

APPRAISAL TODAY

How AI can Help Residential Appraisers and Why Appraisers Will Always Be Needed

By David Galatto

Editor's Comments: This is the best practical article I have ever read about AI and residential appraisers. No tech-talk about using ChatGPT, etc. This is the first article where I learned about what AI really means for residential appraisers!

I've been building AI appraisal software and working with appraisers at several appraisal firms for the last year, which has given me an interesting view of where AI stands in the appraisal industry. Some of what these models can do is genuinely impressive. Some of it is nowhere near as intelligent as it looks. And some of it is just confusing.

I think the easiest way to understand the current AI landscape for the appraisal industry is to unpack it into 3 topics:

- i) what it can actually help with today,
- ii) where I've seen it struggle,
- iii) what UAD 3.6 changes

Note: I'm not going to get into the specific appraisal softwares like TOTAL, Aivre, or Advanced Property Analytics as this is a review of general AI capabilities.

1. Where AI Can Actually Help appraisers today

The biggest thing I've learned building software is that AI is very good at handling the data. Searching, collecting, organizing, comparing, cross-checking data are all areas where AI can do an enormous amount of work very quickly.

Voice-to-text is a simple example. An appraiser can dictate observations during or after an inspection and have AI organize them into notes or commentary.

Writing is another obvious use for AI. Once the underlying analysis is there, modern AI is very good at turning it into readable commentary. But I think everyone knows that.

AI connected to databases

Things get much more interesting once AI is connected to the actual databases an appraiser works with. Take comparable selection. AI can search across the MLS, public records, and listing sites all at once. It can screen hundreds of properties based on dozens of characteristics

and can dig down on the important sales much better than just a simple radius or sale price search.

Now, this doesn't mean AI can pick perfect comps. In our testing, we've seen plenty of situations where an appraiser looks at a comp the AI likes and immediately sees a reason it shouldn't be there.

We've also seen plenty of situations where an appraiser agrees with the comps AI selects.

But the one thing that we've consistently seen is that AI can turn a massive pool into 5-8 genuinely relevant properties for the appraiser to consider and can also give a complete list of other potential comps it looked at but wouldn't consider. This alone can save massive amounts of time.

Adjustments and market analysis

Adjustments and market analysis have a similar advantage.

I've given AI enough reliable sales data and seen it work through thousands of transactions looking for relationships between price and GLA, condition, bathrooms, garages, lot

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size, time, and other characteristics. It can even decide when to utilize more traditional statistical methods, including regression, when those methods are better suited to the question.

And within minutes, I've got adjustment rates, values, and reasoning all lined up for me. Combine that with the local market know-how of the appraiser and the process has just been dramatically expedited.

Quality Control

Then there's quality control. Traditional appraisal software has caught mathematical and field-level errors for years. What newer AI adds is the ability to understand enough of the meaning of the report to catch less surface-level contradictions.

So when people ask me where AI is useful today, I'd have to start with what AI was built on, the data.

2. Where AI Is Still Falling Short

This is the part that has become much clearer to me after actually working with the AI models.

The first problem I've seen is vision. Current models can recognize a surprising amount from property photographs, but recognizing the pieces isn't the same as understanding images at a deep level while also considering the big picture.

For example, AI might see new countertops and stainless-steel appliances and become overly impressed with a kitchen. An appraiser looking at the same MLS photos may notice the smaller things like worn carpeting, dated finishes, or remember that several rooms were never renovated at all.

That nuance is difficult because human vision does much more than identify objects. We absorb materials, workmanship, wear, scale, layout, consistency, and hundreds of smaller visual cues almost without thinking about it.

Thousands of years of human development have made us extremely sensitive to the little details in our physical environment. AI didn't come pre-packaged with that instinct, so it still lacks some of that deeper visual understanding.

The second gap is local market knowledge. An experienced appraiser knows which streets buyers prefer, when two neighborhoods that look similar on paper really aren't comparable, and whether a particular feature really commands a premium in that market.

AI can find patterns in sales data, but not everything shows up neatly in a dataset. It can read hundreds of maps, local guides, and spreadsheets, but when the rubber meets the road, true market knowledge only comes from repeatedly working and ingraining oneself in the market.

The third problem is the data quality. Real estate data is messy, inconsistent, and often more complicated than the fields make it look. We've run into this repeatedly while building our software.

Maybe an MLS field says a property has a patio. AI can easily turn that into patio = yes and move on without thinking twice. An appraiser may look at the photographs and think, "Sure, but that's not what a buyer is going to picture when they hear patio."

The same problem shows up everywhere (don't even get me started with GLA).

Listings exaggerate renovations. Public records conflict with MLS data. MLS data doesn't even exist in certain areas. AI tends to take information at face value, while appraisers know from experience when something doesn't look right.

3. What UAD 3.6 Changes

UAD 3.6 gives AI a better environment to work in by standardizing far more appraisal information.

There's a big difference between giving AI a clearly defined piece of data and having it infer information from text buried in the addendum. The more information that's structured and clearly defined, the easier it becomes for AI to use it reliably.

But there's another side to this. More structure also lets AI spread a mistake. If the system misunderstands one piece of information and then carries that assumption into several related parts of the appraisal, one bad conclusion can quickly become five bad entries.

It becomes a garbage in garbage out problem, and UAD 3.6 is a bit less flexible and forgiving. That's why, from everything I've seen building these systems, keeping AI on a tight leash and keeping it controlled is becoming even more important.

Summary

Overall, AI can already do much of the heavy lifting very quickly, but it still gets things wrong. That makes human guidance and oversight extremely important. *At the end of the day, the AI doesn't have a license on the line. The appraiser does.*

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9-26 UAD 3.6 UPDATE

What tablet or phone should I get for inspection apps?

Ask the software vendor. If you use Android you may find a few that recommend it.

UAD 3.6 software cannot be used for GSE appraisals if not validated.

What does GSEs UAD 3.6 software validation check?

GSEs want to know that the report section is acceptable. The GSEs wrote the software. All software vendors are required to use it.

The GSEs validate that the software can successfully upload: XML, PDF, and images, included in a Zip file. The GSEs can be very "picky" validating. It can take a while sometimes to get the validation completed. This varies widely among software vendors. As of 8/18/26 10 are validated. Eventually, about 24 software vendors is estimated. A few are in the progress now of validation.

Additional features (added by the vendor) are not validated by the GSEs, Examples are: features provided by the vendor's software. Add-ons provided by another vendor such as Datamaster. Both may have additional fees.

How the get the list of GSE validated vendor software companies.

Go to
<https://singlefamily.fanniemae.com/integrated-vendor-list>
Scroll down to Fannie Mae Product Interface
Select (scroll down) "UAD 3.6 appraisal software provider" then click Search.

Where to see sample many completed URAR 3.6 reports from GSEs in one file

Sample Scenarios

Uniform Appraisal Dataset (UAD) Specification
Issued by Fannie Mae and Freddie Mac
Sample Scenario PDFs (Combined)
March 10, 2026

All the reports are filled out and completed so you can see what they look like. Editor's note: the first sample is a 2-4 unit property.

In the document, to see a filled out a Detached SFR sample

Search for:
Uniform Residential Appraisal Report
12345 HOLIDAY HWY, SURFSIDE,
HI 12345

<https://sf.freddiemac.com/docs/pdf/uad-sample-scenarios-combined.pdf>

Few, if any, UAD 3.6 software vendors have fully completed their software

The UAD 3.6 software varies widely among the software vendors. They are all different.

Beta testers and users are finding problems.

This makes it difficult to choose which software you want.

The software vendors definitely did not have enough time to get this fully completed by the deadline of November 2.

Comparison of choosing new software UAD 2.6 (forms) in the 1980s vs. UAD 3.6 software today - Dramatically different

Editor's note: This article was originally written as a review of forms software in the September, 1993 issue of Appraisal Today.

UAD 2.6 - Forms

Similar forms were available in the 1960s. Appraisers were familiar with the forms. In the 1980s they could be written on computers and printed. No more typewriters. The first version of the URAR was in 1984.

It was much easier to decide which software to purchase in UAD 2.6. All software reports were very similar. Mostly you looked at price and a few other features.

With UAD 2.6 in the 1980s, appraisers seldom changed their software. I used to say: "The best software for you is probably your current software." My experience in the 1980s: Around 1986 I chose a nearby software vendor. He took too long to update to Windows. I switched to Bradford Software, about 20 miles away and never changed software again. If I was using UAD 3.6 software, I would choose Bradford again. They also have many types of non-lender software. I like their software. I had an in person demo where I asked questions in early 2025. Today we have the "Analytics Age of Valuation" with UAD 3.6 - totally different than UAD 3.6 in deciding which software to use. So far, about 24 different software vendors are expected. The software from each vendor is different. The report format is standardized but vendors can make changes in how data is imported, etc. AI is new. Vendors are adopting some AI uses, such as identifying photos with captions. As compared with UAD 2.6 where changing software vendors was relatively easy, I assume that now appraisers will not be willing to change UAD 3.6 software vendors once they have learned how to use the new software. They are all much more complicated than UAD 2.6 software.	Selecting your best choice and not changing will probably be happening. You need to test the software you like, not just rely on a demo from the software company. Many vendors offer free trials. Below is a list of UAD 2.6 in 1993 - 13 software vendors, prices, etc. There were very few choices to be made. Today, there are 10 validated now with 24 total anticipated vendors • Appraisers Choice Appraisers Edge • Day One • Dynamic Computing • Formfill • MCS • Microform • Resident App For Real Estate Professionals • Soft Byte "• Total/a la mode nUnited Systems • WCA Some are still in business today. In my 1993 review I found that none of the programs were poor or inferior. None were significantly above the typical. I had expected a wider range. A few vendors had copy/use protection. ACI had a hardware device. Some had customer name encryption. Others had no restrictions. Prices were by the number of users and forms. UAD 2.6 forms varied from \$199 to \$595. Only one user with all forms varied from \$395 to \$3,995.	Most were under \$1,000. ACI was the most expensive. A la mode was \$395. Some had annual support costs, from \$250 to \$300, which typically included upgrades. Issues in 1993: How many forms should I buy? Many vendors price by the form rather than one price for all forms, so price comparisons are often difficult. It is nice to have all the forms, but if you seldom use a form it may be worthwhile just to type it on a typewriter. Consider which forms you use on a regular basis. Calculations All programs reviewed, even the "cheap" ones, had the basic calculations of the Cost Approach and market grid. Many have added features such as calculating GLA by floor and % depreciation in the Cost Approach. The Residential Appraiser has the most sophisticated Cost Approach, with physical incurable and curable, and other calculation. To read the full articles see the May 2026 issue of Appraisal Today about the new forms in the 1993. Available on the most recent paid subscriber web page, currently www.appraisaltoday.com/warren .
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-What UAD 3.6 software should you use to see how they work? The best way to understand the reports is to fill out a report. I always recommend seeing if you like your current forms software vendor first. You are familiar with support, pricing, etc. Looking at another software is also useful for comparisons. If you want to try another software you may consider SFREP and Aivre. SFREP is a legacy software company (started in the the 1980s with UAD 2.6. Aivre is new and a frequent user of AI. SFREP is desktop based. AIVRE is web based. Some appraisers prefer one or the other. SFREP (Appraise-It Pro) is a legacy vendor and started selling their forms software in the 1980s. I had a live hands-on demo, where I asked questions of their report section in early 2025. They have all the UAD 2.6 forms available. I have known the owner, Wayne Pugh (appraiser and son of an appraiser), for decades and have been following their UAD 3.6 development. Online people say it is easy to use. SFREP offers a free, fully functional six-month demo of Appraise-It Pro appraisal software. No credit card or contract is required to sign up. Users can access this trial by visiting the official website at WWW,,SFREP.COM and selecting the orange demo button.	AIVRE is a new appraisal software company and uses AI. I love the ChatGPT type AI to search for what you need in F-1 that has all that Fannie wants. Hopeless to just use Control-F to search for something. It was not developed by appraisers! I have seen many demos and interviewed one of the owners, Jake Lew. Aivere is pronounced i-vo-ree. Has GPAR for non-lender appraisals. Does not have UAD 3.6 forms available at this time. Some of his family members are appraisers, but he decided take computer topics in college. AIVRE has GPAR, but no UAD 3.6 forms as of now. Go to www.aivre.com The platform is free to use until January 1, 2027. Only about 50% of mortgage loans are sold to GSEs and need UAD 3.6 software. The other 50% of mortgage lenders (estimated) do not need to use UAD 3.6. Also what VA will do is not known.	
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The Appraiser's Triangle: Navigating a Historic Turning Point

The Appraiser's Triangle

Navigating a Historic Turning Point



Knowledge is no longer about remembering everything. Today it is about organizing, retrieving, evaluating, and applying information.

That is modern competence.



KNOWLEDGE

Organize
Retrieve
Evaluate
Apply



Aptitude is the ability to recognize patterns, solve problems, follow logical decision trees, and make reasoned decisions.

It turns information into insight.



Experience provides the judgment that data alone cannot replace. It comes from years of analyzing markets, managing risk, and adapting to change.

It keeps us grounded in reality.



EXPERIENCE

Judgment
Risk Management
Adaptation
"Boots on the Ground"



APTITUDE

Recognize Patterns
Solve Problems
Follow Decision Trees
Make Logical Choices



Attitude is the driving force that keeps all three elements moving forward.

It creates momentum for the future.



ATTITUDE

The willingness to keep learning and adapting

Sound
Appraisal
Judgment

Knowledge, Experience, and Aptitude provide the *structure*.
Attitude provides the *momentum*.

The Appraiser's Triangle

By Doug Smith

"Critical thinking separates those who use AI to transform their businesses from those who merely use AI." Roy Meyer- Founder-FaceBook page: AI for Appraisers

"The order is rapidly fadin'
And the first one now
Will later be last
For the times they are a-changin'-Bob
Dylan: The Times They Are A-
Changin'"

The appraisal profession has entered one of the most significant transition periods in its history.

Artificial Intelligence, UAD 3.6, new inspection technology, cloud computing, tablets, mobile workflows, XML reporting, and appraisal waivers are converging almost simultaneously. It is understandable that many appraisers feel overwhelmed.

Social media pages and discussion groups have become filled with questions, software concerns, and uncertainty. Yet every profession reaches moments like this. The issue is not whether change is occurring. The issue is how we respond to it. During times of uncertainty, the easiest decision is to make no decision.

Yet history shows that periods of greatest change reward those who continue learning and adapting rather than standing still. Appraisers are uniquely trained to reconcile conflicting evidence. That is what the sales comparison approach teaches every day. Appraisers don't wait for perfect comparable sales; they analyze imperfect information and arrive at a supported opinion.

Perhaps the greatest irony is that appraisers should be among the people **least afraid of uncertainty**, because uncertainty is the environment in which they have always worked.

Andy Arledge on Scope of the Challenge

Andy Arledge recently summarized the scope of the challenge. UAD 3.6 expands the reportable dataset from approximately 209 required or conditionally required data elements to over 500. More importantly, many of those data points are tied together through conditional decision trees. Selecting one answer often opens additional required fields.

The challenge is not simply remembering hundreds of new fields—it is understanding the logical sequence of decisions they create. UAD 3.6 is not just a bigger form, it is a series of quantitative and qualitative decision trees demanding a newer way of thinking with a sharpening of critical thinking skills.

My thoughts turned to thinking about what qualities and appraiser will need over the next decade. The answer came to me as a simple triangle.

Three Sided Triangle

The traditional appraisal practice is represented by a three-sided triangle with two sides of knowledge and experience on a foundation of aptitude.

As important as all three of these are in a successful practice, attitude remains the driving force. Attitude is the main requirement at this moment in time as the profession has always rewarded those willing to learn.

Appraisers, at this time must accept that "the order is rapidly fadin" and the whole appraisal world is headed to new horizons. The traditional elements of knowledge, experience and aptitude qualities require sharpening and enhancement,

Knowledge

Knowledge no longer means remembering everything. For forty years appraisers were rewarded for memory. Today they are rewarded for not only organization but retrieval of information.

The consequence of the simultaneous introduction of UAD 3.6 as well AI, new technology and all the other elements crowding the appraiser's agenda was brought home to me recently when I considered the means to learn about UAD 3.6 and Appendix F-1 of some 300 pages. In the UAD 3.6 CE class, the instructors made many mentions of using Control (F).

They emphasized that with some 300 pages Appendix F-1 needed a way to find and retrieve information. This key stroke shortcut using a key word allowed an appraiser to find info. In this fast moving world of ever changing advancement, this means of retrieval has largely become obsolete.

Now the first step in this path to adapting to UAD 3.6 is to upload Appendix F-1 into the now changed Gemini Notebook APP and start retrieving the full and specific information required.

Appraisers are no longer expected to memorize USPAP FAQ, every UAD requirement, or every software feature. Appraisers are expected to know how to retrieve and apply them. That is a modern definition of competence.

On the path to appraisal knowledge, appraisers followed a logical process starting with classes, mostly led in person, accumulating textbooks and working with a mentor.

Professional organizations such as the Appraisal Institute, the National Association of Independent Fee Appraisers and others fostered networking and learning from others.

Artificial Intelligence has radically changed the entire concept of accumulating as well as developing knowledge in ways that are constantly changing. In the past, appraiser education and accumulation of knowledge was logical and manageable. Today, that no longer seems to be the case. Appraising was never rocket science and it is not meant to be. To some, the challenge is daunting and unreachable as is rocket science to many. However, returning to the days when spreadsheets were introduced and when Microsoft Excel became the standard, eventually all appraisers took on and adapted to using Excel. That process followed a step-by-step process with learning from classes, text books and from mentors and others. Be assured that those tools remain in the learning process. When my attention first turned to using AI, the first thing I was compelled to do was to request my selected LLM (Large Language Model) to prepare a glossary of this new AI vocabulary. Then, I adapted to AI as another means of mentoring and not only used AI but used it to learn how to use AI. For decades professional competence and knowledge was closely tied to memory. Today, adapting to AI, competence is increasingly tied to: " organizing information, " retrieving information, " evaluating information, " applying information. That is critical thinking.	Experience Experience is still irreplaceable. Appraiser's experience has given the profession an understanding of the reliability and certainty of statistics. Fundamentally, appraising is grounded on the element of risk management. Lenders face the statistical chance that a loan will go bad. Appraisers stack the odds against that risk by determining that if the loan does go bad, the remainder of the loan can be recovered. Risk never goes away. Lenders try all kinds of means to circumvent the process. Now lenders use loan waivers called "value acceptance" but the chips always seem to fall where they may. The statistical certainty of lender risk ensures that appraisers have a future ahead. UAD 3.6 came about because the GSE'S cannot determine the particular market acceptability of the individual property. They have lots of data for local market conditions but they often do not have specific or timely information dealing with an individual property. They need someone on the ground to focus on that property and its acceptability in that specific market. They have spent millions setting up this means in UAD 3.6. That effort points the way to future use of appraisers. It is this "boots on the ground" that is the proven result of the experience quotient of each appraiser now practicing. Aptitude Aptitude is not intelligence, it is: • recognizing patterns • solving problems • following decision tree (a flow-chart-like model used in decision analysis and machine learning). "•making logical choices Exactly what UAD 3.6 requires.	Years ago, a college professor administered a test measuring thinking along a continuum from concrete to abstract reasoning. He smiled at my results and said, 'You'd make a good farmer.' At the time I laughed. Years later I realized he was describing exactly what makes a successful appraiser. We spend part of the day in the physical world-measuring, observing, inspecting - and part of the day in the conceptual world-analyzing markets, reconciling evidence, and exercising judgment. Few professions require moving comfortably between both worlds. The future belongs to professionals who can move comfortably between the world of things and the world of ideas. Few professions have been doing that longer than appraisal. Five years from now, people may not remember the details of UAD 3.6 or today's AI tools. But they will still understand a historic turning point, and they will still understand the qualities required to navigate one. The future belongs to those willing to make thoughtful decisions. This profession has prepared appraisers for this moment. Trust the habits that made for being a successful appraiser in the first place. Keep learning. Keep deciding. Keep moving. Yes, this is a historic turning point. Yes, it is difficult. But this profession has exactly the kind of people who can navigate it. The Appraiser's Triangle:
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Navigating a Historic Turning Point

"Critical thinking separates those who use AI to transform their businesses from those who merely use AI."

- **Roy Meyer, Founder, Facebook page: AI for Appraisers**

"The order is rapidly fadin'
And the first one now
Will later be last
For the times they are a-changin'."

- **Bob Dylan, The Times They Are A-Changin'**

Every profession experiences moments when the old order begins giving way to something new. Residential appraisal is now living through one of those moments.

Artificial Intelligence, UAD 3.6, new inspection technology, cloud computing, tablets, mobile workflows, XML reporting and appraisal waivers are converging almost simultaneously. It is understandable that many appraisers feel overwhelmed. Social media pages and professional discussion groups have become filled with questions, software concerns and uncertainty.

Yet every profession eventually reaches a historic turning point. The question is never whether change is occurring. The question is how we respond to it.

During periods of uncertainty, the easiest decision is often to make no decision at all. History, however, consistently rewards those who continue learning, adapting, and moving forward.

Appraisers, perhaps more than most professionals, are uniquely prepared for such times. Every day we reconcile imperfect information, analyze conflicting evidence, and arrive at a well-supported opinion of value. Uncertainty has always been our workplace. It should not become our enemy now.

Andy Arledge on Scope of the Challenge

Recently, Andy Arledge summarized the scope of the challenge before us.

UAD 3.6 expands the reportable dataset from approximately 209 required or conditionally required data elements to well over 500. More importantly, many of those elements are connected through conditional decision trees.

Selecting one answer often opens additional required fields. UAD 3.6 is not simply a larger form—it is a structured decision-making system requiring a higher level of logical thinking and critical analysis.

As I considered what qualities appraisers will need during the next decade, the answer came to me in the form of a simple triangle.

The traditional appraisal profession has always rested upon three essential qualities: **knowledge, experience, and aptitude**. Today, however, there is a fourth quality that gives those three their momentum - **attitude**.

Knowledge, experience, and aptitude provide the structure.

Attitude provides the willingness to continue learning.

That willingness has always separated those who merely survive change from those who grow because of it.

Knowledge

Knowledge no longer means remembering everything.

For much of my career, professional competence was closely tied to memory. We accumulated textbooks, attended classes, worked with mentors, highlighted USPAP, and gradually built a mental library of appraisal knowledge.

Today, knowledge has taken on a different meaning.

Recently I reflected on learning UAD 3.6 and the nearly 300-page Appendix F-1. During a continuing education class, the instructors repeatedly reminded us to use **Control-F** to locate key words within the document. It was excellent advice because no one could reasonably memorize hundreds of pages of technical requirements.

Then it occurred to me how rapidly our thinking has already changed.

Instead of searching page after page, I uploaded Appendix F-1 into NotebookLM now called Gemini Notebook and simply began asking questions. Within seconds I could retrieve specific explanations, definitions, and guidance tailored to exactly what I wanted to know.

The difference was more than speed. It represented an entirely different way of thinking.

Appraisers are no longer expected to memorize every USPAP FAQ, every UAD requirement, or every software feature.

They are expected to know how to **organize, retrieve, evaluate, and apply** information.

That is the modern definition of professional competence.

When I first began exploring Artificial Intelligence, I quickly realized I didn't even understand its vocabulary. My first request was simply to have AI prepare a glossary of AI terminology. In an interesting twist, I found myself using AI to learn how to use AI. Rather than replacing traditional learning, AI became another mentor.

Professional organizations, mentors, continuing education, textbooks, and networking remain just as valuable as ever. The difference is that today's appraiser has far more effective ways of organizing and retrieving knowledge than ever before.

Experience Experience remains irreplaceable. Looking back over my own career, I realized I have never stopped adapting. When I entered the profession, digital cameras were replacing Polaroid and 35mm film. Flood maps gradually became available online. Measuring tapes gave way to electronic devices, followed by laser technology. MLS systems became digital. Microsoft Excel evolved into an indispensable analytical tool. None of those innovations replaced appraisal. They simply became better tools for appraisers. Artificial Intelligence and UAD 3.6 represent the next chapter in a story that has been unfolding throughout my career. Experience teaches something technology cannot. Judgment The appraisal profession exists because lending is fundamentally an exercise in risk management. No amount of national data can completely explain the market acceptance of an individual property on a particular street, in a particular neighborhood, on a particular day. That is why the GSEs invested millions developing UAD 3.6. They possess enormous quantities of market data. What they still need is experienced local professionals capable of interpreting that data within the realities of an individual property and its marketplace. That "boots on the ground" judgment remains one of the profession's greatest strengths.	Aptitude Aptitude is not simply intelligence. It is the ability to: • recognize patterns, • solve problems, • follow logical decision trees, • exercise sound judgment, and • make reasoned decisions. Exactly what UAD 3.6 now demands. Years ago, one of my college professors administered a test measuring thinking along a continuum from concrete to abstract reasoning. Looking at my results, he smiled and said, <i>"You'd make a good farmer."</i> At the time I laughed. Years later I realized he had described exactly what makes a successful appraiser. Part of our day is spent in the physical world-measuring improvements, observing condition, inspecting neighborhoods, and collecting data. The remainder is spent in the conceptual world-analyzing markets, reconciling evidence, weighing competing explanations, and exercising professional judgment. Few professions require people to move comfortably between the world of things and the world of ideas. Appraisal has always required both. Looking Forward Five years from now, appraisers may no longer remember the details of UAD 3.6, today's AI platforms, or the software updates that currently dominate professional discussions. They will, however, remember this period as one of the great turning points in the profession.	Looking back, I suspect we will realize that this transition was never primarily about software. It was about learning to think differently. The future belongs not to those who know everything, but to those willing to continue learning. Trust the habits that made you a successful appraiser in the first place. Continue asking questions. Continue adapting. Continue making thoughtful decisions. Continue moving forward. Yes, this is a historic turning point. Yes, it presents real challenges. But this profession has spent decades preparing exactly the kind of people capable of navigating it. For the times, indeed, are changing About the author • Bachelor of Arts- Economics • Masters In Business Administration - President- Hotel Consulting Services, Inc. dba Appraisal Services-Douglas G. Smith Since 1992 • Specializing in Real Estate Appraisals, Consulting and Market Feasibility Studies • Montana Certified General Appraiser - License #REA-RAG-LIC-562 • High Value homes, located in the gated communities of The Rock Creek Cattle Company and the Stock FarmPage 14, July, 2026 • Litigation assignments of vacant land and improved properties • Appraisal Institute-SRA designation, AI-RSS(Review Designation)
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Bracketing Has No Empirical Support and Encourages Bias

By Timothy C. Andersen, MAI

© 2026 Timothy C. Andersen. All Rights Reserved. The author acknowledges the use of AI in completing this essay but is 100% responsible for its content.

Editor's Comments: In last month's newsletter, I published a much longer article on many similar topics. This article applies some of it to bracketing.

Abstract

The contemporary lender/AMC demand that residential appraisal reports include one comparable sale above and one below the contract price (colloquially termed "price bracketing") presents itself as a quality-control protocol.

This essay argues that such a mandate lacks verifiable validation, conflicts with foundational principles of valuation theory, and introduces ethical distortions into the appraisal process.

Drawing on appraisal theory (Graaskamp, Ratcliff, and The Appraisal of Real Estate), federal agency guidance, and philosophical frameworks from Popper, Kant, and Kuhn, the analysis demonstrates that price bracketing functions less as a scientific safeguard than as a ritualized administrative heuristic (rule of

thumb).

While bracketing of physical characteristics can reduce inferential extrapolation, contract-price bracketing incentivizes confirmatory selection bias and undermines the probabilistic nature of market value.

The essay concludes that rigid bracketing requirements risk substituting bureaucratic formalism for disciplined professional judgment, thereby eroding the epistemic credibility of residential appraisal.

The Ontology of Bracketing: What Are We Even Talking About?

The contemporary residential appraisal landscape contains a curious artifact: the lender or AMC edict that the appraiser must present at least one comparable sale above and one below the contract price. This directive masquerades as methodological rigor.

At the ontological (philosophical) level, bracketing purports to create a bounded interval within which the subject property's value must reside.

In its defensible form, bracketing of physical or qualitative characteristics, it serves as a practical device to reduce extrapolation.

When a subject's gross living area falls between two comparable sales, the appraiser observes contributory value within an empirical interval.

This form of bracketing aligns with classical valuation education as reflected in the 15th ed. of *The Appraisal of Real Estate* (Appraisal Institute, 2020), which emphasizes comparative analysis grounded in

market evidence.

Price bracketing, however, operates in a different ontological category. It presumes that the contract price itself constitutes a legitimate axis of comparison prior to the independent development of a value opinion.

This presumption quietly inverts the causal structure of appraisal. Instead of deriving value from market data and then comparing it to the contract, the protocol pressures the appraiser to curate data relative to the contract. The object of inquiry subtly shifts from "What does the market indicate?" to "How can the evidence be arranged around the contract, thus supporting it?"

That shift is not trivial. It marks a transition from epistemology to teleology: from inquiry aimed at discovering value to *procedure aimed at justifying a transactional endpoint*.

Epistemology and the Myth of Procedural Safeguards

Karl Popper's philosophy of science centers on falsifiability as the demarcation (border) criterion of meaningful empirical claims. A procedure that cannot, in principle, be shown to *fail* does not meaningfully test reality (Popper, 1959). Price bracketing fails this Popperian test.

No empirical literature demonstrates that the presence of one sale above and one below the contract price increases appraisal accuracy. Nor does any corpus of research establish a causal relationship between such bracketing and improved predictive validity of value opinions.

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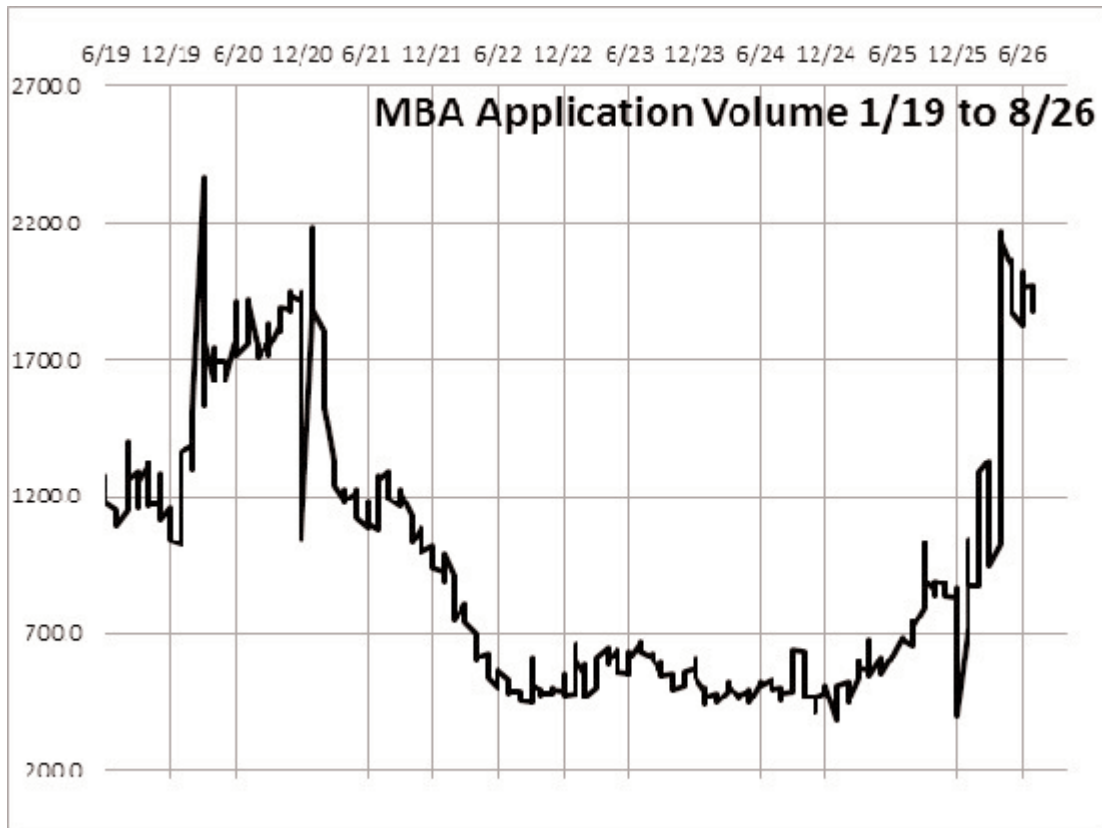
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What price bracketing does accomplish is *bureaucratic legibility*. It renders the appraisal superficially auditable by non-experts.

The reviewer sees a symmetrical grid and infers methodological completeness. Yet this symmetry is aesthetic, not epistemic. It resembles what Thomas Kuhn would describe as a paradigm-preserving ritual: a practice that sustains institutional confidence without necessarily advancing empirical understanding (Kuhn, 1962).

Empirical observations of appraisal practice reinforce this concern. Research analyzing appraisal datasets shows that appraisers typically consider dozens of potential transactions but select only a small subset for formal analysis.

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The criteria governing that selection exert enormous influence on outcomes. When institutional incentives encourage alignment with contract prices, selection effects predictably cluster evidence around those targets. The existence of bracketing in such contexts does not validate the conclusion; *it merely reflects constrained sampling*.

In epistemological terms, price bracketing introduces a prior that contaminates the independence of the evidentiary set. The procedure embeds a confirmation bias into the architecture of the analysis.

Graaskamp, Market Structure, and the Probabilistic Nature of Value

Dr. William N. Kinnard and Dr. James A. Graaskamp both emphasized that real estate markets operate as complex systems characterized by segmentation, imperfect information, and probabilistic outcomes. Graaskamp's conception of real estate as a "store of power" situates value within dynamic socio-economic processes rather than static price snapshots (Graaskamp, 1978).

From this perspective, market value does not emerge as a deterministic point but as a convergence of evidence. Comparable sales function as noisy signals within a distribution. The appraiser's task involves synthesizing these signals through disciplined judgment.

Any protocol that privileges a single transactional datum, e.g., the contract price, as an organizing axis, risks mistaking a contingent observation for a structural parameter.

Price bracketing implicitly makes the contract more concrete as a gravitational center. Yet contracts themselves arise from heterogeneous motivations, negotiation asymmetries (irregularities) and informational frictions.

To organize comparables around the contract elevates a potentially idiosyncratic event into a methodological anchor. This move contradicts the probabilistic ontology of value that underlies modern appraisal theory.

Kantian Deontology and the Ethics of Independence

Immanuel Kant's framework insists that professional action must conform to principles that can be universalized without contradiction (Kant, 1785/1993). Applied to appraisal, the relevant maxim might read: *Select comparable evidence in a manner independent of transactional pressures*. Universalizing the opposite maxim, "...select evidence relative to the contract outcome...", would dissolve the distinction between independent valuation and transactional advocacy.

USPAP's Ethics Rule enshrines independence as a foundational obligation. Although USPAP does not explicitly prohibit bracketing, it requires that appraisers perform assignments with impartiality, objectivity, and independence. A lender-imposed protocol that structurally incentivizes contract-centered evidence selection approaches the boundary of ethical incoherence.

It invites a subtle form of teleological capture in which the means of analysis bend toward the ends of transaction facilitation.

From a Kantian standpoint, the moral hazard lies not in any individual instance of bracketing but in the institutionalization of a rule that conditions evidence selection on a non-epistemic variable. Such conditioning risks treating the appraisal not as *an inquiry into truth but as an instrument of transactional convenience*.

The Legitimate Core of Bracketing

A fair polemic must concede the rational kernel embedded within the practice. Bracketing of physical characteristics can serve as a pragmatic constraint on extrapolation.

When all comparables lie on one side of the subject with respect to a major value driver, the appraiser must infer beyond observed intervals. Including data that span the subject's characteristics strengthens the internal coherence of the adjustment process.

In this limited sense, bracketing aligns with sound inferential logic. It resembles interval estimation in statistics, where observations bounding a parameter improve confidence in its estimated location. The problem arises when this logic migrates from physical attributes to contract price. The latter does not constitute a structural parameter of the property; *it constitutes an outcome of negotiation*.

Combining these concepts commits a category error. It mistakes a transactional artifact for a market variable.

Kuhnian Paradigms and Institutional Inertia

Thomas Kuhn's analysis of scientific revolutions highlights how entrenched practices persist through institutional inertia even when their empirical foundations remain thin. Price bracketing functions as a micro-paradigm within residential lending. It survives because it simplifies review processes and distributes perceived risk.

If an appraisal fails, stakeholders can point to the absence of a procedural checkbox. The presence of bracketing offers bureaucratic insulation; it fails to demonstrate an empirical interpretation and judgment of the data.

Yet Kuhn also reminds us that paradigms eventually confront anomalies. In appraisal, the anomaly manifests when the most relevant comparables cluster on one side of the contract price. Forcing symmetrical bracketing in such contexts <i>degrades</i> analytic fidelity. The appraiser must choose between methodological integrity and procedural compliance. This tension exposes the deeper issue: bracketing as <i>institutional theater</i> versus appraisal as disciplined inquiry. The Sociology of Professional Fear The lender/AMC ecosystem operates within a risk-averse regulatory environment. Price bracketing emerges partly as a sociological response to institutional fear. It promises a visible safeguard against accusations of cherry-picking. Ironically, by codifying a visible pattern of evidence arrangement, it may normalize a subtler form of cherry-picking oriented toward the contract. Professional sociology teaches that <i>visible rituals often substitute for invisible competence</i>. The grid that brackets the contract reassures reviewers who cannot fully evaluate the qualitative nuances of comparability. It transforms epistemic complexity into visual symmetry. For the profession, the danger lies in internalizing the ritual as doctrine. When appraisers begin to believe that bracketing constitutes evidence rather than presentation, the epistemic culture of the field shifts from inquiry to compliance, thus to dependent incompetence. Toward an Epistemology of Courage If AMCs and lenders should fear anything, it is not rhetorical thunder but epistemic complacency. A profession that accepts unvalidated procedural mandates as proxies for truth	risks eroding its intellectual foundations. The credibility of appraisal rests on transparent reasoning, defensible methodology, and independence of judgment, not slavish adherence to a clearly erroneous protocol. A mature framework would treat bracketing as a contingent heuristic, not a categorical imperative. Appraisers should articulate when and why bracketing enhances analysis and when market structure renders it infeasible or counterproductive. Lenders, in turn, should evaluate reports on the coherence of reasoning rather than the presence of ritual symmetry. This stance demands epistemic courage. It asks institutions to tolerate analytic asymmetry when the market so dictates. It asks professionals to defend judgment with argument rather than hide behind checklists. Conclusion: From Ritual to Reason Price bracketing, as currently enforced in many residential appraisal contexts, occupies an ambiguous space between helpful heuristic and <i>bureaucratic superstition</i>. It lacks empirical validation as a guarantor of accuracy. It risks introducing confirmation bias. It conflicts with the probabilistic ontology of market value and strains the ethical mandate of independence. Yet its persistence reflects understandable institutional anxieties. The path forward does not require abolishing bracketing but <i>demoting it from dogma to tool</i>. When used judiciously and explained transparently, bracketing can support analysis. When imposed rigidly as a proxy for rigor, it becomes an obstacle to truth. The profession stands at a familiar philosophical crossroads: ritual or reason, compliance or inquiry. The long-term legitimacy of appraisal depends on choosing the latter.	References • Appraisal Institute. (2020). The appraisal of real estate (15th ed.). Chicago, IL: Author. • Graaskamp, J. A. (1978). Fundamentals of real estate development. Journal of Property Management, 43(4), 32-37. • Kant, I. (1993). Groundwork of the metaphysics of morals (M. Gregor, Trans.). Cambridge University Press. (Original work published 1785) • Kuhn, T. S. (1962). The structure of scientific revolutions. University of Chicago Press. • Popper, K. (1959). The logic of scientific discovery. Hutchinson. About the author Tim Andersen MAI, MSc., CDEI, MNAA The Appraiser's Advocate! 561/635-5265 www.theappraisersadvocate.com Florida State-Certified General Real Estate Appraiser, RZ998 (inactive) Master of Science Degree (MSc) in Real Estate Appraisal MAI Member of the Appraisal Institute (retired) AQB Certified USPAP Instructor, #44754 IDECC CDEI #67601 The Term "The Appraiser's Advocate" is copyright protected Practice limited to: USPAP Compliance, Consulting, and Mentoring Services Expert Witness Consulting and Review Services Classroom and Virtual Instruction Course Development Podcasting
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