



# Federal Housing Finance Agency

Constitution Center  
400 7<sup>th</sup> Street, S.W.  
Washington, D.C. 20219  
Telephone: (202) 649-3800  
Facsimile: (202) 649-1071  
[www.fhfa.gov](http://www.fhfa.gov)

February 10, 2022

Mr. Hugh Frater  
Chief Executive Officer  
Fannie Mae

Mr. Michael DeVito  
Chief Executive Officer  
Freddie Mac

Mr. Tony Renzi  
Chief Executive Officer  
Common Securitization Solutions

Subject: Diversity and Inclusion Considerations in Artificial Intelligence/Machine Learning

The Federal Housing Finance Agency (FHFA or Agency) is issuing Advisory Bulletin AB 2022-02 on Artificial Intelligence/Machine Learning (AI/ML) Risk Management. In conjunction with the issuance of AB 2022-02, the Office of Minority and Women Inclusion (OMWI) is publishing this supervisory letter to provide additional guidance to Fannie Mae and Freddie Mac (the Enterprises),<sup>1</sup> and Common Securitization Solutions (CSS) as an affiliate of the Enterprises, and to establish the Agency's expectations for the consideration of diversity and inclusion (D&I) in the Enterprises' use of AI/ML. The Agency expects that the Enterprises' use of AI/ML be designed to promote D&I and address explicit and implicit biases to ensure equity in AI/ML recommendations. Further, the Agency expects the Enterprises to embed D&I considerations throughout all uses of AI/ML, and to incorporate appropriate training throughout the AI/ML lifecycle to educate the Enterprises' board, management, and staff on the application of these principles.

We recognize the Enterprises' efforts to manage bias under the model risk management process, as well as the incorporation of the concepts of fairness and equity into their lending activities. However, D&I is distinct from fairness and equity and requires additional deliberation because it goes beyond the equity considerations of the impact of the use of AI/ML and requires an assessment of the tools, mechanisms, and applications that may be used in the development of the systems and processes that incorporate AI/ML. Accordingly, this letter clarifies the Agency's expectations and provides additional guidance on embedding D&I considerations in the Enterprises' development and use of AI/ML systems.

Fairness and equity concerns in the use of AI/ML may arise due to data embedded with historical, social, economic, and cultural biases as well as from decisions made during the development of AI/ML systems. Poorly designed AI/ML models may replicate or even amplify

---

<sup>1</sup> Common Securitization Solutions, LLC (CSS) is an "affiliate" of both Fannie Mae and Freddie Mac, as defined in the Federal Housing Enterprises Financial Safety and Soundness Act of 1992, as amended. 12 USC 4502(1). All references to the Enterprises throughout this letter also include CSS.

pre-existing biases and produce discriminatory or unfair outcomes that benefit or harm some individuals, groups, or communities. To address fairness and equity concerns in the outcomes of the use of AI/ML systems, the Enterprises should, at a minimum, consider the following aspects in the development of AI/ML systems:

- *Fairness*, to increase the likelihood that AI/ML outcomes do not result in unjust or inequitable impacts across different demographics. Fairness should be evaluated in consideration of the conditions and objectives of the AI/ML systems and projects to avoid historical, social, economic, or cultural biases or inequitable results.
- *Accountability* of the individuals who are involved in the development, deployment, and use of AI/ML systems so that they consider the systems' impacts and mitigate any potential harms. These individuals should identify, report, explain, and justify AI/ML algorithms and decision-making processes.
- *Transparency* of AI/ML systems, to drive success of appropriate human oversight and allow for objective assessments and insights into the inner workings of these models. AI/ML recommendations are designed to contribute to human understanding and decisions, so increased transparency is essential to identify and minimize the risk of bias or error.

In addition to evaluating fairness and equity concerns throughout the process, the Enterprises should also look for ways to embed D&I in their use of AI/ML. FHFA's Minority and Women Inclusion Rule at 12 CFR Part 1223 requires the Enterprises "to promote diversity and ensure...the inclusion and utilization of minorities, women, individuals with disabilities, and minority-, women-, and disabled-owned businesses at all levels, in management and employment, in all business and activities, and in all contracts for services of any kind."<sup>2</sup>

OMWI distinguishes fairness and equity from D&I by associating fairness and equity with the *results and impacts* on underserved communities of the AI/ML systems and any processes utilized by the Enterprises. Alternatively, D&I assessments account for how underserved communities, specifically Minority-, Women-, and Disabled-Owned Businesses (MWDObS), might be *included* throughout the use of AI/ML tools or applications at the Enterprises. For example, if the Enterprises recognize an opportunity for contracting to use a particular tool, application, or system in the use of AI/ML, they should consider whether outreach or education might expand the opportunity for MWDObS vendor participation.

OMWI recognizes that AI/ML is a developing field and that all opportunity areas where D&I could be advanced may not be readily apparent yet, particularly in areas where AI/ML use is in early stages of development. However, as with any new and evolving program or initiative, we encourage the Enterprises to develop an assessment framework so that there is a mechanism in

---

<sup>2</sup> 12 C.F.R. §1223.21(b)

place to evaluate D&I opportunities in all Enterprise use of AI/ML. Since the extent of D&I opportunity is unknown at this time, there may not be obvious areas in which to embed D&I immediately. The assessment framework will help structure a review process so that D&I can always be considered as the Enterprises expand their use of AI/ML.

We hope this letter provides additional clarification as you work to implement the guidance of AB 2022-02. If you have questions about D&I opportunities in the AI/ML space, please contact Felicia Bland, OMWI Supervisory Examination Specialist at [Felicia.Bland@fhfa.gov](mailto:Felicia.Bland@fhfa.gov), or Soquel Harding, OMWI Principal Policy Analyst at [Soquel.Harding@fhfa.gov](mailto:Soquel.Harding@fhfa.gov).

Sincerely,

---

Sharron P.A. Levine  
Director  
Office of Minority and Women Inclusion