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Department of the Treasury
Office of the Comptroller of the Currency
Docket ID OCC-2023-0002

Board of Governors of the Federal Reserve System
Docket No. R-1807
RIN No. 7100 AG60

Federal Deposit Insurance Corporation
RIN 3064-AE68

National Credit Union Administration
RIN 3133-AE23
Docket No. NCUA-2023-0019

Consumer Financial Protection Bureau
Docket No. CFPB-2023-0025

Federal Housing Finance Agency
RIN 2590-AA62

**Re: Quality Control Standards for Automated Valuation Models**

The National Fair Housing Alliance® (NFHA™) and the National Consumer Law Center® (NCLC®), on behalf of its low-income clients, appreciate the opportunity to comment on the Notice of Proposed Rulemaking (NPRM) regarding Quality Control Standards for Automated Valuation Models.[1] We commend federal regulators for seeking input on this important topic and we hope that our comments below will help inform the regulators' views.

[1] Notice of Proposed Rulemaking regarding Quality Control Standards for Automated Valuation Models, 88 Fed. Reg. 40638 (June 21, 2023), https://www.govinfo.gov/content/pkg/FR-2023-06-21/pdf/2023-12187.pdf.

Founded in 1988, NFHA is the country's only national civil rights organization dedicated solely to eliminating all forms of housing and lending discrimination and ensuring equal opportunities for all people. As the trade association for over 170 fair housing and justice-centered organizations and individuals throughout the United States and its territories, NFHA works to dismantle longstanding barriers to equity and build diverse, inclusive, well-resourced communities.

NCLC is recognized nationally as an expert in consumer credit issues. For over 53 years, NCLC has drawn on this expertise to provide information, legal research, policy analyses, and market insights to federal and state legislatures, administrative agencies, and the courts. NCLC also publishes a twenty-one volume Consumer Credit and Sales Legal Practice Series, including Credit Discrimination (8th Ed. 2022), which examines and applies the Equal Credit Opportunity Act ("ECOA"), the Fair Housing Act ("FHA"), and other civil rights statutes.

As discussed in the May 13, 2022 letter from NFHA, NCLC, and other leading civil rights, consumer, and technology advocates (May 13 Letter),[2] the language of Title XI of the Financial Institutions Reform, Recovery, and Enforcement Act ("FIRREA") is broad, and any regulation promulgated under the authority granted to the Office of the Comptroller of the Currency, the Board of Governors of the Federal Reserve, the Federal Deposit Insurance Corporation, the National Credit Union Administration, the Consumer Financial Protection Bureau, and the Federal Housing Finance Agency (collectively, the "Agencies") by FIRREA should not narrow its scope. Nor should the regulation be too particular or rigid: automated valuation models ("AVMs") are a constantly evolving technology, and to ensure the regulation is effective as that technology changes, a principles-based approach is appropriate. The regulation should not hard-wire the manner of evaluating AVMs for compliance, because the tools and methods for evaluating AVMs are likely to change over time as the AVMs themselves change, and as technology advances. Additionally, more specific direction that depends more heavily on the operation of particular AVMs or their current use-cases is better suited for guidance than the rule itself. At the same time, the regulation should provide more detail than is included in the current proposal to ensure regulated entities are aware of their legal obligations, including obligations related to nondiscrimination.

Also as discussed in the May 13 Letter, the addition of a "nondiscrimination" quality control ("QC") standard, as well as the incorporation of "nondiscrimination" in each existing QC standard, is critically important. Discrimination should be understood as a safety and soundness risk.[3] Additionally, AVMs run a high risk of perpetuating discrimination if they are not

[2] Letter from the American Civil Liberties Union, et al., to Rohit Chopra, Dir., Consumer Financial Protection Bureau (May 13, 2022), https://nationalfairhousing.org/wp-content/uploads/2022/05/NFHA-et-al-Comment-Letter_CFPB-re-AVMs_05-13-2022_FINAL.pdf; *see* Press Release, National Fair Housing Alliance, *Leading Civil Rights, Consumer, and Technology Advocates Urge the CFPB and Other Federal Regulators to Promote Fairness in Automated Valuation Models* (May 18, 2022), https://nationalfairhousing.org/leading-civil-rights-consumer-and-technology-advocates-urge-the-cfpb-and-other-federal-regulators-to-promote-fairness-in-automated-valuation-models/.

[3] *See* Michael S. Barr, Vice Chair for Supervision, Bd. of Governors of the Fed. Reserve Sys., Furthering the Vision of the Fair Housing Act, Speech at the "Fair Housing at 55—Advancing a Blueprint for Equity" National Fair Housing Alliance 2023 National Conference (July 18, 2023), https://www.federalreserve.gov/newsevents/speech/barr20230718a.htm ("Fair lending is safe and sound lending.").

adequately examined and tested: there is no question that discriminatory mis-valuations are a historical and present phenomenon,[4] and AVMs—like any technology—can perpetuate or amplify that bias, or introduce new potentially disproportionate impacts or outcomes.[5] The Agencies should use this opportunity to make abundantly clear that FIRREA prohibits the use of discriminatory AVMs, and to require that AVMs must be reviewed for both disparate treatment and disparate impact (including an analysis of less discriminatory alternatives) in order to meet the requirements of FIRREA.

## Comments on the Proposal

### *A. The Rule Should Use a Principles-Based Approach:*

We commend the Agencies for adopting a principles-based approach to the rule. The rule should be crafted in such a way that changes in AVM technology, or in quality control, testing, or risk mitigation methods, do not escape or become inconsistent with the requirements of FIRREA. As model development techniques, model deployment processes, data types, and data sources change, AVMs will evolve, and risk mitigation, testing, and quality control will have to adapt. In order to effectively implement the requirements of FIRREA, the Agencies should adopt a rule that includes high-level requirements regarding quality control based on core principles of antidiscrimination law, including reviewing the outcomes of AVMs for potential disparate impact. The Agencies should use guidance as the appropriate venue to address the more nuanced issues of compliance, such as how to conduct particular types of testing, including outcomes-based testing for disparate impact, and how to evaluate potential less discriminatory alternatives to an AVM that has disparate outcomes.

Such a principles-based approach contrasts with a specific and detailed rules-based approach, which would enumerate specific policies, procedures, control systems, or methodologies that all institutions must implement to comply with the rule. A principles-based approach should include sufficient detail about what must be covered by QC—for example, QC

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[4] *See generally* Hannah Gable & David Garcia, *Reducing Bias in Home Appraisals: The Roles for Policy and Technology*, Terner Center for Housing Innovation, U.C. Berkeley (March 3, 2022), https://ternercenter.berkeley.edu/research-and-policy/reducing-bias-in-home-appraisals-the-roles-for-policy-and-technology/; NFHA et al., *Identifying Bias and Barriers, Promoting Equity: An Analysis of the USPAP Standards and Appraiser Qualifications Criteria*,13-25 (January 2022), https://nationalfairhousing.org/wp-content/uploads/2022/01/2022-01-18-NFHA-et-al_Analysis-of-Appraisal-Standards-and-Appraiser-Criteria_FINAL.pdf; David Wheaton, *Fighting Appraisal Bias: How the Government and Housing Industry Can Better Address this Discriminatory Practice*, NAACP LDF (May 19, 2023), https://www.naacpldf.org/appraisal-algorithmic-bias/; Jonathan Rothwell & Andre M. Perry, *Biased appraisals and the devaluation of housing in Black neighborhoods*, Brookings (Nov. 17, 2021), https://www.brookings.edu/articles/biased-appraisals-and-the-devaluation-of-housing-in-black-neighborhoods/; Testimony of Junia Howell, *Public Hearing on Appraisal Bias: Hearing Before the Appraisal Subcomm. of the Fed. Fin. Insts. Examination Council*, 2-10 (Jan. 24, 2023), https://s3.amazonaws.com/files.consumerfinance.gov/f/documents/cfpb_appraisal-hearing_junia-howell-testimony_2023-01-24.pdf.

[5] *See generally* Michael Neal et al., "How Automated Valuation Models Can Disproportionately Affect Majority-Black Neighborhoods," Urban Inst., 8-10 (Dec. 2020), https://www.urban.org/sites/default/files/publication/103429/how-automated-valuation-models-can-disproportionately-affect-majority-black-neighborhoods_1.pdf; *see also* Alex Engler, *Auditing employment algorithms for discrimination*, Brookings (March 12, 2021), https://www.brookings.edu/articles/auditing-employment-algorithms-for-discrimination/.

should involve reviewing AVMs to ensure there is no discriminatory disparate treatment, testing AVMs for disparate impact, and analyzing potential less discriminatory alternatives, and the Agencies should explicitly state in the rule their expectations that these kinds of testing be performed—but the rule should not be prescriptive about how those reviews and tests are conducted.

### *B. Consistent with the Statute, the Rule Should be Broadly Applicable:*

FIRREA requires the Agencies, in consultation with the Appraisal Subcommittee and the Appraisal Standards Board of The Appraisal Foundation, to promulgate regulations to implement QC standards for AVMs. FIRREA defines an AVM as "any computerized model used by mortgage originators and secondary market issuers [("SMIs")] to determine the collateral worth of a mortgage secured by a consumer's principal dwelling."[6] FIRREA does not limit the definition of AVM further (for example, by limiting its applicability only to AVMs used during underwriting or defining "determine" to mean a valuation during underwriting); nor does it limit QC requirements to only specific circumstances (for example, by requiring QC only in connection with underwriting decisions).

FIRREA was correct not to limit its coverage to AVMs used only in particular contexts like underwriting, and the Agencies should not introduce such a limitation now. The Agencies' proposed rule incorrectly and inappropriately limits the breadth of the rule's applicability in three ways. First, the proposed rule inappropriately excludes the following from coverage:

(i) Monitoring of the quality or performance of mortgages or mortgage-backed securities;
(ii) Reviews of the quality of already completed determinations of the value of collateral; or
(iii) The development of an appraisal by a certified or licensed appraiser.[7]

Second, the proposed rule also fails to specifically cover essential aspects of a credit transaction. For example, the proposed rule fails to mention the use of AVMs in connection with determining collateral worth for the purposes of private mortgage insurance (PMI) or homeowners' insurance. In addition, the proposed rule omits reference to use of AVMs in connection with options or shared equity contracts, which are heavily dependent on AVMs. Determination of the collateral worth of a consumer's principal dwelling at *any* point in the lifecycle of a loan should be covered, because all such determinations can be as impactful as direct use during underwriting. Use of AVMs to review appraisals can alter the terms and conditions of a loan. AVMs used during loss mitigation can decide whether a borrower remains in their home. The Agencies should rescind the above-named exclusions and explicitly cover AVMs used to determine collateral worth in connection with any aspect of a mortgage transaction.

Third, the proposed rule incorrectly limits accountability to "mortgage originators" and "secondary market issuers"[8] rather than focusing on the statutorily required act. FIRREA states

[6] 12 U.S.C. § 3354(d).
[7] *See* 88 Fed. Reg. at 40673 (Proposed 12 C.F.R. 1026.42(a)(i)(1)).
[8] *See* 88 Fed. Reg. at 40673 (Proposed 12 C.F.R. 1026.42(a)(3)).

that "[a]utomated valuation models shall adhere to quality control standards designed to . . . ."[9] The proposed rule's unnecessarily limited interpretation is unwarranted and will inevitably clash with changes in technology and business models as to how the AVMs are developed and delivered. The statute does not require any particular entity to undertake that QC nor does the statute exempt any entity from undertaking such QC. Moreover, the statute clearly allows for enforcement by the Consumer Financial Protection Bureau ("CFPB"), Federal Trade Commission ("FTC"), and State Attorneys General ("State AGs") "with respect to other participants in the market for appraisals of 1-to-4 unit single family residential real estate,"[10] which arguably allows for the CFPB, FTC, and State AGs to enforce the law against any actor that is not a regulated financial institution. Therefore, the Agencies' regulation should not limit QC requirements only to mortgage originators and SMIs.

In practice, broad applicability is especially important because AVMs "used" by mortgage originators and SMIs are not necessarily developed by the mortgage originators or SMIs. In other words, the entity who builds, programs, and presumably engages in testing of the AVM during development—the "AVM Developer"—is not always the mortgage originator, SMI, or other individual or entity who employs the AVM in its course of business—the "AVM User." The fact that a mortgage originator may be an AVM User but not an AVM Developer should not exempt it from taking the steps necessary to assure itself that the AVM in question is not discriminatory. But it does support an approach to this rulemaking that allows for robust QC to occur at an appropriate place, and with an appropriate party, during AVM development, with and by the entity who has the tools and data necessary to conduct that QC. Because it might not always be possible or advantageous for a mortgage originator to directly engage in QC, the rule should focus not on which actor must conduct QC, but rather the standards and principles that AVMs must meet, including antidiscrimination standards. All actors, then, should be responsible for ensuring that the QC occurred and was appropriate, by either conducting that QC directly or by engaging in appropriate due diligence. This QC should occur not only prior to an AVM's adoption or use, but also on an ongoing basis. In guidance, the Agencies should provide additional information about how QC can and should be carried out in the broader marketplace, and how mortgage originators, SMIs, and others can reasonably ensure the AVMs that they use comply with QC requirements. This guidance should discuss the appropriate role of AVM Developers and AVM Users in ensuring robust and adequate QC of AVMs, and could include due diligence or other steps appropriate for originators or SMIs to take given the relationships between participants in the market, differing technological capability between and among AVM Developers and various AVM Users, and the availability of the data necessary to conduct robust QC.

In addition, the rule should explicitly cover servicers as well as Fannie Mae and Freddie Mac (the "GSEs"). In connection with loan modifications, the preamble to the proposed rule seems to suggest that "servicers" are covered entities, particularly when they are deciding whether to approve a loan modification or other changes to an existing mortgage,[11] but the preamble language describing the definition of a "mortgage originator" seems to exclude

[9] 12 U.S.C. § 3354(a).
[10] *Id.* § 3354(c)(2).
[11] *See* 88 Fed. Reg. at 40642.

"servicers."[12] The final Rule should provide for broad coverage, including servicers, whenever an AVM is used to determine the collateral worth of a mortgage in connection with a credit decision—including decisions made during servicing. In addition, the definition of "secondary market issuer" should explicitly mention Fannie Mae and Freddie Mac to clarify the critical importance of covering AVMs used by these entities.

### *C. The Agencies Should Release Loan-Level Appraisal Data:*

For robust QC to be possible, the Agencies must make available to the public loan-level, quality, representative, and comprehensive appraisal data. The release of additional information from the Uniform Appraisal Dataset would enhance all entities' ability to ensure that AVMs meet quality control standards—including through the performance of quantitative testing for nondiscrimination.

## Comments on Specific Questions

### *A. Scope of the Proposed Rule – AVMs Used in Connection with Making Credit Decisions*

*Question 1. How, if at all, could the agencies' proposal to cover loan modifications and other changes to existing loans be made clearer?*

The definition of "credit decision" in the proposed rule includes decisions "regarding whether and under what terms to originate, modify, terminate, or make other changes to a mortgage."[13] Although the proposed rule is clear that the AVMs used by a mortgage originator for purposes of decisions about loan modifications and other changes to loans originated by that mortgage originator itself are covered, as discussed above, the proposed rule is not clear about loan modifications and other changes to existing loans when such decisions are made by servicers, nor is the rule clear about such decisions when made by secondary market purchasers. Consistent with the purposes and language of FIRREA and with the definition of "credit decision," the rule should make clear that AVMs used in all such decisions are subject to the rule, rather than focus on which market participant is making a particular decision in a particular case.

### *B. Scope of the Proposed Rule – Appraisal Waivers*

*Question 5. Please address the feasibility of mortgage originators performing quality control reviews of the AVMs that secondary market issuers use to evaluate appraisal waiver requests. What, if any, consequences would such an approach have for mortgage originators' use of appraisal waiver programs?*

The rule should clearly state that mortgage originators are responsible for ensuring that any AVMs that affect the mortgage originator's credit decisions meet appropriate QC standards. However, as discussed above, the appropriate method for doing so might not be for the mortgage originator to itself conduct robust QC—particularly for smaller lenders who might lack sufficient data or other resources to perform QC to the full extent required. Instead, it might be appropriate

[12] *See* 88 Fed. Reg. at 40646.
[13] 88 Fed. Reg. at 40642, 40670, 71, 72, 73, 74.

for mortgage originators to conduct due diligence or take other measures to ensure that appropriate QC has been performed. The due diligence activities performed by mortgage originators need not be the same as the QC activities performed by the SMI and/or the AVM Developer. Appropriate due diligence might involve sharing materials such as data, descriptions of model variables, and model testing results. Due diligence should also involve mortgage originators obtaining certifications from SMIs that the AVM complies with applicable federal laws and regulations, including the AVM QC rule.

### *C. Scope of the Proposed Rule – AVM Uses Not Covered by the Proposed Rule*

*Question 11. What would be the advantages and disadvantages of excluding AVMs used by certified or licensed appraisers in developing appraisal valuations?*

As discussed above, FIRREA covers "computerized model[s] used by mortgage originators and secondary market issuers to determine the collateral worth of a mortgage secured by a consumer's principal dwelling."[14] It does not limit coverage to mortgage originators. In other words, the object of the statute, and the proper object of this rulemaking, is the AVMs themselves, so long as those AVMs have a downstream use in mortgage originators' or SMIs' determinations of collateral worth. Explicitly excluding AVMs used by certified or licensed appraisers is not consistent with FIRREA, and the Agencies should not include such an exemption in the final Rule.

Appraisals, when they are required or when they otherwise occur, are a critical step in the loan lifecycle, and are used by mortgage originators and others to determine the value of collateral. Use of appraisals by mortgage originators and others is accordingly a subject of significant interest, and subject to important legal requirements, including prohibitions on using discriminatory appraisals.[15]

It is clear that mortgage originators, SMIs, and others engaged in real estate-related transactions cannot rely on discriminatory appraisals.[16] If an appraiser is using or relying upon one or more AVMs when reaching an opinion of value for a home, then this poses questions about whether those AVMs are themselves biased or discriminatory (i.e., whether the AVMs used by the appraiser adhere to appropriate QC standards). If an appraiser uses an AVM that is biased or discriminatory when reaching their opinion of value, that in turn raises serious concerns about the appraisal and whether its downstream use is permissible.

Currently, there is little public information about how AVMs are used by certified or licensed appraisers when completing assignments and reaching opinions of value. The Agencies should work together, and with the Appraisal Subcommittee and other appropriate entities, to increase transparency around this issue. At the same time, the Agencies should ensure that mortgage originators, SMIs, and others are aware of their obligations not to rely on discriminatory appraisals, and further, that use of an AVM that has not been adequately tested or

[14] 12 U.S.C. § 3354(d).
[15] 42 U.S.C. § 3605.
[16] *Id.;* 15 U.S.C. § 1691.

quality-controlled with respect to antidiscrimination could pose risks to compliance with the Fair Housing Act, the Equal Credit Opportunity Act, and other antidiscrimination laws.

Additionally, an explicit exemption for AVMs used by appraisers could lead to inconsistent results, because, as explained above, an AVM Developer and an AVM User are not necessarily the same. It is entirely possible that the same AVM could both be used by appraisers and also used directly by mortgage originators or others in other contexts: an AVM Developer could license the same AVM to an appraiser or an appraisal management company, and to a mortgage originator, and to a SMI, and each could use the same AVM to determine the value of a dwelling used as collateral for a loan. If an explicit exemption were made for AVMs used by appraisers, then the AVM would simultaneously be exempt from coverage, but also covered, because it is also used by mortgage originators or SMIs. As noted above, the Agencies should focus the rule on the statutory requirement that AVMs "shall adhere to quality control standards,"[17] rather than attempting to draw distinctions between different AVM Users. The best approach is for the Agencies to draft the final Rule in accordance with FIRREA's language, and to focus the final Rule on core principles to which AVMs must adhere.

As noted above, in practice, robust QC might not always be best accomplished by mortgage originators, SMIs, or any other particular AVM User. The appropriate entity to complete robust QC will depend on resources, data availability, and technological capability. This does not mean that mortgage originators, SMIs, or other AVM Users should be exempt from the requirement to ensure that the AVMs they use have received appropriate QC—for example, through due diligence or through adherence to third-party compliance standards. Instead, it underscores the need for a regulation that is consistent with the statute and broad and flexible enough to allow for QC in the most efficient and advantageous fashion, coupled with guidance to ensure that all involved in the marketplace for AVMs can meet their obligations to ensure the AVMs they use meet statutory and regulatory requirements.

*Question 12. What would be the advantages and disadvantages of including AVMs that are used in reviews of completed determinations within the scope of the proposed rule? To what extent do institutions use AVMs in reviewing completed determinations?*

The Agencies should include AVMs that are used in reviews of completed determinations within the scope of the proposed rule. First, as detailed at the outset and in the response to Question 11, nothing in FIRREA suggests that this use should be excluded, and explicit exclusion runs the risk of inconsistent standards being applied to the same AVM.

Second, a review of a completed determination can itself be a determination of collateral worth or part of such a determination. If an AVM is used to review, for example, a traditional appraisal, the output of the AVM can inform whether a mortgage originator accepts an appraisal, and the value that the originator will place on the collateral. Crucially, if an AVM is itself discriminatory, it might not identify discriminatory appraisals. It is only through a robust and appropriate QC—including for nondiscrimination concerns—that mortgage originators, SMIs, consumers, and the Agencies themselves can be assured that the review of an appraisal using an AVM will detect problems with the appraisal, including potential mis-valuation due to bias or

[17] 12 U.S.C. § 3354(a).

discrimination. If an AVM fails to detect mis-valuation, this also has the potential to affect the determination of collateral worth, because an appraisal might be accepted rather than rejected.

A recent FHFA study illustrates the need to include AVMs that are used in reviews. Researchers used the Uniform Appraisal Dataset to determine how often appraisals produce a valuation that is less than the contract price in census tracts with majority white and minority populations. They found this occurs much more often in minority census tracts. As they explained—

> The more than double the percentage of low appraisals in high minority tracts as compared to white tracts is a signal of potential racial and ethnic bias in home valuations. Because we know that there is some anchoring effect for appraised values at or near the contract price, appraisal gap (percentage point difference between low appraisals between the tract categories) makes for a stronger inference of bias in both the raw statistic and when controlling for explanatory factors.[18]

Using AVMs to review appraisals is squarely covered within the letter and spirit of FIRREA and should be included—rather than excluded—in the Rule.

Finally, "completed determination" is not a defined term in the statute or the proposed rule. The meaning is ambiguous, and an exemption that makes reference to the term could be used by mortgage originators, SMIs, or others in attempts to evade or limit QC requirements. For example, it is not clear whether the review of a "completed determination" includes a lender's in-house review of an appraisal report prior to an underwriting decision being made, or would only include a review of an appraisal after a loan is approved or denied. The correct approach is for the Agencies not to exempt AVMs used to review completed determinations, because in any case (as noted above), such reviews do have the potential to themselves serve as a determination or part of a determination of collateral worth.

We are particularly concerned that Fannie Mae and Freddie Mac might interpret the proposed exception for reviews of completed determinations of value[19] as excluding their valuation systems from the scope of the rule. Fannie Mae describes its "Collateral Underwriter" as an "appraisal risk assessment tool."[20] Freddie Mac describes "Loan Collateral Advisor" as a "tool that analyzes appraisal reports and provides a view of valuation risk at no cost to our customers."[21]

Furthermore, both GSEs have appraisal waiver processes that are described as relying on lenders' valuations. Fannie Mae says its "Value Acceptance" process "uses data and technology

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[18] Anju Vajja, Fed. Hous. Fin. Agency, Have Racial and Ethnic Valuation Gaps in Home Purchase Narrowed? (Aug. 8, 2023), https://www.fhfa.gov//Media/Blog/Pages/Have-Racial-and-Ethnic-Valuation-Gaps-in-Home-Purchase-Narrowed.aspx.

[19] *See* 88 Fed. Reg. at 40674 (Proposed 12 C.F.R. 1222.27(b)(2)(ii)).

[20] Fannie Mae, Collateral Underwriter Fact Sheet (June 2021), https://singlefamily.fanniemae.com/media/document/pdf/collateral-underwriter-fact-sheet.

[21] Freddie Mac, Loan Collateral Advisor FAQ, General Loan Collateral Advisor Question #1, https://sf.freddiemac.com/faqs/loan-collateral-advisor-faq (last visited Aug. 20, 2023).

to accept the lender-provided value, allowing lenders to deliver loans for certain eligible transactions to Fannie Mae without an appraisal."[22] This system appears to rely heavily on prior appraisals. "For value acceptance to be considered, generally a prior appraisal must be found for the subject property in Fannie Mae's Collateral Underwriter (CU) data. . . . When a property address match is found, [Desktop Underwriter] will use the information from the prior appraisal to determine if the loan casefile is eligible for value acceptance."[23]

Likewise, Freddie Mac's "Automated Collateral Evaluation" process "is a Loan Product Advisor capability that leverages proprietary models, historical data, and public records to allow lenders to underwrite certain loans without an appraisal."[24] It too reviews the lender's valuation of a property. "The lender submits the loan to Loan Product Advisor, specifying the estimate of value . . . or the sales price . . . for the mortgaged premises. The ACE models determine the acceptability of the value or sales price as the basis for the lender underwriting the loan and use available data to assess the condition and marketability risks associated with the property."[25]

The limited public information available about Collateral Underwriter, Loan Collateral Advisor, Valuation Acceptance, and Automated Collateral Evaluation strongly suggests that they would fall within the scope of the rule were it not for the proposed exemption for reviews of completed determinations. Fannie Mae's reliance on prior appraisals, alone, illustrates the importance of including appraisals review software within the scope of the rule. But even if these GSE systems arguably would not fall within the definition of AVM in the proposed rule, they illustrate the importance of broadly interpreting the statutory definition of AVM. These systems will affect the sale price and available loan amount for most homes in the United States. They are integral to the valuation process used by most lenders. Therefore, the Agencies should modify the proposed rule to clearly cover these systems.

*Question 13. What, if any, additional clarifications would be helpful for situations where an AVM would or would not be covered by the proposed rule?*

As discussed above, FIRREA is broad in scope. Regulations promulgated under FIRREA should not remove from coverage situations that the statute itself includes in its scope. The regulation should provide clarity as to entities' QC obligations, but should not narrow the statute's reach. For this reason, we recommend that the Agencies **remove the exclusions for the following:**

(i) Monitoring of the quality or performance of mortgages or mortgage-backed securities;
(ii) Reviews of the quality of already completed determinations of the value of collateral; or
(iii) The development of an appraisal by a certified or licensed appraiser.[26]

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[22] Fannie Mae, Value Acceptance (Appraisal Waivers) Frequently Asked Questions, at 1 (Mar. 2023), https://singlefamily.fanniemae.com/media/9456/display.
[23] *Id.* at 3 (Mar. 2023) (FAQ #6).
[24] Freddie Mac, Automated Collateral Evaluation (ACE) FAQ, FAQ #1, https://sf.freddiemac.com/faqs/automated-collateral-evaluation-ace-faq (last visited Aug. 20, 2023).
[25] *Id.* FAQ #2.
[26] *See* 88 Fed. Reg. at 40673 (Proposed 12 C.F.R. 1026.42(a)(i)(1)).

### *D. Definitions – Automated Valuation Model*

*Question 14. What, if any, other definitions of AVM would better reflect current practice with respect to the use of AVMs to determine the value of residential real estate securing a mortgage?*

We recommend that the rule remain focused on the statutory language itself, rather than specifically aligning with "current practice." The rule should be drafted with potential future uses of AVMs in mind, and not limited in such a way that may make the rule less relevant or effective. Additionally, the definition of AVM in the rule should not introduce exclusions that are not contained in the statute itself.

### *E. Definitions – Dwelling*

*Question 20. What, if any, alternate definitions would be more suitable than the proposed definition of dwelling and the approach to what is a principal dwelling?*

We recommend that regulators consider adopting the broader definition of dwelling from the Fair Housing Act, which defines a dwelling as "any building, structure, or portion thereof which is occupied as, or designed or intended for occupancy as, a residence by one or more families, and any vacant land which is offered for sale or lease for the construction or location thereon of any such building, structure, or portion thereof."[27]

*Question 21. Should the rule define the meaning of "consumer" or is that term commonly understood?*

*Question 22. Because the CFPB proposes to apply its existing Regulation Z definitions of "dwelling" and "consumer," the CFPB invites comment on whether, for purposes of the AVM requirements, it should amend its definitions and associated commentary to address particular circumstances, consistent with the objectives of section 1125. Should the rule exclude from coverage AVMs used only in making determinations of the worth of particular residential structures or AVMs used only in extending credit to a trust where a non-obligor individual uses the residence as their principal dwelling? Should the rule include language to address special circumstances, such as dwellings purchased by active-duty military personnel for their future permanent residence while assigned temporarily to a different duty station? Please provide any supporting explanation and data.*

This response addresses Questions 21 and 22. While the term "consumer" may be commonly understood, we nonetheless recommend including a definition in the rule to ensure the definition remains appropriately broad. In particular, we support adopting the definition in the Proposed 12 C.F.R. 1026.2(a)(11). *See also* the answer to Question 20 above.

Definitions should not be modified to exclude particular uses of AVMs. As discussed above, FIRREA does not limit its requirements to the use of AVMs only in particular circumstances. Determination of the collateral worth of a consumer's principal dwelling at *any*

[27] 42 U.S.C. § 3602(b).

point in the lifecycle of a loan should be covered, because all such determinations can be as impactful as direct use during underwriting. The restrictions noted in Question 22 should not be adopted. AVMs should be broadly covered by the rule.

### *F. Definitions – Mortgage*

*Question 24. What are the benefits and disadvantages of including purchase money security interests arising under installment land contracts in the definition of mortgage?*

We strongly support the proposed rule's use of a broad definition of "mortgage." Such a broad definition is necessary to protect consumers, particularly consumers of color. A narrow definition would have a disparate impact on protected classes by excluding broad swaths of the market from the quality control standards.

More specifically, we applaud the proposed rule's use of a definition that tracks Regulation Z and would include "purchase money security interest arising under an installment sales contract, or equivalent consensual security interest" on a consumer's dwelling.[28] As the proposed rule recognizes, land contracts (also known as installment sales contracts) are credit because they create a debt (the purchase price) and defer its payment.[29] Land contract creditors often fail to comply with the Truth in Lending Act ("TILA"), lender licensing requirements, and other applicable laws. This common failure, whether based in lack of understanding or willful disregard, must be addressed by regulators. There is no principled reason to exclude land contracts from the scope of the final Rule. Rather, it is important that consumers using this kind of alternative home purchase method have as many of the same protections that apply to traditional mortgage loans as possible. Otherwise, land contract sellers will continue to exploit a perceived vacuum of regulation in order to foist abuses on consumers who are perceived to have few other options.[30]

There would be a number of important benefits of including installment land contracts in the definition of mortgage in the regulation. First, this would create consistency between a variety of federal laws that apply to home lending transactions. TILA,[31] the Real Estate Settlement Procedures Act,[32] and the S.A.F.E. Act[33] all apply to installment land contracts to the same extent as to traditional mortgage loans (depending on whether the originating lender makes a certain volume of transactions).

Second, including land contracts in the AVM rule would ensure appropriate protections for these transactions that disproportionately impact homebuyers of color. Land contracts are disproportionately used by Black homebuyers, because they are unfairly denied traditional

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[28] *See* 88 Fed. Reg. at 40645, 40673 (Proposed 12 C.F.R. 1026.42(a)(i)(2)(v)).
[29] *See* 12 C.F.R. 1026.2(a)(14) (definition of "credit"); *see also* 15 U.S.C. § 1602(x) (including "purchase money security interest under an installment sales contract" in the definition of "residential mortgage transaction").
[30] Testimony of Sarah B. Mancini, *Exploiting the American Dream: How Abusive Land Contracts Prey on Vulnerable Homebuyers: Hearing Before the Subcomm. on Housing, Tansp., & Cmty. Dev. of the S. Comm. on Banking,* 12-14 (July 11, 2023), https://www.banking.senate.gov/imo/media/doc/mancini_testimony_7-11-23.pdf.
[31] *See* 12 C.F.R. 1026.2(a)(14) (definition of "credit"); *see also* 15 U.S.C. § 1602(x).
[32] 12 U.S.C. § 2602(1); 12 C.F.R. 1024.2(b).
[33] 12 C.F.R. 1008.23 (defining "residential mortgage loan" to include any "other equivalent consensual security interest on a dwelling," consistent with the Truth in Lending Act).

mortgage credit at a higher rate.[34] Such alternative financing has its roots in the race-based redlining policies that were promoted by New Deal programs in the 1930s.[35] Adopting a broad definition would acknowledge that history as well as the current reality that consumers of color are disproportionately likely to rely on mortgage alternatives. Including land contracts in regulations that apply to mortgage lending can help to remedy the dual credit market.

Third, consumers in land contract transactions are more likely to be impacted by AVMs than consumers in traditional mortgage loan transactions. Because land contracts are typically made for smaller loan amounts, and used to purchase less expensive homes, AVMs are more likely to be utilized in these transactions.[36] Consumers and lenders in these transactions would both benefit from the greater accuracy, avoidance of conflicts of interest, nondiscrimination, and protections against data manipulation that the rule would require.

### *G. Quality Control Standards – Proposed Requirements for the First Four Quality Control Factors*

*Question 30. Is additional guidance needed on how to implement the quality control standards to protect the safety and soundness of financial institutions and protect consumers beyond the existing supervisory guidance described in part I.A of this SUPPLEMENTARY INFORMATION? Should such additional guidance explain how a regulated entity would implement quality control for an AVM used or provided by a third party?*

Yes, it is critically important that the Agencies issue additional guidance regarding the implementation of the quality control standards. As discussed below, regulators should issue guidance on how to evaluate whether AVMs comply with antidiscrimination laws and regulations and meet QC requirements with respect to nondiscrimination. The Interagency Appraisal and Evaluation Guidelines and the Model Risk Management Guidance do not provide the needed guidance on antidiscrimination laws, including how to evaluate AVMs for disparate impact and how to evaluate potential less discriminatory alternatives. Among other things, the Agencies should review the responses to their 2021 Request for Information regarding Financial Institutions' Use of Artificial Intelligence, including Machine Learning.[37]

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[34] *See* Testimony of Nikitra Bailey, *Promoting Economic Prosperity and Fair Growth through Access to Affordable and Stable Housing: Hearing Before the H. Select Comm. on Econ. Disparities and Fairness in Growth*, at 14 (March 1, 2022), https://docs.house.gov/meetings/EF/EF00/20220301/114459/HHRG-117-EF00-Wstate-BaileyN-20220301.pdf; Jeremiah Battle et al., *Toxic Transactions: How Land Installment Contracts Once Again Threaten Communities of Color*, National Consumer Law Center, 3-7 (July 2016), https://www.nclc.org/wp-content/uploads/2022/09/report-land-contracts.pdf.

[35] Battle et al., *supra* n. 34, at 3-4.

[36] *See* Pew Charitable Trusts, Issue Brief, "Small Mortgages are Too Hard to Get: A shortage of loans for homes priced below $150,000 bars many American families from homeownership" (June 22, 2023), https://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2023/06/small-mortgages-are-too-hard-to-get.

[37] Press Release, National Fair Housing Alliance, *Leading Civil Rights, Consumers, and Technology Advocates Urge the Federal Financial Regulators to Promote Equitable Artificial Intelligence in Financial Services* (July 1, 2021), https://nationalfairhousing.org/leading-civil-rights-consumer-and-technology-advocates-urge-the-federal-financial-regulators-to-promote-equitable-artificial-intelligence-in-financial-services/.

### *H. Quality Control Standards – Proposed Requirements for the First Four Quality Control Factors; Specifying a Nondiscrimination Quality Control Factor*

*Question 31. In what ways, if any, would a more prescriptive approach to quality control for AVMs be a more effective means of carrying out the purposes of section 1125 relative to allowing institutions to develop tailored policies, practices, procedures, and control systems designed to satisfy the requirement for quality control standards? If so, what would be the key elements of such an alternative approach?*

*Question 34. What are the advantages and disadvantages of a flexible versus prescriptive approach to the nondiscrimination quality control factor?*

This response addresses Questions 31 and 34. Providing guidance with a flexible approach to quality control for AVMs is likely to be more effective than a specific rules-based approach. The techniques used to train models, including AVMs, that rely on artificial intelligence and machine learning, are developing rapidly. It would be imprudent to take an overly specific approach that may be incompatible with—or even deter the adoption of—advancements in AVM techniques that are likely to be forthcoming. A flexible and principles-based approach, on the other hand, will remain applicable regardless of changes in AVM methodologies, QC best practices, and data availability.

This is especially true for the nondiscrimination quality control factor. Not only are AVM methodologies changing, but so are techniques for mitigating disparate impact, debiasing models, and searching for less discriminatory alternatives.[38] A more flexible, principles-based approach will encourage and enable entities to adopt the latest, most effective techniques for mitigating discrimination risk.

That said, while NFHA supports a flexible and principles-based approach, the proposed rule is too open-ended. The Agencies should include some additional direction in the rule, which is currently too sparse and nonspecific, especially with respect to nondiscrimination. In particular, we recommend the following:

First, the rule should articulate baseline standards for nondiscrimination from applicable statutes and regulations. In particular, the rule should explicitly reference the Equal Credit Opportunity Act and Fair Housing Act prohibitions on disparate treatment and disparate impact.[39]

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[38] *See, e.g.,* Nicholas Schmidt and Bryce Stephens, "An Introduction to Artificial Intelligence and Solutions to the Problems of Algorithmic Discrimination" (2019), https://arxiv.org/ftp/arxiv/papers/1911/1911.05755.pdf; Brian Hu Zhang, et al., "Mitigating Unwanted Biases with Adversarial Learning" (2018), https://arxiv.org/abs/1801.07593; Linna Zhu, et al., "Revisiting Automated Valuation Model Disparities in Majority-Black Neighborhoods," Urban Inst. (May 2022), https://www.urban.org/sites/default/files/2022-05/Revisiting%20Automated%20Valuation%20Model%20Disparities%20in%20Majority-Black%20Neighborhoods.pdf.

[39] 42 U.S.C. § 3601 *et seq*.; 24 C.F.R. 100.500; *Tex. Dep't of Hous. & Cmty. Affairs v. Inclusive Communities Project*, 576 U.S. 519, 539 (2015); 12 C.F.R. 1002.6(a); Official Staff Commentary, 12 C.F.R. pt. 1002, Supp. I, 6(a)-2; HUD, DOJ, OCC, OTS, Fed. Rsrv. Bd., FDIC, FHFB, FTC, NCUA, Policy Statement on Discrimination in Lending, 59 Fed. Reg. 18266 (Apr. 15, 1994).

Second, while we do not recommend that specific methodological techniques be required, we encourage regulators to provide examples of the kinds of compliance activities that are intended. As we did in our comment letter responding to the SBREFA Outline, we have provided an Appendix with considerations for fair AVMs.

Third, the rule should make clear that compliance with applicable antidiscrimination laws calls for more than simply avoiding the use of prohibited bases as predictive variables in an AVM. A proper compliance program involves other forms of antidiscrimination testing, such as disparate impact and bias testing. Disparate impact should explicitly include assessments of outcome disparities. Regulators should also explicitly state in the rule their expectations that these kinds of testing be performed.

## *I. Quality Control Standards – Specifying a Nondiscrimination Quality Control Factor*

*Question 32. What are the advantages and disadvantages of specifying a fifth quality control factor on nondiscrimination? What, if any, alternative approaches should the agencies consider?*

*Question 33. To what extent is compliance with nondiscrimination laws with respect to covered AVMs already encompassed by the statutory quality control factors requiring a high level of confidence in the estimates produced by covered AVMs, protection against the manipulation of data, and random sampling and reviews? Should the agencies incorporate nondiscrimination into those factors rather than adopt the fifth factor as proposed? Would specifying a nondiscrimination quality control factor in the rule be useful in preventing market-distorting discrimination in the use of AVMs?*

This response addresses Questions 32 and 33. The inclusion of a fifth quality control factor is critical if the proposed rule is to successfully engage with all appropriate aspects of QC for AVMs. Nondiscrimination should be understood as a dimension of model performance—alongside accuracy, stability, and other criteria—and as such, should be appropriately identified as a central, required aspect of quality control. Put another way, discriminatory AVMs result in mis-valuations and market distortions, which are a threat to safety and soundness. The two concepts are inextricably linked.

This is not to say that the first four factors are irrelevant to nondiscrimination. Incorporating nondiscrimination into the first four factors or having a fifth nondiscrimination factor should not be an either/or proposition. The first four factors have a role to play in nondiscrimination and should be interpreted accordingly, and as we stated in the May 13 Letter, fair lending risk should not be separated from safety and soundness risk. These factors are simply not sufficient on their own to ensure appropriate consideration of nondiscrimination. This is why specifying a fifth quality control factor is especially important.

First, an entity could plausibly have multiple quality control measures in place relating to each of the first four factors, while still failing to engage with the implications of those factors for nondiscrimination. For example, an entity could have processes for "[e]nsur[ing] a high level

of confidence in the estimates produced"[40] as a general matter, but if none of those processes consider whether an AVM performs well for particular protected class communities, these processes could miss issues that would be detected if there were an explicit factor for nondiscrimination. The current Model Risk Management Guidance is illustrative of this potential gap: although nondiscrimination could be read into that guidance, regulators have not done so.[41] In other words, the rule should make clear that the "accuracy" of a model should be evaluated not simply overall, but also with reference to protected class. This is especially important when mis-valuations are prevalent in minority areas; if an AVM is tested only at the overall level, its performance in minority communities could be swamped by the larger effects of the full dataset, effectively masking inaccuracies or biased outcomes for minority consumers. Moreover, "accuracy" might not be a full and appropriate metric when dealing with issues of nondiscrimination, because the gauge for whether an AVM is "accurate" (for example, a comparison to a traditional appraisal) could itself be biased or discriminatory. Special care must be taken in this area, given the prevalence of mis-valuation, bias, and discrimination in appraisals.

Similarly, "random sample testing and reviews" are potentially useful tools for monitoring AVMs from an antidiscrimination perspective, but only if the testing and reviews are performed with an eye to such issues. Randomization that repeats errors in underlying data (for example, mis-valuation in traditional appraisals), or data that are under-representative with respect to protected classes, can amplify bias and inaccuracy. Unless QC is undertaken in a manner that avoids these issues, an AVM could lead to discriminatory outcomes despite meeting the four other QC factors. Likewise, measures designed to guard against manipulation of data could include manipulation done with discriminatory intent, but would not necessarily include such protections in practice, absent a clear statement in the rule.

Additionally, there are key nondiscrimination concepts that do not readily fit within the first four factors. First, none of the four factors makes explicit that AVMs must avoid the incorporation of overt prohibited bases, proxies for prohibited bases, or other forms of disparate treatment. Second, none of the first four factors places appropriate emphasis on disparate impact and potential less discriminatory alternatives. As to disparate impact and less discriminatory alternatives, the assessment of valuation outcome disparities is necessary, as is the identification and pursuit of less discriminatory alternatives. These activities are not adequately captured by the four factors the Agencies propose. Ensuring compliance with nondiscrimination laws, therefore, requires an additional factor. A fifth factor can and should fill this gap.

Finally, the rule should make clear that ongoing QC is necessary as to all quality control factors, including nondiscrimination. As conditions on the ground change, and as technology develops, the accuracy, adequacy, and soundness of AVMs is likely to change as well. This could be due to the data used to train AVMs becoming obsolete, or to methodological or modeling advances that alter the state of the art for AMVs. In other words, QC upon AVM development or initial AVM adoption is necessary, but it is insufficient to ensure the ongoing accuracy and reliability of AVMs, including with respect to nondiscrimination.

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[40] 12 U.S.C. § 3354(a)(1).

[41] Bd. of Governors of the Fed. Reserve Sys., Supervisory Letter SR 11-7: Guidance on Model Risk Management (Apr. 4, 2011), https://www.federalreserve.gov/supervisionreg/srletters/sr1107.htm.

*Question 35. Are lenders' existing compliance management systems and fair lending monitoring programs able to assess whether a covered AVM, including the AVM's underlying artificial intelligence or machine learning, applies different standards or produces disparate valuations on a prohibited basis? If not, what additional guidance or resources would be useful or necessary for compliance?*

Mortgage originators' and SMIs' existing capabilities for assessing whether AVMs apply different standards or produce disparate values on a prohibited basis likely vary significantly from entity to entity. Techniques for measuring whether automated models—even models based on artificial intelligence or machine learning—result in disparities in outcomes or biases in outcome predictions are relatively well-established.[42] At a minimum, entities can require their vendors and SMIs to certify that the AVM has been assessed using these techniques and complies with applicable federal and state law, including non-discrimination laws. The adequacy of an entity's CMS, however, is ultimately for the regulators to determine.

We recommend that regulators take steps to improve the availability of data to covered entities, such as information form the Uniform Appraisal Dataset. Doing so would help overcome the data limitations that might otherwise prevent entities from effectively performing certain QC activities.

Thank you for considering our views.

Sincerely,

National Fair Housing Alliance

National Consumer Law Center (on behalf of our low-income clients)

[42] *See* Relman Colfax PLLC, *Second Report of the Independent Monitor, Fair Lending Monitorship of Upstart Network's Lending Model*, 13 (Nov. 10. 2021), https://www.relmanlaw.com/media/news/1182_PUBLIC%20Upstart%20Monitorship_2nd%20Report_FINAL.pdf; Navdeep Gill, Patrick Hall, Kim Montgomery, and Nicholas Schmidt, *A Responsible Machine Learning Workflow with Focus on Interpretable Models, Post-hoc Explanation, and Discrimination Testing*, 5-6 (2020), https://pdfs.semanticscholar.org/4a74/37803481e6599c1755fb8a8a8f823eaf28e3.pdf?_gl=1*1e3zjlu*_ga*ODI0Nzk4ODE1LjE2OTIxMTg3OTI.*_ga_H7P4ZT52H5*MTY5MjExODc5MS4xLjAuMTY5MjExODc5NS41Ni4wLjA; Charles River Associates, *What is Disparate Impact Testing?*, CRA Insights (Jan. 2023), https://media.crai.com/wp-content/uploads/2023/01/30101848/FE-Insights-What-is-Disparate-Impact-Testing.pdf.

## APPENDIX - Ensuring Adherence to Appropriate Quality Control Standards

Policies, practices, procedures, and control systems to ensure that automated valuation models adhere to appropriate quality control standards should account for the following considerations:

1. **"Ensure a high level of confidence in the estimates produced"**
    a. Does the AVM provide for a fair, transparent, reliable, stable, explainable, repeatable process?
    b. Is there a 95% confidence band provided for estimates?
    c. Is there transparency about the method and assumptions made while estimating the confidence band?
    d. Are the features that are used to develop/train the model checked for equivalence to features used in the production version of the model?
    e. Is there a way to protect the model from confidentiality and integrity attacks?
    f. Are the estimates produced by the model representative of the population of housing stock in the jurisdiction where the model is being developed and deployed? Are there gaps/accuracy issues in estimates for sub-populations and are they ameliorated?
    g. Does the model ensure the same missing data imputation method being used at the training stage is applied at the serving stage along with distribution of each feature and distribution of model predictions in training and serving stages?
    h. Does the process ensure input data is frequently and appropriately updated?

2. **"Protect against the manipulation of data"**
    a. Is there a means to protect the records used to train the model?
    b. Are there defenses that assure fairness, accountability, and fair lending?
    c. Is there a means to protect the model from confidentiality and integrity attacks and cybersecurity risks?
    d. Is there defense at training and runtime so there is robustness of distribution drift? This will help guarantee the model performance is retrained in the likely event that input distributions in training and production environments differ.

3. **"Require random sample testing and reviews"**
    a. Is the random sample testing representative of the data used to train the AVM?
    b. Is there a data imbalance report that contains the distribution of each model?
    c. Does the data imbalance report and data missingness report provide evidence to evaluate and decide if the selected features are sufficiently representative or inclusive?

4. **"Comply with applicable nondiscrimination laws"**
    a. Does the process ensure that the data being used to train the model is appropriate, representative, fair, and accurate?
    b. Are appropriate metrics used to measure model performance and fairness (including potential disparate impact) of the algorithmic solution? If there is a cut-off score and pass rate at the decision stage of the algorithmic system, what is it and how does it affect model fairness (including disparate impact)?

c. Is there a plan to monitor the quality of the inputs and model predictions post-deployment relative to the inputs used to train the model and predictions used to validate the model? Input monitoring should gather information required to measure drifts in model features and output monitoring should provide information sufficient to quantify drifts in model output.
d. Does the monitoring plan include metrics that could be used to evaluate robustness of the AVM system? Is there monitoring of potential feedback loops and delayed impact of metrics used to measure model performance and fairness?
e. Is there diversity in the appraiser, lender, and AVM developer pool?
f. Have the missingness patterns of the features used to develop the trained model been compared with a similar report on the features used in the production version of the model to ensure there is no degradation of, lag, or drift in model performance, especially for consumers of color?
g. Is there a comparison of the fairness metrics across protected class categories before and after the model is deployed in production using appropriate distance metrics? The goal of these comparisons is to inform decisions about whether the AVM model in production should be retrained, patched, or retired.