

2021



FHFA VEROS RESPONSE

VEROS REAL ESTATE SOLUTIONS
2333 N. Broadway Suite 350 Santa Ana, CA 92706



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Section A: APPRAISAL POLICY and PROCESS IMPROVEMENTS

Question A1.1: Is there is a need to provide new valuation solutions that address industry identified issues of appraiser capacity, turn-times, training, and rural and high-volume market coverage? What are those potential solutions? What are the risks of these policies and the challenges in implementing them?

The expertise of professional real estate appraisers plays an important and critical role in the mortgage lending process. Appraisers are often the best independent resources of information in determining the collateral risks of a property, and the appraisers' skills and local knowledge of a market help borrowers and lenders determine the current value of a property based on Uniform Standards of Professional Practice (USPAP).

With the static supply of appraisers coupled with the advancements in technology, data and modeling, the expansion of alternative valuation solutions has already occurred and should continue. There are opportunities to build on the use of the existing full spectrum of alternative valuation solutions. Today's appraisal-waiver programs and cascades of various appraisal/valuation alternatives (bifurcated, exterior and desktop appraisals, automated valuation models (AVM) with or without property inspection reports or homeowner-generated photos along with other new and hybrid approaches to determine value or condition) may be perfectly suitable for use on a subset of properties that are non-complex and have low valuation or collateral risk.

In cases where there is limited data available to determine the property risks, like in many rural markets, the best option is to engage a licensed appraiser with experience and geographical competency to determine the property value. The local appraiser is in the best position to find the most relevant comparable data and make the proper adjustments to determine a reasonable value conclusion. However, even in these cases, the increasing amounts of data and analytics will prove insightful in the evaluation of the integrity, quality and valuation conclusions of the appraisal. Housing finance stakeholders need to move away from the historical practice of an "either-or" analysis. The availability of a wide continuum of services and data sources affords a much more holistic view of property valuation risk.

Alternative valuation solutions may be appropriate in non-complex or conforming markets with reliable property information as well as comparable and related market data. This can allow the licensed appraisal professionals to focus their expertise on the more complex and riskier properties while allowing lower risk, conforming properties to be completed using an alternative solution. For example, trainees, new or less experienced appraisers, or other appropriate third-parties can be utilized to perform inspections under the supervision of an experienced appraiser who is offsite. Appropriately generated and authenticated condition information from homeowners may also serve to provide further insight for the appraiser. This can result in better valuation turn-times and helps offset appraiser capacity concerns by providing a gateway to attracting new appraisers to the industry.

These new solutions can maximize the time of currently licensed appraisers and allow each of them to be more efficient as they quickly and accurately perform the duties they have been trained to do which includes sorting, analyzing, and reconciling data. Less time is spent driving, measuring, and taking photos of the subject and the comparable properties. These current inefficiencies are not only slowing the existing process but may be a deterrent to more data and technology savvy young professionals looking to residential appraising as a career. A more modernized and technology-driven appraisal approach would be appealing to new appraiser trainees looking to be a part of a vibrant and growing industry. The use of the existing alternative methods should be applied in a slow, deliberate manner that can be measured and controlled.

The risk in using an alternative valuation solution is related directly to using the wrong valuation tool for the loan or property type. For example, relying solely on an AVM for a high-end, complex property instead of an experienced, licensed appraiser can lead to higher valuation risks. These types of evaluations should be assigned to licensed and well-trained professional appraisers. The risk in engaging a licensed appraiser to complete a full interior report on either a low-risk property or loan is a utilization and efficiency risk. It is also a supply risk when a highly qualified, licensed appraiser is unavailable to work on more complex assignments that require their expertise.

Alternatives have already begun in various pilots and due to necessity in the wake of COVID-19. These efforts should encourage the ongoing expansion of these products in a controlled and monitored fashion as these products continue to be measured and improved over time.

Question A1.2: Are there opportunities for process improvements that allow non-traditional valuation services (inspection-only, desktop, exterior-only) to augment traditional appraisals? Please elaborate on the risks, challenges, and benefits. Separately, are there opportunities to improve traditional appraisals to mitigate problems and concerns that have been observed to date?

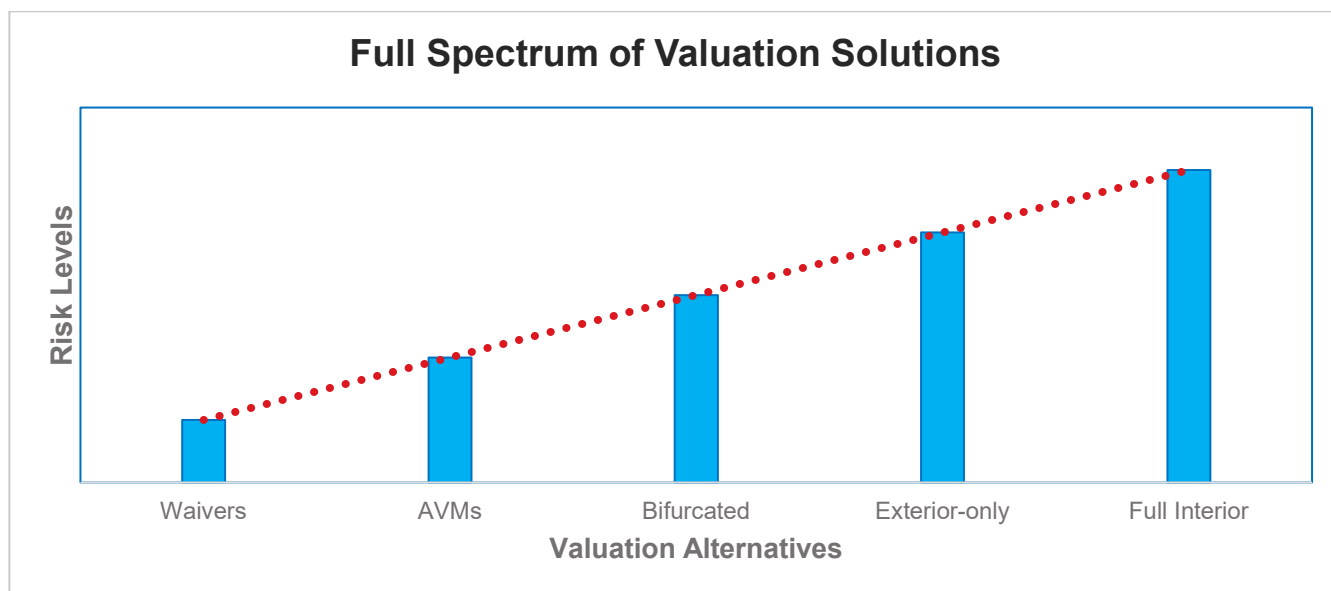
Technology has advanced significantly since appraisal forms were introduced, including their last material updates. Computer hardware and processing power grow every year. Better and more precise data sets continue to be cultivated, structured, more useful, and more readily available. Today's advanced systems and platforms allow for dynamic and modularized data to be assessable and customized. Other notable advancements include the evolution of MISMO, the continued growth of UAD, digital signature technology, and blockchain as well as major leaps forward in "Big Data" and deep machine learning. These provide immediate efficiencies and security. Property inspection advancements include the growth in inspection companies, aerial/satellite imagery and image-tagging technologies, the use of drones, and third-party inspection apps. Technology opens the door for alternative valuation approaches that have been tested and after the documented performance has proven to be safe and effective.

The chart in Exhibit 1 below illustrates the possible uses of alternative valuation solutions based on the risk level of the loan and the collateral. Appraisal waivers should be an option on low risk loans and non-complex properties, but as the overall collateral risk increases, the valuation options would change in accordance with risk thresholds or tolerances. The full spectrum would include all options leading to a full interior appraisal report when necessary for the highest risk lending decisions.

As one example, a loan with a low Loan-to-Value (LTV) and a recently completed full appraisal in a conforming neighborhood with ample sales data may be a good candidate for an appraisal waiver. In contrast, a similar loan

with a low LTV but without any reliable condition information may require a new inspection by a trainee, or an appropriately trained non-appraiser working under the supervision of a licensed appraiser. As loan risk increases or properties become more complex, a licensed appraiser may be required to personally inspect the exterior-only or complete a full interior inspection appraisal.

EXHIBIT 1



The figure in Exhibit 1 is meant only to illustrate a continuum of possible and available valuation alternatives considering the risk of a particular loan or property complexity. It is not meant to be an exhaustive list by any means. Further, as referenced in response to A.1.1, these alternatives should not be strictly compartmentalized. The use of available data or tools such as AVMs should be encouraged in concert with multiple valuation approaches. It is important to avoid the temptation of being over-prescriptive. Do not repeat past mistakes of creating a virtual form or box that sets forth only one way or one path to properly determine values and consideration of valuation risk. The ultimate question is one of safety and soundness. Considerations include whether an industry stakeholder is utilizing an approach or strategy that is correlated to risk, supported by data and with appropriate operational controls, and has been properly implemented, followed, and regularly tested. While best practices will certainly evolve, different stakeholders will have different solutions – this should not be a one-size-fits-all approach.

Question A1.3: Do appraisal waivers have a place in Enterprise appraisal policy and process, and if so, for what segment of loans? What are the current risks to Enterprise safety and soundness in how appraisal waivers are offered? Would caps or other limits on their usage be appropriate?

Appraisal waivers should be used as part of the full spectrum of alternative valuation options available to lenders for low-risk loans or non-complex properties and where there is ample and reliable property data. As the loan risk (e.g.

LTV) or property complexity increases, so does the risk and volatility of valuation. See also, responses to questions A.1.1 and A.1.2.

Appraisal waivers are not new and are already being used by many lenders. Historically, loans associated with appraisal waiver programs have performed quite well compared to alternatives and when controlled for other variables. This data is readily available to FHFA. Further, in September of 2019, the FDIC, the Federal Reserve, and the Office of the Comptroller of the Currency (the Agencies) have jointly issued an amended rule (the Appraisal Rule) that increases the threshold for residential real estate transactions requiring an appraisal from \$250,000 to \$400,000. The commentary around that decision is instructive on this question as well. As a result of COVID-19, there has been an unprecedented increase in the volume of appraisal waivers under appraisal waiver programs. As these loans become more seasoned, the associated performance data will prove quite valuable in determining the evolution and applicability of these types of programs.

To mitigate the risks of the inappropriate use of appraiser waivers, the process needs to be monitored, transparent, and based on sound lending practices and performance data. The waivers should only be used when there is low loan risk and reliable property data to support a reasonable valuation conclusion. In areas where the amount of data is scarce or when the property characteristics cannot be verified, alternative valuation approaches up to and including an exterior or full appraisal may be preferred.

Question A1.4: Would utilizing alternative inspection workforces, such as insurance adjusters, real estate agents, and appraisal trainees assist with addressing appraiser capacity concerns? Are there risks of using third-party non-appraisers? If yes, How?

Yes, these referenced individuals can be used for inspection and to supplement and verify the current data sources for property information that includes public records, MLS, county records, and realtor comments. Any third-party who is inspecting a residential property as part of a housing finance transaction should be properly trained, directed and supervised. Regarding alternative data sources, there is a risk that data from alternate sources may be conflicting and must be reconciled. This is not new. These risks can be mitigated by leveraging the expertise of a licensed appraiser to analyze and cross-check the data sources to help determine which is more credible, which may include a discussion with the designated property inspector assigned to the property. See also responses to questions A.1.1 and A.1.2.

Question A1.5: Is there a need for additional policies and controls to balance potential risks with efficiency benefit from appraisal modernization? If yes, please provide your recommendations.

As appraisal modernization tools, data and related solutions evolve, it will be important to consider and monitor the impact of data sources feeding models that are a part of this modernization effort and, at least in part, built and validated on said data sources. As data sources and the data within applicable sources change, the potential impact on models fueled by these sources must be evaluated over time. These efforts should be part of any standard model management process. This is also another reason why a more holistic approach to property valuation risk with several independent sources and determination of value provides a greater level of safety and soundness.

Question A1.6: Do the objectives as outlined for the UAD update and forms redesign meet the current and future needs of the mortgage industry? Are there opportunities for refinements or additions?

We support the move from the outdated, multiple-form appraisal approach to the new, dynamic data-centric and highly transparent approach that still utilizes the knowledge and experience of the human appraiser or valuation experts. This data dynamic appraisal approach allows all parties to perform their valuation responsibilities better, more efficiently, whether that is generating an appraisal or reading and understanding the appraisal. The benefits across the entire appraisal and valuation value-chain impact all stakeholders from consumer to investor.

The new valuation process should have defined minimum standardized reporting with the ability to dynamically add modules (extensibility) as the assignment (Scope of Work) changes. It should also be flexible enough to seamlessly add new data elements (e.g. valuation range) as policies around property valuation evolve. As also referenced in answers to prior questions (see A.1.1, A.1.2 and A.1.4), new valuation tools will need to have the ability to allow different parties (Inspectors, Real Estate Agents, Appraisers, Valuation Providers, Data Providers, etc.) to complete specific sections or segments of sections of the valuation, as may be applicable.

The solution should be flexible enough to accommodate the evolution of the “appraisal,” as well as alternative and hybrid valuation products and services. Better valuation platforms, systems, modules streamline the dynamic use of data. High-performing valuation and risk analytics coupled with readily available inspections will expand all forms of valuation and simultaneously reduce risk.

Section B: RISK MANAGEMENT

Question B2.5: What are the challenges associated with quality of service, enforcement and consumer protections related to non-appraiser entities providing property inspection data?

See our response to question A.1.4.

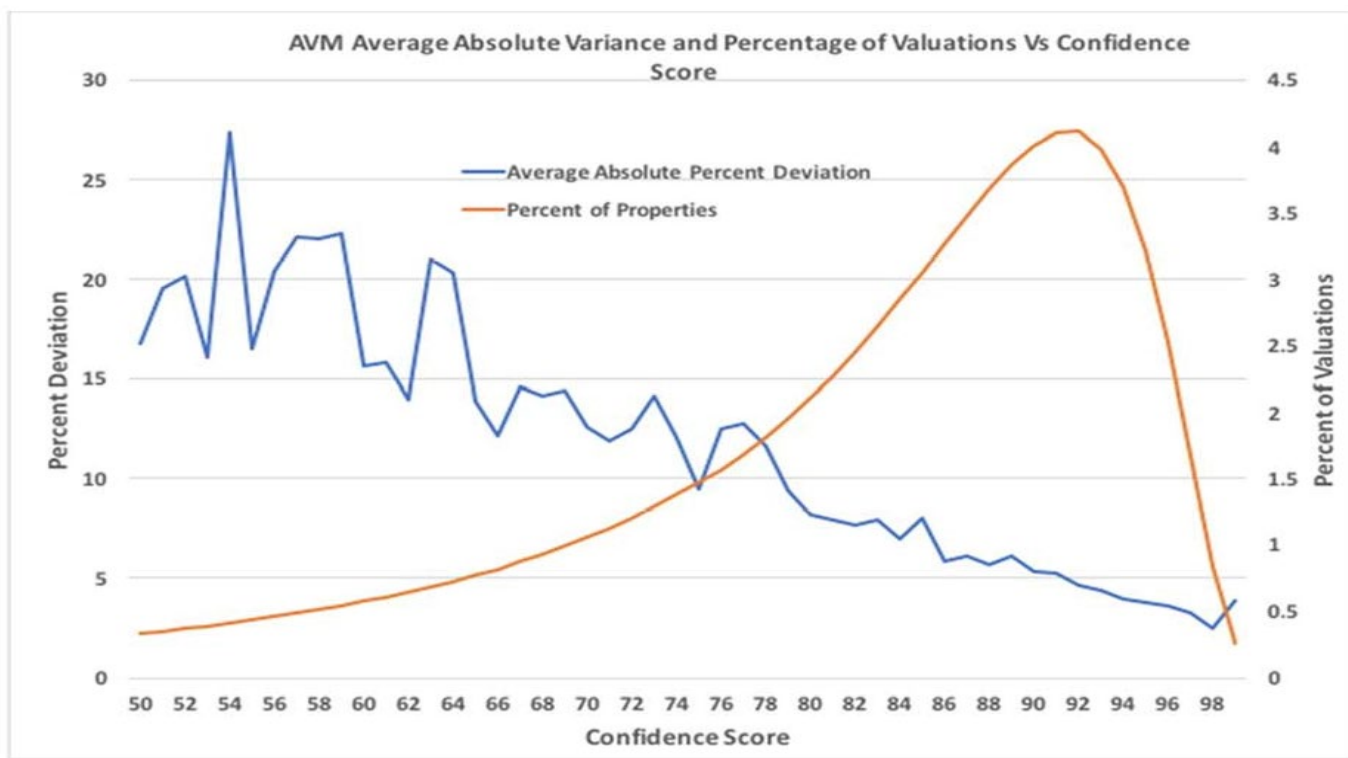
Question B2.6: Is there any data or evidence you could share regarding the performance of alternative appraisal solutions versus traditional appraisals?

One example of the performance of an alternative appraisal solution is the automated valuation model (AVM). There are two types of AVMs in the market today, consumer-facing AVMs and professional-grade or lending-grade AVMs. Examples of consumer-facing AVMs are generally found on realtor sites and are typically provided to the user free of charge and are used by realtors to generate new business leads. Professional-grade AVMs, on the other hand, are rigorously tested on massive scales so that their performance, consistency, and risk are well known and documented by lenders, investors, and third-party stakeholders throughout the mortgage industry. All references to AVMs in this response are related to professional-grade AVMs since they have the potential to be used for mortgage lending purposes.

Improvements in AVM performance have resulted from increases in the availability of data as well as improvements to the quality and integrity of traditional data sources. Further, material advances in the approach to modeling property values and methods of analyzing massive quantities of data such as advances in Big Data analysis, database technologies, and deep machine learning have and will continue to drive performance to new heights.

A confidence score reflects the valuation’s expected reliability – that is, how accurate the valuation is expected to be based on prior testing of the model. The average (absolute) percent deviation of a value estimate from a benchmark value, typically a recently observed purchase price, is one way to assess model accuracy. An example of the relationship between confidence scores (for value estimates where the model is blind to the benchmark value) and average absolute percent deviations of the estimate from the benchmark are shown in Exhibit 2 below for a single AVM. As can be seen in Exhibit 2, confidence scores are highly correlated with AVM accuracy for a sample of properties with known benchmarks.¹ Further, as with most top-tier AVMs, the overwhelming majority of valuations for this single AVM model are delivered at its highest levels of accuracy with more than 80 percent of the sample displaying less than a 10 percent deviation from its benchmark.

EXHIBIT 2



As a result of advances in technology, the availability of data, and the integrity of data over the past ten years, AVM performance has dramatically improved. In 2019, the Mortgage Bankers Association (MBA) published an article documenting the state of AVM performance over the prior decade. AVMs first appeared almost three decades ago

¹ Mortgage Bankers Association, *The State of Automated Valuation Models in the Age of Big Data*, January 2019, p.16: See <https://www.mba.org/Documents/Member%20White%20Papers/StateOfAutomatedValuationModels-final.pdf>

and are readily and routinely tested on massive scales so that their performance and risk are well known and documented by lenders, investors, and third-party stakeholders throughout the mortgage industry. Prior to 2007-08 crash, several studies attempted to document the performance of AVMs vis-à-vis appraisals. Generally, these studies concluded that appraisals tended to have an over-valuation bias compared to the AVM. (Source: *Systems Risk in Residential Property Valuations by the Collateral Assessment & Technology Committee, June 2005*) These proven valuation tools can and should be responsibly used as part of the continuum of valuation alternatives discussed in response to questions A.1.1, A.1.2, and A.1.3.

Question B2.7: Should Enterprise type COVID-19 appraisal flexibilities be part of an updated appraisal process to address disasters and other events to lessen market impacts?

Yes, with proper analysis the Enterprises can now leverage the UCDP data to validate the performance of the "COVID-19 appraisals" as compared to the safety and soundness of "non-COVID-19 appraisals". Considering these flexibilities provide the needed safety and soundness, the flexibilities can be extended and further implemented according to the appropriate risk.

For other types of disasters, natural disaster data is now available at the property level and can be accessed to identify natural disaster risks on individual properties affected by floods, wildfires, windstorms, earthquakes, hurricanes and more. This data allows for the immediate identification of potentially damaged and high-risk properties that must have appraisals that include onsite inspections. This data will therefore recognize unimpacted properties in the flagged disaster area counties and allow for appraisal flexibilities when appropriate.

SECTION C: INDUSTRY CONSIDERATIONS

Question C1.1: What do you envision the impact of appraisal process improvements as described in this RFI to be on the appraisal industry? What impact, if any, has increasing use by the Enterprises of alternative appraisal solutions had on the availability and/or quality of traditional appraisals?

Implementing these valuation approaches not only speeds up the valuation and loan manufacturing process (streamlined timelines), but also decreases costs and mortgage risk through a more holistic approach to property valuation risk. The traditional appraisal process would benefit from embracing automation and new data sources as well as available and proven solutions and their derivatives. Enhancements to the traditional appraisal process can improve speed/turn-times, accuracy and data integrity. Property inspections and condition-related data sources can easily be combined with prior full appraisals or AVMs to assure a lender that the property condition is appropriately considered. In an increasingly automated and Big Data world, embracing these advances is a logical way to improve the integrity and efficiency of loan manufacturing that will benefit all stakeholders in the mortgage value-chain.

Question C1.2: What would be the impact of appraisal policy and process improvements to the mid or late career appraiser? Do you believe late career appraisers would delay retirement if

they could focus on specific valuation services like desktop appraisals? Alternatively, would late career appraisers cease operations due to technology adoption challenges?

Alternative valuation solutions like desktop appraisals will allow experienced and late-career appraisers to use their time and talents more efficiently. Bifurcated/hybrid appraisals save time on travel, preparing property sketches, taking interior/exterior photos, and driving to view and photograph comparable sales. With the use of the dynamic modules mentioned earlier, greater data accessibility, and the use of top-performing valuation/risk analytics the bifurcated appraisal can become a useful and efficient addition to the appraiser's valuation service options. Armed with more reliable property and comparable sales data resources, along with innovative valuation tools and, better technology; the late-career appraiser can focus more of their efforts on the more important tasks of analyzing, reconciling, and reporting their value conclusions.

While full inspection appraisals performed by experienced appraisers will continue to be an important role in the valuation of high-risk collateral and unique or atypical properties, appraisers can benefit from the available advancements in data collecting and technology to maintain and grow in an efficient, cost-effective, secure, and reliable manner. Changes and new technology have always been part of the appraiser profession, as with any industry, those that embrace these changes will be the most successful and productive. Many appraisers have noted the COVID-19 flexibilities granted by the GSEs have provided opportunities to confidently embrace alternative methods and new technology to streamline their appraiser process. Significant changes to appraisal datasets and appraisal process will need to be implemented over longer timelines so as to not have a negative impact on stakeholders, including appraisers, and the housing finance system.

Question C1.3: Do you believe appraisal policy and process improvements would have a positive impact on access to credit, including for rural and underserved markets by providing additional valuation services that serve the needs of these markets?

There can be little doubt that appropriate and responsibly implemented new valuation policies and process improvements will have positive impacts on access to credit and liquidity in the housing finance system. If there are positives that we can take from the tragedy of COVID-19, industry stakeholders demonstrated that with the responsible use of technology and data, the housing finance system cannot only withstand an unprecedented and massive shock but serve as foundational support to our economy. Contrast this to the lack of these tools in what led up to the last disaster of 2007-08. Within the spectrum of valuation approaches, full or hybrid appraisals may be needed in rural markets depending on the property's accessibility, complexity, and available data. However, as the stakeholders gather more structured and robust property details and market data in rural and underserved communities, more alternative valuations will certainly become available in these markets in the future and should be leveraged while following the tenants expressed in response to question A.1.5.

Question C1.4: Is there discrimination in current collateral valuation practices? If you believe there is discrimination, describe the impact. Please provide any relevant data or analyses to support your position. Conversely, are there concerns that alternative or automated solutions could have a discriminatory impact?

We support diversity and inclusion on all levels, and we believe racial bias should not play any role in the valuation process regardless of the particular valuation approach. As a data and technology company, and as we have referenced in response to prior questions, we believe a more holistic approach to property valuation utilizing robust

quantitative data and research tools can help identify instances where there may be racial disparities and mitigate or eliminate any potential bias. Alternative and traditional appraisal valuation solutions can be cross-checked compared based on quantifiable analytics to help identify potential racial bias. All valuation approaches, including the analytics tools should also be evaluated to determine whether and to what extent there is any inherent disparate impact present in the underlying data.

Question C1.5 What are the fair housing impacts of current FHFA and Enterprise policies and procedures on appraisals and valuations, and how can these policies change to further fair housing? Please provide any relevant data or analyses.

See response to question C1.4 above.

Question C1.6: Do you have any additional feedback on issues and questions raised by this RFI?

The requirements for the valuation of a property in a mortgage transaction outlined in the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA) and its amendments have been left untouched for the better part of a quarter-century. During that time, society has witnessed more advances in technology than experienced in the prior 100 years and more. The advent of personal computers and the internet, social media, smartphones, DNA mapping, alternative fuels, electric vehicles, GPS systems, fiber optics, as well as other advances in biotechnology and medicine, energy, transportation, urban planning, and civil engineering are all examples of just how dramatically our world has changed in a very short time.

The vast increases in the availability of data (as well as the integrity of that data) and technologies that leverage this data have been unprecedented and moving at an exponential pace. Most industries have been embracing the application of available data and technology to traditional processes. Similarly, mortgage stakeholders should be encouraged to responsibly apply the full spectrum of alternative valuation solutions where and when these tools can be most effectively used to provide greater access to credit markets, significantly lower risk and potential bias while dramatically shortening the time for a mortgage and at substantially lower costs.



Veros Real Estate Solutions
2333 N. Broadway Suite 350
Santa Ana, CA 92706

866.458.3767 Toll-free
714.415.6300 Corporate
www.veros.com