

White Paper

February 28, 2024 (updated)

How to Reduce Appraisal Bias

With help from FNMA and FHLMC

(The Suggested Solution is on the next page)

By Craig Gilbert

Intended Users

- **Federal National Mortgage Association (Fannie Mae)**
- **Federal Home Loan Mortgage Corporation (Freddie Mac)**
- **Federal Housing Finance Agency (FHFA)**
- **Federal Financial Institution Examination Council (FFIEC)**
- **Appraisal Subcommittee (ASC)**
- **Office of Comptroller of the Currency (OCC)**
- **Federal Deposit Insurance Corporation (FDIC)**
- **Board Governors of Federal Reserve System (FRB)**
- **National Credit Union Administration (NCUA)**
- **Consumer Financial Protection Bureau (CFPB)**
- **Dept. of Housing and Urban Development (HUD)**
- **U.S. Department of Veterans Affairs (VA)**
- **Council To Advance Residential Equity (CARE)**
- **Appraisal Software Vendors**
- **Licensed and Certified Residential Mortgage Appraisers**

How can FNMA and FHLMC help to Reduce Appraisal Bias?

The Solution

The “*Time Adjustment*” field for *Comparable Sales* in the Residential Appraisal Report Forms must be changed immediately from an *optional* field to a ***Required UAD field*** that allows a “**Money Field**” only.

If Fannie Mae and Freddie Mac were to adopt this straightforward solution, it would contribute to mitigating the bias highlighted in the two most recent blog posts by Scott Susin, the Senior Economist at the Federal Housing Finance Agency (FHFA).

FNMA Single Family Selling Guide: “*The date of sale and the time adjustment (market conditions) are critical elements in determining an accurate value because the appraisal is based on a specific date in time (effective date of appraisal). The comparable sales being considered must be analyzed by the appraiser to determine if there have been any changes in market conditions from the time the comparable went under contract to the effective date of the appraisal. This analysis will determine whether a time adjustment is warranted.*”¹

The inclusion of a Time Adjustment field as a ***mandatory UAD monetary field*** should have been considered essential when the UAD was implemented in 2010, or at any point during the subsequent 14 years. The absence of such a field for this duration lacks a clear explanation or rationale, in light of the Selling Guide requirements.

¹ Fannie Mae, Selling Guide, Section B4-1.3-09, Adjustments to Comparable Sales, Date of Sale & Time Adjustments, 1/31/2017

The Federal Housing Finance Agency (FHFA) is a U.S. regulatory agency created in 2008 that is responsible for supervision, regulation and housing oversight of Fannie Mae, Freddie Mac, and the Federal Home Loan Bank system. FHFA has overseen the conservatorship of FNMA & FHLMC since 2008. The three Strategic Goals of FHFA are: 1. Secure regulated entities' safety and soundness; 2. Foster housing finance markets that promote equitable access to affordable and sustainable housing; and 3. Responsibly steward FHFA's infrastructure.²

On January 8, 2024, FHFA published "***Underutilization of Appraisal Time Adjustments***"³, which reported the following conclusion: "***Appraisers underutilize time adjustments for local house price growth, even though they can have an important effect on valuations***".

Noteworthy Citations from the January 8, 2024, FHFA Senior Economist's Report

"In principle, appraisers can consider price changes that have occurred since the time the comparables sold and make adjustments known as market conditions adjustments or time adjustments."

"Fannie Mae, Freddie Mac and Federal Housing Administration appraisal guidelines require such adjustments whenever market conditions have been changing."

"This analysis also finds that appraisers frequently do not make time adjustments, even when they are likely to impact the appraised value substantially."

"During much of the analysis period, appraisers time adjusted fewer than 10 percent of the comparable sales".

"Because comparable sales in this analysis are typically six months old at the time of the appraisal, expected time adjustments would range from approximately 2.5 to 9 percent of the sales price, on average". "Even during the rapid price increases of 2021, time adjustment frequency rose only to about 25%".

"However, making no time adjustment amounts to an assumed adjustment of zero, which is unlikely to be accurate."

"This result implies that appraisers should have time adjusted for 64 percent of the comparables, far greater than the 13 percent they actually adjusted."

"One potential reason for underutilization is that these adjustments are some of the more analytically complex calculations appraisers might perform".

At the 4th and final Appraisal Subcommittee's *Appraisal Bias* hearing on February 13, 2024, panelist Jillian White, CEO of Appraisal Insights, stated "*we have data from the FHFA blog post that race has an input on the application and size of time adjustments that are applied to appraisals*" and "*the public trust has been eroded and continues to be eroded.*" At the same hearing, panelist Maureen Sweeney, an Independent Appraiser, author and USPAP instructor, stated "*there are very specific ways to develop a time adjustment.*"⁴

² Federal Housing Finance Agency, 'About FHFA', 'About Us', 'FHFA At-A-Glance', 'Our Strategic Goals', www.FHFA.gov, Feb. 2024

³ Scot Susin, Senior Economist, "Underutilization of Time Adjustments", Federal Housing Finance Agency, January 8, 2024 [Blog | Federal Housing Finance Agency Underutilization of Appraisal Time Adjustments \(fhfa.gov\)](https://www.fhfa.gov/blog/underutilization-of-appraisal-time-adjustments)

⁴ Appraisal Subcommittee Hearing, "Public Hearing on Appraisal Bias", ASC, February 13, 2024

On January 16, 2024, FHFA published “**Underappraisal Disparities and Time Adjustments**”⁵, with the following conclusions reported: “**Several studies document racial and ethnic disparities in underappraisal. Racial disparities in appraisers’ use of time adjustments for local price growth are one important factor driving these results**”.

Noteworthy Citations from the January 16, 2024, Senior Economist’s Report

“Time adjustments closely relate to underappraisals.”

” Recently, concerns have arisen over possible inaccuracies and inequities in mortgage appraisals, with striking press reports of low appraised values for Black homeowners replaced with much higher ones after a re-appraisal conducted with a white stand-in”.

“Rapid house price growth typically leads to more underappraisal, according to appraisal experts, economic theorists, and statistical studies.”

“Is the racial disparity in underappraisal, or some portion of it, due to racial disparities in the practice of time adjustment?”

“While Fannie Mae, Freddie Mac, and Federal Housing Administration appraisal guidelines require time adjustments whenever the market conditions have been changing, they seem to be frequently omitted when properties can still appraise above the contract price in their absence.”

*“This pattern suggests that appraisers consider time adjustments only as one of their final steps after substantially completing an appraisal.” ***

“Time adjustments are least common for homes in majority-Black tracts at only 13.4%, as opposed to 18.4% in majority-white tracts.”

“In white tracts, 52 percent of appraisals initially below the contract price rise above the contract price through time adjustment. However, this happens on 30 percent of the time in Black tracts, a disparity of 22 percentage points.”

“As marginal buyers teeter between approval and denial, additional help can be decisive.”

“For these borrowers, time adjustments could make the difference between an appraisal that allows a home purchase to move forward and one that does not.”

***Order of adjustments: #1 - Property Rights (such as Fee Simple, Leasehold, Leased Fee); #2 - Transactional (such as financing terms, seller carried note, concessions, mortgage rate buydown); #3 - Market Conditions [also known as “Time Adjustment”], #4 – Location; and #5 - Physical elements (lot size, living area, etc)..*

Note: Time adjustment (Market Conditions analysis) should not be the last adjustment made.

⁵ Scot Susin, Senior Economist, “Underappraisal Disparities and Time Adjustments”, Federal Housing Finance Agency, January 16, 2024, [Blog | Federal Housing Finance Agency Underappraisal Disparities and Time Adjustments \(fhfa.gov\)](https://www.fhfa.gov/blog/federal-housing-finance-agency-underappraisal-disparities-and-time-adjustments)

The Federal Financial Institutions Examination Council (FFIEC) is an interagency body of the U.S. Government established in 1979. The FFIEC is empowered to prescribe uniform principles, standards, and report forms to promote uniformity in the supervision of financial institutions.⁶

On February 12, 2024, the following Press Release was published: ***“FFIEC Issues Statement on Examination Principles Related to Valuation Discrimination and Bias in Residential Lending”***⁷

“The Federal Financial Institutions Examination Council today issued a statement of principles related to valuation discrimination and bias for member entities to consider in their consumer compliance and safety and soundness examinations.”

Notable Citations from the 2/12/24 FFIEC Statement

“Valuation discrimination or bias can cause consumer harm, lead to violations of law, and have a detrimental impact on communities.”

“In addition, valuation discrimination or bias could result in deficient and unreliable collateral valuations that undermine an institution’s credit decisions and negatively impact its safety and soundness.”

“Therefore, examination processes should include consideration of whether institutions’ risk management practices for valuations are appropriate to identify and address valuation discrimination or bias and promote credible valuations.”

“Deficiencies in real estate valuations, including those due to valuation discrimination or bias, can lead increased safety and soundness risks, as well as consumer harm and have an adverse impact on borrowers and their communities.”

Examples of such harm are consumers being denied access to credit for which they may be otherwise qualified, offered credit at less favorable terms, or steered to a narrower class of loan products.”

“For an institution, the failure of internal controls to identify, monitor, and control valuation discrimination or bias could negatively affect credit decisions, potentially exposing an institution to legal and compliance risks or affecting an institution’s financial condition and operations.”

“In assessing compliance management systems, examination processes should consider whether the institution’s risk management practices for residential real estate valuations are appropriate to identify and address valuation discrimination.”

⁶ Federal Financial Institutions Examination Council,

⁷ FFIEC Press Release, Statement on Examination Principles Related to Valuation Discrimination and Bias in Residential lending, February 12, 2024: <https://www.ffiec.gov/press/pr021224.htm>
https://www.ffiec.gov/press/PDF/FFIEC_Statement_on_Exam_Principles_Related_to_Valuation_Bias.pdf

What is a Time Adjustment?

The term “*Time Adjustment*” is used interchangeably with ‘*Market Conditions Adjustment*’, which is the proper terminology.

“Market Conditions” is defined as “*An element of comparison in the sales comparison approach; comparable properties can be adjusted for differences in the points in the real estate cycle at which the transactions occur. Sometimes called a ‘time adjustment’ because the differences in dates of sale are often compared, although that usage can be misleading because property values do not change merely as the result of the passage of time.*”⁸ ‘*Time Adjustment*’ and ‘*Market Conditions Adjustment*’ are synonymous in this white paper.

It’s important to recognize that property values aren’t influenced merely by the progression of time; instead, they fluctuate due to a variety of economic market factors. These include, among others, the availability of housing, consumer demand, variations in mortgage interest rates, trends in employment and unemployment, economic conditions from a local to a national scale, and the overall sentiment of the market.

The three phases of market cycles encompass a period of undersupply, a period of oversupply, and a period of equilibrium. Typically, housing prices rise during the undersupply phase, fall during the oversupply phase, and remain relatively stable or unchanged during the equilibrium phase.

Common terminology employed for data analysis and tracking price fluctuations over time encompasses Price Indexing, Market Price Indexing, House Price Indexing, and Time Series Analysis.

For appraisers to formulate reliable and precise value assessments, it is essential to examine market conditions, which include understanding the market cycle and price trends. Conducting a market analysis is a mandatory aspect of the appraisal process, not a discretionary one.

The beginning of the first page of the GSE URAR Residential Appraisal Form includes the following declaration:

“The purpose of this appraisal report is to provide the lender/client with an accurate, and adequately supported, opinion of the market value of the subject property.”

FNMA and FHLMC Market Conditions Addendum (Form 1004MC)

The GSEs introduced the market conditions form, known as the 1004MC, in November 2008 as a reaction to the 2007 subprime mortgage crisis. Its objective was to offer a uniform method for appraisers to assess and document market conditions, thereby aiding lenders in making informed lending choices in markets that are appreciating, stable, or declining.⁹

*“From the start many appraisers said they found its use inappropriate for many market situations and conditions. Members of the AI Government Relations Committee expressed this opinion to Fannie Mae during recent discussions on ways that the GSEs could improve its policies and procedures.”*¹⁰

Fannie Mae eliminated the requirement for including Form 1004MC with an appraisal report on 8/7/2018.

⁸ Appraisal Institute, *The Dictionary of Real Estate Appraisal*, 7th Ed., Chicago IL

⁹ Fannie Mae, Selling Guide Announcement SEL-2018-06, August 7, 2018

¹⁰ “Fannie drops form 1004MC”, October Research-Appraiser News, Regulatory and Industry Outlook, August 29, 2018

According to FNMA, “Collateral Underwriter®(CU™) now provides robust market trend information for lenders and Fannie Mae, enabling measurement and management of market risks in a more rigorous way. Appraisers remain responsible for analyzing market conditions and accurately reporting them in the neighborhood section of our appraisal form.”¹¹

How can Bias be Harmful?

Bias can result in flawed or erroneous outcomes and misinterpretations of data. When present in data analysis, bias can reinforce existing prejudices and disparities, causing a distorted, biased, or inaccurate representation of reality, which in turn can lead to unjust decisions. This can also erode the trust that intended users have in the appraiser's analysis.

GSE “Uniform Appraisal Dataset” (UAD)

UAD specifies all the necessary fields in an appraisal report for submitting appraisals using particular residential forms like URAR and Condo Forms. Thanks to UAD standardization, appraisal reports are machine-readable, enabling them to be electronically reviewed and stored in a database server.

UAD standardizes the definitions and responses for a crucial subset of fields within the appraisal report, establishing field-specific Standardization Requirements.

To simplify the process for appraisers, appraisal software vendors have fully incorporated the UAD Technical Specifications into their products, eliminating the need for appraisers to memorize every UAD code, sequence, and order.

The mandatory formatting for a specific UAD field is facilitated by one of six methods: Boolean, Date/Time, Enumerated, Money, Numeric, and String. Fields can be categorized as required, conditionally required, or optional, with the Time Adjustment field being an example of an optional field that can be left blank.

Specific data fields need to adhere strictly to UAD requirements and formats to enable the electronic transmission of the appraisal as an Extensible Markup Language (XML) file.

The Date of Sale/Time is a mandatory field for each comparable sale and needs to be inputted in an exact format. Yet, the present UAD architecture does not mandate an adjustment in the Comparable Sales +/- \$Adjustment field, meaning that a monetary adjustment analysis is not compulsory in this field.

Appraisers frequently leave the +/- \$Adjustment field for Date of Sale/Time empty, even in markets experiencing discernible price increases or decreases, since this field is considered "optional". There is no obligation or requirement to fill in this field. However, it's important to note that leaving this field blank is not equivalent to entering a \$0 adjustment

The GSEs initially introduced the UAD specifications on December 16, 2010. Since then, there have been several updates, as reported by FNMA. Between 2018 and 2023, input from stakeholders was collected for the

¹¹ Fannie Mae, Selling Guide Announcement SEL-2018-06, August 7, 2018

Uniform Mortgage Data Program (UMPD). The GSEs have reportedly released specifications and supporting documents during this period.

The GSEs' schedule shows that the development of UAD v3.6 is set from the second quarter of 2023 to the first quarter of 2025. Testing for UAD v3.6 is planned from the fourth quarter of 2024 to the fourth quarter of 2025. <https://singlefamily.fanniemae.com/media/21336/display> <https://singlefamily.fanniemae.com/media/25391/display>

Should the prices of comparable properties be escalating at a rate of +6.0% annually and the "Time Adjustment" fields remain unfilled, the suggested values would be significantly underestimated.

Demonstration of a UAD Appraisal Form *Comparable Sale Analysis*, showcasing scenarios without and with Time Adjustments.

#1: Without Market Conditions (Time) Adjustments

In the existing UAD framework, the Time Adjustment field is 'optional,' allowing it to be left blank. The result is that the indicated value of the subject would be significantly understated by \$21,000 to \$30,000.

There are <input type="text"/> comparable sales in the subject neighborhood within the past twelve months ranging in sale price from \$ <input type="text"/> to \$ <input type="text"/> .							
FEATURE	SUBJECT	COMPARABLE SALE # 1		COMPARABLE SALE # 2		COMPARABLE SALE # 3	
Address							
Proximity to Subject							
Sale Price	\$ <input type="text"/>	\$ <input type="text"/> 500,000		\$ <input type="text"/> 520,000		\$ <input type="text"/> 525,000	
SalePrice/GrossLiv.Area	\$ <input type="text"/> sq. ft.	\$ <input type="text"/> sq. ft.		\$ <input type="text"/> sq. ft.		\$ <input type="text"/> sq. ft.	
Data Source(s)							
Verification Source(s)							
VALUE ADJUSTMENTS	DESCRIPTION	DESCRIPTION	+(-) \$ Adjustment	DESCRIPTION	+(-) \$ Adjustment	DESCRIPTION	+(-) \$ Adjustment
Sale or Financing							
Concessions							
Date of Sale/Time	(2/17/24)	s02/23;c01/23	OPTIONAL	s05/23;c04/23	OPTIONAL	s06/23;c05/23	OPTIONAL
Location							

#2: The same property with Market Conditions (Time) Adjustments

Given a scenario where prices are rising at a rate of +6% annually (+0.5% per month), positive Time Adjustments of +\$30,000, +\$23,500, and +\$21,000 would be applied to the three comparable sales, respectively, as detailed below:

There are <input type="text"/> comparable sales in the subject neighborhood within the past twelve months ranging in sale price from \$ <input type="text"/> to \$ <input type="text"/> .							
FEATURE	SUBJECT	COMPARABLE SALE # 1		COMPARABLE SALE # 2		COMPARABLE SALE # 3	
Address							
Proximity to Subject							
Sale Price	\$ <input type="text"/>	\$ <input type="text"/> 500,000		\$ <input type="text"/> 520,000		\$ <input type="text"/> 525,000	
SalePrice/GrossLiv.Area	\$ <input type="text"/> sq. ft.	\$ <input type="text"/> sq. ft.		\$ <input type="text"/> sq. ft.		\$ <input type="text"/> sq. ft.	
Data Source(s)							
Verification Source(s)							
VALUE ADJUSTMENTS	DESCRIPTION	DESCRIPTION	+(-) \$ Adjustment	DESCRIPTION	+(-) \$ Adjustment	DESCRIPTION	+(-) \$ Adjustment
Sale or Financing							
Concessions							
Date of Sale/Time	(2/17/24)	s02/23;c01/23	+30,000	s05/23;c04/23	+23,500	s06/23;c05/23	+21,000
Location							

Footnotes

Besides applying a "Time" adjustment based on a percentage change over time, this adjustment can be calculated and applied using (+/-) \$Dollars per Day, instead of a percentage change. A Regression Analysis concerning price changes over time yields a '*Dollars per Day*' market change, not a percentage change.

Neglecting to adjust for market conditions can lead to a biased appraisal, which might be too low or too high due to the failure to accurately measure and analyze market conditions, including not incorporating market-supported Time adjustments.

An appraisal that is biased due to significantly flawed analysis and results could be deemed misleading.

If an appraisal is found to be misleading, it could result in one or more violations of the Uniform Standards of Professional Appraisal Practice (USPAP).

Price Indexing

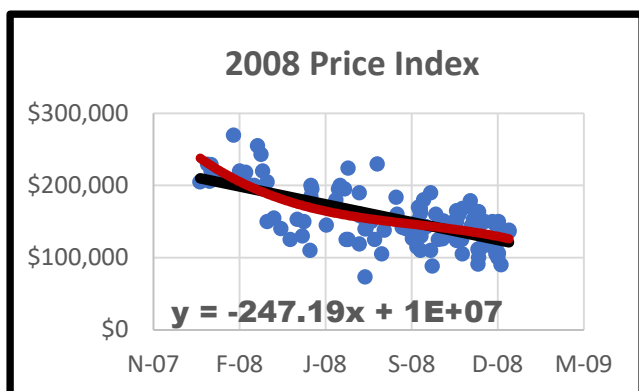
The Multiple Listing Service (MLS) is generally the most reliable source of data, although public records and other resources are also valuable. Data from MLS can be exported to applications like Excel, Gnumeric, R (R-Studio), or specialized appraisal analytics software. Such appraisal analytics tools include Synapse by Spark, Data Master, Redstone by Bradford Technologies, Gandysoft, Titan Analytics, Appraisal Genie, Solomon Adjustment Calculator, among others. Additionally, paired-sales analysis is a useful method that can be employed.

The Following 4 Price Indexing Graphs were created using MLS data, Excel and Regression Analysis

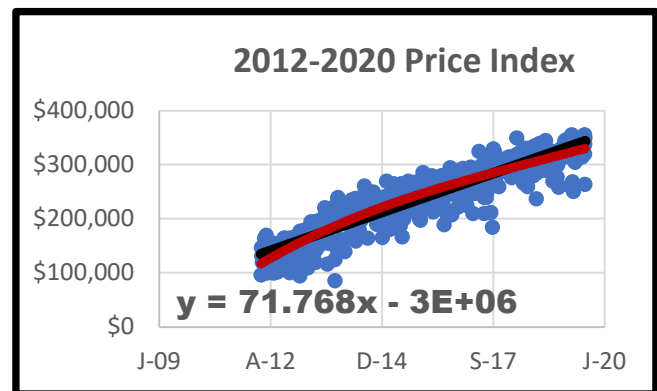
When appraising a hypothetical property, a one-story detached residence in Moreno Valley, CA, featuring 1,450 square feet of living space, 3 bedrooms plus a den, 2 bathrooms, a 2-car garage, no pool, constructed in 1980, on a 7,000 square foot lot, it's crucial to utilize data from competing sales to assess market conditions for time adjustments. The selected 'competing properties' should closely resemble the subject property, with minimal differences apart from the sale date.

Search Criteria for Price Indexing: 'Riverside County CA, Moreno Valley, Living Area 1,300-1,600 sf; 3-4 Bedrooms; 2 Baths; Year Built 1975-1985; one-story; lot size 6,000 - 8,000 sf, 2 car garage, no pool; 'Sold'

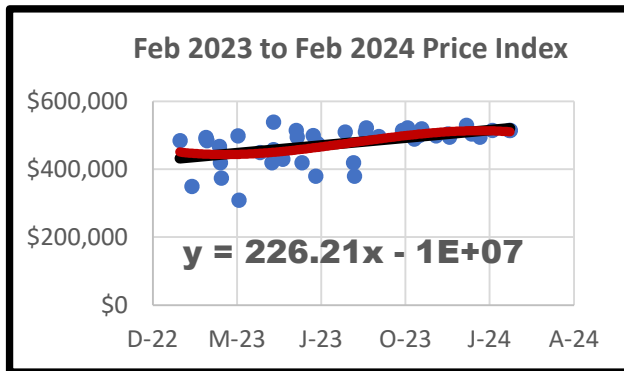
In 2008, prices were declining at an average rate of **(-) \$247 per day** ("Decreasing")



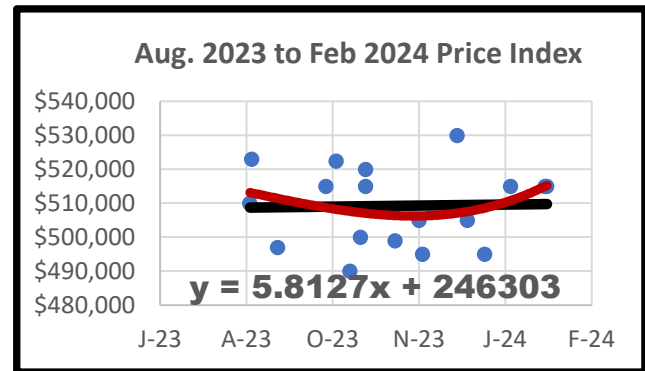
From 2012 through 2020, prices were increasing at an average rate of **(+) \$72 per day** ("Increasing")



For the past 12 months, prices were increasing at an average rate of +\$226 per day ("Increasing")



For the past 6 months, prices were increasing at an average rate of only (+) \$6 per day ("Stable")



Note: The **Black** line illustrates a Linear Regression, while the **Red** line depicts a Third-Order Polynomial.

Incorporating Time adjustments is a crucial aspect of the appraisal process, a topic that has been a staple in appraisal education for many years. This concept is covered extensively from beginner to advanced courses focusing on the Sales Comparison Approach. Appraisers have access to numerous resources for analyzing market data to create Time adjustments. Attending in-person courses or seminars isn't mandatory, as there are ample online and live Zoom resources available for appraisers.

Options for developing market conditions analysis and making time adjustments include:

George Dell MAI, SRA, CRE (www.Valuemetrics.info) A complimentary two-hour YouTube webinar is provided, demonstrating the process and methodology for extracting MLS data to facilitate Price Indexing through Regression Analysis. This can be accomplished using either Excel or Gnumeric software. Furthermore, George Dell offers courses in Statistics, Graphs, and Data Science, specifically teaching appraisers how to fully automate this procedure using R (R-Studio) software, which is available at no cost.

Link to Free *Market Price Indexing* YouTube webinar: https://www.youtube.com/watch?v=rdvBmtd4_6E

Richard Hagar SRA (www.RichardHagar.com) Free Webinar through OREP (E&O Insurance)

[Free Webinar: Easy Ways to Use Excel to Support Your Adjustments - OREP Education Network](#)OREP Education Network

Joseph Lynch (www.reaa.org) www.reaa.org Joemlynch2112@gmail.com Webinars

Appraisal Institute (<https://www.appraisalinstitute.org/education/search/application-interpretation-of-simple-linear-regression>)

McKissock Learning: <https://www.mckissock.com/blog/appraisal/how-to-build-a-regression-model-in-8-simple-steps/>

Appraiser eLearning (<https://appraiserelearning.com/training-webinars/>)

(there are many others)

This suggested solution will Reduce Appraisal Bias

The “*Time Adjustment*” field for *Comparable Sales* in the Residential Appraisal Report Forms must be changed immediately from an *optional* field to a ***Required UAD field*** that allows a “**Money Field**” only.

Footnotes:

Immediate implementation of this change is necessary and should not be postponed until the UAD v3.6 release in 2026. A software developer from an Appraisal Forms Vendor has indicated that incorporating a "Required UAD Field" for the "Date of Sale/Time" would be an easy addition for them.

If the Time Adjustment field remains optional, the appraisal biases identified in two FHFA reports, one FFIEC report, and discussed during the fourth ASC Appraisal Bias Hearing and other Bias Reports will continue.

A "Critical Error" alert is triggered when a "UAD required" field is left blank in an appraisal report, highlighting the unfilled field and preventing the report's transmission via XML to an AMC, lender, or GSE. This system has been effective since UAD's inception in 2010, with vendors ensuring compliance through necessary coding.

The Date of Sale/Time field must be filled out in times of market price fluctuations, as long as the change can be accurately measured using methods like regression or paired-sales analysis. Neglecting this can result in appraisals that do not reflect the market's true value, being either too low in rising markets or too high in declining ones.

From my experience developing an AVM in 1999, I learned the importance of accurate Time Series Analysis for reliable results. Today's personal computers are capable of performing such analyses with various software, allowing easy data export from MLS for regression analysis, eliminating the need for additional software purchases for time indexing.

The expectation is that the GSEs will implement the recommended solution promptly and autonomously, without needing prompts from FHFA, ASC, or other entities.

There are no drawbacks to rapidly adopting this solution.

Implementing this solution will yield beneficial outcomes for all stakeholders and the public, encompassing a decrease in the bias highlighted by the FHFA and FFIEC, as well as in Jillian White's testimony during the fourth ASC public hearing on bias.¹²

Baked In Policy

As per Dr. Andre Perry from the Brookings Institution¹³

“The devaluation we found based on 2017 data provides evidence that discrimination is baked into current policy”.

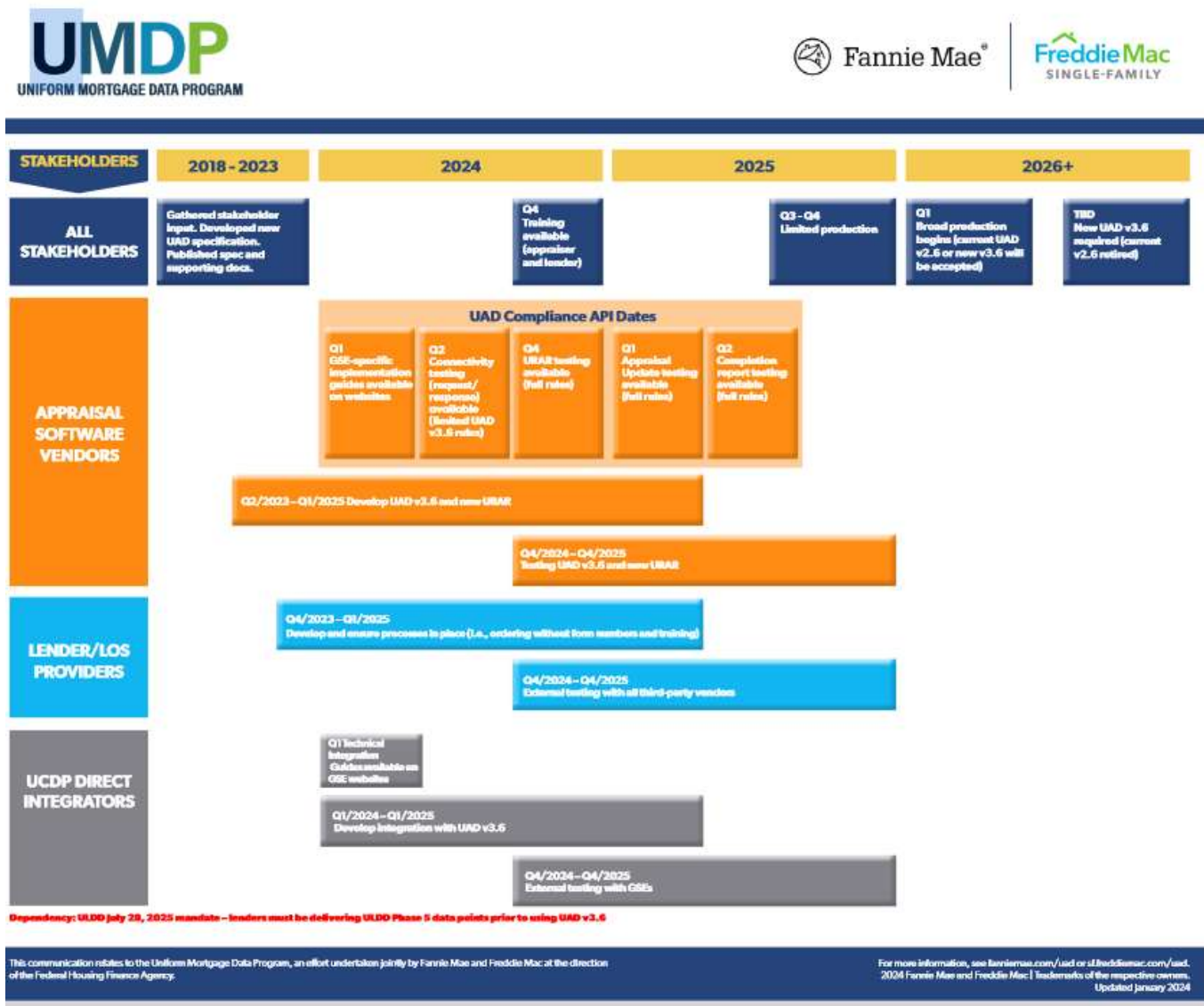
Maintaining the current practice, where the Date of Sale/Time analysis field can be left 'blank,' seems to be a baked in policy, as Dr. Perry pointed out.

Now is the opportune moment to make a change and remove a significant aspect of this entrenched, baked in policy.

¹² Appraisal Subcommittee Hearing, “Public Hearing on Appraisal Bias”, ASC, February 13, 2024

¹³ Dr. Andre M. Perry, “Know Your Price”, Washington D.C., The Brookings Institution, 2020, Page 66

GSE UNIFORM MORTGAGE DATA PROGRAM TIMETABLE



URL link to the GSE UMPD Timetable

<https://singlefamily.fanniemae.com/media/25391/display>

- It's unnecessary to delay until 2026 for UAD v3.6 to adopt my proposed solution, which aims to mitigate appraisal bias.
- Acting sooner rather than later is preferable.
- Appraisal software vendors possess the capability to implement this solution swiftly.

CRAIG GILBERT, ASA, SRA, CRP – BIO

Mr. Gilbert initiated his career in appraisals in 1975 during his senior year at the University. With an extensive background spanning over 49 years, he has amassed substantial experience in valuing both residential and non-residential properties, as well as diverse ownership interests. This includes appraising partial or fractional interests in real estate and real estate holding entities. He holds qualifications as an Expert Witness and Consultant, frequently providing expertise in litigated matters concerning real property. Typical defendants in these cases encompass appraisers, attorneys, sellers, neighbors, real estate agents, homeowner associations (HOAs), and Title Companies.

Mr. Gilbert's education, experience and accomplishments include:

- Certified General Appraiser in California since 1992 and Licensed R.E. Broker since 1986
- B.A. degree - Business Administration – *Real Estate Finance* – CSUF (1976)
- SRA designation (1980)
- CRP designation – Worldwide Employee Relocation Council (WERC) (1992)
- Chief Appraiser - Keystone Savings & Household Bank - 1975-1982
- In 1982, The Federal Home Loan Bank Board enlisted him to establish an appraisal division and assume the role of Chief Appraiser at San Marino Savings, a non-compliant Financial Institution. This Institution/BOD were reported by Mr. Gilbert to the FBI & FHLBB for internal Mortgage Fraud he identified in 1983, and he resigned.
- Independent Appraiser: 1983 to the present
- President of the OC Chapter of the Society of R.E. Appraisers (before merger to form A.I.) from 1984 to 1985
- Co-Founded *Relocation Appraisers & Consultants* (RAC) in 1990
- Co-developed Veros AVM Software including fraud algorithms, beginning in 1999.
- Instructor for multiple real property valuation seminars & courses on behalf of the Appraisal Institute, Society of Real Estate Appraisers, RAC, WERC, Community Colleges, Valuemetrics and for the State of California's Dept of Financial Institutions (*How to Recognize Fraud in Appraisals and R.E. Transactions*).
- Published author of multiple articles with international distribution
- With extensive experience in Litigation Support, he has served as a valuation Consultant, Subject Matter Expert, and Expert Witness in numerous State and Federal Cases. These cases have covered a broad spectrum including Civil, Criminal, Probate, Bankruptcy, Title Defect claims, Easements, and Family Law matters. Testified as Expert Witness in State and Federal Courts and in Depositions on numerous types of cases in California, Nevada, and Texas, starting in 1984.
- Testified as an Expert Witness in Mediation and Arbitration Hearings.
- *Court Appointed* 730 Expert (the Court's neutral Expert) by the State of California Superior Court.
- In two significant Federal cases, he provided expert witness testimony representing the FDIC (client), where each case involved claims totaling \$300 million. The allegations centered on appraisal and review fraud as well as gross negligence attributed to two prominent Appraisal Management Companies, namely eAppraiseIT and LSI.
- Co-developed the 2010 *Relocation Appraisal Form* on behalf of the WERC.
- Co-developed a *General-Purpose Residential Appraisal Form* on behalf of Bradford Technologies.
- Presented with the *President's Award* by the WERC in 2011
- Presented with the *Meritorious Service Award* by the WERC in 2015
- Active member of the Orange County Realtors MLS Committee from 2015 to 2024. Also active on the Independent Broker Alliance Committee, Grievance Committee, and the Young Professional Network Committee.

Craig Gilbert, ASA, SRA, CRP, Certified General Appraiser

Craig Gilbert Appraisals Craig@CraigGilbert.Net 714-356-0000 mobile - call or text

[Comprehensive C.V. is available at www.CraigGilbert.net > About > Qualifications of Craig Gilbert (tab)]