN (19.9, 25.1)
TOTAL		

Additional discussion of Sales Ratio specifics will follow in the audit “Sales Ratio Studies” Chapter 7. The point of this discussion is compliance with various “Quality Standards” requires staff first and foremost to have the skills, knowledge, experience and depth of application to

understand the methods and techniques needed for attaining compliance with the mandates. In this section I find the appraiser's office preformed their duties at a high level. The evaluation of compliance as mandated meets most standards of quality and performance.

Recommendations have been provided that intend to protect the accomplishments of meeting compliance mandates. Retirement of senior level, highly skilled and knowledgeable staff is a future concern, but must be addressed now with a proactive succession plan.

Technology and its use have created a paradigm shift in the process and application of mass appraisal methods and techniques (scope of work). Future leaders and directors of staff in the appraiser's office will require updates to their skill sets. It is recommended new and enhanced skills be obtained by attending the most current education available and then install these new methods and techniques into the appraisal process. Budgets and policies supported by the county board of commissioners, and the PVD will also need adjusting to support these changes from a funding and administrative perspective.

Information Technology

Question#1: Does a modern database management system with its expected services and interfaces underlie the assessment system?

- **Are there sufficient automated edits in place in the jurisdiction?**
- **Are there backup and recovery provisions in place?**

Question #2: Does the database improve quality and minimize potentially inconsistent redundancies?

Question #3: Does the database enable added functionality?

Question #4: Do the database tools provide for modern support for temporal and spatial variables?

- **Can the database handle data entry and updating for past, current, and upcoming tax years and the need of the users to separately activate separate tables to do so**
- **Does the data base meet IAAO standards for usability?**

Response by Jurisdiction: Two database management systems operate within the appraiser's office. The Orion system from Tyler Technologies is the primary source for storing real property and manufacture home data. The personal property data resides in the Aumentum system from Thomson Reuters.

The Orion system is provided to counties throughout Kansas as the primary Computer Assisted Mass Appraisal (CAMA) software for real property. A personal property application is also available in the Orion system but is not used by the jurisdiction. The PVD provides detailed guidance in the Procedures Compliance Guide on the internal tables and use thereof contained in the Orion system.

The Orion system provides the jurisdiction adequate levels of editing and backups. The Aumentum system lacks the quality control features of the Orion System requiring other external application to assist with data integrity for personal property data and analysis.

Questions #2 - #4 address the overall user satisfaction with system operations, ease of use, learning curve to get to proficiency in use, and ability to handle multiple tax years. For all categories the Orion system being a Windows based user interface, basic ease of use, and overall functionality is good. Users can move around in the Orion system without much difficulty. This is not the case for the Aumentum system. Functionality and flexibility of the Aumentum causes delays in workflow, requires an extra level of user education to learn scripted queries for retrieval of data items and reports. This system has been in place since 2010 with no updates, with only system patches being provided on a monthly basis. The vendor opines they don't expect to roll out any new versions of the software before 2021. They have developed a new version in California, and it is being tested. It is live in Riverside, CA and Sedgwick County is aware that version has experienced problems. The jurisdiction's estimate is it could be 2025 before an updated version is available for use in the appraiser's office.

The appraiser's office states they are confident the Orion system meets IAAO standards because the PVD does state that the Orion system produces results in compliance with USPAP.

Question #5: Does the database provide support for parcel aggregates and sub-parcel records?

Question #6: Does the valuation software allow for flexibility and adaptation?

- **Can revisions be made in valuation tables without jeopardizing the official roll in progress?**

Response by Jurisdiction: The current configuration of Orion in the appraiser's office does not include support for parcel aggregates (multi-parcels) and sub-parcels. However, Orion does now provide such configurations as part of the Orion system. Flexibility has been previously addressed in the response to questions #2-#4. Orion does allow table revisions, but Aumentum does not.

Response by the Consultant: **Questions #1 - #6** are aimed at addressing the operations, security and functional use of software applications. There is not a current IAAO Standard on database usability. The Standard on Mass Appraisal, 2017 does address the use of data, as does the

Standard on Automated Valuation Models, 2018. The private sector has created data standards for residential and commercial appraisals⁴. The “usability” is more of a user reaction to the retrieval and storing of data items.

The details of data base design and use is a process completed by technology companies and information technology departments. The Orion and Aumentum systems are in place and Orion is a mandated CAMA system by the PVD for use by all county property appraisers in the state of Kansas.

Each system was demonstrated during the on-site visit. Neither system provides full functionality or flexibility. If Orion and Aumentum engaged in complete functionality and flexibility there would be little need for staff to create external work arounds using MS Excel, or OnBase, a document management system. Commercial property activities other than data characteristics are processed entirely outside of the Orion system. This is a customized application referred to as “EUS” or Economic Unit Summary. The EUS was developed using C-Sharp a.k.a. C#, a programming language, designed by [Microsoft](#). The EUS application was designed to transact the needed functionality for valuing multi-parcels by working with the GIS and combining multi-parcels into “Economic Units” to be valued, and then to allocate the values back to the individual parcels for assessment. The IT support for the EUS is not in-house, meaning it is not provided by the county IT staff. The process used to create the economic units requires heavy processing loads and is usually completed in off business hours to avoid conflicts with other County batch processing routines.

RECOMMENDATION #6: The Orion CAMA system is locked in place and ultimate control of updates are provided by Tyler Technologies and to the PVD, the holder and distributor of Orion to users using a centralized browser-based system. Other than attending user meetings and requesting updates, improvements to functionality is through the PVD pipeline, there is no choice but to keep using the Orion system as is. The addition of the Multi-Parcel Valuation system in Orion may provide greater flexibility than the current EUS system once it is learned and implemented. See RECOMMENDATION #1 in the chapter on [Operation Environment](#). (click on hyperlink).

The Aumentum is problematic on several levels. Most notably it also functions as a tax billing system used by other departments. According to the staff in the appraiser’s office, some county departments are satisfied with how Aumentum performs and have not shown an interest in exploring other software options that would provide all users a more efficient system. (Note from Consultant: *A more precise recommendation will be presented in the personal property chapter*)

⁴ IAAO Fair & Equitable 2008, Linne

According to the Tyler Technologies web site, there is an Orion solution for tax billing and collection. As stated below this option deserves further consider if it creates needed efficiencies.

“Orion is a proven software solution for CAMA and tax billing and collection.

From simplifying processes and improving workflow to ensuring efficient and consistent operations, Orion connects you to all the essential business tools you need.”⁵

At the county level effort between county offices is required to improve work flow. Like with the multi-parcel issue, when a single department is functional and others require extra time and staff to create work-arounds outside of a central system, this is not efficient government. Exploring and finding software that is more flexible and functional for valuing personal property must be considered. With the projections for updates to Aumentum out as far as 2025, this is the equivalent of a user working in DOS applications from a technology perspective.

Question #7: Does the valuation modeling software produce results capable of being timely applied?

Question #8: Can the valuation modeling software produce data on the confidence of its estimates?

Response by Jurisdiction: **Questions #7 and #8** address the output and deliverables that the valuation systems are capable of. While not all valuation functions are completed within the Orion software, the cost model results and comparable sale results are completed and applied using Orion. Currently some analysis such as location adjustments, updating depreciation tables to the local market, sales validation results, notes, and developing market models using multiple regression analysis (MRA) are completed outside of Orion. The Orion MRA module provides standard regression measure of “goodness of fit” e.g. R^2 , standard error of the estimate and coefficient of variation. Individual measures of variable importance included are, correlation, T or F values and standardized regression errors. All the above pertain to residential model development.

As previously discussed, the current version of Orion in use does not support the valuing of multi-parcels that represent a single economic unit. In-house tools have been developed and implemented for valuing commercial properties. Primarily used on commercial is a segregated summary statistical model developed using baseline values.

Response by the Consultant: As previously discussed the appraiser’s office must create work-arounds in their processes for all functions not provided by the CAMA software. This requires

⁵ <https://www.tylertech.com/products/orion/appraisal>

additional efforts and testing before implementation. It also requires the appraiser's office to ensure their results will be accepted into the Orion CAMA and Aumentum systems for the purpose of noticing changes in value and creation of the tax bill.

RECOMMENDATION #7: The County Clerk, Treasurer/collector, information services, and appraiser's office must come together to improve functionality of all software products used in the property tax cycle. While this may come at a cost initially, if the benefit is improved efficiency for any one department, the one-time cost is preferred to annual cost increases required for additional staff. A full study of finding new or improved measures of efficiencies where current software is inadequate is needed sooner than later.

Question #9: Does the valuation modeling software support its estimate of a parcel's value with a small set of comparable properties, sold or unsold, that have had their estimates adjusted to reflect how they would compare to the subject property after adjusting for the differences between them?

Response by the Jurisdiction: Residential – Yes. Multi-parcel issues on commercial records prevent Orion from being able to produce income & comparable sales estimates (performed outside of Orion). Tyler Technologies made it possible in Orion, Aumentum did not. A demonstration of adjusted comparables was presented during the on-site visit.

Response by the Consultant: As mentioned in other responses by the jurisdiction the Orion system is focused mostly on valuing residential properties. Comparable sales and income analysis are completed outside of the Orion system, specifically for multi-parcel economic units. On the Tyler Technologies⁶ web site promoting Orion as a full CAMA solution, specifically saying: "Develop, calibrate and test your model(s) using cost, market, or income appraisal methods". Understanding this as a marketing claim, the options to complete values for residential, income producing properties is at least potentially available for use. Now that a solution is also present to complete values on multi-parcel records is also present, the RECOMMENDATION made in the Operating Environment chapter is supported.

Question #10: Can the valuation software permit the implementation of analyses not contemplated by the original design, either by customizing reserved variables and processes in the core DBMS, by facilitating third party interfaces, or both?

Response by Jurisdiction: Tyler Technologies made it possible in Orion, Aumentum did not. The Orion System has been interfaced with the OnBase and Apex sketching software. When using the

⁶ <https://www.tylertech.com/products/orion/appraisal>

Orion System notes and other documents created using OnBase are displayed seamlessly, as are the sketches created in the Apex application.

Response by the Consultant: As stated in their response, the jurisdiction provided demonstration and examples of third-party implementation and analysis. The functionality of third-party applications appeared seamless in operation.

Question #11: Does the system take advantage of the benefits of integrated CAMA/geographic information technology?

Response by Jurisdiction: GIS is managed by the Sedgwick County GIS Division. ESRI products services parcels and land data. Information is integrated in Orion automatically when GIS publishes their data. Maps in Orion ping to GIS servers. Demonstrations and examples were provided during the on-site visit.

Question #12: Does the system provide advanced workflow processing and management, including those relevant for appeals documents at the various required levels?

Question #13: Does the system provide advanced document management?

Response by Jurisdiction: Yes, when using Orion. No when using Aumentum. Orion does support documents being attached to records, but Sedgwick County uses a separate scanning software (OnBase) that is integrated with Orion. It does not support documents being attached. Aumentum PP has extremely limited integration with OnBase software.

Response by Consultant: The review of the Orion and Aumentum applications in terms of workflow and management are connected to the response in the two previous chapters on Operating Environment and Management and Staffing. The Orion technology provides the required tools needed to complete the appraisal/assessment function resulting in compliance with quality mandates and value mandates. The appraiser's office staff is highly skilled in all facets of operating Orion. While not all modules in Orion have been fully deployed, they are available for use. It has been suggested earlier that using the multi-parcel application must be considered and evaluated for use by visiting other jurisdictions where it is used and tested.

The Aumentum system is a source of frustration by users in the appraiser's office. A visit to the Thomson Reuters⁷. Web site reveals all the property tax components available as an integrated tax administration and CAMA system. The appraiser's office and the PVD have worked out the CAMA side with the Orion mandate. Aumentum remains in the Register of Deeds, County Clerk, and Treasurer's/collector's office as an active application. Based on the Aumentum system

⁷ <https://tax.thomsonreuters.com/en/aumentum>

demonstrated compared to the one described on the Thomson Reuters web site, the system in place in Sedgwick county is an older version without recent updates.

Question #14: Does the agency keep abreast of potentially relevant technological developments?

Response by Jurisdiction: Yes. The staff members involved with modeling, reconciling final values, and the in-house GIS technician are involved keeping abreast of updates and enhancements to the current technology. They spend time reviewing new functions and evaluating how a new technology tool would benefit the overall appraisal and GIS process.

Question #15: Does the computer system maintain a frozen record of the property at the time of sale?

Response by Jurisdiction: “Sales history is used in creating Models in the valuation process determining value estimates. This process does not function for Commercial multi-parcels. A Commercial Sales Database is used for tracking of multi-parcels; however, it is not used in determining “value estimates.”

Conclusion on Information and Technology: Availability and use of the many technology components used by the appraiser’s office, are directly connected to the two previous chapters. Technology is responsible for completion of most procedures. When the technology is working correctly as the user expects, the Operating Environment is considered productive with appreciated efficiencies. These same efficiencies influence staffing levels and required abilities. The county appraiser’s ability to influence improvements in current technology is tempered by dynamics from outside sources. The Register of Deeds and County Clerk participate in the property tax system at the beginning where sale transactions filed with the Register of Deeds evoke changes in property lines and the County Clerk has authority of what parcels are split, or combined. The Treasurer’s/collector’s work is at the end of the property tax cycle, via notice requirements, billing, and collections. There is general frustration among most elected officials with Aumentum software.

The PVD controls the Orion CAMA system, and provides assistance to counties when requested. This does not mean that if the county appraiser requires or requests added functionality it can be provided immediately, or ever. All indications from the county support the idea that Orion meets the majority of their needs and where it does not, they have developed a work around. The only exception is the management and control over multi-parcel economic units. There is an Orion solution for management, but issues involving control over who initiates splits and combinations of parcels are not part of the software domain.

Review of the technology and its operation have revealed its ability to comply with appraisal standards required by USPAP, and additional mandates of the PVD (known as special conditions

in USPAP). The provided RECOMMENDATIONS are directed toward strategies that would improve processes and reduce processing time. Technology has allowed the appraiser's office to do more with less, more parcels per staff member and fewer staff members. The appraiser's office has done an excellent job of using technology.

As the audit progresses there will be additional commenting on technology and its use.

Cadastral Mapping.

Questions:

- 1. Do the cadastral maps enable the jurisdiction to have reasonable assurance that all taxable parcels have been identified and no parcels have escaped inclusion in the system?**
- 2. Do the cadastral maps provide the basic information specified in the IAAO standard?**
- 3. Does the jurisdiction maintain a complete set of cadastral maps showing the identity, size, shape, and location of each parcel in the jurisdiction as of each assessment date that remains subject to ongoing litigation?**

Response by Jurisdiction: In response to the above questions, all are in the affirmative. Yes. "Copies of GIS Parcel layers are saved at the end of each year."

Response by Consultant: Demonstrations of the GIS were presented during the on-site visit. The internal review of the GIS is based on functionality and use by the staff in the appraiser's office. The Orion system and GIS are integrated and work seamlessly together. Map layers can be displayed from Orion for a specific parcel, and from a GIS parcel, users can display Orion data.

Questions:

- 4. Are maps and related records maintained on a timely basis?**
- 5. Are all parcels assigned a unique identifier that is associated with its current configuration and size?**
- 6. Do cadastral maps include representations of improvements as well as the legal boundaries of the parcels?**
- 7. Are maps spatially referenced and capable of meeting national map accuracy standards or IAAO standards, including those cited by reference such as the**

American Society for Photogrammetry and Remote Sensing (ASPRS) standards? Do they meet the standards when plotted at the scales cited in the IAAO standard?

Response by Jurisdiction: **Questions #4-#7** are all “Yes.”

Response by Consultant: **Questions #4-#7** all pertain to compliance with the IAAO Standard on Digital Cadastral Maps and Parcel Identifiers, 2015. This standard is used to evaluate compliance with the specific questions.

It is important to note that the Geographic Information System (GIS) for Sedgwick County resides in its own department, a/k/a. Sedgwick County Geographic Information Services (SCGIS). The web site, <https://www.sedgwickcounty.org/gis/about/> provides details on all services provided for the Wichita/Sedgwick County region. Key services include data development and conversion, mapping, data queries, geo-spatial analysis, application development and website support.

It is the responsibility of the register of deeds and appraiser’s office to provide data required for updates to the parcel and ownership layers to the SCGIS updated regarding parcel layers.

The IAAO GIS standard provides this statement in section 2, Introduction:

- Cadastral maps for the entire jurisdiction.... are essential to the performance of assessment functions.
- Digital cadastral maps enable the assessor to more efficiently;
 - access parcel location and information,
 - reveal geographic relationships that affect property value,
 - provide a platform for the visualization of data layers and analytical results.

Section 2.1 The Role of the Assessor, from the GIS standard:

- The assessor, or an authorized agent, should be the data steward for parcel and assessment data.
- Possess the ultimate authority to inventory, create and define all parcels and other cadastral layers.
- The assessor should maintain parcel identifiers for assessment purposes.
- The assessor should work closely with GIS or IT agencies that creates and maintain GIS data.

The GIS standard continues with this statement: “The assessor should track current ownership of all parcels via the recording of deeds and other documents conveying title”and... “In larger jurisdictions this function may be performed by a separate department. Nevertheless, deed processing and cadastral mapping are functionally related through the review of ownership and the interpretation of property descriptions and should be organizationally linked in the assessor’s office” And.... “The assessor should address policy-level matters, such as how the overall mapping program is integrated in a multipurpose data-sharing environment.”

RECOMMENDATION #8: I have previously discussed the issue of multipurpose data sharing, in [Recommendation #2](#) . The IAAO GIS standard recognizes this issue as a division of responsible, departments that do share require being “organizationally linked.”

Response by Consultant Continued: Questions #4-#7. Section 3 of the IAAO GIS Standard - **Core Components of a Digital Cadastral Mapping System:**

- A geodetic control network based in a mathematical coordinate projection.
- A cadastral parcel layer delineating the boundaries of real property in the jurisdiction.
- A unique parcel identifier assigned to each parcel.
- Other cadastral layers related directly to the parcel layer, such as subdivision, lot and block, tract, and grant boundaries.
- Digital aerial orthophotographs.
- A computer system that links spatial data and parcel attribute data.

The SCGIS as it pertains to and operates within the appraiser’s office follows the Core Components of the IAAO GIS standard.

Section 3.3 - **Core Cadastral Map Layers** at a minimum consist of:

- A PLSS layer, if geographically applicable.
- Subdivision, plat and condominium boundaries as recorded or filed.
- Block and lot boundaries as recorded or filed.
- Parcel boundaries; platted and unplatted, both taxable and nontaxable.

These layers are specifically identified on the SCGIS website.

Property Data:

- [Lots](#)
- [Property Parcels](#)
- [Subdivisions](#)

A continued review of the IAAO GIS standard Sections 3.4 – 3.10 reveals the SCGIS complies in all areas based on review of data layers and processes described on the SCGIS website. Section 4 of the GIS standard covers the specifics of creating a digital geographic system. As this SCGIS is in place and fully functioning a comparison of processes is not required.

Section 5 covers System Maintenance of the GIS. The county appraiser has only partial responsibility for maintenance regarding parcels and ownership. They are responsible for “Archiving” tax layer data for each specific assessment cycle, thus year. Section 5.2 covers archiving and the appraiser’s office is complying.

Section 6 in the GIS standard covers “Quality Control” during creation and maintenance of the GIS layers. As the appraiser’s office does not create or maintain any line work, an audit comparison for controls falls outside of the scope of work specific to the appraiser’s office.

During the on-site interviews and demonstrations appraiser’s staff did not identify any issues experienced with mapping errors detrimental to their specific work and use of the GIS. Positional accuracy from a user perspective is acceptable.

Questions Continued:

- 8. Are maps (or a geographic information system) capable of significantly enhancing the mass appraisal system?**
- 9. Does the GIS or mapping system display and support valuation areas and identifiers?**
- 10. Can market areas and neighborhoods be updated with GIS?**
- 11. Does the jurisdiction perform advanced spatial analyses possible only with a GIS?**

Response by Jurisdiction: **Questions #8 - #10** are all “Yes.” **Question #11** is “No.” **Questions, 8,9,10** all address how the appraiser’s office uses the GIS technology. The creation of the economic unit system and tracking of multi-parcel values would be even more time consuming and difficult without the enhancements the GIS provides. Economic units can be displayed as single parcel unit (that is the users can see all parcels visually). This provides for instant visual feedback of building inventory and allocated values. The residential market areas are a map layer and used to control for market area adjustments in modeling process, identify outlier value estimates, and select comparable sales from competing neighborhoods within a market area. The GIS is also a product used for workflow controls, data collection, building permits, in-house data verification, land value maps, tracking and processing appeals. Some of these workflow processes are integrated with Orion, while others are completed using Orion data with external GIS processes and applications.

Conclusion by Consultant on Cadastral Mapping:

The IAAO standard on Digital Cadastral Maps and Parcel Identifiers is used as the guiding source document for compliance. The appraiser's office staff members are skilled users of the GIS layers made available to them. The specific layers of lots, parcels, and subdivisions are part of the daily and annual work products used and delivered by the appraiser's office. The integration of parcels from Orion with parcels in the GIS allows for many enhanced operations and geo-spatial analysis to be performed by staff in the appraiser's office.

The standard on GIS does provide guidance on the necessity for the assessor and others within the county governmental structure to work together to solve for the best outcomes when GIS production responsibilities cross departmental lines of authority or authorization.

[Recommendations #1](#) and [#2](#) are presented in recognition of this guidance. Recognition of efficiency, cost savings, and best practices are also desired results.

Question #11 was answered "No." The question does leave room for interpretation as the appraiser's office perceives "spatial analyses" as some type of 3D analysis, which can be true. What is completed using the EUS to combine single ownership, multi-parcels into a single economic unit to value, and then allocate the portions back out is an example of an advanced method of spatial analyses. While cumbersome and time consuming when viewed on a GIS layer, considering the processes used, not many jurisdictions have solved the multi-parcel processing question.

I do see an opportunity to use the GIS as an enhancement for analysis and valuation of commercial and industrial properties using a response surface variable in a commercial model to account for geographic differences. I will discuss this more and provide a recommendation during the chapter on Commercial Valuation -10.

After review and analysis of how the appraiser's office is supporting and using the SCGIS including comparative compliance with the IAAO GIS standard, there are no concerns of non-compliance. Recommendations #1 and #2, address departmental responsibility for a better environment of workflow, functional questions on operations of parcel creation, and ownership boundaries.

Property Use Codes, Market Areas, and Neighborhoods

This section covers the statutory requirements of K.S.A. 79-1476 providing for a Real and Personal Property Classification system. The section will address only Real Property

Classification system as Personal Property has its own chapter devoted to valuing and assessing personal property. The questions below were answered by the jurisdiction.

Questions:

1. Does the jurisdiction employ a logical property type classification scheme?

Response by the Jurisdiction: The classification system is mandated by the state Constitution Article 11.—FINANCE AND TAXATION- § 1. System of taxation; classification; exemption, and K.A.S.79-1439 - Property Valuation, Equalizing Assessments, Appraisers and Assessment of Property. The constitution goes on to setup classifications for real property as follows:

	Sub-Class	Class	Percentage
Class Number 1	1	Residential - Apartments	11.5%
	2	Land Devoted to AG Use	30%
	3	Vacant Lots	12%
	4	Real Property Non-Profit – sub class	12%
	5	Public utility, Except RR	33%
	6	Commercial & Industrial, on Buildings on AG Land	25%
	7	All other not sub-classified	30%

All property except for agricultural land is appraised at full value based on its highest and best use, the classes are assigned based on such highest and best use. Once the appraised value is completed the class percentage is applied to convert the appraised value to assessed value.

2. Does the CAMA system provide for mixed use properties?

Response by the Jurisdiction: “Yes, but it doesn’t work.”

3. Has the jurisdiction developed separate geographic areas and location identifiers for each major property type?

Response by the Jurisdiction: “Yes.” This is discussed in the previous chapter under [question #10](#). There are ten geographic stratifications for market areas and each market area contains sub-strata neighborhoods.

4. Do appraisers determine geographic areas used for valuation purposes?

5. Are geographic areas sufficiently large to afford adequate market data for analysis?

Response by the Jurisdiction: Questions #4 and #5 are “Yes” but there is some misunderstanding of the question.

6. Does the jurisdiction validate the assignment of property use codes and geographic identifiers?

Response by the Jurisdiction: “Yes, this is completed through a query. Edits are set up to catch errors.”

Response by the Consultant: The USE CODE’s are mandated and in compliance with the mandates as provided by Kansas law, as well as the Kansas constitution. The PVD cited no violation of compliance in the 2018 report on compliance. The PVD provides specifications, manuals, guides, schedules, memoranda, regulations and directives on the various procedures for valuing property, as per Directive #17-048. This includes guides for specific methodologies directed at these property types.

- 1) Personal Property Guide
- 2) Oil and Gas Appraisal Guide
- 3) Grain Elevator Appraisal Guide
- 4) Commercial Feedlot Appraisal Guide

Further review and discussion of how property is valued is provided in the sections covering Land Values, Residential Valuation, Commercial Valuation, Personal Property Valuation, and Appeals.

Property Data Collection and Maintenance

This chapter covers the specifics of what data is collected, how often, the sources of data, use of building permits, and zoning. I also looked at how technology is used to collect and maintain data and if any data quality standards are in place. The questions are grouped for responses from jurisdiction and consultant. In all, 15 questions on data are addressed in this chapter.

Compliance measurements for data collection are cited in the 2018-2019 Procedural Compliance Guidelines, PVD. Specifically stated are USPAP, PVD Manuals, PVD guidelines, and PVD Directives. PVD provides data collection guidelines for proper coding of attributes into the Orion system.

Questions:

1. **Do computer records contain information on current property use, highest and best use, and indicators of legal uses, such as zoning? Also covered are various methods of collecting and maintaining data.**
2. **Does the jurisdiction have a documented rationale for the data it collects, including its decisions on interior vs. exterior inspections and the frequency of each type of inspection?**
3. **Does the jurisdiction maintain computerized data on land attributes important in the local market?**
4. **Does the jurisdiction physically inspect properties at least every four to six years?**

Response by the Jurisdiction: Yes, to all the above. Zoning is carried on the data file, but maintenance of zoning is lacking and does not meet accuracy standards. Maintaining zoning as a property attribute is not a priority. The reason is, there are 30 -40 different zoning classifications in the county, with no standards regarding meaning. Highest and best use is not a coded property attribute. We follow PVD guidelines and business rules in-house as directed. PVD compliance guidelines require documentation on all data changes, and updates. i.e. what data items were changed, who made the changes, creation of a record history of changes?

K.S.A 79-1476 mandates every parcel of real property shall be viewed and inspected by the county once every six years. The Revaluation Maintenance Specifications requires the county appraiser to select a sample of parcels for inspection to ensure that 100% are inspected at least once every six years. In the Sedgwick county appraiser's office this is known as "17%", e.g. 1/6 or 17% are reviewed each year.

Response by the Consultant: Having reviewed the requirements set-forth by:

- Kansas statute, PVD Directive #11-043, administrative regulation;
- USPAP SR 5-2(e);
- 2018 Procedural Compliance Review Checklist, 2018 Compliance Status Report, and Sedgwick County 2018 Compliance Review;
- On-site demonstration of process, and discussion.

The appraiser's office meets the compliance requirements as they pertain to Questions #1 - #4. The issue of "Highest and Best Use", while not carried on the actual record, the "Use Code" assigned gives the data collector/appraiser the opportunity to make the assigned use code represent each parcels highest and best use. At the time of assigning the Use Code if the parcel or economic unit is to be appraised based on highest and best use, as such the Use Code can reflect a

use other than the current actual use when it does not represent the highest and best use. Such an action would then reflect the finding of the case cited. (See *Board of Douglas County Comm'rs v. Cashatt*, 23 Kan.App.2d 532, 933 P.2d 167 (1997).)

Questions:

- 5. Does the jurisdiction regularly obtain copies of building permits, occupancy permits, or both, and does it conduct physical inspections of affected properties?**
- 6. Is the residential property record card designed to facilitate collection and review, and is it supported by a data-coding manual and training program?**

Response by the Jurisdiction: We complete a manual review of Metropolitan Area Building and Construction Department database for City of Wichita and unincorporated areas of Sedgwick County. Building permits for small towns that don't go through MABCD are faxed or emailed to our office. Building permits include % completed. We are reviewing building permits to determine if it's something we need to go out on. We would not go out on a roofing permit or elevator inspection.

Question:

- 7. Does the office use mobile electronic devices for field data collection?**

Response by the Jurisdiction: SG Co KS uses an older system from Tyler-“Mobile Office”, appraisal staff finds inefficient & outdated for updating data in the field. A newer system is available- “Field Office” that allows for uploading and downloading of CAMA data which would eventually cut down on entry staff & errors. The estimated cost of upgrading to “Field Office” is \$70,000 with annual maintenance costs; the cost is based on the population of the county.

Response by the Consultant: Questions, #5 - #7 fit together for analysis of compliance and processes. The appraiser's office has access to the permitting system for the City of Wichita and can review permits on an as needed basis. The process is basically manual to get the permit from the city electronic system into the Orion system for field checks and review.

The data collection record is setup to match the data input for the Orion system. The appraiser's data collection staff did not indicate any issues regarding the order of data collected, or difficulty completing the form in the field. Since populating the record is completed manually for data entry, it is important the collection form follow the screen used to capture the field data electronically. Reducing data entry time, and errors provides better efficiency and order of inspection as field appraisers can easily adapt their inspection order to the form to gain efficiency. Data entry requires efficient organization to reduce errors and time.

RECOMMENDATION #9: Data collection is the most time consuming, labor intensive, and expensive task completed in the mass appraisal process. The appraiser's office is legally responsible for creating and maintaining a complete and accurate inventory of every piece of real estate in the county. A primary duty is to "discover" the specific data required to complete the appraisal. The ability to obtain building permits is a real time saver. Processing building permits manually is not.

As previously recommended, the appraiser's office must have solid line of cooperation with agencies outside of the office. Building, zoning and code enforcement offices are another example where this cooperation needs to exist.

Regarding Question #5, it is recommended that the appraiser's office develop a plan with the cooperation of the City of Wichita's permitting department to receive building permits via an electronic transfer of a file that can be used to directly attach the permit information to the assessment record. For this to happen one of two changes would be required.

- Work with the GIS departments so that the official address on the permit can be matched to the address on the assessment record.
- Or The appraiser's office provides a cross referenced database to the building department with the parcel identification number. Once the permitting officer enters the address the parcel ID is also included on the permit and can electronically attach the permit to the assessment record.

The second concept has been implemented in many assessment jurisdictions across the United States and is a workable option to be considered for implementation. (see [example document](#) at the end of the audit)

RECOMMENDATION #10: Question #7 addresses the use of mobile technology in the field. The jurisdiction has tried implementing "Mobile Office" a technology that provides for uploads and downloads of records for processing, and then upload of records processed. An updated process is available in Orion called, "Field Office." The appraiser's office is cautious in their approach to purchasing Field Office due to a cost estimate of \$70,000, plus an annual maintenance fee of \$5,680. The fee is based on parcel count.

The number one recognition when dispensing with an old system, (in this case manual data collection) and going to a new technology system, is there will be a change in required skill sets. These changes include, physical ability to manage another field apparatus, appropriate training using technology in the field, (classroom and field), and open lines of communication with the vendor.

Recently the Appraisal Manager from the Douglas County Appraiser's Office posted on the IAAO "Open Forum" the approach used to implement the "Mobile Office" technology. It is

recommended the Sedgwick County Appraiser's Office work towards a technology driven data collection solution to be implemented. The recommended steps include:

- Develop an Implementation Plan
 - Include expectations of results and cost saving
- Get in touch with Douglas County Appraiser's Office
 - Visit the office on a field trip to learn from their experience implementing Mobile Office
- Meet with the Vendor of Mobile Office to discuss an implementation plan.
 - Contract with Tyler Technologies to allow a pilot study to be conducted
 - Use the pilot study to find solutions to problematic issues.
- Consider alternate technology data collection applications. Assessment Analyst by ESRI would be an example as it also integrates with GIS.

The recommendations above are provided as a method for reducing workloads. As discussed in chapter 2 an increase in staffing up to six is being recommended in the 2020 fiscal year. Even with the above recommendations implemented, it does not guarantee increased staffing levels may not be needed. Attrition through retirement, and resignations are also part of the staffing equation.

S.W.O.T. analysis requires measuring the Strength, Weakness, Opportunities, and Threats when changes in processes are being considered. Failure of a previous attempt in using technology for data collection should not be the reason for ending the search for a solution. The fact that Douglas County has all the same mandates as Sedgwick County and has found a mobile solution that works is encouraging and needs further research on the part of Sedgwick County.

The \$70,000 price tag for Mobile Office sounds expensive, but in consideration that it may stave-off the need to hire even more data collectors in the future is an opportunity that deserves serious consideration. Technology does not require benefits, it's at work every day, and often provides opportunity for creative changes in other processes within the work environment.

Mobile data collection is relatively new in the property assessment industry in the past ten years. Many attempts have found failure. Recently more successes have emerged, specifically where planning, training, and testing were at the forefront of implementing the changes.

Recommendations #9, and #10 must be included with staff level discussions being requested. If \$70,000 were expended on a successful mobile data collection system, how would efficiencies be measured and what would the return be?

Questions:

- 8. Does the assessment office have computerized edits that include both range and consistency checks?**
- 9. Are property data collected or at least reviewed by experienced appraisers?**
- 10. Does the jurisdiction have explicit data accuracy standards?**
- 11. Does the jurisdiction have a data quality control program?**
- 12. Does the jurisdiction avail itself of valuable third-party data sources?**
- 13. Does the jurisdiction obtain and make appropriate use of electronic photographs?**
- 14. Does the jurisdiction capture property data available from marketing materials or blueprints?**
- 15. Does the jurisdiction capture information submitted during appeals?**

Response by the Jurisdiction: Yes to questions #8-#15. Edits are in place and work effectively and efficiently. **Questions #9, #10, #11** – Appraisal Support performs the checks for data accuracy as follows:

- <1Yr Employment 100% QC
- 1 – 2 yrs. of Employment 25% QC
- 2 - 5 yrs. of Employment 10% QC
- 5 + yrs. of Employment 5% QC
- Splits/Plats 100% QC

QC is increased if the error rate goes above 2% until error rate is improved. Caveat is that after QC is completed, the managerial staff is also doing the work being QC'd. All commercial data is 100% QC'd.

Sources for third-party data include: Zillow, Realty Rates, CoStar, LoopNet, CoreLogic, Burbauch, Keller Craig & Assoc., IREM. Marketing materials when available, blueprints, and data secured via the appeal process are other sources of data capture. Street level photos, aerials and oblique imaging are also used in the data verification procedure. All data provided in confidentiality is stored in a private hard copy file by order.

Response by the Consultant: The statements above from the jurisdiction provides the methodology deployed to ensure quality data. Inexperienced data collectors have 100% of their work checked for quality control. As a data collector gains experience, they require fewer checks. During the on-site visit the staff shared that an overall error rate of two percent (2%) or less is the requirement of PVD regarding data accuracy. Data edit within the Orion system keeps data entry errors to a minimum using on-line edits to capture data ranges that are not acceptable, and logical edits that provide warnings before the data entry is accepted.

Third party data sources provide additional insight for parcels with transactions currently on the market. It's not clear if data reviewed from third party sources is compared with the current record for corrections or updates. In the questionnaire response the jurisdiction does ensure third party contribution are scanned and attached to the specific record for viewing.

Conclusion by Consultant on Data Collection and Maintenance:

Quality data is a primary concern and expectation that drives all functions to be completed by the appraiser's office. Collecting data for appraising real property is a rigorous process that requires specific planning. The IAAO has recently published their Apendium of eight books, (AKA "The Body of Knowledge.", <http://www.amazon.com> search Apendium). Book 2 covers the entire breadth of knowledge and skills required for a successful and comprehensive data collection plan. Equally rigorous is data maintenance. The mandates set-forth by the PVD's Revaluation Maintenance Specifications (RMS), and directives require wide-ranging attention to details of collecting and maintaining the data. Kansas law requires reinspection of every parcel once every six years. Sold parcels require a measurement verification.

All processes used for data collection must be approved and verified by the PVD. Measurement errors greater than 10%, or +/- one foot or more are considered substantial errors. Stringent **quality control** checks are performed on the data by the appraiser's office and PVD. The PVD grades out the data collection and maintenance process using its compliance report system, at a maximum amount of four points (4) on a one hundred (100) point scale. These four points if weighted by importance are the most important points awarded. Without quality data,

compliance in other categories will suffer greatly in attempting to achieve their own required compliance points. Quality data results in credible value estimates and thus equitable assessments.

The data collection methods used by the appraiser's office are following mandates of the PVD, having graded out at the maximum compliance points of four (4). Two recommendations are provided as a means of efficiency and cost reduction over time. Two areas of data collection that are prone to errors (reduction in quality and time), are data reentry from hard copy to computer, and the fact the data must be keyed twice. Mobile data collection technology is designed so that if data is digitized in the field no further entry is required. All the field data is still subject to the same edits as if completed at a desktop station. The recommendations are not expected to significantly improve the data quality, but over the course of a few years it will provide greater efficiency in the overall process, and possibly reduce the need for additional future data collection staff.

All commercial data is collected and manually digitized but not commercial data resides in the Orion system. This is another area of operations that needs a plan, (five-year plan) to improve efficiencies. Data collection, transaction, market analysis, application, and appeals are all areas for commercial real property where better and expanded use of technology can improve many processes currently in place on the commercial side.

To repeat, the importance of data quality cannot be over emphasized. It is the nucleus of all valuation and assessment process, from discovery to appeal, and billing and collection. Because the data is used in the private sector via the Sedgwick County website, it is fully transparent to all who have a need. Attorneys, insurance companies, newspapers, realtors, title companies, real estate investment, represent just some of the commerce entities that use the data daily off the website, or through the taxpayer assistance staff. Incorrect, inconsistent, unreliable data can make for errors in decisions in the public and private sectors.

When all the different measures of data quality are considered the data collected and used by the appraiser's office is reliable, current, and meets prescribed data quality standards.

Sales Data and Ratio Studies

Sales data and its use in a Ratio Study are evaluated using the IAAO Standard on Ratio Studies, 2013. The standard is divided into two Sections; Guidance of Local Jurisdictions and Monitoring by Oversight Agencies. According to the PVD (the oversight agency); **Permanent Administrative Regulations – Article 4. – Real Estate Ratio Study, 93.4.6 Performance standards**, “Table 2-3 of the “standard on ratio studies,” adopted by the executive board of the international association of assessing officers in April 2013, is hereby adopted by reference and shall constitute the performance standards used to evaluate the appraisal of residential and commercial and industrial real estate.” ... However, the coefficient of dispersion shall have a range of **5.0 to 20.0**, with a **level of confidence of 95 percent**. (Authorized by K.S.A. 79-1491; implementing K.S.A. 79-1485, 79-1486, 79-1487, and 79-1488, K.S.A. 2013 Supp. 79-1489, K.S.A. 79-1490, 79-1492, and 79-1493; effective June 26, 1998; amended April 20, 2001; amended Oct. 3, 2014.)

STANDARD ON RATIO STUDIES—2013

Table 2-3. Ratio study uniformity standards indicating acceptable general quality*

General Property Class	Jurisdiction Size/Profile/Market Activity	COD Range
Residential improved (single family dwellings, condominiums, manuf. housing, 2-4 family units)	Very large jurisdictions/densely populated/newer properties/active markets	5.0 to 10.0
	Large to mid-sized jurisdictions/older & newer properties/less active markets	5.0 to 15.0
	Rural or small jurisdictions/older properties/depressed market areas	5.0 to 20.0
Income-producing properties (commercial, industrial, apartments,)	Very large jurisdictions/densely populated/newer properties/active markets	5.0 to 15.0
	Large to mid-sized jurisdictions/older & newer properties/less active markets	5.0 to 20.0
	Rural or small jurisdictions/older properties/depressed market areas	5.0 to 25.0
Residential vacant land	Very large jurisdictions/rapid development/active markets	5.0 to 15.0
	Large to mid-sized jurisdictions/slower development/less active markets	5.0 to 20.0
	Rural or small jurisdictions/little development/depressed markets	5.0 to 25.0
Other (non-agricultural) vacant land	Very large jurisdictions/rapid development/active markets	5.0 to 20.0
	Large to mid-sized jurisdictions/slower development/less active markets	5.0 to 25.0
	Rural or small jurisdictions/little development/depressed markets	5.0 to 30.0

These types of property are provided for general guidance only and may not represent jurisdictional requirements.

**The COD performance recommendations are based upon representative and adequate sample sizes, with outliers trimmed and a 95% level of confidence.*

**Appraisal level recommendation for each type of property shown should be between 0.90 and 1.10.*

**PRD's for each type of property should be between 0.98 and 1.03 to demonstrate vertical equity. However, PRD standards are not absolute and may be less meaningful when samples are small or when wide variation in prices exist. In such cases, statistical tests of vertical equity hypotheses should be substituted.*

**Alternatively, assessing officials can rely on the PRB, which is less sensitive to atypical prices and ratios. PRB coefficients should generally fall between $-.05$ and $.05$. PRBs that are statistically significant and less than -0.10 or greater than 0.10 indicate unacceptable vertical inequities.*

**CODs lower than 5.0 may indicate sales chasing or non-representative samples.*

The appraiser's office can utilize ratio study data in more detail than does the PVD. As the questions are reviewed and analyzed the ratio study standard will be compared for compliance and application of use. The two major aspects of appraisal performance accuracy are the appraisal level, the overall ratio of appraised values to market values. The level provides information on the degree to which legal requirements are met and based on the statistical **median**. The second measure, uniformity measures the degree to which properties are appraised at equal percentages of market value, the coefficient of dispersion (COD) provides insight into uniformity within market stratum, and between stratum.

The state of Kansas requires that each real estate transaction completed include a "Sales Validation Questionnaire," (SVQ) form PV-RE22-OP (Rev. 08/12), with exceptions per Directive #03-041. The questionnaire is submitted to the Register of Deeds.

Questions:

- 1. Are all transfers of property (sales) uniquely identified and captured?**
- 2. Are real estate sales properly screened and appropriate adjustments made?**

Response by the Jurisdiction: An operations documentation report on sales validation or SVQ was submitted in support of all questions in this chapter. Appraisal Support completes initial screening of the SVQ. A single person is assigned the responsibility of sales research to validate each sale, assign it to the proper class, and verify the legal description and update the sales information in the Orion system. The SVQ document being processed is an image residing with the register of deed, (ROD). Staff in the appraiser's office is notified by the ROD when SVQ's are available for processing. With the volume of SVQ's recorded each week and a PVD deadline on the 10th of each month to report, additional staff members are re-assigned from their primary duties to assist with SVQ validation process. In 2018 twelve-thousand plus (12,000 +) SVQ's were recorded in Sedgwick county.

The departmentalization of the appraiser's office also requires routing sales data to residential, ag, and commercial staff. Sales verification of the routed SVQ is completed by that department. The following steps are used to complete the verification process.

- Check the register of deed database for any accompanying documents
- Check the Aumentum tax system for entry
- Check the District Court database
- Contact buyer/seller, via phone
- Contact when required, attorney, realtor, involved parties to transaction

- Examine the sale on third party sources, Realtor.com, Zillow etc.
- Additional research if ratio is out of predetermine range .80 – 1.10
 - This may include field verification by the appraisal staff

After all processes are completed on verification and entry, all documents and notes are sent to imaging. All sales data is then imported into OnBase. At the request of the appraiser's office a batch processing routine must be run by county IT.

Response by the Consultant: As in the chapter on data collection, sales data validation is another required data collection item. In this case sales price and all related attributes to the sale so that the price can be evaluated and confirmed as a representation of an arms-length transaction. Sales flagged as arms-length are used to estimate market value, conduct ratio studies, and as comparables during appeal to support the estimated value.

Sales validation is a time consuming and labor driven process. See the IAAO standard on Verification and Adjustment of Sales, 2010. This standard provides the specifics steps and processes recommended for validating a sale price as an arms-length proxy for market value. The Appraisal Foundation's, Appraisal Practice Board published two documents in 2015, Identifying Comparable Properties Revised, and Identifying Comparable Properties in Automated Valuation Models for Mass Appraisal⁸ as guidelines to be used in both the verification process, and the use of arms-length transactions for market analysis.

This review confirms the appraiser's office verification methods comply with the stated standards and guidelines.

Questions:

- 3. Are sales used in valuation analyses and ratio studies adjusted to the valuation date (time-trended)?**
- 4. Are ratio studies conducted at timely intervals during the valuation process?**
- 5. Does the jurisdiction conduct ratio studies by property groups and subgroups?**
- 6. Does the jurisdiction use ratio studies as a tool for planning both reappraisals and staff needs?**

⁸ https://www.appraisalfoundation.org/imis/TAF/Resources/Guidance/TAF/Valuation_Advisories.aspx?hkey=d74f24ae-8dcb-412e-947f-6df153626ae2

7. Can the jurisdiction perform ratio studies by combinations of property characteristics specified by staff on an ad-hoc basis?

Response by the Jurisdiction: “Yes” sales are time-adjusted to the valuation date. Question #4, Residential runs them periodically through the year, commercial relies on information provided by PVD. Ratio studies are completed at the start and end of the valuation process for Residential properties. The report is viewed by County Appraiser, Residential Project Leader, Department Application Manager and Residential Modeler. PVD Ratio Report is seen by County Appraiser and is distributed to staff. The most recent ratio report includes a graph showing a decline in ratios over a twelve-month period, declining ratios are an indication of rising prices.

Question #5: Residential does periodically and at years end conducts a market analysis. Commercial staff members may run ratio studies periodically and performs a market analysis at the end of the year for final review.

Question #6: “No.”

Question #7: “YES.” FOLLOW UP QUESTION: *Can an appraiser conduct a ratio report for their own use by a neighborhood for example?* Security settings in Orion are in place to limit these reports to employees who need to see them. The Residential Department uses them. The Commercial Department cannot run the report in Orion, but the reports are done with outside applications and statistical software. Residential can conduct a ratio report for their own use by a neighborhood using the Orion sales file. The commercial sales file is not inside the CAMA system. Thus, commercial cannot run a ratio report in Orion due to the multi-parcels present.

Response by the Consultant: Questions #1 - #7 are originating from the portion of the Ratio Study standard in the context of compliance for jurisdictional use. As an on-going and continuous study of quality measures, ratio studies are aimed to keep all valuation staff informed and up-to-date on how current appraisals comply with ratio standards. Periodic ratio studies also provide for identifying compliance of vertical and horizontal equity patterns, examples would be: between market areas, and neighborhoods each being in an acceptable range. The appraiser can also analyze by property attributes, land size, building size, age, grade, wall type etc., looking to see whether these attributes show any appraisal bias being 10% +/- from the overall median? Uniformity can also be reviewed in the same manner.

All analysts and appraisal staff must have the ability to complete a quality assurance ratio study at any time, beginning of a cycle, in the middle, or to confirm compliance with the PVD ratio report.

Questions:

8. Does the statistical program used to produce the ratio study compute the IAAO standard measures of level (median, mean, weighted mean ratio), horizontal uniformity [coefficient of dispersion (COD)], and vertical uniformity [price-related differential (PRD) and coefficient of price-related bias (PRB)]? (Note: Jurisdictions will enjoy a grace period for introducing the use of the PRB.)
9. Does the jurisdiction compute confidence intervals for the statistics it computes as described in question 8 above?
10. Does the jurisdiction compute additional study-validating measures for the statistics it computes as described in question 8 above?

Response by the Jurisdiction: Q #8. Yes, PRB is not being used at this time. Q#9. Yes. Q #10. "SPSS & R Studio software is used for this" SPSS is used to do time trend sales ratio and detailed market analysis. Information is easier to manipulate in SPSS over Orion and Excel.

Questions:

11. Does the jurisdiction test that sold and unsold properties have been appraised similarly (to ensure sample representativeness)?
12. Do the ratio studies include appropriate graphics?
13. Do the jurisdiction's ratio studies compare favorably with any the oversight agency may conduct, possibly an appraisal- rather than sales- ratio study?

Response by the Jurisdiction: Q #11.- #13. Yes. SPSS & R Studio software is used for this. Limited graphs are available in Orion for PRD and median ratio(very basic)

Response by the Consultant: Using the standard on Ratio Studies as it pertains to the appraiser's office specifically, some deficiencies in use and construction of ratio reports exist. The deficiencies are not considered a violation or total non-compliance with the ratio standard, but they earn a discussion. The appraiser's office relies mostly on the ratio reports generated by the PVD. This is understandable due to the fact fifty-percent (50%) of their compliance score is based on the ratio statistics. The statistical measure in the PVD report confirms an overall compliance. The PVD report is not designed to measure appraisal performance within strata. Levels and uniformity using intra-county performance measures compared with the overall PVD measures will provide insight into uses and other data strata not in compliance. Responses by the jurisdiction imply internal ratio studies on stratified data are limited primarily due to limitation within the Orion system and time. Ratio studies on selected strata can be completed

in SPSS or R but it requires additional time and effort to export the data and to then complete the analysis. SPSS does support a pre-programed sales ratio module, the R system does not. The COD and PRB statistics require users to create the algorithm within those software platforms as these measures are specifically created for use by the property assessment industry, this setup requires an additional time commitment to setup for COD and PRB results.

PVD Sales Ratio Summary – 2018:

The sales ratio results from the Sedgwick County 2018 Compliance Review are displayed in the table below:

MEASURE	RATIO STUDY	CONFIDENCE RANGE (IN/OUT)	POINTS ALLOCATED	SUBCLASS WEIGHT	POINTS POSSIBLE	POINTS RECEIVED
1. STATISTICAL MEASURES						
a. RESIDENTIAL						
LEVEL: MEDIAN RATIO	90.1	IN (87.9, 91.8)	25	0.798	20.0	20.0
UNIFORMITY: COD	10.6	IN (9.7, 11.7)	25	0.798	20.0	20.0
b. COMMERCIAL/INDUSTRIAL						
LEVEL: MEDIAN RATIO	90.9	IN (86.2, 94.9)	25	0.202	5.0	5.0
UNIFORMITY: COD	22.2	IN (19.9, 25.1)	25	0.202	0.0	0.0
TOTAL					45.0	45.0

Considerable weight is placed on ratio results toward the total points awarded by the PVD, with 100-points being a perfect overall score. Fifty-percent (50%) or 50 points is possible to receive in sales ratio section. In 2018, the appraiser’s office earned 45 of the 50-points available. As seen in the table the COD on Commercial/Industrial is slightly above the twenty-percent (20%) stated by the PVD and IAAO standard. It is noted the 22.2% does fall within the 95% confidence interval range. This however only validates that the 22.2% COD can be asserted as the true COD with a 95% level of confidence.

A second sales ratio report, generated by the SGCAMAPROD system on 2/13/2019, produced the following:

REPORT TOTALS									
	COUNT	PRICE	TOTAL VALUE	AGGR RATIO	MEAN RATIO	MEDIAN RATIO	STD DEV	COD	PRD
Summary	6301	1,157,240,807	\$1,108,701,070	95.81%	95.81%	95.85%	6.75	5.58	100.001

The above ratios are for residential class properties only and have been trimmed using the method of any ratio greater than 1.5 +/- times the median ratio. Thus, ratios greater than 143%, or less than 48% are not used in the study and are flagged as outliers. Comparing the two reports apples to apples is not reliable. The appraiser’s office provides for all residential arms-

length sales as ratio candidates, then trims the outliers using the method stated above. This method does not conform to the IAAO Standard of Sales Ratio, Appendix B, page 53 and 54. The same outlier trimming method is also described in the Kansas Real Estate Ratio Study. The actual PVD report statistics are on the website <https://www.ksrevenue.org/pdf/17FinalRatioStudy.pdf>. Reviewing the 2016 PVD report as a gauge it appears the ratio reports are based on a data sample with fewer observations reported, and the PVD does a sub-class report on strata. No reason was provided for the difference in medians on the residential class.⁹

RECOMMENDATION #11: This recommendation is based on the full analysis in this section covering sales processing procedure, in-house ratio studies for intra-jurisdictional knowledge of different strata, and compliance with the PVD mandates of statistical compliance.

As stated previously, using PVD ratio standards the appraiser's office meets the statistical measures for compliance. No further action is required in reaching the overall compliance goal. The recommendations are directed toward improving workflow on documenting sales validation and improving processes for monitoring appraisal performance periodically during the appraisal cycle.

Sales validation and documentation is labor concentrated, and time-consuming. Methods and techniques that will reduce the time required and reduce the labor required should be explored. The suggestions here follow a pattern suggested in the data collection section. How technology is used currently is more important than what technology is used. With the technology pieces locked in, e.g. Orion, OnBase, EUS, and Aumentum, any improvement will need to be made using a study of workflow and processing habits. Following is a list of considerations for change:

- As filing and recording the SVQ falls on the Register of Deeds for initial processing before available for processing by the appraiser's office.

Opportunity #1

- Develop a system for and with the ROD, as an SVQ is recorded and the parcel identification number assigned, the property class is also assigned for that parcel.

⁹ The 2017 Kansas Real Estate Ratio Report was not available on at the time this report analysis was completed.

- This eliminates the need for a second person to enter the PIN, decide if residential, Ag, or commercial/industrial. (This can be accomplished electronically)

Benefit: As sales are ready for review by the Appraisal Support, a second sorting, query is not required to identify non-residential sales. This type system also allows for agriculture, and commercial sale to be available for processing sooner.

- Understanding that once the ROD's notifies specific staff members that an SVQ file is ready for processing, each SVQ is then pulled for review and saved for attachment to the appraiser's record. From this step a "Sales Cover Sheet" is created.

Opportunity #2

- It is apparent some information on the "Sale Cover Sheet" is populated from an electronic file. (If this is not the case it must be.) The Orion system must host a Change of Ownership screen, with the ability to add all pertinent data, and information about the sale. It will also include a history of Ownership report.
- Orion, or Aumentum will also provide space for appraiser notes, date, and initials. Example below:



- With deeds, and SVQ's being retained as an image by the ROD, it would save effort and time if a link is created using the parcel ID as reference to allow users in the appraiser's office to click on a link and all the pertinent documents would be available for viewing. No attachment would be needed. Click [Recorder of Deeds Parcel Documents](#)

Benefit: Keeping all data on sale and ownership changes as part of the CAMA database and not as an outside work around that must be attached will be a time saver, reducing redundancies and providing consistency of process.

When integrated with the CAMA database all the sale information is readily available for viewing on a single screen.

Any mandated reports by the PVD can then be generated from the CAMA database, in summary or full form. Click on to see [examples](#).

- Completing in-house sales ratio reports will bring hidden problems from models, or equity into focus. Using in-house ratio analysis to discover inequities, geographically, by property uses, age related, quality grade assignment, and many others is in the IAAO standard on Ratio Studies, under the topic of “Horizontal Equity.”

Opportunity #3

- The concept of equity for property appraisal and assessments embeds what is described as vertical equity, as related to Sale Price. The price related differential, (PRD) and price related bias (PRB) statistics are used as measures for gaging whether appraisals are accurate at different price levels; whether higher priced properties are appraised at different percentages of value than lower priced properties?
- Horizontal equity compares ratio results for specific property attributes such as, age, location, size, use, etc. See example using validation codes:

FLAG	Count	Median	Mean	Mean	IQR	SD	COD	COV	PRD	PRB
1 Arm’s Length	2313	0.9963	1.0242	1.0053	0.1235	0.1506	9.271	14.7090	1.0188	-0.0601
2 Relocation	273	1.0241	1.0301	1.0293	0.1025	0.0877	6.529	8.5107	1.0007	0.0211
7h Bank REO	45	1.5228	1.5197	1.3997	0.3330	0.2692	13.907	17.7129	1.0857	-0.1862
Combined	2631	1.0000	1.0333	1.0124	0.1257	0.1482	9.751	14.3410	1.0206	-0.0642

In this example jurisdiction it is mandated the Bank REO’s initially remain in the ratio report, relocation sales are also mandated to remain. It is clear the REO sales do not represent the typical market and their use skews the overall result and analysis. While the “Relocation Sale” have good statistics, they tend to be appraised slightly high based on the overall ratio results. Relocations are appraised with the same model as arms-length transactions and Bank REO’s. What is different with these two groups is the motivations of the seller are different than the typical market observes.

Example #2, commercial ratio results are outside of the COD standard of 20%, but without analysis to identify the problem finding a solution is difficult. Using the variable “Use” to breakdown the ratio report gives a better view of results as provided.

Ratio Summary Statistics Section

				Wtd.						
USE_CODE	Count	Median	Mean	Mean	IQR	SD	COD	COV	PRD	PRB
C 0050 Apt>6	10	1.0160	0.9343	0.9479	0.3170	0.2477	17.277	26.5129	0.9857	0.2653
C 0060 CBusn	62	1.0068	1.0276	0.8449	0.3498	0.3987	26.191	38.7968	1.2162	0.0009
C 0070 Office	19	0.9620	1.1198	1.0941	0.5038	0.5251	34.959	46.8970	1.0235	0.0940
R 0043 Apt<6	15	1.0000	0.9912	0.8357	0.2351	0.2954	19.775	29.8032	1.1861	-0.1662
Combined	106	1.0000	1.0211	0.8700	0.3449	0.3937	26.584	38.5606	1.1737	0.0065

The example jurisdiction, like Sedgwick County, has a median level that meets the ratio standard, but the COD is above the 20%. However, the apartments are within the standard COD. Office properties have an extremely high COD. This jurisdiction needs a full review of “Office” procedures, operations, and value outputs. Only by stratifying the commercial sales by “Use Code” is this revealed. The next example provides additional ratio statistics for consideration, all are discussed in the ratio study standard.

Additional Ratio Summary Statistics Section

										5%
					15%	Wtd.	Wtd.			Trim.
USE_CODE	Count	Min	Max	Range	COC	COD	COV	MADM	MAPDM	Mean
C 0050 Apt>6	10	0.3988	1.1923	0.7935	60.000	20.535	964.1041	0.0985	9.697	0.9497
C 0060 CBusn	62	0.2072	2.2464	2.0391	50.000	40.299	2745.038	0.1469	14.589	1.0067
C 0070 Office	19	0.5320	2.8556	2.3236	26.316	39.855	2288.314	0.2446	25.430	1.0560
R 0043 Apt<6	15	0.3183	1.6654	1.3471	66.667	11.479	548.2145	0.1207	12.068	0.9911
Combined	107	0.0592	2.8556	2.7963	49.533	34.295	2269.650	0.1639	16.393	0.9967

Appraisal and Sale Price Summary Statistics Section

		Appraisal	Sale Price	Appraisal	Sale Price
USE_CODE	Count	Mean	Mean	Median	Median
C 0050 Apt>6	10	337461	356020	326881	332500
C 0060 CBusn	62	549448	650307	332752	342500
C 0070 Office	19	537756	491508	246447	390000
C20062 ComrDevRate	1	92040	1553473	92040	1553473
R 0043 Apt<6	15	163068	195136	168237	185000
Combined	107	469120	539237	246447	300000

The above examples were generated using NCSS 11¹⁰

Benefit: Additional depth of in-house ratio analysis provides the precise measures to identify areas of non-compliance with the ratio standard before, rather than after, the appraisal/assessment cycle is completed. In recognizing the additional time, and thus staff for this level of analysis, consider out-sourcing the analysis. Working with student interns from WSU should be considered. The jurisdiction's SPSS software is capable of all the above calculations, as is R, and Excel. It is just a matter of a one-time setup to make it all work. Further discussions will follow on stratification of sales data in the chapters on valuation and model development.

Another important benefit of having on-demand, in-house ratio analysis available is for use in an appeal. Statistically providing the actual level of appraisal on all parcels in a class, or by use, or with in specific market area is strong evidence on how credible the appraised values are. And when the ratio statistics are not supportive, it can be telling the review appraiser that a needed value change is basic and able to avoid an appeal all together.

Conclusion by Consultant on Sales Data and Ratio Studies: Sales data and its prescribed use goes to the core for all operations and processes in the appraiser's office. All property subject to market value estimates are evaluated comparing appraised value to sale price. Standard 5 of USPAP SR 5-7 (comment) states in part.....*"requires appraisers to evaluate performance of models, using techniques..... and model performance statistic such as appraisal- to sale ratio studies"*. As the PVD mandates compliance with both USPAP and the IAAO Standard on Ratio Studies and both standards site market value and thus sale price as the target of the value estimate, the entire effort toward estimating value by the appraiser's office is reliant on the use of sale price as both a guide and target.

This audit on process and operation finds the appraiser's office to be in compliance with how sales are processed and then used in estimating value based on the standards of compliance required. The audit review does reveal areas of operation that can be improved to gain efficiencies aiding in reducing staff time. Conducting stratified ratio studies can be used to help reduce the COD on commercial property as a class. These suggested steps are found in the "RECOMMENDATIONS." The "Opportunity" suggested to reduce the time to process the SVQ does require cooperation of the Register of Deeds and possibly county IT or Tyler Technologies/Orion staff. This is presented as an "Opportunity." For future change. As a county all opportunities to increase efficiencies must be explored. Completing in-house ratio studies

¹⁰ NCSS 11 Statistical Software (2016). NCSS, LLC. Kaysville, Utah, USA, ncss.com/software/ncss.

using various strata to discover areas where values and equity can be improved requires more staff time. This was stated as a reason for not completing ratio studies at this depth. The results of in-house ratio studies are needed. While ratio studies on-demand are desirable, even having quarterly studies with predefined requirements completed by an outside source, e.g. consultant, intern etc. is preferable to having no report.

Land Valuation

Land valuation in Kansas is divided into three classes, residential, agriculture, and commercial. The PVD's 2018-19 Procedural Compliance Guidelines will be used for documentation of compliance for each class. The response by the appraiser's office to the questions in this chapter is weighed against the mandates of K.S.A. 79-1476, and K.S.A 79-420, USPAP Standard 5, SR 5-5a(iii), 5-6b, 5-7b, the RMS Section 8, and the IAAO Standard on Mass Appraisal of Real Property, 2017.

Questions:

1. **Is the land valuation process clearly documented?**
2. **Is all land assigned an appropriate unit of comparison?**
3. **Aside from areas with few sales, is land valuation based primarily on the sales comparison approach, using either a standard unit or base lot method?**
4. **Are size adjustments regularly developed based on market analysis?**
5. **Are adjustment factors regularly developed for relevant features based on market analysis?**
6. **Does land valuation employ spreadsheet or statistical software?**

Response by the Jurisdiction: Residential land is valued using base rate models. In all there are 206 land models used to estimate land values in the neighborhoods. The valuation is completed manually outside of Orion in Excel and manually updated in Orion. Each parcel is assigned to a neighborhood in the Excel spreadsheet then the model is applied to estimate the value. Section 8 of the RMS provides a framework for each of the three land classifications. Industrial is classified as commercial land. The front foot, whole site, square foot, or per acre base rate method is the foundation of the model structures used on all land models. These models are known as Computer Assisted Land Pricing (CALP) models.

Questions:

#7: Does land valuation employ computerized mapping or GIS software?

#8. When current year sales are insufficient for reliable analysis, does the office supplement them with prior sales and/or employ supplemental land valuation methods?

#9. Are land valuation tables or models regularly updated?

#10. Are sales ratio studies regularly conducted for vacant land?

Response by the Jurisdiction: A neighborhood or market area map is generated in the appraiser's office utilizing GIS software which provides the defined areas to which each parcel is assigned for land valuation.

Q#8, Q.#9, and Q.#10 are "YES."

Questions:

#11. Is agricultural and timber land appraised in compliance with legal requirements using appropriate methods and techniques?

#12. Are mineral properties appraised in compliance with statutory requirements using appropriate methods and techniques?

Response by the Jurisdiction: **Q.#11.** PVD provides annual agricultural use values for all counties. **Q#12.** Sedgwick County, Kansas has no severed mineral records to apply values to. Oil and Gas are valued as personal property.

Response by the Consultant: Agricultural land carries a split value. "Fair market value in money" in accordance with K.S.A. 79-503a, applies a market value to the home-site land and improvements. Land devoted to agricultural use shall be valued based on the capitalization of agricultural income. As set forth in K.S.A. 79-1476, agricultural use models based on soil productivity shall be developed and provided to the county by the PVD. The county appraiser is required to use the Orion "use value tables" as developed and provided by the PVD. The PVD sees the use value as a "Jurisdictional Exception" to USPAP as it is mandated value method prescribed by Kansas law.

Conclusion by Consultant on Land Valuation:

Land value models are stored in the Orion CAMA system using the prescribed tables, defining the models as, AgMkt, Acres, Site, Sqft, Lot, Depthfactor, and NBHD. During the on-site visit land

models were reviewed with discussion on the process. Land value is based on a simple base rate with a different model for each defined geographic area. An example model is: (Base Size * Base Val) +/- adjustments. The adjustments are for size if the subject is smaller than the base there is negative adjustment. If the subject is larger, a positive adjustment will be made to the base value. Land values are tested for reasonableness to the market where vacant land sales are available. When such sales are unavailable, land to building ratios based on typical market allocations are used.

Land value compliance methods are found in the PVD, Procedural Compliance Guide. The PVD will verify each neighborhood profile for conformity of economic status, land use mix, and market trends. They also verify that each active land model has an analysis or narrative. The PVD also verifies that each active land model has an analysis or narrative. Such analysis and conclusion are required and must be available for review. Sales comparison is the preferred approach to land valuation. When sales data is insufficient, alternate recognized methods are required for valuing land.

For Agriculture land, the LandAgMkt table is reviewed to verify values are updated as provided by the PVD.

Overrides to market land values must be documented for reasons and supported. The overrides are coded into the Orion system.

RECOMMENDATION: #12

Opportunity/Threat: This recommendation is provided for clarity of operational opportunity that is not currently in use. Creating and maintaining 206 land models even with the aid of the CAMA system is an intricate and time-consuming process. The Orion system as presented and discussed in the Information Technology chapter lacks [full flexibility](#), in this case to the use of “Hybrid Models”¹¹ that can be used to adjust for the variations of multiple base rate models. Use of this model structure can reduce the number of models required for 206, to in theory one, but a realistic estimate would be ten (10) or fewer.

It is possible with the current models to reduce the numbers of models by identifying models with similar base rates and adjustments, then using binary NBHD’s as a method to adjust for different locations, as the location provides the basis for the starting base rate. Obtaining the expertise of an outside modeling expert could prove helpful in condensing the number of models

¹¹ IAAO AVM Standard 2018, p23

and yet still being capable of applying the models using the Orion Land Valuation module and meeting compliance requirements as set forth by the PVD.

Residential Valuation

The following documents are used for evaluation of residential real property. As set forth by the Kansas Constitution, Article 11 § 1 covers the classification system. Class 1: Real Property, sub-class (1) is Residential property (including multi-family residential and mobile homes). Guidelines used for compliance include, Procedural Compliance Guide PVD, 2018-19, Revaluation Maintenance Specifications PVD, 2019, USPAP 2018-19, IAAO Standard on Mass Appraisal Real Property, 2017, and Automated Valuation Models, (AVMs) 2003 revised 2018.

Questions:

- 1. Is primary reliance placed on the sales comparison approach in the appraisal of single-family homes, condominiums, and townhomes?**
- 2. Are sales used in residential valuation adjusted to the valuation date?**
- 3. Are residential valuation models, equations, and tables recalibrated each revaluation year?**
 - Does the jurisdiction recalibrate residential valuation models, equations, or tables each revaluation year?**
- 4. Are single-family residential neighborhoods adequate in size?**
- 5. Do residential sales comparison models include those property characteristics that contribute significantly to value?**

Response by the Jurisdiction: Yes to all the above. Condominium's detached single family, townhomes, and multi-family are all part of the residential class. There are six (6) urban models, four (4) rural models and one (1) condo model. All models are fully recalibrated each year as required by law. Model specification and calibration is completed in the Orion CAMA system using the multiple regression analysis (MRA) module.

Response by the Consultant: **Q #1 - #5.** The standard on Mass Appraisal of Real Property begins with addressing the requirement of complete and accurate data. The audit covered the topic data collection in chapter 6. The Mass Appraisal Standard section 3, covers valuation accuracy, selection of characteristic data, and property classes. Section 4 give specifics on "Valuation" and

includes the three approaches to value. In section 4.1 of the standard, use of geographic stratification is provided saying: *“stratification is appropriate when the value of property attributes varies significantly among areas and each area is large enough to provide adequate sales.”* The Mass Appraisal standard provides this ranking system as a guideline for what value approach is “typically useful” for different use classes.

Type of Property	Cost Approach	Sales Comparison Approach	Income Approach
Single-family residential	2	1	3
Multifamily residential	3	1, 2	1, 2
Commercial	3	2	1
Industrial	1, 2	3	1, 2
Nonagricultural land	–	1	2
Agricultural	–	2	1
Special-purpose	1	2, 3	2, 3

Mass Appraisal Standard sections 4.6.1 – 4.6.3 specifically address different classes of residential real property and using MRA as a method to calibrate a sales comparison and multifamily residential models. Section 5 of the Mass Appraisal standard addresses, quality assurance and value defense. For this audit quality assurance is reviewed in chapter 7 and value defense is in the final chapter 12.

The IAAO standard on AVM's is also applied in this valuation section. The AVM standard covers the specifics of the modeling process with emphasis on appraisal and statistical principles. The following bullet points highlight areas where the AVM standard applies to completing a Mass Appraisal;

- 3.3 Purpose of an AVM – “efficiently provide an accurate, uniform, equitable estimate of fair market value.”
- 3.4 Development and Application of AVMs – “AVMs are developed using appraisal principles and techniques” ...” Two major components of valuation modeling are specification and calibration.”
 - The model specification process identifies property characteristics (variables) that reflect consumer demands and are used to construct the model structure.
 - Model calibration is the process of deriving coefficients for the variables previously specified in addition variables are created through transformations to avoid collinearity problems.

- 3.4.1 Scope of Work – “The scope of work defines the type of property and geographic area in which the AVM will be applied, and the steps required to develop and implement the AVM”

In Kansas the Scope of Work is promulgated by the PVD in the Procedural Compliance Guide, with specifics defined in the RMS, and USPAP Standard 5, SR 5-2(j), Standard 6, SR 6-1 and 6-2. All jurisdictions in Kansas are required to submit a SOWD electronically to the PVD. Compliance to this requirement is graded out in the “Procedures” section of the 2018 Compliance Review. A total of 36 points are possible in this section. Sedgwick County received 32 points. The deficiencies resulting from issues in reporting is discussed in the chapter on Land Valuation.

USPAP Standard 6, SR 6-1 states in the comment, Comment: “Documentation for mass appraisal for ad valorem taxation may be in the form of (1) property records, (2) sales ratio and statistical studies, (3) appraisal manuals, and documentation, (4) market studies, (5) model building documentation, (6) regulations, (7) statutes, and (8) other acceptable forms.” As noted in previous chapters and in this chapter, the appraiser’s office meets this requirement that is specific to the ad valorem methods of “Mass Appraisal”. SR 6-2 addresses the appraisal date. K.S.A. 79-503a states that the appraisal date is January 1, thus compliance is achieved with this rule. Due to the fact the PVD requires compliance with USPAP in all phases of the appraisal process and has promulgated directives and compliance documents, and statutory references, all county appraisers are required to follow, compels compliance with USPAP as the Appraisal Process is completed. On the 2018 Compliance Review, under “Procedures,” d1. LAND VALUATION MODEL CALIBRATION, and d2. MARKET AG LAND VALUATION, no points are received.

While it is stated the Orion CAMA, system is USPAP compliant, the total clarity of such a statement is asynchronous. The appraiser’s office as routine requires some analysis outside of Orion be completed in order to comply with PVD processes.

Questions:

6. How are atypical homes valued?

Response by the Jurisdiction: Cost Approach

7. How are homes subject to flooding, tornados, hurricanes, contamination, or other external obsolescence issues valued?

Response by the Jurisdiction: Valued using cost, market or multiple regression analysis with additional lump sum or percentage adjustments.”

8. How are condominiums and townhomes valued?

Response by the Jurisdiction: Valued using cost, market or multiple regression analysis

9. Are condominium and townhome neighborhoods adequate in size?

10. Are appropriate procedures in place for the valuation of mobile/manufactured homes?

Response by the Jurisdiction: Mobile homes placed on a permanent foundation are valued as real property. The title must be in the name of the same person(s) as the underlying real property. All other mobile homes are valued as Personal Property. The Marshal Swift cost for manufactured homes is available in the Orion CAMA system. For mobile homes classified as real property they are valued in Orion. For mobile homes on real property, but not on a permanent foundation are noted on the Orion record for reference.

Questions:

11. Are appropriate procedures in place for the valuation of cottage and recreation properties?

12. Do construction costs manuals reflect the local market?

13. Are depreciation schedules market-derived?

14. Are cost values reconciled to the market?

15. Are values checked for accuracy, uniformity, and compliance with IAAO ratio study standards?

Response by the Jurisdiction: **Questions #9, #11 - #15** all “Yes.”

Question:#16. When multiple approaches are used, how are values reconciled?

Response by the Jurisdiction: During final review of parcels where multiple approaches were developed (sales comparison, cost, MRA, etc.), the approach that is chosen will be the one which provides the best indication of market value and offers the most support. This process and its procedures are documented.

Response by the Consultant: The jurisdiction provided a sample of model development sheets for residential properties. Review of these work products, and using the requirements found in the scope of work documented in the PVD’s Procedural Compliance Guidelines, the IAAO standards on Mass Appraisal, and AVM, evaluation of the models was conducted. The residential valuation processes used in the appraiser’s office follow these evaluation documents. Mandates for completing a construction cost multiplier analysis, and depreciation analysis were each given maximum points on the 2018 Compliance Review by the PVD.

RECOMMENDATION #13: This recommendation is advisory for the purpose of clarity regarding the modeling process. Valuation model development and all the processes are complex in technique and development. Yet in the end it is the simple progression of the “Appraisal Process.” Development of a model summary report would be helpful and useful for explaining the complexities of the entire process. The report should include examples how the market areas are selected. The report should be structured to answer the following questions:

- Exactly what does the model structure for cost, market, and MRA models look like?
- If each model is market based, then how are they different in using the market data?
 - How is the same market data applied differently to Cost and Sales Comparison?
- Specifically, what accuracy measures are used to reconcile the different value estimates?
- Provide a ratio report for each market area, and within each market area a further breakdown by Cost, Market, or MRA models should be made.

A summary report provides an immediate review of results that are clearly stated and revealed for review by technical and non-technical users. The results can also be used as support in the appeal process. The Neighborhood Profile reports are a start on implementing this recommendation, but additional results on values would improve the total understanding. Standard 6 in USPAP provides guidance on completing a Mass Appraisal Report.

Conclusion by Consultant on Residential Valuation: The appraiser’s office staff devotes considerable time preparing data for use in the valuation process. These processes have previously been examined and validated in other chapters of this audit. Without quality data it is impossible to “produce and communicate credible mass appraisals” as USPAP Standard 5 requires. The Orion CAMA system allows for use of market derived construction cost multipliers, and market derived depreciation tables. The appraiser’s office provided MRA output results for the direct market models in each of the market areas. Also reviewed was a ratio report on residential values with the following results:

REPORT TOTALS									
	COUNT	PRICE	TOTAL VALUE	AGGR RATIO	MEAN RATIO	MEDIAN RATIO	STD DEV	COD	PRD
Summary	6301	1,157,240,807	\$1,108,701,070	95.81%	95.81%	95.85%	6.75	5.58	100.001

These overall results meet the standards of accuracy based on the IAAO standard on Ratio Studies.

Opportunities:

- The advisory recommendation provides for better communication of results.

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- Additionally, an area of concern surrounds the methods used in the model development and analysis phases for excluding outlier sales or value estimates. This was expressed in the Sales Ratio chapter, but it changes some in the valuation section. It was expressed that during model calibration when percent error exceeded thirty percent (30%) +/- that case (sale) was no longer used to calibrate the model. This policy needs to be reviewed with the guidance provided in the IAAO standard on Ratio Studies, Appendix B.
- Holdout Samples are another chance to get better feedback on model performance. Section 5.3 Mass Appraisal Standard, “Since they were not used in the valuation, holdout samples can provide more objective measures of valuation performance.” Also see AVM standard 7.4.

The “Opportunities” are provided as processes to ensure the ratio statistics are unbiased measures not affected by elimination of all poor value estimates. If only the lowest error rate is allowed the “error rate measure” coefficient of dispersion (COD) is distorted. Using a consistent and objective outlier procedure is recommended. The COD in the report in the 2018 Compliance Report from the PVD, provides that the residential class accounts for half the COD points allowed and awarded in the report.

Overall analysis and development of residential values follow mandated laws, and directives. Evaluation with IAAO standards as guidelines reveals some areas where opportunities exist to improve the valuation processes.

Commercial Valuation

Compliance regarding commercial valuation is evaluated based on Kansas law, K.S.A. 79-503a, K.S.A. 79-1476, USPAP, and adherence to the rules in the PVD Procedural Compliance Guide and the RMS. IAAO standards on Mass Appraisal, AVM and Sales Ratio Studies will be used for comparison of mandates by PVD and the Orion CAMA system, to suggested methods found in the IAAO Standards. Like with other property classes, commercial property is subject to the “17%” rule for data collection. Commercial property is appraised at 100% of fair market value and assessed at twenty-five percent (25%) of the appraised value. The following 13 questions were answered by the jurisdiction regarding the processes and operations used for completing the appraisal of commercial real property in Sedgwick County.

Questions:

- 1. Does the jurisdiction have a commercial cost manual that is up to date and rooted in the local market?**

Response by the Jurisdiction: Cost values are generated in the Orion CAMA system using annually updated Marshall and Swift valuation tables with the local multiplier applied.

- 2. Does the jurisdiction have a program for the routine capture of income and expense data?**

Response by the Jurisdiction: I&E data is gathered through an annual survey questionnaire mailing and from information willingly supplied during valuation appeal meetings. It is also obtained through the appeal process.

Response by the Consultant: The appraiser's office provided a 61 page "Commercial Data Collection" document and the "Benchmark Study January1, 2018" providing insight into the processes used to apply the Cost and Income approaches. These documents contain much of the specific processes required to generate accurate cost estimates using the Orion CAMA system. The Benchmark Study includes the specific model specifications and calibrations used for application of the income approach.

- 3. Do commercial appraisers screen and validate commercial market data?**

Response by the Jurisdiction: We research market listings for sale and for lease properties through Co-star, Realty Rates, Burbach, IREM, Loopnet, and other local realty listing sources. Sale transaction data is verified through interviews.

- 4. Does the jurisdiction obtain and utilize information on typical income and capitalization rates available from third party sources?**

Response by the Jurisdiction: Cap rate studies are contracted annually from Keller and Associates. Property types addressed in the studies are rotated on a bi-annual basis.

- 5. Are spreadsheet and/or statistical packages used in analyses?**

Response by the Jurisdiction: SPSS, Excel, RStudio

- 6. Are multi-family properties appraised by the sales comparison or income approach?**

- 7. Do multi-family valuation models recognize features important to renters and investors in such properties?**

Response by the Jurisdiction: **Q#6 and Q#7** – The income approach is typical” “Many features are accounted for in the economic grade assignment. We list apartment counts by bedroom/bathroom combinations

8. Are office buildings appraised based on capitalized net income?

9. Are retail appraisals rooted in market data, and do they recognize variations in relevant location and building features?

10. Do appraisals for warehouses and light industrial properties recognize the features that drive market value for such properties?

Response by the Jurisdiction: **Q#8** YES. Response by the Jurisdiction: **Q#8** Yes. **Q#9** – Variances are recognized through economic grades and building section rank” **Q#10** – Many features are accounted for in the economic grade assignment.

11. How are values reconciled?

Response by the Jurisdiction: All Commercial property values are annually analyzed in comparison to model estimates. Properties with value outside the norm or that have special circumstances identified are individually reviewed by Appraisers.

12. Does the jurisdiction have policies for the appraisal of mixed-use properties?

Response by the Jurisdiction: PVD provides guidance. There is cooperation among divisions within the office regarding mixed use properties.

Response by the Consultant: **Q #3- Q#12** all involve the use of the data and analysis found in the Benchmark Study. The Benchmark Study is a stratified analysis of the varied uses, classes, sizes and tenancies found in the commercial properties within Sedgwick County. Examples of strata's:

- Apartments
- General Office Low Rise – Single Tenant
- General Office Low Rise – Multi Tenant
- Multi-Tenant Retail under 20,000 sq. ft.
- Multi-Tenant Retail over 20,000 sq. ft.
- Single Tenant Retail less than 5,000 sq. ft.
- Industrial Warehouse – up to 5,000 sq. ft.
- Industrial Warehouse – 5,000 to 15,000 sq. ft.

Improvements have been assigned an investment grade “class”: A, B, C, D that uses a different criterion than the assignment of a Marshall Swift building class that also uses A, B, C, D. An “Investment Class Definitions” table is provided for assistance. The Benchmark Table is well designed for easy application of the data. Sedgwick County Appraiser and staff are the intended users of the Benchmark Study, however there is not any specific mention of what specific data is used to develop the benchmarks. Knowing the full coverage areas of the data sources provides full credibility that all benchmarks reflect local market trends and economic conditions.

During the on-site interview commercial staff provided a demonstration of the valuation processes used on commercial property types. This included the cost approach generated from Orion and the application of results from the benchmark study. Problematic issues discussed included:

- Lack of full disclosure on data sources used to develop Benchmark Study.
- Use of the Economic Unit System (EUS) into the future without the ability to update or fix bugs.
- Anticipated updates to Marshall and Swift system will pressure production do to needed training and adjustments in processes.
- Frustrations with lack of income analysis capabilities within the Orion system.

When the cost estimate and the benchmark estimate have a spread greater than thirty percent (30%) +/- the value is specifically reviewed using comparable sales and equity analysis to reconcile the final value estimate. The practice of reviewing individual value estimates, or a sample set of parcels is not a part of the current valuation processes for commercial real property.

The appraiser’s office staff involved with valuing the commercial sector of real property in Sedgwick County exhibits a high level of skill and understanding and proficient application of the methods and practices required to produce credible mass appraisals.

13. **How are special purpose properties appraised?**

Response by Jurisdiction: “Cost Approach is typical.”

Conclusions by the Consultant: Using the Sedgwick County, 2018 Compliance Review and the PVD Procedural Compliance Guide 2019 for a basis of mandated compliance on commercial processes, maximum points were awarded for the “Scope of Work” section. On the “Statistical Measures” section under “COMMERCIAL/INDUSTRIAL – UNIFORMITY: COD”, zero points were received as the COD is 22.2% thus greater than the 20% maximum allowed by the PVD for compliance.

RECOMMENDATION #14: The IAAO standard on ratio studies section 4.2, suggest completion of at least four (4) ratio studies when there is a revaluation. In Sedgwick County revaluation is completed annually thus a constant evaluation of results is required. A baseline study on commercial property provides preliminary information on appraisal level and uniformity. At the very least this baseline ratio report should provide results on the different commercial stratum. Completing a stratified ratio study, any stratum with statistical measures outside of allowed compliance results can be identified. After all commercial property is revalued a second report should be generated for compliance results, and to identify any property classes or uses in need of further review.

A second level of non-compliance is associated with the fact no formal review of appraised values is conducted during the revaluation cycle. IAAO standard on mass appraisal, section 5.5 specifically states: “*confidence begins with application of reliable appraisal techniques, generation of appropriate valuation reports, and **review of preliminary values**”.* Such reviews are helpful in identifying specific causes of uniformity issues. For example, is the cost approach estimating value too high (or low) for a certain class, or market area? Determine if an adjustment can be made on the model side to correct this problem.

RECOMMENDATION #15: The valuation process is like all the processes in the appraiser’s office, it demands labor intensive assignments to complete the valuation cycle start to finish. The current Benchmark Study is completed by an outside consulting firm using a variety of data studies, and data sources. For 2019 the county appraiser’s office added local data, including sales and income information to the Benchmark Study using Microsoft’s Excel spreadsheet.

Opportunity: Going forward the format and templates for development of in-house benchmarks are established, it is recommended the process continue in-house in future valuation cycles. The advantage is appraisers can have input into the data used and analysis. Knowing what the data sources are and how reliable the data is, provides a higher level of confidence in the estimated values. The in-house benchmarks also allow for testing on sample data sets as part of the development process, this in turn allows for adjustments toward improved value estimates at the inception of the valuation cycle.

Threats: Implementation of the stated opportunity above can create complications of meeting mandated timelines for completion for the commercial appraisers. Much of the labor needed to complete the commercial values results from a lack of flexibility between the Orion, EUS, and Aumentum systems. In order to implement RECOMMENDATIONS #14, and #15, either additional staff is required, or a complete review and inventory of methods used is required. Such a review will develop a plan to reduce time thus labor and leverage the use of technology.

Conclusion by Consultant on Commercial Valuation: The knowledge, skills, and proficiencies required to complete credible mass appraisals on commercial real property takes years of

education and experience. There are many market variables that must be considered by the appraiser. Where residential property in general participates in the local market, there are many market components involved with commercial real property. Commercial property transacts in a local markets, regional markets, and global markets. Commercial property is purchased for single tenant use, multi-tenant use, no growth investment with tax advantage, to highly leveraged growth investment, and tax advantage. The list goes on as does the complexity of understanding market forces. Having reviewed the processes and steps mandated and used by the Sedgwick County appraiser's office, commercial staff, and appraisers, they meet the majority of compliance standards.

As discussed in this chapter there is room for improvement at the uniformity level. No data was provided, and no in-depth ratio studies conducted to measure how much improvement can be made. Recommendations are provided to address methods that can be implemented to improve the statistical COD and bring it into compliance. But more important these recommendations provide for improved processes to enhance the overall knowledge of the relationship the appraisals have to the sales price between different commercial classes.

Each chapter of the audit discusses the amount of labor required to meet compliance mandates of Kansas law, and the PVD. Commercial valuation is no different. Leadership at the county level and within the appraiser's office must continue to explore and investigate new methods to increase efficiencies and effectiveness. The commercial valuation section in the appraiser's office needs to begin with discovery and implementation of improved efficiencies immediately.

Valuing Personal Property

This description provided by the appraiser's office incorporates the documents used for compliance accountability when valuing Personal Property. See below:

By law, the county appraiser must appraise all taxable personal property using publications and valuation guidelines prescribed by the State Division of Property Valuation. The county may deviate from a prescribed value, if it is "market-driven", in order to achieve market value. All deviations must be documented [K.S.A. 79-1456]. The Kansas Constitution places personal property into Class 2, which is further divided into six subclasses. A brief description of each personal property subclass and the manner in which it is valued and assessed for property taxation is outlined below. Guidelines for valuing personal property can be found on the Property Valuation Directors website. The Personal Property Valuation Guide provides the guidelines for valuing mobile/manufactured homes, motor vehicles, commercial/industrial machinery and equipment, and other tangible personal property. The Kansas Oil & Gas Appraisal Guide provides the guidelines for valuing oil and

gas property. Information pertaining to the valuation of state appraised railroads and public utilities can be found on the PVD website under “Public Utilities.”

Questions:

1. What personal property is assessable in the jurisdiction?

Response by the Jurisdiction: See below:

- **Mobile Home**
- **Mineral Leasehold** interests, *except* oil leasehold interests the average daily production from which is five barrels or less, and natural gas leasehold interests the average daily production from which is 100 mcg or less.
- **Public Utility**
- **Motor Vehicles (24M trucks, 16/20M trucks, Buses)**
- **Commercial & Industrial Machinery and Equipment**
- All other tangible personal property not otherwise specifically classified (**Trailers, ATV's, Non-Highway vehicles, Motorbikes, Recreational Vehicles**-not taxes when tagged, **Snowmobiles, Dune Buggies, Golf Carts**)
- **Watercraft**
- **Aircraft**

2. Is a thorough personal property discovery program in place?

Response by the Jurisdiction: The owners of taxable personal property are required by law to list their property each year with the county appraiser. When the owner does not list taxable property, the appraiser must discover the property and place it on the appraisal roll. Methods the county can use to discover taxable property within their jurisdiction include:

- Accessing information from public records,
- Viewing the property,
Obtaining information from lessees and others that are required to list property they do not own, but have in their possession
- Utilize State title lists, state watercraft and the Manufactured Home Community list that is received by owners/operators

Refer to the “Discovery of Personal Property” section in this guide for more information. [K.S.A. 79-1411b].

Additional Sources the county appraiser can use to discover taxable property or identify its owner are:

- Previous assessment records, physical inspection of the property

- Real property field appraiser records, Previous Audits
- State and local sales tax permits, City and county business licenses
- Property transfer documents, Bill of Sale Business listings from the news media
- Classified Advertisements, Telephone directories
- City directories, Accounting records
- Public records (trade name records)
- Title and registration applications, Corporation charters, partnership
- FAA Aircraft Registrations articles
- Mobile/Manufactured Home Court Lists Permits
- Ks. Dept. of Wildlife, Parks, & Tourism Boat Registrations

3. How is personal property appraised?

Response by the Jurisdiction: Personal Property is appraised per guidelines, provided to the Appraiser's office every year, and established by the Kansas Dept. of Revenue (KDOR) and the Property Valuation Division (PVD).

All personal property, **except certain motor vehicles and commercial/industrial machinery** and equipment, is appraised at its "market value" as of the first day of January each year. Market value is the amount of money a well-informed buyer would pay and a well-informed seller would accept for property in an open and competitive market without any outside influence. Certain motor vehicles and commercial/industrial machinery and equipment are appraised using a **value-based method**; however, it is not "market value."

Response by the Consultant: Exceptions to the "market value" requirement is bolded and underlined above for clarity in the response. These exceptions are not valued at "market value".

4. Is personal property valuation automated?

Response by the Jurisdiction: No, however, Personal Property trailers and Commercial & Industrial Machinery & Equipment (CIME) and 16/20M trucks are auto valued based on depreciation.

5. Are the real and personal property systems linked to each other?

Response by the Jurisdiction: No, except for Manufactured Homes, which are valued in the Real Property system and then interfaced over into the Personal Property system.

6. Does the jurisdiction provide taxpayers with required reporting forms each year?

Response by the Jurisdiction: Yes, we have preprinted renditions and instruction letter that is mailed to the property owner every year. We also have blank renditions available to property owners at their request.

Response by the Jurisdiction: *Q#6 & Q#7 are the same questions;* No, we only utilize the forms that we mail to the property owners.

8. Does the jurisdiction take remedial action when a taxpayer fails to respond?

Response by the Jurisdiction: The county appraiser is required by law to apply a penalty to the assessed value of personal property that is not listed in a timely manner or that is not listed at all. County appraisers may grant an extension to file if a taxpayer submits a written request, or before the March 15th deadline, which states just and adequate reasons for the extension. When an extension is granted and the taxpayer fails to file by the extended deadline, penalties are calculated from the March 15th deadline (April 1st for oil and gas renditions), not the date of the extended deadline.

Response by the Consultant: What documents are available to discover a new business that has not previously filed on personal property? Answer below, also included a blank form:

Failure to File Penalties: [50%] [K.S.A. 79-1422] *If within one year following the March 15th filing deadline, the county discovers a taxpayer failed to file a list or failed to file a complete list of taxable personal property, the county appraiser must determine the assessed value of the property and apply a 50% penalty for failure to file. When the taxpayer fails to file a complete list of the property, the penalty is applied only to the omitted or underreported property. If the county discovers taxable personal property that was omitted from the appraisal roll after June 15th of the current tax year (the date the appraiser certifies the appraisal roll to the county clerk), but prior to March 15th of the following tax year, the county clerk must place the property on the assessment roll as an added tax and apply a 50% penalty to the assessed value. [K.S.A. 79-1427a]*

If a failure-to-file penalty is applied to the value of taxable personal property and the taxpayer later files a list of the personal property within one year of March 15th, the failure- to-file penalty is no longer applicable and the appropriate late filing penalty is applied to the assessed value of the personal property which is now filed late.

9. Are personal property returns retained in a central repository?

Response by the Jurisdiction: Yes, all returns, and documentation received are scanned and kept in our imaging system.

10. Does the personal property system flag abnormal year-to-year changes?

Response by the Jurisdiction: No, this is done manually with sequel queries that we run yearly.

11. Does the office conduct routine audits?

Response by the Jurisdiction: No, we have not completed audits on accounts since the early 2000's. However, we do have a strict Quality Control (QC) policy on the valuation of accounts worked by staff.

Response by the Consultant: Collecting and listing the constitutionally classified personal property such as renditions, manufactured mobile homes, motor vehicles (all classes and sub-classes), commercial/industrial machinery and equipment, and mineral leasehold interests (oil and gas) is a discipline itself. The IAAO Standard on the Valuation of Personal Property provides this list of methods suggested for discovery:

Self-Declaration form, also called personal property statement, return, affidavit, report, listing, schedule rendition, and other titles in various jurisdictions.

- Conducting an annual canvass.
- Previous assessment records and previous personal property statements or returns
- Cross reference business with leasing company returns.
- Physical inspection (on-site review)
- Real property field appraiser reports and the property characteristic file
- Audits (desk, office, field, telephone, or correspondence)
- Income Tax Returns
- State, provincial, and local sales tax permits
- Federal, state, provincial, municipal, and county business licenses and registrations
- Building permits
- Chambers of commerce membership lists
- New business listings from news media
- Public records (such as trade name records, Uniform Commercial Code [UCC] forms, corporation charters, partnership articles, and assumed name notices)
- Property transfer documents, including recorded bill(s) of sale
- Classified advertisements
- Telephone directories
- City directories
- Accounting records, including financial statements
- Various state and federal tax returns (usually restricted to audit records)
- Internet research on business operations and contacts
- Web sites, specifically leasing and sales
- Advertisement fliers or mailers
- Other resources that can be helpful include access to governmental databases—Department of Motor Vehicles (DMV) or Department of Revenue records providing lists of manufactured home owners or lists of corporate taxpayers by jurisdiction.

The Sedgwick County appraiser's office uses many of the methods suggested in the IAAO standard. Some methods are not applicable.

Section 6.1 of the IAAO personal property standard addresses the statutory authority and regulatory compliance and enforcement. Comparing the standard with the Kansas statutory requirements property enforcement measures, and penalties are in place to require accurate and timely filing by the property owner. The appraiser’s office has created queries that provide proxy audits of returns and a quality control using independent sources.

Valuation methods are based on statutorily defined methods. The default value is “market value” except where by statute an alternate value is defined. The PVD provides guidelines to counties for valuation of all personal property. The 2018 Compliance Status Report, page 8 indicates these personal property measures are complying:

Five (5) Residential Personal Property renditions - meet guide compliance guide requirements: Yes			6/13/2018	6/28/18 msr	YES	
Five (5) Commercial Personal Property renditions - meet guide compliance guide requirements: Yes			6/13/2018	6/28/18 msr	YES	
Five (5) Oil renditions - meet guide compliance guide requirements: Yes			6/13/2018	6/25/18 msr	YES	
Five (5) Gas renditions - meet guide compliance guide requirements: N/A			6/13/2018	6/28/18 msr	N/A	
Personal property mail date: 04/30/2018	Extension granted to: N/A	Proof of Mailing: Yes		6/4/2018	6/22/18 msr	YES
Oil &/or Gas mail date: 04/30/2018	Extension granted to: N/A	Proof of Mailing: Yes		6/4/2018	6/22/18 msr	YES
Real Property Certification: 05/30/2018	Personal property certification: 05/30/2018	Oil & Gas certification: 05/30/2018		6/4/2018	6/22/18 msr	YES

Reviewing the documents that provide statutory control on the valuation of personal property and the fact the PVD did approve that all classes met the compliance guide requirements, the methods, techniques, and processes used to complete the valuation of personal property meet the compliance expectations.

Meeting compliance directives and standards procedurally is not a statement confirming the processes and procedures are efficient or represent best practices. As stated in other chapters of the audit, when a process cannot be completed in a single source computer application, and requires manual data entry, specialized queries that can only be run on legacy software platforms, lacks internal processing controls. Completing the personal property roll requires the use of the Aumentum for all personal property except Oil and Gas. Oil and Gas valuation is completed in Microsoft Excel. The PVD requires county appraisers to use Orion cost and depreciation on mobile homes, then the results must be entered in the Aumentum system. Neither Orion, or Aumentum provide any quality control functions for personal property. Efficiency and effectiveness are not achievable when three systems are used (only Orion is required) that were never designed to work interactively with each other and likely never will. Change and reorganization for valuing personal property is needed.

RECOMMENDATION #16: During the on-site interview the exchange of methods between Orion, and Aumentum were demonstrated. The concern addressing that the two systems to work in

concert with each other has been addressed already as it pertains to land valuation, and multi-parcel economic units. The jurisdiction has also conveyed information that the Orion system has a Personal Property and Oil & Gas modules available. It is recommended these modules be purchased and implemented into the Orion CAMA system. Implementation of this recommendation does recognize that the Aumentum system may still be a preference for other departments. The Treasurer/collector uses it for billing of personal property. If required it is more efficient to export and import final numbers from one system to another than to manually enter the data as is now being done. As suggested with other recommendations for change, this conversion can be completed on a multi-year implementation plan, but the sooner the better.

Conclusion by Consultant on Personal Property Valuation: The laws, directives, and operating processes required to complete the valuation of personal property are complex. The staff in the appraiser's office responsible for carrying out the assignment of valuing personal property demonstrates in-depth knowledge and skills in meeting the compliance requirements. The discovery and listing process are labor intensive and time consuming. Lacking a cohesive personal property computer system is a bottleneck to an efficient system. While safety of a process is inherent in the concept of, "this is how we always do it". Technology is available that can streamline the processes involved with valuing and taxing personal property. The word "synergy" is often used to describe where two or more agents can produce a combined effect greater than the sum of their separate efforts. Having Orion, Aumentem, Excel, and control queries, as separate functioning parts is the opposite. The needed separate interactions to use each of the software platforms is a detriment to efficiency and effectiveness in completing the valuation of personal property. Add to this the amount of labor required to track and control the inputs and outputs of each system and the need for operational change is fully apparent.

The recommendation is not a new concept but one that has been revealed in several of the chapters. The term CAMA, "Computer Assisted," implies the computer is helpful and reduces the time and labor required to complete a task. When the human must assist the computer (enter data manually, write and apply specialized queries, etc.) to create a functioning solution, inefficiency is the result.

Value Defense and Appeals

The statutory mandates directing the appeal process in the state of Kansas are K.S.A 29-1404, K.S.A 79-1448, and K.S.A. 79-1460 with additional references therein. Appeals must be filed within 30 days of the valuation notice. For real property the notice date is on or before March 1, and for personal property May 1. This begins the "informal hearing process". Guidance on the appeal process is also found in the PVD's Procedural Compliance Guide, 2019 page 76. The IAAO

standards on Tax Policy, Assessment Appeal, 2016 also provide guidance for evaluation in this chapter. There are two aspects of an assessment appeal: matters of valuation or fact, such as the amount of an appraised value, or assessment; and matters of law, such as interpretation of statutes. Administrative matters of taxation, e.g. payment under protest, or exemption from taxation are not specifically joined to valuation appeals. These matters will only be addressed in the audit as they pertain to an appeal on property valuation.

Questions:

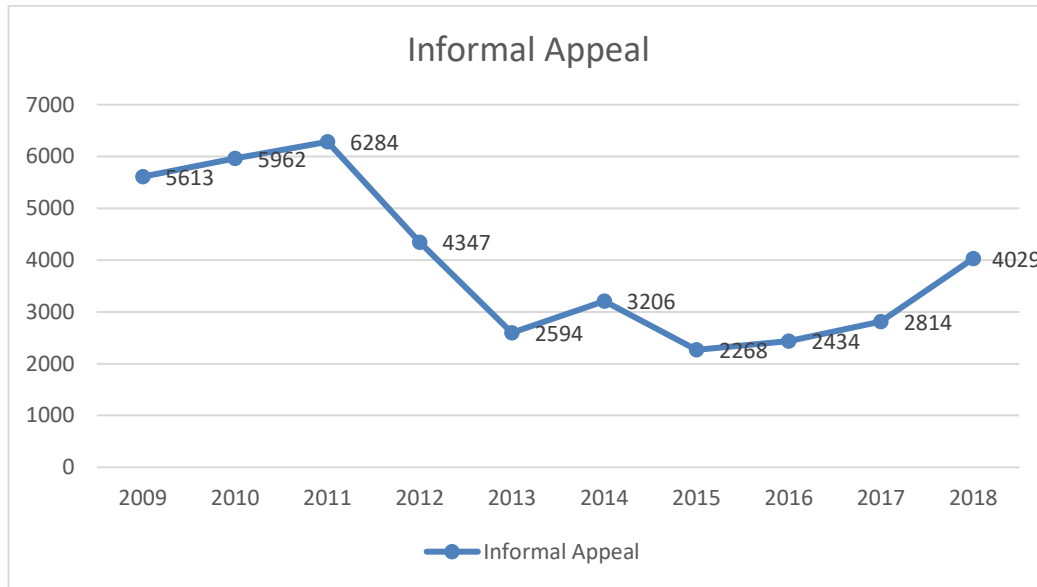
1. **Has the jurisdiction evaluated the review of final values and appeal system under which it operates and its role in the system?**
 - **Do the assessment and tax calendars impose constraints on the time available for tasks crucial to developing defensible values or defending assessments, such as whether the time between the valuation date, deadlines for submitting income and expense information, the deadline for completing rolls and issuing notices, appeal deadlines, etc.? Is the calendar readily available to the public?**
 - **Are taxpayers required to state the grounds for their appeals and to back up their complaints with evidence?**
 - **Do the reasons for appeals suggest problems with assessments that have a systemic cause (that is, outdated values or valuation methods that do not meet professional standards)?**
 - **Do assessments have a presumption of correctness that must be overcome with evidence?**
 - **Are members of formal appeal bodies required to have relevant experience?**
 - **Are formal appeal bodies briefed on the current year's assessment program?**
 - **Are appeal bodies required to give a reason for their decisions?**
 - **Is there a common belief that the formal appeal process is biased or corrupt?**

Response by the Jurisdiction: The assessment and tax calendars are combined so the public and the various offices in the property tax system know statutory deadlines and when deliverables are due. Calendars are on the county website, PVD's website and in the offices of the Appraiser, County Clerk, Register of Deeds and Treasurer. However, the calendar dates mandated by the Kansas law do not allow enough time to appropriately complete our tasks, given our current staffing levels.

Taxpayers are not "required" to state grounds for appeal or provide evidence. The appeal form does provide space for the taxpayer to include their reason for the appeal. However, the Kansas Board of Tax Appeals will not dismiss a case or otherwise disregard an appeal if the taxpayer does not provide a reason or evidence with the appeal form. Appeals are not based on any

systemic causes. The burden of proof is on the county appraiser. Some property owners believe the system is biased but this line of thinking is not prevalent.

Response by the Consultant: The initial appeal process or “informal appeal” begins with the mailing of the “change in value notice.” This starts a 30-day clock to file the informal appeal. All appeal decisions are due by May 15. The graphic below provides a view of the number of cases for informal appeals;



Since a low of 2,268 informal appeals in 2015, appeals have been trending upward to 4,029 in 2018, a 77.65% increase for 2018 over 2015. While the increase in the number of appeals is gradual in the two years prior to 2018, the change is abrupt for 2018 with an additional 1,215 informal appeals over 2017. The additional 1,215 appeals in 2018 are required to be processed within the same time period as in 2017. The 2018 trend brings out a discussion of additional time, additional staff, or both to meet the mandate of ending hearings on or before May 15, and final decisions on or before May 20. There are 80 days between March 1 and May 20. Actual workdays number 57.

Efficiency and effectiveness are paramount to completing the process where the appraiser’s office generates an evidence packet to substantiate the value and provide this packet to the property owner on request. In addition, the appraiser may need to review and prepare rebuttal to any evidence submitted by the taxpayer. Sedgwick county informal hearings are scheduled for every 20 minutes on real property, and 30 minutes for agriculture. One variable not mentioned in a directive or standard is, application for an appeal and informal meeting for the property owner is often delayed until late into the thirty days. It is common for many appeals to arrive in the ten-day period prior to the deadline for filing. This of course shortens the processing time for the appraiser’s office.

RECOMMENDATION #17: In consideration of required processing time, and available processing time for an informal appeal, it is recommended that an automated evidence system be developed. Once a parcel number is entered into the system and flagged for an informal hearing an evidence packet is generated automatically. It would include all items required to support a recommended value on appeal; (it may support a different value than currently on the parcel). The hearing appraiser would review the packet for approval and distribution to the appellant. If the cost, and sales comparison approaches support a reduction, that can be sent as a stipulation of value. If accepted no hearing is required.

Recommendation #17 is conceptual in design. The county appraiser would need to work-out details with the Tyler Technologies to create a module in the Orion system that would generate a digital report of: Property Record, Cost approach, Adjusted Comps Sales, and Adjusted Equity Properties, and the MRA estimate.¹² Ideally it would also include maps, and the sketch. An acceptance parameter of +/- ten percent could then be used to decide the direction of the appeal recommendation. Those recommendations would include, stipulate to a lower value, no value change the appeal moves to the BOTA, no change the appellant accepts the county evidence and withdraws.

- 2. Are taxpayers encouraged to discuss concerns with the jurisdiction informally before lodging a formal appeal?**
- 3. Does the jurisdiction have documented procedures for handling taxpayer inquiries and formal appeals?**
- 4. Does the jurisdiction track the status of each formal appeal to ensure that proper preparations are made for the hearing, that it is appropriately disposed of, and that records are properly updated?**

Response by the Jurisdiction: **Q #2 – Q#4:** The appraiser’s office encourages property owners and/or their agents to visit us in-person, call or connect with our website to get appraisal information, check property characteristics and get information about the appeal process. We provide information on the types of documentation they may want to bring to an appeal meeting to help clarify or justify their request for a change in value or classification.

The Information & Assistance (I & A) Manual contains procedures for serving the public who have inquiries. The Appeal Coordinator also has written procedures for assisting property owners who are appealing. They also answer questions on date, time and location of the appeal and assist with rescheduling, etc.

¹² Nassau County NY has a sample example: <https://www.nassaucountyny.gov/4656/Understanding-Your-Prognose-Report>

Our office logs each appeal at every level into Orion (CAMA) system and the appeal is scheduled, tracked, and generates a real property result letter. There is no place in Aumentum Personal Property to formally log, schedule, track and generate result letters. Thus, an in-house database was created to log, schedule, track and generate result letters. Data is queried from the Aumentum tables to populate various information in the in-house Personal Property Appeal database.

Real property appeals are conducted in-person or via telephone. Personal Property appeals are conducted on the telephone.

Each property owner / agent gets a confirmation letter indicating the date, time and location of each appeal meeting. Quality control checks are performed on each appeal to ensure the value determined for each appeal is correctly entered into the system and matches the values on the Appraiser Appeal Information Sheet and the final value in the system and that the classification is correct. If a reduction in value is made that causes a refund to be generated, then the change order is QC'd and processed in Aumentum Tax to affect the tax roll. All the paperwork pertaining to an appeal (filing, confirmation letter, property owner and Appraiser Office documentation and the change order) are scanned into the OnBase scanning system. The OnBase scanning system has levels of security.

Response by the Consultant: Compliance for **Q#2, #3, and #4** is largely found in the responses from the jurisdiction. The appraiser's office takes the responsibility of working with property owners to resolve issues surrounding an appeal seriously. The communication with the appellant before and after appeal is designed to inform and educate how the appeal process works. The taxpayer assistance department is front line in answering questions and helping taxpayers complete their application for an informal appeal. The appraiser's office also provides written documentation on their website and have a detailed brochure explaining all the different levels and timelines involved in the appeal process.

Compliance with PVD falls into three categories';

- PVD will verify informal real property appeal records were held and notifications mailed prior to the statutory deadline.
- PVD will verify that the notification of results from the informal appeals include BOTA appeal information.
- PVD will verify all real property appeals are entered into the Orion system.

Internally, hearings are tracked in an external Microsoft database. All documentation associated with the appeal is scanned into the OnBase system for attachment to the specific record. Changes

on appeal that result in a refund must be also processed in Aumentum system, as this is where billing resides.

RECOMMENDATION #18: The administrative processing of an appeal sacrifices efficiency in the process which only satisfies the PVD requirement on reporting noticing deadlines, and that parcels under appeal are enter into the Orion system.

This recommendation is linked to #17. If an Orion record is flagged for appeal all associated documentation should be immediately available to view and transferred to required PVD reports. Development of a hearing schedule and tracking is in relative terms a simple database function. External documents/evidence, e.g. appraisals, income/expense reports, copy of the appellants appeal and comments would be the only items needing scanning and attachment with OnBase. Reduction of redundant tasks is the path to efficient and effective changes in operations.

5. Does the jurisdiction take steps to present its case effectively?
6. When a formal appeal involves difficult appraisal issues and considerable value is at stake, can the jurisdiction obtain outside expert assistance?
7. Does the jurisdiction allow—or have a strategy for allowing—online appeal filings?

Response by the Jurisdiction: **Q #5 – Q#7:** Yes Property owners and their agents can file an appeal by emailing the office. Appeals are not conducted on-line.

Response by the Consultant: **Questions #5 thru #7:** At the on-site interview and during phone conferences questions #5 and #6 received multifaceted discussion. These two questions tend to steer away from the informal hearing process and into the formal “Board of Tax Appeals” (BOTA) hearing on appeal. At BOTA the rules of evidence are more specific. Two publications are useful for understanding how the appeal process works after the informal decision is made: A Guide to Property Valuations Appeal Process – Equalization Appeals¹³ and A Guide to Property Valuations - Payment Under Protest.¹⁴ Reference to Recommendation #17 and its implementation would go a long way toward an “on-demand” process for presenting the idea that evidence e.g. market data was used to estimate value. At the on-site interview responses also included appraiser complaints that informal appeals wasted time as no evidence is provided in support of the appeal from the taxpayer.

The burden of proof is on the appraiser’s office to produce evidence that meets the “preponderance of the evidence” standard. The Kansas Supreme Court in *Nauheim v. City of Topeka*, 309 Kan. 145, 432 P.3rd 647 (2019) opined regarding this burden of proof. The Court

¹³ <https://www.ksrevenue.org/pdf/pvdappealeqnohop.pdf>

¹⁴ <https://www.ksrevenue.org/pdf/PUPNotification.pdf>

stated that **preponderance of the evidence has been defined as “evidence which is of greater weight or more convincing than the evidence which is offered in opposition to it.”** Black’s Law Dictionary 1182 (6th ed. 1990) The Court went on to state that **“a preponderance of the evidence” means that evidence which shows a fact is more probably true than not true.**’ [Citations omitted.] citing *In re B.D. -Y.*, 286 Kan. 686, 691, 187 P.3rd 594 (2008).

Success by the appraiser’s office at the BOTA is then by definition a challenge. Preponderance of the evidence is somewhat subjective as is the “Appraisal Process.” On appeal, two opinions of value are opined. Each estimate is based on facts that are not always absolute, thus regarding the opined value, it is also important to express the weight given in “reconciliation of value” to those appraisal facts given most weight by the by the appraiser to arrive at the final value estimate opined. Preponderance of the evidence means evidence that is convincing, and can be measured as factually true and accurate, this is where the focus of the appraiser’s opinion should be centered. “More true than not true, and more convincing than the opposition’s evidence.”

Question #6 asked about using outside expertise. If the idea that the evidence must be “more truthful and accurate” is the guide, then it makes sense that an expert having specific experience and expertise on specific property types provide assistance or complete an appraisal on appeal. When completing an evidence-based appraisal there are enormous amounts of data analyzed, weighed, mathematically processed, and reconciled. By USPAP standards the estimated value must be “credible.” Organized presentation of the appraisal process during an appeal hearing is critical to attaining a preponderance decision (best evidence) and upholding the burden of proof.

RECOMMENDATION #19: Preparation of an appraisal report and communicating the results in a manner that is meaningful and not misleading follows the logic of “begin with the end in mind.” Ultimately the appraised value is an “opinion.” What can get lost is that the opinion being expressed is based on a trained analyst using facts derived from market participants. The market facts are weighed against the prescribed definition of value, “Fair market value” to be exact. *“The riches of the world pales in comparison to the value of an honest opinion.” Harvey MacKay – Author.* USPAP’s Ethics Rule, **Conduct** requires: integrity, impartiality, objectivity, independent judgment and ethical conduct.

- Must not accept an assignment that includes the reporting of predetermined opinions and conclusions

All appraisals completed by the appraiser’s office are required to comply with USPAP. USPAP itself was created to: *“promote and maintain a high level of public trust in appraisal practice”* (see the Preamble). The public does not fully comprehend this concept or really care. This creates

obstacles to credibility, impartiality, and objectiveness for appraisers working in the ad-valorem appraisal discipline.

The following are ideas detrimental to the concepts of an honest opinion whether from the report or from the appraiser's testimony:

- An appraiser is paid to support the highest value, or lowest value specific to their client.
- The most current appraisal (submitted as evidence) estimate was created to match and support the value being appealed. (if so then integrity, impartiality, objectivity, independent judgment is not in play.) When defending the county's value before the Small Claims Division or the regular Board, the appraiser must begin *de novo* (starting from the beginning; anew). The appraisal itself should be *de novo* prior to the appeal hearing.
 - de novo (starting from the beginning; anew)
 - most formal appeal hearings use this concept
 - the appraisal should also be *de novo* prior to an appeal hearing

When the appraiser embraces and understands their ethical responsibilities to produce a credible appraisal new insight is gained, and there is the possibility a **newly developed opinion of value** is formed. From this the appraiser guides the future of the appeal. The new opinion may validate the old one, but the evidence is better, or the new opinion supports a stipulation offer to a lower value. Each outcome must meet the burden of proof standard placed on the appraiser. The next example provides insight into development of a "*do novo*" appraisal in concept:

Example: On appeal to the BOTA the appraiser should be supporting the most recent value estimate they opined. Let's say at the informal hearing the appealed value is \$150,000 set by the mass appraiser. The property owner wants \$110,000. The evidence packet supports \$140,000 using sales most comparable to the subject. The taxpayer at the informal hearing declines the new appraised value also and moves onto the BOTA with the appeal. At the BOTA hearing the appraiser is supporting \$140,000, as the most recent value opinion, not the \$150,000 currently on the roll as stated at the informal hearing.

All appraisals produce a range in value, after a deeper dive into analysis of the sales, the value opinion "anew" could be, say \$130,000. The point being not to try a support a value the market does not support like \$150,000. Since the taxpayer rejected the offer at \$140,000 during the informal, the value on appeal is still at \$150,000 but that is not the new value that the evidence supports. Trying to support a value of \$150,000 that is not supported by facts in the market

place violates both “**preponderance of the evidence**” and “**USPAP**” by reporting of predetermined opinions and conclusions.

ACTION: If and when an appeal moves forward to hearing the roll of the appraiser does not change, only their scope of work. As a witness the appraiser is only an advocate for their analysis, methods, techniques, and estimate of value. To be effective in the role as an expert witness they must spend time with the presenter of facts (usually an attorney) to prepare testimony and recognize weakness in their appraisal, (they all have some) and how to address them when exposed during cross-examination.

- Prepare an appraisal report in compliance with USPAP Standard 2, or Standard 6 based on the assignment. In preparation of the reports, focus on using market facts to form opinions within the appraisal process (highest and best use is a good example of an opinion required before the value opinion.)
- **Keep in mind the Scope of Work for a single property appraisal report will likely be different than a mass appraisal and report.**
- In preparation of an appraisal be sure to check the USPAP competency rule.
- Have appraisals been reviewed using USPAP Standard 3 by a qualified review appraiser.
- Meet with the presenter of facts (attorney if provided) to prepare testimony on the appraised value.

An appeal boils down to a conflict of opinions. The above discussion and recommendation are intended to illuminate some of the areas resulting in a conflict of opinion.

Mass Appraisal VS. Single Property Appraisal: Confusion does exist when appraised values for assessment are developed using mass appraisal methods under USPAP Standards, 5 and 6. On appeal to the BOTA, the appraisal evidence is prepared under Standards 1 and 2. It is important to keep in mind that mass appraisal results are applied to a single property. The appeal is a single property value estimate being challenged not the entire results of the mass appraisal.

Mass appraisal and single property appraisal follow the same prescribed “Appraisal Process,” they are only different in application stated by the scope of work. Recognized mass appraisal methods inherently include an “error term” for the contribution of each “variable” (Property Characteristic). The mass appraisal also includes an estimation error of the overall value results using Coefficient of Variation (COV) and Coefficient of Dispersion (COD). While the IAAO standard on ratio studies prescribes a COD of 10%-15% as acceptable for overall results of the mass appraisal (residential), property owners don’t adhere to the same standards of accuracy.

Preparation of an appraisal for appeal before the BOTA using single property methods provides for a further refined market analysis of transactional data for a single specific subject property. This refined analysis does not discard the use of the market data used in the mass appraisal it provides for narrowing comparisons parameters to transactions that are, most similar to a specific subject property. A full discussion on converting the mass appraisal results to a single property appraisal using the best comparables and calibration results from the mass appraisal can be found in the Appraisal Practice Boards "[Identifying Comparable Sales for Mass Appraisal](#)."¹⁵ Completing a precision analysis will reveal if the error term from the mass appraisal applies directly to the selected subject. The end result will be a revised and new opinion of value, or a second level of detailed analysis that supports the appraiser's opinion using the mass appraisal model.

A second benefit when using a single property method and report at the BOTA is, results can be compared directly to any evidence the taxpayer/appellant submitted in support of their claim.

8. Does a supervisory agency or review body have the power to review values and valuation methods on its initiative, or is the jurisdiction required to submit valuations to a regulatory body for approval before taxes can be levied?

Response by the Jurisdiction: PVD has the authority to review any work performed by any County Appraiser's Office in Kansas. PVD usually does not review all values but through compliance procedures and queries understands what a county has done over the year to set and defend values.

Conclusion by Consultant on Value Defense and Appeal:

Methods for delivering solutions designed to improve efficiencies in the informal and formal appeal processes are presented in recommendation #17 and #18. The evaluation of current methods recognizes the appraiser's office follows the IAAO standard on Assessment Appeal, 2016. Compliance with PVD reporting requirements are also being met.

The number of appeals increased significantly in 2018, and when this happens additional pressures to complete all informal appeals on a timely basis is problematic. The analysis of appeal processes raised some questions:

- How effective is the preparation of data with a limited time-frame?
- Is the taxpayer/property owner getting their concerns addressed?

¹⁵

https://appraisalfoundation.org/imis/docs/Valuation_Advisory_5_Identifying_Comparable_Properties_AVM_and_Mass_Appraisal_Final_081413.pdf

- Are appeals with small differences given the same attention as large differences?
- How many appeals are “kicked down the road” just to allow more time?

Creating more efficient evidence gathering for appealed properties will provide a better level of customer service, enhanced response to appraisers involved with the appeal process, and a reduced workload at the next appeal level if resolved at the informal level.

Not fully vetted in the analysis on appeal is the notion the appeal itself is based more on ability to pay, or lack of wanting to pay taxes than the actual value. This is often the hidden agenda of an appeal. In these cases the appraised value is not really at the front of the issues. Still an appeal has been filed. Payment under protest is a better suited venue when the tax amount is the dispute, not the appraised value.

The formal appeal is a product of displeasure with a decision coming from an informal appeal. A formal appeal cannot be filed unless the property has been subjected first at the informal appeal level. At the formal appeal level “preponderance of the evidence” is still the on-going burden of proof which the county must meet. Mass appraisal relies on statistical measures for appraisal compliance, but the burden of proof is on the county appraiser. Appeals moving to the BOTA are often supported using a single property report as evidence. The preponderance of the evidence is the measure accuracy, single property appraisal continues with the same specific data about the subject property as used in mass appraisal. What changes is the use of comparative data. With a single property appraisal, specific market transactions are confined to the transactions; cost, market, income that best represent the market environment of a specific subject property, or economic unit. When the scope of work changes from mass appraisal to a single property appraisal using limited number of specific market transactions, the estimated value opinion may change as a reflection of a small sample of market data specific to a single property. A subject property with a limited demand from local market forces requires the appraiser to explore transaction data on a national or even global market.

The single property appraisal and report must be detailed enough in documentation and recognition of scope of work changes that a new estimated value does represent a factual reflection of specific market conditions that were present but not singularly measured using mass appraisal techniques.

It is important to produce a documented and supported conclusion of appraised value for each appeal case, informal or formal. For the appraised value to be upheld by the BOTA the preponderance of the evidence must be obvious in the appraisal report, analysis, and conclusions. Credibility of the appraiser at hearing is a result of presentation skills as a witness, and the appraiser’s ability to convey competence of the appraisal process and subject properties participation in its market environment.

Communications and Taxpayer Assistance

Questions in this chapter center around how the county appraiser's office provides for open communications with taxpayers and other stakeholders. There is a statutory notice requirement for changes in value that serves to protect the taxpayer's interest in how their property is valued. The appraiser's office is also the keeper and custodian of the property inventory for Sedgwick County. When consideration is given to time, and resources required to create the property inventory, it is recognized as a valuable resource. With website access available on a 24/7/365 basis to the property inventory, the data is available for viewing by those involved with commerce, attorney's, developers, taxing bodies, realtors, etc. Evaluation in this chapter covers these various levels of assistance and communications.

Questions:

1. Does the jurisdiction have an active public information and assistance program?

Jurisdictions Response: The Sedgwick County Appraiser's Office has an Information & Assistance Division that disseminates and provides written and oral information. We also have a Speaker's Bureau that will speak at events.

2. Does the jurisdiction employ appropriate communications channels in addressing its constituents' concerns and needs?

Jurisdictions Response: The office uses email, the county website (Appraiser's webpage), online application for looking up values, sales and detailed property characteristics, Sedgwick County Mobile Application, newspaper, Appraiser's Office Speaker's Bureau and information communicated in written and oral format

3. Can property records be accessed online by parcel identifier, situs address, owner, and geographically?

Jurisdictions Response: Not by owner for security purposes. Not geographically.

4. Does the jurisdiction have informational materials available for the public?

Jurisdictions Response: Our office provides brochures regarding manufactured homes, watercraft, business personal property, printouts of sales and values in their neighborhood, real property cover letter, information on filing for appeals and exemptions, etc.

5. Does the jurisdiction have contingency plans for responding to crises and emerging issues?

Response by the Jurisdictions: At Sedgwick County, the Appraiser’s Office is the Damage Assessment Officer. Our office has a station in the 911 emergency operations building in case of a disaster. We are also included in the county government’s Continuity of Operation Plan (COOP). Our office works closely with PVD to keep abreast of issues at the state and federal levels which could affect us. We are members of the Kansas County Appraiser’s Association as well.

Response by the Consultant: Responses by the appraiser’s office were all answered in the affirmative. Guidance and evaluation of Communication and Taxpayer Assistance is drawn from the IAAO standard on Public Relations, 2011. Taxpayer assistance is a primary tool used to bring attention and focused level of communications regarding the duties and responsibilities of the county appraiser’s office. **Question #1 and #2** describe the specific methods used to inform and educate the taxpaying public.

The answer to question #3 is a little confusing. There is open online access to property record data, geographic information system, sales reports are example tested on the website and GIS site. There are links to parcels from GIS, and to GIS from a parcel. This PIN: [30002845](#) generated a ten-page property record card.

Question #4 addresses written material available. Brochures, reports, links to PVD and other official documents attached to property taxes are all available on the website. Personal property registration, agricultural land use value, appeals, mobile land records, valuation notices, and a tax calendar are also available.

Question #5 covers how the appraiser’s office is associated with crises and emergency issues. The IAAO includes this as a recommendation in section 3.3.1 “Crisis Plan.”

RECOMMENDATION #20: At the on-site interview a discussion that addresses the questions in this chapter ensued. At the basic level the appraiser’s office has all the boxes checked toward providing taxpayer assistance on an as needed basis. It can even be said they are proactive toward educating the taxpayer as any government office. The functions and work products completed as daily operations in the appraiser’s office are hidden (not intentionally) from core constituencies. Implementing a proactive approach would be a step toward providing information not just when it’s requested but as an exposure of the skills and knowledge housed in the appraiser’s office. Below are some examples:

- The office promotes a speaker’s panel, but what do they speak about?
 - Include a list of topics available
- Budget requests are made, or staff increases recommended. Why are these requests being made and for, what purpose?
- Monthly reports to the county board of commissioner are important.
 - A proactive outreach program keeps others informed on an on-going basis.

- Meeting and presentations with professional groups, realtors, attorneys, financial institutions, real estate appraisers, developers, civic organizations.
 - Related to the speaker's panel, but meeting with community leaders and educating them on the complexities of the property tax system, opens doors, and lines of communications.
 - Results are often seen in enhanced cooperation, with the identified groups.
 - The appeal process can result in stipulations of value (negotiated settlement) and yield the county actual construction costs, access to MLS, digital submission of plans, etc.

It is not well known the amount of data, research, education, cost per parcel, local vs. state rolls etc. that must happen to produce a tax bill. The fact the appraiser's office does not prepare or send the tax bill would likely be a surprise to many.

Proactive programs provide upfront knowledge and information so others can make informed decisions. Providing market studies to realtors may soften their position of access to the local MLS. Providing graphs of growth in permits, sales, new construction, helps support requests for budget increases, new technology, or additions to staff for specific departments. An outreach program provides the gateway to request new or additional resources long before the need arises.

Conclusion by Consultant of Communications and Taxpayer Assistance:

The appraiser's office meets all the basic levels of assistance required by law and most that are suggested in the IAAO Standard on Public Relations. There are many other opportunities beyond the current level of communicating primarily through the "Taxpayer Assistance" department. A more robust outreach program if planned, will provide an enhanced relationship with constituents.

The board of county commissioners controls the purse strings on budget requests including funding for staff in the county appraiser's office. Providing monthly reports (even if only in writing) verbally on activities and processes are useful when it's time for budget approval. Such reporting creates the opportunity to educate others on PVD mandates and the cost for fulfilling mandates.

Developers, property managers and realtors are the creator of market data and transactions used to estimate value, find and list property. When these groups better understand what the appraiser does with sales, plans, rents, etc. the more likely they are to provide access to data they control. Attorneys also represent developers and property managers on appeal. When the appraiser's office appears before these groups, opportunities to network are created that allow for a more cooperative rather than a confrontation environment during appeal.

The list and reasons go on. The idea of the recommendation is finding ways for creative transparency regarding the property tax system. Or as one author put it: "Taxation without Explanation."¹⁶

CONCLUDING STATEMENT BY CONSULTANT:

The preceding review of "Operations and Procedure" found no evidence substantiating any **non-compliance** based on the mandates reviewed in the Kansas statutes, or mandated directives by the Kansas Property Valuation Director. Adherence to the Uniform Standards of Professional Appraisal Practices (USPAP) is implied by Kansas law, and PVD directives. Also used in the evaluation were the IAAO standards on:

- Assessment Appeal
- Automated Valuation Models
- Contracting for Services
- Digital Cadastral Maps
- Mass Appraisal
- Oversight Agencies
- Personal Property
- Professional Development
- Property Tax Policy
- Public Relations
- Ratio Studies

The IAAO standards provided additional guidance on suggested best practices used to formulate many of the "RECOMMENDATIONS".

Used as references mandated by the State of Kansas are the, State of Kansas Personal Property Guide, 2019 Procedural Compliance Guide, 2019 Revaluation Maintenance Specifications (RMS), and the 2018 Kansas Property Tax Law. These guides provided specifics regarding the application of laws and directives. The jurisdiction provided pages from the 2018 Sedgwick County Compliance Review, and 2018 Compliance Status Report, both of which are used to measure the statutory and directive compliance. Using these two documents the only deficiencies noted are for a COD of 22.5% on the commercial class, where 20% is the maximum allowed. Also omitted is, reporting analysis on a land acre model #R1024, Sq. Ft. model #R0130,

¹⁶ Taxpayers' Federation of Illinois, 1993 - R.D. Picur, R.A. Miranda

neighborhood models #8, #9, #16, and analysis for all commercial models were not submitted for confirmation in the Orion system according to the PVD.

In all, twenty (21) recommendations are included in the report (#21 to follow). The first twenty (20) recommendations concentrate on improving methods to gain efficiency and effectiveness of results. Kansas law mandates require tremendous amounts of labor to achieve quality results on a timely basis. The Orion CAMA system is paramount to assisting in achieving these mandated results. There is a theme however developed during the review of each of the processes. This theme encompassed using many analytical processes which must be completed outside of Orion. The Aumentum system used by the ROD's and Treasurer/collector guides parcel maintenance, personal property and tax billing. Orion has modules to complete all these processes, parcel maintenance, specifically multi-parcels, personal property, and the billing collection. With Orion being a mandated CAMA system for use in all of Kansas, Sedgwick County must reach-out to counties that have moved all processes into Orion as a model for doing the same in Sedgwick County. For commercial valuation, only the cost approach is currently being completed in Orion.

RECOMMENDATION #21: The county appraiser is requesting six additional staff for the 2020 fiscal year. Considering the numerous processes that require manual data entry, or re-entry of data, coupled with rigorous statutory timelines to complete specific processes; several experienced staff members are considering retirement within the next five years; it is recommended that six additional staff members be hired for the 2020 fiscal year.

This review of operations and procedures reveals a high level of commitment, knowledge and expertise linked directly to the staff in the appraiser's office. The required knowledge and expertise are not available in an instant. The skills required to produce a mass appraisal are uniquely different from those possessed by many private sector appraisers. Creation of economic units is itself a skill few possess, or fully understand. There are learning curves to Orion, including knowing how to make it work with external systems to create what appears to be a seamless result. **Recommendation #5** included a plan for succession to replace skills of experienced staff members that will be retiring in the next five years. If implemented many of the recommendations include learning new skills not currently in place. For these reasons and the many others provided in the previous 20 recommendations, the hiring of additional staff is supported.

Addendum

Register of Deeds, screen from PIN all documents

Building Permits, Electronic

Project Type	Permit Type	Permit No	Date Issued	Valuation	PIN	Scope of Work	Address	Permit Issued to	Owner Name
SINGLE FAMILY ALTERATION	BLDG PERMIT - GENERAL	152629	01/10/2019	\$9,000	1425376005	INTERIOR KITCHEN REMODEL, REMOVE NON-LOAD BEARING WALL, NEW CABS, C-TOPS, FLOORING	1910 OAKWOOD AVE	B J ARMSTRONG INC	FOGLE, BRIAN & CINDY
SINGLE FAMILY ALTERATION	BLDG PERMIT - GENERAL	152950	01/22/2019	\$65,000	1433477012	NEW KITCHEN CABS/APPLIANCES, SIDING, & NEW DETACHED 2 CAR GARAGE	1206 N CLINTON BLVD	KATTELMAN CONSTRUCTION & DESIGN INC	OCONNOR, STANLEY & MARY
SINGLE FAMILY ALTERATION	BLDG PERMIT - GENERAL	152852	01/16/2019	\$5,000	1434302009	REMODEL KITCHEN & MASTER BATHROOM	12 NORBLOOM AVE	BANKS REMODELING INC	CALVERT & METZLER MEMORIAL HOMES
SINGLE FAMILY ALTERATION	BLDG PERMIT - GENERAL	152891	01/17/2019	\$10,000	1529151002	FRAME, HANG, FINISH EXT WALLS;ADD BATH;ADD BEDROOM & CLOSET	3901 RAVE RD	DW SCOTT INTERIOR CONSTRUCTION	NEWMAN, CASSANDRA
SINGLE FAMILY	BLDG PERMIT - RESIDENTIAL	152474	01/02/2019	\$230,000	1530106002	NEW CONSTRUCTION - SINGLE FAMILY HOME	8 MACKENZIE CT	KEN VERKLER CONSTRUCTION	KEN VERKLER CONSTRUCTION
SINGLE FAMILY	BLDG PERMIT - RESIDENTIAL	152941	01/18/2019	\$350,000	1530109030	NEW CONSTRUCTION	4 BENT CT	TRUNK BAY CONSTRUCTION INC	ALAN BARDWELL
SINGLE FAMILY	BLDG PERMIT - RESIDENTIAL	152947	01/18/2019	\$350,000	1530109031	NEW CONSTRUCTION	2 BENT CT	TRUNK BAY CONSTRUCTION INC	ALAN BARDWELL
OFFICE BLDG ALTERATION	BLDG PERMIT - COMMERCIAL	152464	01/02/2019	\$10,720	1531351003	REMOVE/INSTALL CEILING, LIGHTS, REPLACE DOOR FRAME INSTALL HVAC DAMPERS	3024 E EMPIRE ST	CATALYST CONSTRUCTION INC	ADVOCATE BROMENN MEDICAL
HOSPITALS/INST ALTERATION	BLDG PERMIT - COMMERCIAL	152530	01/08/2019	\$198,530	2102176006	FINISH UPGRADES TO EXISTING TRANSITIONAL CARE UNIT	2200 E WASHINGTON ST	RIVER CITY CONSTRUCTION	OSF DESIGN GROUP

Displaying records 1 - 7 of 7 at 3:41 PM CT on 3/15/2019

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Select	Index	Date Filed	Instrument Date	Kind	GRANTORS	GRANTEES	Description (Not Warranted)	File Number	Book/Page	Ref	Amount	Images
<input type="checkbox"/>	OFF	08/19/2004 Instrument Date 08/09/2004	8/6/2004	MORTGAGE	RAUT, SHISHIR RAUT, SHWETA	NATIONAL CITY MORTGAGE CO	Pin Number: 15-31-226-016 SAPPHIRE LAKE Lot:67	2004-00028562			\$202,200.00	19 pages
<input type="checkbox"/>	OFF	06/07/2005 Instrument Date 05/23/2005	5/23/2005	RELEASE	NATIONAL CITY BANK OH	RAUT, SHISHIR RAUT, SHWETA	Pin Number: 15-31-226-016 SAPPHIRE LAKE Lot:67 1ST ADDITION	2005-00015923		2004-00028563		2 pages
<input type="checkbox"/>	OFF	12/13/2012 Instrument Date 11/20/2012	11/20/2012	MORTGAGE	RAUT, SHISHIR RAUT, SHWETA	PNC MORTGAGE	Pin Number: 14-31-226-016 SAPPHIRE LAKE Lot:67 Pin Number: 15-31-226-016	2012-00031283			\$172,500.00	21 pages
<input type="checkbox"/>	OFF	01/14/2013 Instrument Date 12/12/2012	12/12/2012	RELEASE	PNC BANK NATIONAL ASSOCIATION	RAUT, SHISHIR RAUT, SHWETA	Pin Number: 15-31-226-016 SAPPHIRE LAKE Lot:67	2013-00001526		2004-00028562		2 pages
<input type="checkbox"/>	OFF	10/20/2015 Instrument Date 10/16/2015	10/16/2015	RELEASE	PNC MORTGAGE	RAUT, SHISHIR RAUT, SHWETA	Pin Number: 15-31-226-016 SAPPHIRE LAKE Lot:67	2015-00019982		2012-00031283		2 pages
<input type="checkbox"/>	OFF	02/08/2019 Instrument Date 01/18/2019	1/18/2019	DEED	RAUT, SHISHIR RAUT, SHWETA	HYLAND, DAVID HYLAND, ROSELLA	Pin Number: 15-31-226-016 SAPPHIRE LAKE Lot:67 Address: 1311 NORMA DR BLOOMINGTON, ILLINOIS 61704	2019-00001893			\$240,000.00	2 pages
<input type="checkbox"/>	OFF	02/08/2019 Instrument Date 01/25/2019	1/25/2019	MORTGAGE	HYLAND, DAVID HYLAND, ROSELLA	ILLINOIS NATIONAL BANK	Pin Number: 15-31-226-016 SAPPHIRE LAKE Lot:67	2019-00001894			\$160,000.00	13 pages
Select	Index	Date Filed	Instrument Date	Kind	GRANTORS	GRANTEES	Description (Not Warranted)	File Number	Book/Page	Ref	Amount	Images

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314 W 10th St, Kansas City, Missouri 64105-1616 USA
 816/701-8100, Fax 816/701-8149, 800/616-4226, www.iaao.org

Appendix A – Personnel Resumes

Michael W. Ireland, RES, CAE

816 S. Mercer St.

Bloomington, IL. 61701

Email- mwireland@comcast.net

PROFESSIONAL EXPERIENCE

Assessor, City of Bloomington Township (Retired 12-31-2013):

I was appointed Assessor in August of 1980. I served eight full terms as an elected assessor. Prior to being the assessor, I supervised the appraisal process in the Bloomington office. The following details my ad valorem experience, and accomplishments:

- 01.01.2014 to present: Work part-time for the Bloomington Assessor as an analyst/model builder, and mentor to young staff professionals.
- Developed procedures and guidelines for completing the appraisal process including, data collection, and data analysis required to arrive at supported value estimates.
- Conducted sales ratio studies for performance analysis, and testing of the appraisal process.
- Provided supporting appraisals and detailed expert witness testimony before the local appeal board, the state Property Tax Appeal Board on behalf of McLean County.
- Illinois statutes required re-appraisal of the jurisdiction every four years. I have completed this requirement every four years starting in 1975. Beginning in 1999, semi-annual updates are completed after the quadrennial year.
- Provided the training and education of staff to assist in the process of, field review, model development, finalizing the tax roll, informal appeal processing, and formal appeal hearings, working with the public and explaining the individual impact of the re-appraisal. Under my supervision three staff members earned the CAE designation, and three also evolved into IAAO senior instructors.
- Designed and installed a complete computer assisted assessment system (CAAS) using existing staff and resources. The first system was deployed in Dbase III in 1985. In 1995, we migrated the data to MS Access and redesigned the interface for a Windows platform. Since 2014 I have worked with the

staff and a developer to update the system design and efficiency, this also includes a new web site interface.

- 2004, converted data collection from paper to digital using tablet PC's. In 2012 upgraded paperless process to Apple iPad technology using remote access to server. All task and processes are completed in a paperless environment from building permits, through the appeal process.
- Perform data analysis and develop property valuation models using Number Cruncher Statistical System (NCSS). Transfer valuation model algorithms to the MS Access system for deployment and simplified user application.
- 1988, designed and implemented searchable property information database. This was made available to real estate professionals via a dial-up bulletin board service. In 1998, moved this concept to the internet opening it to the public. The site address is; www.wevaluebloomington.org.
- Maintained standards for accuracy of assessment, and uniformity according to IAAO Standards and State Standards of assessment level within 5% of the legal level and a coefficient of dispersion (C.O.D.) less than 15% overall.
- Prepared an annual budget to be approved by the Town Board of Trustees. Part of the budget management process requires I procure employees, negotiate leases, purchasing equipment, and plan office layout.
- Assisted the township in planning, and designing a new office building for the assessor, and township supervisor. Construction was completed in 2003.
- Meet monthly with the Town Trustees to review office expenditures, inform them of progress on assessment cycle, and educate them regarding issues surrounding the property tax.
- Served as a management and technical member of the McLean County GIS Management Committee, for implementing a countywide Geographic Information System from 1998.
- 2014 – Present, mentor to staff, providing education, training, and skills enhancement. Also complete the model development, performance analysis, and advise on software design upgrades to the in-house CAMA system and web site.

Illinois Property Assessment Institute:

The Illinois Property Assessment Institute (IPAI) is a not-for-profit educational organization that provides basic education for assessment officials in the State of Illinois. I served as the Director of Education for the Illinois Property Assessment Institute from, 1983-1993, and Executive Director from,

1992-1993. State statutes recognize the IPAI as the designating and certifying authority for assessors. My experience and accomplishments while with the IPAI are as follows:

- Developed a yearly course curriculum to meet the demands of new and experienced property tax professionals. Annual course enrollment was 1,200 to 1,500 students.
- Hired qualified instructors to teach forty to forty-five different course offerings each year.
- Developed courses and exams covering various topics e.g. [Advanced Assessment Ratio Study, Mass Appraisal of Garden Apartments, and Introduction to Basic Model Building.
- Computerized the student record system to keep track of each student transcript and status of recertification.
- Implemented a financial system for bookkeeping and reporting of income and expenses.
- Planned and developed a multi-level advanced designation program for Illinois property tax professionals. (CIAO-I)

CONSULTING ACTIVITIES

- Provided education and training for appraisal/assessment staffs using IAAO, and other education provider materials throughout the US and Canada over the past 35 years.
- Member of IAAO, technical review team for Anchorage, AK, in 1997. Provided 28 specific CAMA system recommendations for improvement of the system and process.
- Served as a member of a peer review committee in Illinois to study the implementation of assessment procedures as a pilot study for improving assessment performance. 1998.
- Provided a variety of consulting services on data collection, proper valuation methods, CAMA systems, valuation models, database design, digital sketching, and photography.
- Developed custom education programs for appraisal staffs including the CAMA modeling team for Cape Town SA, and assessment ratio analysis for the state of Utah. 2000-2004.
- Completed the property valuation modeling for Tygerberg South Africa in 2001.
- Provided education and training on data analysis, and modeling for the Republic of Mauritius. – 2010.
- Completed a review of procedures for the Decatur Township Assessor, and Town board with recommendations for improvement, staffing, and updating all systems to best practices. 2013

RELATED PROFESSIONAL ACTIVITIES

- Member IAAO Education Committee 2018
- Professional Development Lifetime Achievement Award, IAAO 2015
- Member of IAAO Ad Hoc Infrastructure Review Committee 2013 – 2014
- Education Chair, Appraisal Institute, Heart of Illinois Chapter 2004 – 2005
- Senior Instructor for the International Association of Assessing Officers. 1986- present
- Served as vice-chair on the assessment / appeal committee, and member of multi-state review committee to recodify the Illinois Revenue Act of 1939. Bill passed spring of 1993.
- Chaired IAAO ad-hoc committee for developing Uniform Mass Appraisal Report.
- Chaired IAAO CAAS Council 1994 and 2000
- Member of special task force to revise Standard 6 of the Uniform Standards of Professional Appraisal Practice, Published by The Appraisal Foundation [1991 and 1995].
- Elected to serve on the IAAO Executive Board. [1988 - 90]
- Past Chapter President Society of Real Estate Appraisers, [1983 - 84]
(currently Appraisal Institute)
- Performed independent appraisal assignments for lending institution, relocation companies, and various corporations, which included all types of properties.
- Developed adult education session for explaining the use of and how the property tax system works.
- Guest lectured at Illinois State University in the departments of political science, and finance and law.
- Member of IAAO Editorial Board since 1986. (IAAO dissolved) Member IAAO Subject Matter Expert (IAAO recently dissolved).
- Chaired the Education Committee for the International Association of Assessing Officers. [1989 - 91, 98]

PROFESSIONAL DESIGNATIONS, LICENSE

314 W 10th St, Kansas City, Missouri 64105-1616 USA
816/701-8100, Fax 816/701-8149, 800/616-4226, www.iaao.org

- Certified Assessment Evaluator [C.A.E.] International Association of Assessing Officers. 1990
- Residential Evaluation Specialist [R.E.S.] International Association of Assessing Officers. 1977
- Senior Residential Appraiser [SRA, 1978-2004] Appraisal Institute, Resigned Membership
- Senior Real Property Appraiser [S.R.P.A., 1990-2004] Appraisal Institute, Resigned Membership
- Illinois Real Estate Sales license, No. 076-0233746. [Expired]
- Certified Illinois Assessing Officer, [CIAO] Illinois Property Assessment Institute. 1969
- Member of Illinois Assessors Association Board of Directors, Vice-President. 1985 - 1989
- State Certified General Appraiser, No. 553-001126 [Expired 09/30/15]

TEACHING AND PRESENTATION EXPERIENCE

Instructor Certification:

- Began presenting appraisal related materials in 1975 at the spring conference of the Illinois Property Assessment Institute.
- attended first IAAO Instructor Training Workshop. 1978
- completed my student instructor training assignment. 1983
- approved as a Senior Instructor for the IAAO. 1986 - Present

Teaching Experience:

- Illinois Property Assessment Institute, IPAI
- International Association of Assessing Officers, IAAO
- Bloomington – Normal, adult education, Property Tax Forum
- Local civic organizations, Kiwanis, Exchange Club, loan companies, real estate companies, etc.
- Chicago Real Estate Company, appraisal licensing courses
- National Association of Independent Fee Appraisers, (NAIFA).
- Guest lectured at Illinois State University in the political science department, and Law and Real Estate.
- Taught courses in a majority of the contiguous states and Alaska.
My teaching experience includes some of the largest jurisdictions in the US, Chicago, Houston, and New York, Phoenix, and small rural areas in Louisiana, Mississippi, Wyoming, and Utah.
- International experience includes Toronto ON, Victoria BC, Edmonton AB, Cape Town SA, and Republic of Mauritius.
- Developed custom materials and presentations as requested for jurisdictions conforming to specific regulations, laws, data requirements, etc.

The current IAAO course curriculum where I have specific expertise and approval to the teach follows:

Courses:

1. Course 101 — [Fundamentals of Real Property Appraisal](#)
2. Course 112 — [Income Approach to Valuation II](#)
3. Course 201 — [Appraisal of Land](#)
4. Course 300 — [Fundamentals of Mass Appraisal](#)
5. Course 310 — [Applications of Mass Appraisal Fundamentals](#)
6. Course 311 — [Residential Modeling Concepts](#)
7. Course 312 — [Commercial/Industrial Modeling Concepts](#)

8. Course 320 — [Multiple Regression Analysis](#)
9. Course 322 — [Application of Residential Modeling Concepts](#)
10. Course 331 — [Mass Appraisal Practices and Procedures](#)
11. Course 332 — [Modeling Concepts](#)
12. Course 400 — [Assessment Administration](#)

Workshops:

1. Workshop 155 – [Depreciation Analysis](#)
2. Workshop 157 – [Appraisal Uses of Excel Software](#)
3. Workshop 159 – [Market Analysis for Income Valuation](#)
4. Workshop 162 – [Marshall & Swift Cost Approach \(Residential\)](#)
5. Workshop 163 – [Marshall & Swift Cost Approach \(Commercial\)](#)
6. Workshop 171 – [IAAO Standards of Professional Practice & Ethics](#)
7. Workshop 352 – [Computer-Assisted Mass Appraisal Feedback](#)
8. Workshop 354 – [Multiple Regression Analysis for Real Property Valuation](#)
9. Workshop 450 – [Principles of Property Assessment](#)
10. Workshop 451 – [Planning an In-House Revaluation Program](#)
11. Workshop 452 – [Fundamentals of Assessment Ratio Studies](#)
12. Instructor ITW – [Instructor Training Workshop, IAAO](#)

EXPERIENCE DETAILED ON, AUTHORSHIP, COURSE MATERIALS, AND TECHNICAL PAPERS

The following is a list of authorship contributions including textbooks, appraisal/assessment courses, and papers published or presented at conferences during my career.

Textbook Contributions:

- Co-author Visual Valuation, Chapter 11, Appraisal Institute, Chicago IL, M. Linne' 2010
- Authored, Chapter 11, Introduction to GIS/CAMA Integration, IAAO text on Assessment Administration, 2003.
- Contributing technical editor for Mass Appraisal of Real Property, R.J. Gloudemans, IAAO 1999
- Contributing author and global technical editor for, Property Appraisal and Assessment Administration, J.K. Eckert, PhD, IAAO, 1990.

Development of Course Materials:

- IAAO Course 334 – Application of Mass Appraisal to Non-Residential Properties 2017 contract *Review of course materials for application of best practices, adherence to appraisal standards, and consistency with IAAO standards of practice, and check accuracy of labs and solutions. Also develop a set of NCSS labs that replicate SPSS output.*

- IAAO course 333, Residential Model Building, NCSS interactive lab development. 2016
A new course to be offered in the spring of 2017, includes a hands-on experience using a statistical software package to develop valuation models. SPSS, or NCSS are the software selected by the education committee
- IAAO course 332 Residential Modeling Concepts, course review instructor 2016
Provided IAAO instructors and staff with course corrections, suggested improvements in Excel labs, and timing of presentation for each section of materials.
- Introduction To Regression And Spatial Analysis Used In Mass Appraisal, IPTI/IAAO 2014
This two day seminar focusing on an introduction to regression and spatial analysis. The focus will be on market analysis basics, review of linear regression, market models using non-linear regression and spatial analysis.
- Introduction to AVM and Spatial Analysis, IAAO/URISA 2001-2013
This course was developed for use at the pre-conference seminar of Integration GIS and CAMA. Course is designed for assessment and GIS professionals who need to have a primer on CAMA and how it relates to GIS in the real world. A highlight of this course is the live hands-on data analysis and GIS data exploration using PC's. The material was co-developed with Pat O'Connor, ASA
- Using NCSS for Market Analysis, and Modeling, MAAO 2008
An in-depth four-day workshop using live data to teach students market analysis methods, and lead them through a series of labs developing cost and direct market model, and using Automated Comparable sales for appeals.
- IAAO, Mass Appraisal 300 series curriculum development team 2008
The team completed a new curriculum outline for all 300 level courses to be rewritten in the next 3-5 year.
- Technical Review for IAAO Course 112, Yield Capitalization Methods 2007
- Technical Review for IAAO Course 101, Fundamentals of Real Property Appraisal 2006
- NCSS Basics for Sales Ratio Analysis, State of Utah 2006
Introduction to using the NCSS software covering its basic functionality. Converting the state of Utah's ratio study from MS Excel to NCSS that is easily updated each year without reformatting.
- Preparing Data for Modeling, IAAO 2000.
Preparing data for Modeling is a comprehensive look at property data stored in a computerized environment and how a data structure can impact model accuracy.
7 continuing education credit hours
- Introduction to Using Number Cruncher Statistical System (NCSS) 2000.
This course deals with the basic functionality of the software and how to get started using it for analysis in the assessment office.
7 continuing education credit hours
- Co-authored the Applications of Residential Modeling, Course 321/322 IAAO 1999.
This course deals with hands-on computer modeling and analysis using the NCSS and AEP software. Developed the Student Reference Manual, course labs, and exam for this weeklong course. 30 hours of continuing education.
- Development of Capitalization Rates IAAO 1999.
This course deals with various methods of capitalization, and techniques. Emphasis is on using the property cap rate method with the defined technique.
7 continuing education credit hours
- Introduction to Mass Appraisal Methods IAAO 1987.
This course is a prep course for what is now IAAO Course 300. The workshop covered the basics of a CAMA system, how data is stored, and what model building is about. Students us a case study where a cost manual is analyzed and converted into a model formula that replicates the cost tables.
15 Continuing Education Credit Hours
- Assessment Administration and Office Management IPAI 1986.
This course deals with administration of various functions in the assessment office, data collection, sales analysis, dealing with personnel issues, implementing practices that conform to Illinois law. Materials cover communication and public relations using an interactive case study from a college management course.
15 Continuing Education Credit Hours

- IAAO 300 Series Curriculum Team IAAO 1986 & 2008.
Member of the IAAO 300 curriculum, team of specialist worked on converging all IAAO courses in the 300 series, (300,310,311,312,320,322) into a curriculum where each course built on and added to the previous course. This curriculum level covers the entire range of mass appraisal and modeling skills required to work in the modern assessment office today.
- Mass Appraisal of Garden Apartments IPAI 1985.
This course deals with the use of statistical methods for analyzing data and developing basic market and income models to be applied to a case study property.
15 Continuing Education Credit Hours
- Advanced Sales Ratio Analysis Illinois Property Assessment Institute 1982.
This deals with various ways to use ratio analysis to improve property assessments in areas with under or over assessments, and high dispersion. Covered weighting ratios by property class for equalization purposes as described in the IAAO Ratio Standard. Basic introduction to simple regression.
15 Continuing Education Credit Hours

Technical Papers and Standards:

- IAAO, Body of Knowledge development team, Subject Matter Expert, Knowledge Area #4, Valuation. 2015-2017
- Appraisal Practice Board, Appraisal Foundation. Subject Matter Expert 2012.
Assigned to specifically study and recommend on the issue of "Identifying Comparable Properties", my specific focus is on Mass Appraisal / AVM.
- Subject Matter Expert for the IAAO, on all Mass Appraisal Course, 300 Series 2008 – 2013
Respond to issues found in course content that is questioned by instructors, or IAAO education staff regarding mass appraisal methods, techniques, exam questions etc. for clarity on the issue with confirmation or corrections when deemed appropriate.
- Automated Valuation Model Standard development committee. IAAO 2003, 2017
Specific authorship of Sections 4, Calibration Techniques and, Residential AVMs, Standard on Automated Valuation Models, AVMs, 2003. Consulted with the IAAO standards committee, and reviewed 2017 rewrite of AVM standard
- USPAP Task Force Appraisal Foundation 1990 & 1996
Member of task forced selected by the Appraisal Standards Board to rewrite Standard 6 of USPAP. I specifically authored, SR 6-8 on developing a written mass appraisal report.
- Authored and presented papers at the annual IAAO conference and the IAAO/URISA Conference on Integrating GIS and CAMA. A partial summary of papers are as follows;
 1. Overview on developing a Body of Knowledge for the appraisal/assessment industry, 2016 IAAO Conference
 2. Run the Numbers/Modeling How-to with GIS Enhancements, 2012 GIS/CAMA
 3. Response surface analysis without a GIS, IPTI Conference, Chicago IL 2011
 4. Tabular VS. GeoStatistical Analysis, 2011 GIS/CAMA
 5. Practical Integrations of Valuation Modeling and Geographic Information Systems, GIS/CAMA 2010
 6. Market Variance, Why do similar properties have dissimilar prices, 2008 GIS/CAMA

7. Implementing CAMA/GIS, No IT, No CAMA/GIS No Problem, 2007, GIS/CAMA
8. What are AVM's Doing with GIS?, 2005 GIS/CAMA Conference.
9. A Peek Inside an AVM 2004, 2005, IAAO, and GIS/CAMA Conference.
10. Benefits for an AVM Standard 2003, IAAO Conference.
11. Location Analysis for Commercial Property, 2002 GIS/CAMA Conference, November-December 2002 v9 no. 6 Assessment Journal.
12. Simple Methods for Using Data for Information, 2000 International Property Tax Institute.
13. Developing an Assessment Professional, 2000 IAAO Conference.
14. The intent and meaning of Standard 6, of the Uniform Standards of Professional Appraisal Practice, March-April 1992 v. 14 no. 2 Assessment Digest
15. Transportability of a general-purpose residential market calibrated-cost model, June 1991 v10 no. 2 Property Tax Journal.

EDUCATION:

I graduated from Bloomington High School in 1966. In 1968, I was offered a job in the Assessor's Office. I decided to use this opportunity as my educational nucleus using the experience and specialized training as a practical educational tool from which I would learn and grow intellectually and professionally.

- 1969, earned my Certified Illinois Assessing Officers designation
- 1969 to 1978, continued to take appraisal and assessment courses.
- 1978, completed the requirements for the Senior Residential Appraiser designation (SRA) from the Society of Real Estate Appraisers (now the Appraisal Institute).
- 1979, completed requirements for the Residential Evaluation Specialist designation (RES) from the International Association of Assessing Officers.
- 1986, completed the requirements for the Certified Assessment Evaluator designation (CAE) from the IAAO in 1986.
- 1989, completed the requirements for the Senior Real Property Appraiser designation (SRPA) from the SREA (now the Appraisal Institute).
- 2017, inducted into the Bloomington High School, Hall of Fame

Since 1978, I have accumulated in excess of 7,500 contact hours of course work pertaining to appraisal, assessment, professional practice, legal liabilities, administration and other related topics. Sponsoring Organization of class work are:

- American Institute of Real Estate Appraisers
- Appraisal Institute
- Society of Real Estate Appraisers (now Appraisal Institute)
- National Association of Independent Fee Appraisers, (NAIFA)
- McKissock School of Appraisal Education, www.McKissock.com
- Bloomington - Normal Board of Realtors
- Bloomington - Normal Adult Education
- Environmental System Research Institute, ESRI®
- Illinois Department of Revenue
- Illinois Property Assessment Institute

- International Association of Assessing Officers
- International Property Tax Institute
- Lincoln Institute of Land Policy
- MapInfo Corporation

This large volume of intensive study course work along with the practical incorporation of the methods and techniques taught have given me a broad-based background from which to draw upon and use in implementing and administrating many various appraisal/assessment duties and responsibilities. A complete course transcript available upon request.

TECHNICAL SKILLS

- Proficient in the use of MSWord, MS Excel, MS PowerPoint, MS Access, NCSS12, Apex Sketching, ESRI ArcMap, AEP, and Gotomypc.com.
- I have developed valuation and income models using multiple regression, non-linear regression, feedback, summarized statistics, and automated comparable sales using Euclidean metric selection.
- I had responsibility for developing and maintaining the cadastral layer of the GIS for my jurisdiction.
- Administrated network servers, add, modify users and their network permissions, create file shares and maintaining data backup schedules, in-house and online.
- Setup Client PCs.
- Transfer user files and configuration to and from workstations
- Install hardware components, e.g. memory, hard drives, modems
- Software installation on host and client PCs
- Setup and install wireless network, e.g. routers, switches, filters
- Configure and purchase technology, e.g. PCs, servers, tablet PC, digital cameras, software upgrades.

COMMUNITY ACTIVITIES

- Chair of Bloomington Zoning Board of Appeals. I have been a board member since 1978. Term ended in August 2016.
- Served on Citizens Advisory Council to school board and as vice-president [1984 - 86]
- YMCA volunteer, swim team parent board 1986 - 89, search committee for youth activity director, program committee
- I coached American Legion Baseball 1969 - 74. I coached girls and boys in the Prairie City Soccer league 1983 - 1999. I assisted with coaching in youth wrestling club from 1990-2004.
- Youth Football coach, 2014 – present

Larry J. Clark, CAE

PERSONAL INFORMATION

Address: 492 Garfield, Bonner Springs, Kansas 66012

Telephone: Home (913)422-7231 -- Office (816)701-8130 – Cell(913)403-6143

EDUCATION

College: Kansas State College of Pittsburg - Pittsburg, Kansas

Major: Social Science (Pre-Law)

Minor: Business Administration

Graduation Date: May, 1972 B.A.

Graduate Work:

Law School - Kansas University-Lawrence, Kansas-44 hours

M.B.A. Program - P.S.U.-Pittsburg, Kansas 27 hours

Appraisal Schools:

Property Valuation Division of Kansas Department of Revenue

23 Courses and Workshops 1979-1996

International Association of Assessing Officers

21 Courses and Workshops 1979-2003

American Institute of Farm Managers & Rural Appraisers

2 Courses

Appraisal Institute

5 Courses

Courses/Workshops Taught

Changing Environment of the County Appraiser in Kansas

Ratio Studies – NCRAAO

IAAO Course 300

IAAO Course 301

IAAO Course 302

IAAO Course 311

IAAO Course 312

IAAO Course 350

Commercial Property Association of Kansas Appraisal Seminar

IAAO Workshop 354(604)

IAAO Course 402

RMA Commercial Exam Workshop(Wrote and presented)

SPSS For the Appraiser Workshop(Wrote and presented)

IAAO Workshop 150 – Mathematics for Assessors

IAAO Workshop 152 – Narrative Report Writing

IAAO Workshop 157 – The Appraisal Uses of Excel Software

IAAO Workshop 161 – Marshall & Swift Residential One Day

IAAO Workshop 162 – Marshall & Swift Residential Manual

IAAO Workshop 163 – Marshall & Swift Commercial Manual

IAAO Forum 906 – Valuation of Billboards

IAAO Forum 914 – Using the HP 12C

IAAO Forum 960 – Marshall & Swift Residential Square Foot Costs

IAAO Forum 962 – Marshall & Swift Commercial Square Foot Costs

Final Value Review Workshop for the United Kingdom

Consulting Projects

Wyandotte County, Kansas – Ongoing help preparing annual statistical reports

Crawford County, Kansas – Periodic sales ratio reporting

Craig County, Colorado – SPSS training 2000 and 2002

Volusia County, Florida – SPSS training 2001

Eagle County, Colorado – SPSS training 2002

Clay County, Missouri – Cama conversion

TerraScan – Cheyenne, Wyoming Cama conversion training

IAAO – Bexar Central Appraisal District – peer review

IAAO – United Kingdom – development and presentation of a mass appraisal course 350

IAAO – United Kingdom – development and presentation of a Final Value Review Workshop

Arkansas Chapter of IAAO – Developed and taught a workshop on the use of SPSS in producing ratio studies

Reynolds Appraisal Company – Developed and taught a workshop on the use of SPSS in appraising

Assessment Coordination Division, State of Arkansas – Taught one day workshop on interpretation of SPSS output

Russian Society of Appraisers – Presented a one-day workshop on the U.S. property tax system in Moscow

Lincoln Institute of Land Policy, State Administration of Taxation of China – Presented a two-day workshop on IAAO standards at the Renmin University in Beijing, China

PROFESSIONAL DESIGNATIONS

Certified Kansas Appraiser (CKA)

June 8, 1982

awarded by the Institute of Certified Kansas Appraisers

Residential Evaluation Specialist (RES)

October 6, 1982

awarded by the International Association of Assessing Officers

Certified Assessment Evaluator (CAE)

March 15, 1984

awarded by the International Association of Assessing Officers

MEMBERSHIP

Regular Member International Association of Assessing Officer

Professional Designation Advisor for Kansas - 1991 - 2005

Senior Instructor - Courses/Workshops 151, 152, 162, 163, 300, 310, 311, 312, 350,
400, 402, 451, 452, 906, 914, 960, 962

State Representative - 1994 - 1999

Grader - 1994 - 2005

Professional Admissions Subcommittee - 1995 – 1997

Education Subcommittee – 2000-2003 (Chairman, 2000 & 2001, 2003)

Professional Development Committee – 2004, 2005

Professional Designations Subcommittee - 2007

Most Valuable Member - 1994

Bernard L. Barnard Award Winner – 1997, 2004

AVM Standards Committee Member – 2003

Presidential Award Winner – 2003

Instructor of the Year – 2005

Verne W. Pottorff Designee of the Year Award - 2008

Regular Member Kansas City Chapter of IAAO

Education Committee - 1990

Treasurer - 1991

Secretary – 1992, 2007

Vice President - 1993

President - 1994

Regular Member Kansas County Appraisers Association

Minerals Committee - 1981

Personal Property Committee - 1982, 1983

Constitutional Committee (Chairman) - 1982

Publications Committee - 1982

CKA Committee - 1982 (Chairman) 1983 (Chairman) 1984

Education Committee - 1983, 1984 (Chairman)

Appraisers Handbook Committee - 1982, 1983

Executive Board - 1984, 1989, 1990

Editor, Kansas County Appraisers Newsletter 1985 - 1991

Vice-President - 1990

President-Elect - 1991

Legislative Committee - 1991 - 1996

President - 1992

President's Award Recipient - 1985, 1991