Federal Housing Finance Agency
Office of Housing and Regulatory Policy
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Washington, D.C., 20219

Class Valuation Response to the FHFA Request for Information on appraisal modernization
Submitted to AppraisalRFI@fhfa.gov

First, we want to thank the Federal Housing Finance Agency for taking the time to consider these very important topics. It is critical that the appraisal profession adapt and evolve with the advancing technologies available in order to support the marketplace with this critical function and maintain relevance into the future. We want to focus mainly on the adoption of hybrid processes and the importance of understanding the differences in the methods and technologies utilized.

It's true that some hybrid data collection methods imply considerable risk, errors, and inconsistency, in turn reducing public trust and detering appraiser adoption. Some methods rely on lesser-trained individuals to accurately measure a property and assess what images are needed to determine value—a skill many appraisers have taken years to perfect. There are many examples where this has failed, leaving the appraiser and downstream stakeholders exposed to significant risk with only a partial understanding of the collateral.

That said, this is where careful selection and deployment of the right property-technology is important. The computer vision and machine learning technologies available to support these solutions are the same technologies used in autonomous vehicles and other industries at the forefront of innovation. Many in the appraisal industry are unaware that these advanced technologies are available and growing in popularity in property-related industries. It is time we bring these advanced tools into our profession.

The use of 3D Scanning technology to collect property data is the most immediate and obvious way to support the hybrid appraisal process. It provides a permanent visual record of the property with comprehensive, standardized, and unbiased source data; including but not limited to:

- Detailed floorplans with precise measurements
- Understanding of functional utility, quality, and condition
- 3D virtual renditions ensuring no space is missed or omitted and every space visible
- Year, make and model of all major home appliances and mechanical systems
- Spatial context of characteristics, features, externalities, and conditions that impact property value

This is an improved means of property data collection that helps drive appraiser adoption and provides increased confidence to all stakeholders by offering a drastic improvement over what can be provided today.

If done properly and responsibly, hybrid processes will not only solve the critical need to drive capacity into the marketplace, but they will also drastically improve the appraisal process and significantly reduce systematic risk overall. We believe this solution can and should be **appraiser-centered and enterprise ready.**

By being appraiser-centered, these solutions should bolster appraiser confidence and independence, allowing for the higher quality appraisers to perform more transactions in less time with more accuracy. The smart adoption of new technologies will attract new and innovative entrants into the appraiser industry. The reduced need for site visits allows appraisers to extend their careers later into their lives. When a broken leg, may prevent an appraiser from driving, hybrid solutions allow them the independence to continue to earn an income. Acceptable solutions should not reduce the role of the appraiser, but instead elevate their importance and expertise in the valuation process.

By being enterprise ready, these solutions must also drastically improve the process in a repeatable, scalable way to provide a better end product. A consistent and standard means of data collection must give investors more confidence in the determined value and reduce systematic risk. Solutions should provide complete transparency of every aspect of the property, ensuring nothing is omitted, while also reducing implicit and explicit bias by eliminating interaction with the appraiser.

The value offered in adopting a hybrid process is truly endless. We're excited for the direction our industry is headed and look forward to working together in any way that we can.

Thank you for your time,

The Class Valuation Team

Appraisal Policy and Process Improvements

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?

There is a great need to support the appraisal industry and improve a system that is negatively impacting stakeholders on both sides of the process. Continued growth of transactional needs and a shortage of available, high-quality appraisers has the market completely overwhelmed. Many consumers may even lose their ability to buy a home due to appraisers' timeline, and many in the industry are forced to utilize less-professional, less-qualified appraisers providing less reliable results. These issues are exacerbated in rural, underserved, and high-volume markets.

There are many ways to help solve this issue; although, the hybrid and digital appraisal solutions provide us with the most immediate, drastic impact. They allow for the highest qualified appraisers to engage in the highest number of transactions; thereby, keeping the appraiser engaged in the most important aspect of the appraisal process for most transactions.

It is imperative that FHFA understand the different approaches to the hybrid appraisal being tested, and that there are highly credible solutions that leverage emerging technologies to produce a true digital appraisal. It is critical that not all solutions to solve this problem be considered equal and that not all concerns or perceived risks are inherent in all solutions.

Presently, conventional lending policy locks the appraisal industry into archaic processes and outdated technology significantly lacking standards, accountability, objectivity, transparency, and consistency. With available technological advances, we have a huge opportunity to not only solve the broken fulfillment system, but to also dramatically reduce systematic risk, offering downstream stakeholders more comprehensive, unbiased, objective, and transparent data about the property than what appraisers are able to provide today.

It is important that marginal solutions focused on driving down cost and reducing turn-times not be compared to more sophisticated solutions. Some solutions are dependent on training non-appraiser professionals on key aspects of property data collection (i.e. measuring and sketching the property). These are liable to be riddled with error and dependent on basic mobile apps to manually capture property insights. A general Q&A paired with still photography leaves appraisers and downstream stakeholders with only a partial understanding of the property and lack of confidence in the process.

To facilitate a viable and scalable appraisal process in which appraisers rely on third-party data, new policies must require exceptionally high standards including but not limited to; detailed floor plans with interior layout displaying the functional utility of the property, full visual record of the interior, exterior and externalities of the property, complete virtual tour of entire property (not a limited set of still images prime for omission and misrepresentation).

There are many providers in our space that have these technologies and ability to deploy a quality labor force to support it. Those who don't possess this capability are able to license it. These technologies are advancing rapidly and will continue to be more readily available for all providers.

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?

The appraisal industry has not advanced at the same rate as the rest of the mortgage market. The current practices provide us with insufficient data or insight of property characteristics delivered in an inconsistent and non-standardized fashion. We know from UCDP data on properties that have multiple appraisals that there is often substantial variance between reporting appraisers based on how they collect and report the data. This leaves the risk holders with little to use to truly understand inherent risks. Furthermore, we know that at times appraisers leave key aspects of a property unreported. This is either due to lack of competency, limitations of the technology being used, or in the worst-case fraud.

We have a tremendous opportunity—not only for process improvement, but to also advance and modernize our profession. The same technologies utilized to support the hybrid process also support higher standards, greater precision, and overall greater confidence for stakeholders. Leveraging computer-vision technologies, akin to the technology used to safely guide self-driving vehicles, and image capture mechanisms, we can now generate detailed, virtual renditions of the home and extract incredibly comprehensive, accurate, standardized and authenticated source-data of a property.

These technologies are readily available to the appraisal process providing machine generated:

- Highly detailed and accurate floor plans in a consistent and standard fashion
- 3D measurements and layouts displaying key factors related to quality of construction like ceiling height, volume of rooms, etc.
- Measurements of walls, flooring material, fenestration, and more
- Spatial context of any contributing factors positive or negative that influence the value of property
- Year, make, and model of major appliances and mechanicals in the home
- Complete visual record of the collateral providing full transparency of the condition and other relevant factors
- Geo-coordinates and time stamps that accurately capture location and time the data was captured

All of this is presented to the appraiser in the hybrid process enabling a robust virtual inspection of the property for a credible digital appraisal. Greater reliance on technology supports scalability and adoption by eliminating the risks and dependencies of training non-appraisers to measure or collect data. This will advance the appraisal process into a completely digital era providing authenticated source data in a highly consistent and standard fashion, offering complete transparency for all appraisers, downstream users, and stakeholders.

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?

We definitely believe there is a place for waivers on certain limited transactions. We also believe incorporating a form of property data collection to get a complete understanding of the condition of the property is important. I think many stakeholders like MI companies, secondary market investors and taxpayers would feel more comfortable utilizing responsible hybrid processes to obtain value over any increase in waivers. This is evident by the number of consumers who waive their right to a waiver and request an appraisal to support the biggest purchase of their life. Additionally, the waiver models themselves will continue to degrade with increased population of waivers. At a minimum, Property data collection should be deployed on a large share of waivers without more recent appraisals completed and available in UCDP.

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?

It is highly critical we immediately expand capacity and drive the majority of appraisal business to the most qualified appraiser professionals. Providing an increase in capacity will allow the best appraisers to thrive while also alleviating the poor performers.

Some believe the noted credentials are an indication of qualification to perform inspections to support the appraisal process out of the box. This is not exactly accurate. They are educated to significantly different qualifications which are at times in conflict to the appraisal process itself. There are also some misperceptions as to the training and certifications utilized in some of the industries. In fact, none of these credentials are gained from training that includes specifics about how to capture property data and measure a property for a third-party user.

While many of the abovementioned professionals may make great candidates individually, none should be considered without technology to support the process. If the proper tech is employed, there is no need to limit the process to these credentialed categories alone.

The most important consideration, like many other day-to-day consumer needs, is anyone who enters the home should be appropriately background checked and vetted for consumer safety and confidence. Additionally, we should focus on consumer experience and individuals who are trained accordingly. When appropriate technology is utilized, we can focus more on the consumer themselves. We know credentials alone are not an avenue to ensure consumer safety. Even appraisers are not free from historic issues, and why companies like Clearbox and others have built businesses to appropriately vet appraisers and real estate agents. Even though this is known, some procurers of appraisal services today still do not background check their networks.

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.

The following concerns have been noted by appraisers surveyed on the quality of data they're accustomed to receiving when completing current desktop, exterior, and hybrid products.
- Lack of photos or poor photo quality: 56%
- Missing sketches from third party data collectors: 44% (Inaccurate sketches: 38%)
- Missing data from third party-collectors: 44% (Inaccurate data: 50%)

As appraiser adoption is paramount to ensure scalability of these solutions, guidelines and policies should be implemented to ensure standardized, comprehensive data is provided for appraisers to confidently and credibly perform hybrid appraisal assignments. The comprehensive data must be immutable and transparent with no possibility of omissions. To achieve this, property technology deployed in the hybrid process must subscribe to a common standard to include common elements such as a unique property identifier, image (and metadata) standards, floorplan and area calculation standards, etc. Standardization ensures property data can be collected independent of the appraisal process and deployed universally, industry-wide in appraisal manufacturing software, automated underwriting systems, AVMs, etc.

We believe an independent association of property data collection service providers and stakeholders should be established to develop and maintain these standards, to which the enterprises would be a key stakeholder, along with other government agencies, lenders, primary and secondary market participants, industry trade groups, etc. Most importantly, the technologists and innovators at the bleeding edge of developing these technologies should take the lead to ensure the standards implemented do not become so restrictive that they block further innovation.

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?

There is no arguing the existing uniform appraisal forms are outdated. While the advent of UCDP and UAD paved the way for great technologies like CU and LCA, UAD itself is severely limited by the forms that serve as its source, rendering the present UAD insufficient. Furthermore, the limitations of the forms and the forms-driven appraisal manufacturing technology used by largest cohort of appraisers, is a key contributor to the quality concerns of residential appraisals.

The current initiative to decouple appraisal data collection from appraisal analysis and reporting is a great step in the right direction to transition appraisal manufacturing from the present form-filling exercises to a precise, data driven analysis that fosters public trust in the appraisal profession.

That said, the pattern to perform a complete overhaul of forms and data standards every 10 years is unsustainable. The overhaul itself exacts an enormous toll on the industry. Then from day one of implementation, it results in stagnation and soon-to-be-outdated solutions that cannot take advantage of emerging technologies.

Since the initial UAD mandate, property technology has been evolving and presenting opportunities to improve the conventional lending collateral risk management ecosystem. In parallel, mortgage industry stakeholders and innovators have continued collaboration to advance the MISMO Property and Valuation Services model far beyond the capabilities of the proprietary 2.6GSE version.

Maintaining these versions in silos with only periodic updating to the proprietary model used by the enterprises is inefficient, costly, and disruptive to the industry. We recommend an approach where the collateral policy teams and data modelers at the enterprises adopt the existing MISMO model and come to the table in constant collaboration with the MISMO Property and Valuation Services Community of Practice stakeholder group to affect a pattern of continuous and incremental improvement that keeps pace with the capabilities of technology.

Risk Management

B2.1: How could the Enterprises make additional data available to appraisers while promoting appraiser independence without crowding out other data providers? What additional challenges arise if the enterprises provide data to appraisers?

We encourage the Enterprises to make the property data sets, the data discrepancy messages, and revised

quality messages available by API to certified entities such as data aggregators and other entities in the manufacturing chain who have the capability to deploy it in appraisal manufacturing software, appraisal quality control software, and collateral risk underwriting systems. Use a thoughtful process of vetting similar to that used to approve participants of the modernization pilots to ensure designs for use of the data preserve appraiser independence while empowering appraisers with the data needed to sufficiently address the risk concerns identified by Collateral Underwriter and Loan Collateral Advisor. Certainly, the existing Data Providers would be among those capable of deploying thoughtful solutions that meet the vetting criteria.

B2.2: How can the Enterprises improve their collateral tools currently available to lenders?

We believe AMCs should be given direct access to this data. As an agent for the lender, the AMC's role is to perform QC functions in the appraisal process to the lender's standards. Having access to this information would allow for reduced revisions and cycle-times in the process and allow the AMC to mitigate issues more proactively.

B2.4: How can lenders manipulate automated underwriting systems when seeking an appraisal waiver? For example, lenders changing the loan amount, submitting data changes multiple times, or submitting to both Enterprises and delivering to the one who offers the waiver? How do the Enterprises minimize this manipulation?

As the waiver risks are assessed, we do feel precautions to ensure these behaviors are mitigated would be an appropriate action. Part of the responsibility of FHFA is to protect against the misuse of these tools that are being provided to the industry participants and ensure they are used properly.

Simple precautions to track and flag suspect resubmission behaviors for audit, then taking action to eliminate bad actors from waiver eligibility seems like a plausible solution to dissuade this behavior.

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

The most important aspect is to not rely solely on the training of these non-appraiser entities. Technology must be utilized to ensure the information is captured in a reliable and comprehensive fashion. The authenticated source data must be provided to the appraiser through secure channels that foster trust and that empower them to make appropriate determinations on their own using a digital environment—not dependent on a less-qualified party to make determinations. Technology can and must be utilized so the appraiser can still perform their analysis.

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

Yes, examples of authenticated source data can be shared. There is also data available to show the improvement in data collection using these advanced methodologies in comparison to standard appraisal processes as evidence by previous appraisals performed. Furthermore, as we are able to provide more of these services removing the appraiser from interaction with all parties interested in the transaction, we can further bolster appraiser protection and independence by reducing any potential forms of bias.

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?

Flexibilities should be in place to account for all potential issues that would limit an appraiser's ability (or apprentice, trainee, other third party, etc.) to view the interior of the home or visit the home altogether. Aside from COVID-19, considerations should include natural disasters (like hurricanes, floods, earthquakes, or otherwise), health crises, and/or other borrower/occupant limitations.

Industry Considerations

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?

Deploying the hybrid process will drastically impact the industries capacity issues. They will expand the working lives of appraisers and allow the highest quality appraisers to manage a greater share of the volume. It will bolster appraiser independence by completely eliminating the appraiser from contacting any parties to the transaction. This will protect both the appraiser and the consumer from potential biases or false accusations.

Hybrid processes deployed with advanced technologies will forever improve trust and credibility, by providing more consistency, quality, and comprehension of property data. However, if done inappropriately, we risk injecting significant systematic risks. We must use technology and not allow marginal solutions that only focus on driving down cost and reducing cycle-times. We must require certain standards be utilized to deliver credible results.

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? Or alternatively, would late career appraisers cease operations due to technology adoption challenges?

Hybrid and digital appraisals have the opportunity to dramatically impact the mid to late career appraisers in a positive way. Many appraisers around the country live in difficult climates that become more difficult to navigate with age. Providing the appraiser, the ability to extend their working years by no longer having to drive far distances or navigate the climate, will make a huge impact.

That said, it is imperative appraisers are provided enough data and information to provide credible results and feel comfortable trusting of this process. This is where the use of technology is so important. Many of these technologies have focused on integrating easily with the software appraisers use daily, minimizing the need to learn new tools or procedures.

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?

Many underserved and rural markets are currently most dramatically impacted by appraiser capacity. Often times these lower-median-income markets are paying fees two- to four-times higher than what is charged in much higher-median-income regions. They are then forced to wait two- to four-times longer to receive service. There is no question the use of a credible, hybrid process would have a positive impact to both the appraisal services and access to credit in these areas.

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?

It is clear this is a topic of concern and there has been recent evidence to this fact. There is still much more discussion and investigation to be done in this arena. It is critical that we look further into these issues which can get quite complex and are driven by years of discrimination affecting homes and data in more diverse neighborhoods and areas.

No matter where you stand on these issues, there is no question the hybrid process can help mitigate the potential of discrimination. Eliminating the appraiser from engagement to parties to the transaction and collecting authenticated source data about a property, allows for pure unbiased property data to be utilized in the process and reduces the potential for direct or implicit racial bias at the transactional level.

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.

By removing any contact between the appraiser and those interested in the transaction, a hybrid process can reduce the potential of explicit and implicit bias impacting the value. By removing this interaction, not only would we be able to protect the consumers from bias, but we are also able to protect the appraiser from allegations of bias. It's important to note that these types of issues are impacted by many pieces of the process, and an innovative appraisal solution will not alone solve the problem, however we believe it could be an important piece to helping us take a step forward in reducing unfair bias of any kind in our industry.

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

We feel it is critical that the appraiser be strongly considered in this process and that we must demand solutions that support their requirements to provide these services with credibility and confidence. Appraiser adoption is paramount. And the appraiser's value should be protected in this process. We know many appraisers will claim a hybrid process is a first step in the elimination or marginalization of their role. However not all solutions should be viewed as equal. Every appraiser we've had the opportunity to meet with, and present our solution to, has left interested and excited.