

Joint Enterprise Credit Score Solicitation

February 18, 2020

Enterprise Credit Score Solicitation

In accordance with the requirements of the Validation and Approval of Credit Score Models Rule (12 C.F.R. Part 1254), Fannie Mae and Freddie Mac (collectively, the “Enterprises”) have published the following Credit Score Solicitation to request applications from prospective credit score model developers (“Applicant”). The Enterprises will accept applications in response to this Credit Score Solicitation beginning on May 18, 2020. In order to be considered, each Applicant must submit a complete application for each credit score model meeting the requirements outlined in the Credit Score Solicitation no later than September 15, 2020. The Applicant must pay all fees as invoiced, and the Enterprise must receive all data required for review of a credit score model.

Contents

I.	Application Requirements	4
II.	Application Fee(s)	5
a.	Upfront Application Fee.....	5
b.	Assessment of Remaining Fees.....	5
c.	Additional Cost for Multiple Models.....	5
d.	New Credit Reporting Agency (CRA) Fee	6
III.	Instructions for Submitting the Application.....	6
a.	Timeline and Notice to Applicants.....	6
IV.	Information that Must be Submitted by Applicant	7
a.	Specifics about Applicant.....	7
b.	Specifics about the Model and Credit Score.....	7
c.	Fair Lending Certification and Compliance with Law Certification.....	9
d.	Demonstrated Use of the Model	9
e.	Data Requirements for Assessments.....	10
V.	Data Acquisition Process.....	11
VI.	Process and Criteria for Conducting a Credit Score Assessment.....	12
a.	Accuracy Standard	12
b.	Reliability Standard	12
c.	Integrity Standard	12
VII.	Process and Criteria for Conducting Enterprise Business Assessment.....	13
a.	Accuracy, Reliability Standard.....	14
b.	Fair Lending Assessment Standard	14
c.	Impact on Enterprise Operations and Risk Management, and Impact on Industry Standard.....	15
d.	Competitive Effects.....	16

- e. Third-Party Vendor Reviews 16
- Disclaimer..... 16
- Appendix A: Fannie Mae Addendum 18
- Instructions for Submitting the Application 18
 - a. ProcureOne Registration..... 18
 - b. Application Fee 18
 - c. Qualifications of Applicant..... 19
- Appendix B: Freddie Mac Addendum 22
 - a. Applicant and Model Information..... 22
 - b. Application Fees 22
 - c. Solicitation Response Submission..... 22
- Appendix C: Fair Lending Certification..... 24
- Appendix D: Compliance with Law Certification..... 25

I. Application Requirements

The Enterprises will consider all relevant factors during the credit score model (“Model”) validation and approval process. These factors include assessing a Model’s integrity, reliability, and accuracy; its historical record of measuring and predicting credit behavior (such as default rates); and consistency of the Model with the safe and sound operation of an Enterprise. In support of these general principles, the numerical value or categorization (“Credit Score”) generated by a Model must meet all the following criteria. The Credit Score must:

- accurately reflect a borrower’s propensity to repay a mortgage loan in accordance with its terms;
- be generated by a Model that uses credit history information and data that is available in the archive of at least three credit reporting agencies that meet the requirements of the Fair Credit Reporting Act (each a “CRA” and together the “CRAs”) and that is sufficient to meet the Credit Score Assessment requirements of each Enterprise. The Model must also be in production with at least three CRAs by the time an Enterprise notifies the Applicant that the Enterprise is beginning the Enterprise Business Assessment; and
- be compliant with all applicable laws and regulations.

By submitting an application in connection with this Credit Score Solicitation, the Applicant acknowledges and agrees to all terms and conditions set forth in this Solicitation, including but not limited to the following:

- the Enterprises will provide each Applicant, via a CRA, identifiers for the specific credit records and time periods (the “Reference Data”) for which a CRA shall generate a Credit Score in accordance with Applicant’s designated scoring methodology. Applicant will, via a CRA, make available all Credit Scores for each credit record in the Reference Data for purposes of this Solicitation.
- Applicant will seek approval from the Enterprises of any CRA supporting the Credit Score generation process that has not already been approved by the Enterprises. CRAs must be approved counterparties of the Enterprises and approved to receive and store the Personally Identifiable Information (PII) contained in the Reference Data provided by the Enterprises for analysis.
- Applicant is responsible for all business arrangements and costs associated with acquiring and delivering Credit Scores to each Enterprise. The Credit Scores will be used for two assessments (Credit Score Assessment and Enterprise Business Assessment).
- the Enterprises may use the Credit Scores in such manner as they shall deem appropriate in order to evaluate the Credit Scores and fulfill the purposes of this Credit Score Solicitation. Without limiting the foregoing, Applicant specifically agrees that the Enterprises may (and will ensure that no CRA limits the Enterprises’ right to):
 - obtain multiple Credit Scores from multiple Applicants derived from the same Reference Data;
 - obtain the credit report data underlying any Credit Score submitted by Applicant (directly or via a CRA);
 - use Credit Scores to develop or calibrate proprietary models for assessment purposes;

- use a Credit Score for whatever time period the Federal Housing Finance Agency (“FHFA”) and the Enterprises deem necessary for the purposes of this Credit Score Solicitation; and
- compare the Credit Score produced by different Models for assessment and evaluation under this Credit Score Solicitation.
- Applicant agrees that it will not use the names of the Enterprises in its promotional materials or make any representations or disclosures about the outcome of the testing and evaluation process, without the express prior written consent of the Enterprises.

The Enterprises will not use any data submitted by or on behalf of Applicant with its application to reverse engineer any Model or for any purpose other than in connection with the review of the Model in connection with this Credit Score Solicitation and the implementation or assessment of any Model selected as a result of this Credit Score Solicitation.

The Applicant will be notified once an Enterprise has deemed its application to be complete.

II. Application Fee(s)

Each Applicant is required to pay a separate “Application Fee” to each Enterprise.

The Application Fee is intended to reimburse the Enterprises for the validation and approval process. The Application Fee is the sum of (a) the Upfront Application Fee, (b) an Assessment of Remaining Fees, (c) a Multiple Model Fee (if applicable), and (d) a New CRA Fee (if applicable). The Application Fee amount will be collected in two parts: 1. an Upfront Application Fee of \$200,000 to commence the application review process and 2. all other fees, as applicable. The applicable fees associated with the validation and approval process can be found in the fee schedule in the addendum for each Enterprise. All fees must be delivered in full prior to an Enterprise beginning its assessment of the Model(s).

a. Upfront Application Fee

Each applicant is required to pay a separate “Upfront Application Fee” to each Enterprise. The Upfront Application Fee is intended to cover a portion of the total cost to reimburse the Enterprise for the work associated with the review of each applicant’s qualifications, the acquisition of historical consumer credit data, and other expenses associated with the assessment of each applicant’s Model(s).

b. Assessment of Remaining Fees

The Assessment of Remaining Fees amount reimburses each Enterprise for the remaining cost for the work associated with the review of each applicant’s qualifications, the acquisition of historical consumer credit data, and other expenses associated with the assessment of each applicant’s Model(s). This amount is determined based on a number of factors, including the number of applicants (which impacts the per-applicant cost of the acquisition of historical consumer credit data).

The Applicant is responsible for any costs associated with providing the Credit Score for each borrower in the Reference Data as described in Section IV (e).

c. Additional Cost for Multiple Models

Each Applicant that submits more than one Model will pay the “Multiple Model Fee” to each Enterprise.

The Multiple Model Fee amount is determined by the number of Models submitted by an Applicant. Any Model submitted by an Applicant that is currently required by the Enterprises will not be counted as a Model for purposes of determining the Multiple Model Fee. All other Model versions beyond the first Model for each Applicant will be subject to the Multiple Model Fee.

d. New Credit Reporting Agency (CRA) Fee

CRAs provisioning Credit Scores to the Enterprises must be approved CRA counterparties of the Enterprises. Any CRA counterparty must be approved by the Enterprises to receive and store PII contained in the Reference Data provided by the Enterprises for analysis.

If one or more of the CRAs supporting the Applicant's Credit Score generation and provisioning process is not currently approved by the Enterprises for this purpose, the Applicant will be assessed a New CRA Fee ("New CRA Fee") paid to each Enterprise for each CRA being assessed for approval.

The New CRA Fee reimburses each Enterprise for the work performed to ensure a new CRA has the appropriate infrastructure with the Enterprises, particularly with regard to the transfer and storage of PII.

The Applicant will be responsible for a separate New CRA Fee for each new CRA other than the existing approved Enterprise CRAs: Experian™, Equifax®, and TransUnion®. Each new CRA must meet each Enterprise's counterparty eligibility requirements. The Enterprises reserve the right, in their sole discretion, to decline approval of a proposed new CRA.

III. Instructions for Submitting the Application

An application will be considered complete only after each Enterprise has received all required fees and information from the Applicant as well as any data that must be obtained from a third party. See the appendices listed below for the specific requirements for each Enterprise:

- Appendix A: Fannie Mae Addendum
- Appendix B: Freddie Mac Addendum

a. Timeline and Notice to Applicants

Within 60 days of the submission of a Model, the Applicant will receive an application status notice indicating if additional information is required from the Applicant. An application will be considered complete at the sole discretion of each Enterprise and depends on receipt of all third-party data necessary for review and assessment of each application. The Applicant will be notified after an Enterprise has deemed an application complete.

Each Enterprise will notify the Applicant when the Enterprise begins the Credit Score Assessment, which will extend for 180 days, subject to extension by FHFA. Each Enterprise will provide the Applicant notice within 30 days of a determination that the Applicant's application has passed the Credit Score Assessment.

Each Enterprise will perform an Enterprise Business Assessment of each application that the Enterprise has determined to have passed the Credit Score Assessment. The Enterprise Business Assessment will be completed within 240 days.

If an Enterprise approves an Application, the Enterprise will provide written notice to the Applicant and the public in accordance with 12 C.F.R §1254.9(b). If an Enterprise disapproves an Application, the Enterprise will provide written notice to the applicant including a description of the reasons for disapproval, in accordance with 12 C.F.R §1254.9(c).

IV. Information that Must be Submitted by Applicant

Each Applicant will be required to submit information describing its organization and information related to each Model submitted for assessment. The sections below outline the information expected from each Applicant about each Model.

a. Specifics about Applicant

Each Applicant will be required to provide a description of its qualifications as a Model developer, including a description of the Applicant's corporate structure (including relationships through common control or ownership), governance structure, development experience, financial capacity, and past financial performance.

Each Applicant must demonstrate meeting the following minimum corporate requirements:

- be a viable organization with a minimum of three consecutive years of performance;
- be organized under federal law, or organized under the laws of one of the 50 states, the District of Columbia, Puerto Rico, Guam, the U.S. Virgin Islands, or a U.S. domiciled branch or subsidiary of a foreign entity; and
- have an acceptable net worth, as determined by each Enterprise.

Applicant must provide to each Enterprise responses to the requests listed below:

- the most recent seven consecutive quarters of financial statements in a Microsoft Excel compatible format (PDF files will not be accepted) including balance sheet, income statement, and equity roll forward;
- their most recent interim financial statements;
- related-party accounts receivable balance for the latest interim financial statements, if applicable;
- a description of their corporate structure;
- a list of key executives and the board of directors;
- a description of their ownership structure and if not publicly traded, key investors; and
- Fidelity Bond and Errors & Omissions insurance policies, including the minimum coverage amount.

See Appendix A and Appendix B for templates that must be completed by each Applicant and submitted to the respective Enterprise.

b. Specifics about the Model and Credit Score

Applicants must provide responses to the requests listed below to each Enterprise for each Model submitted for assessment:

- name of Model and Model version at each CRA;

- the date the Model became commercially available in the production environment at each CRA;
- describe the data used in the Model (e.g., credit report data, cellular payment data, bank statement data, etc.);
- describe the source of the data used (Experian, Equifax, and TransUnion; credit bureaus (other than Experian, Equifax, and TransUnion); National Consumer Telecom & Utility Exchange; LexisNexis; Finicity; etc.);
- describe any restrictions on publication of Credit Score under contract between the Applicant and each CRA;
- a list of Adverse Action Score Reason Codes at each CRA, with descriptions;
- describe the maximum number of Score Reason Codes provided by the Model with each Credit Score;
- describe the range of Credit Score values produced by the Model at each CRA. Provide Credit Score exclusions and specific Credit Score values provided to exclusion categories;
- describe the minimum criteria required by the Model to produce a Credit Score;
- describe the modeling technologies and statistical techniques used to develop the Model;
- state whether the Credit Score algorithm is the same at each CRA that supports the Model:
 - are the Credit Score segments the same at the CRAs that support the Model?
 - are the variables in each segment the same at the CRAs that support the Model?
 - are the variable buckets, spline nodes, etc., the same at the CRAs that support the Model?
 - are the weights assigned to each bucket, spline, etc., the same at the CRAs that support the Model?
 - if the answer to any of the questions above is ‘No,’ please provide an explanation of why differences exist and the impact, if any, to the consistency and reliability of the scores.
- describe the development and validation datasets:
 - population;
 - sample random, stratified, etc.;
 - sample exclusions;
 - number of observations (number that met the performance variable criteria, number that did not meet the performance variable criteria);
 - dates of credit report snapshots; and
 - out of sample test period.
- describe performance variable and performance window;
- describe the segmentation structure;
- provide the number of unique variables in the Model that generate the Credit Score:
 - are any control variables used during Model development? if so, what are they?
 - are the variables created by the Model developer or sourced from the CRAs?
 - are CRA variables top coded, censored or truncated within the Model that generates the Credit Score?
- describe how the following items are treated in model development and when the Credit Score is used for commercial purposes in each CRA’s production environment:
 - tax liens and judgments (public records removed from credit reports due to National Consumer Assistance Plan);
 - medical tradelines/medical collections;

- disputed tradelines;
- tradelines with “impacted by natural disaster” code;
- rental tradelines;
- inquiry deduplication;
- student loans;
- foreclosures;
- foreclosure alternatives;
- bankruptcy; and
- mortgage delinquencies (lates).
- state whether the Model that generates the Credit Score uses “trended” credit report data (balance, limits, actual payment amount or scheduled payment amount going back in time up to 24 months);
- state whether the Credit Score is impacted by “self-reported” tradelines (e.g., Experian Boost™); if so, how the Credit Score is impacted;
- describe how the scaling was done to align Credit Scores produced at different CRAs;
- describe methods to distribute the Credit Score to customers;
- describe the impact, if any, on the Model due to data elements that have been smoothed, truncated, censored or aggregated; and
- state whether certain data elements have been omitted, modified, or discounted in the Model.

c. Fair Lending Certification and Compliance with Law Certification

The application must include a Fair Lending Certification in the form attached as Appendix C. This certification must be executed by the Applicant’s most senior officer responsible for legal and/or regulatory compliance.

The application must also include a certification, in the form of the “Compliance with Law Certification” attached as Appendix D, certifying that the Applicant complies with all applicable laws in collecting, deriving, analyzing, and sharing data elements used in the Model. This certification must be executed by the Applicant’s most senior officer responsible for legal and/or regulatory compliance.

d. Demonstrated Use of the Model

The application must provide a description of the breadth and scope of the use of the Applicant’s Model in the market. Applicant should describe what differentiates its Model from competitors in the market and the specific benefits the Model provides to its customers. At a minimum, the application should describe:

- how many customers employ the Credit Score for the purposes of granting credit?
- what is the annual volume of Credit Scores used in credit-granting?

The application should also include at least one customer testimonial regarding the customer’s use of the Credit Score to make decisions on extending credit to prospective borrowers. The testimonial should include the following:

- a description of why they selected the Credit Score for use in their business process;
- customer Point-of-Contact information (name, title, email, phone number);
- industry of the customer using the Credit Score;

- length of time the customer has used the Credit Score;
- the customer's use case for using the Credit Score;
- the CRAs from which the customer sources the Credit Score; and
- a description of the existing credit-granting use cases for the Credit Score.

Compliance with this Section IV(d) is not required for any Model submitted by an Applicant that is currently required by the Enterprises.

e. Data Requirements for Assessments

Each Enterprise will identify Reference Data comprised of the population of single-family loans purchased by the Enterprises and applications submitted to each Enterprise's Automated Underwriting System ("AUS")¹, during two different time periods in the economic cycle. The time periods ("Analysis Time Periods") used to select the Reference Data are:

- March 2009 – February 2010, and
- July 2016 – June 2017.

Each loan purchased by an Enterprise in the Reference Data will have enough data to observe whether such loan reached a 90+ days delinquency event within 24 months of the Enterprise purchase date.

In addition to purchased loans, the Reference Data will also include applications which were submitted to each Enterprise's AUS during the Analysis Time Periods but were not ultimately purchased by that Enterprise. These records will be used as part of the Fair Lending Assessment in conjunction with data on purchased loans.

Each Enterprise will use consistent Reference Data for that Enterprise's Applicants. Each Enterprise will provide its Reference Data to each CRA with data that identifies the borrower(s) related to each loan or application and a corresponding unique identifier for the loan or application.

For each dataset provided by an Enterprise to a CRA, the CRA will deliver back to the respective Enterprise:

- the credit report data for all borrowers associated with each loan or application;
- the Reason Codes associated with each Credit Score; and
- the Credit Score for all borrowers associated with each loan or application on each Model being assessed.

Using the unique identification number in the data provided by each Enterprise to each CRA, each Enterprise will append the Credit Score for each Model and the credit report data to the Reference Data created by each Enterprise. The Reference Data, including all appended data from the CRAs, will be used by each Enterprise for the Credit Score Assessment and the fair lending assessment.

¹ Records of applications that resulted in purchased loans would not be duplicated in the Reference Data; these would appear only once in the Reference Data as a purchased loan. Additionally, purchased loans do not have to have been submitted through the AUS.

V. Data Acquisition Process

Each Enterprise will work directly with each CRA to acquire the historical consumer credit data and Credit Scores necessary to test the Model's ability to predict default rates. The contracts under which historical consumer credit data and Credit Scores are provided must include appropriate provisions to protect Personally Identifiable Information (PII).

Prior to an Enterprise sending Reference Data (which contains PII) to any CRA, the CRA must be a vendor approved to handle such data by each Enterprise. The cost of reviewing CRAs that are not currently approved to work with each Enterprise will be borne by the Applicant (see Section II(d): New Credit Reporting Agency (CRA) Fee under the Application Fee(s) section and the related Addendum for each Enterprise)

The process used to identify and acquire the data required to assess Applicant Models is described below:

- each Enterprise will identify the single-family loans purchased and applications submitted during the two Analysis Time Periods;
- each Enterprise will create Reference Data (borrower names, address, social security number, archive date, and an Enterprise specific unique identifier) for each Analysis Time Period and deliver the Reference Data directly to each CRA;
- each CRA retains the Reference Data delivered by each Enterprise and the related credit report data retrieved from their archive data;
- each CRA will deliver detailed credit report data associated with the Reference Data to each Enterprise so that the Enterprises can begin preparation of their analysis datasets;
- at an appropriate phase of the application process and, only after an Applicant has made appropriate arrangements with each CRA, an Enterprise will request that a CRA produce the applicable Credit Score for each Model on the borrowers in the Reference Data retained at the CRA;
- the CRA will deliver the Credit Score produced by the Model, applicable reason codes, and the unique identifier back to the Enterprise;
- the CRA will not deliver any Reference Data that reasonably could be linked to the identity of a borrower other than through the Enterprise unique identifier;
- the Enterprise will merge the Reference Data (using the Enterprise unique identifier) with the data delivered by the CRA to analyze the performance of the Credit Score.

An application will not be complete until the Enterprise has received the Credit Score from the applicable CRA and verified that the data provided is accurate.

Under the data acquisition process described above, each Enterprise will contract separately with each CRA to purchase the consumer credit data required for the analysis and pass the cost of this data acquisition onto the Applicant via the Application Fee. Applicants and CRAs will be responsible for the commercial terms of generating and delivering Credit Scores to each Enterprise.

VI. Process and Criteria for Conducting a Credit Score Assessment

Each Model will be assessed by the Enterprises, in their sole discretion, for accuracy, reliability, and integrity, consistent with the criteria described in 12 C.F.R. § 1254.7 and this Credit Score Solicitation. Under the Credit Score Assessment, each Model will be evaluated on a standalone basis, independent of each Enterprise's business systems and procedures. As part of the Credit Score Assessment, each Enterprise may use outside counsel and other advisors, as necessary.

a. Accuracy Standard

Each Enterprise will evaluate whether a Model is accurate. A Model is accurate if it produces Credit Scores that appropriately reflect a borrower's propensity to repay a mortgage loan in accordance with its terms, permitting a Credit Score user to rank order the risk that the borrower will not repay the obligation in accordance with its terms relative to other borrowers.

To test the accuracy of a Model, each Enterprise will conduct statistical tests to assess each Model's ability to predict the divergence among borrowers in their propensity to repay mortgages purchased by the Enterprise. The Enterprises have established an initial Credit Score accuracy benchmark, using a Kolmogorov–Smirnov (“KS”) test cutoff (“KS Benchmark”) that has been informed by analysis performed by each Enterprise to evaluate the accuracy of the Credit Score in use today, Classic FICO, based on the population of Reference Data for the July 2016 – June 2017 time period. The initial KS Benchmark value is .35.²

b. Reliability Standard

Each Enterprise will evaluate whether a Model is reliable. A Model is considered reliable if it produces Credit Scores that maintain accuracy through the economic cycle.

The Enterprises will test the reliability of each Model using loans purchased from two different time periods in the economic cycle. The time periods used to assess the reliability of each Model are shown below:

- March 2009 – February 2010
- July 2016 – June 2017

The July 2016 – June 2017 time period represents recently acquired loans with enough performance history consistent with the default definition (90+ days delinquency event within 24 months of the Enterprise purchase date) used to evaluate the Credit Score. March 2009 – February 2010 represents a time period earlier in the economic cycle and is materially different from the economic cycle when the recently acquired loans were originated.

c. Integrity Standard

Each Enterprise will evaluate whether a Model has integrity. A Model has integrity if, when producing Credit Scores, the Model uses relevant data that reasonably encompasses the borrower's credit history and financial performance.

² The statistical KS benchmark was established for purposes of this initial Credit Score Solicitation only. The statistical benchmark reflects a minimum level of accuracy based on a specific population of loans. The benchmark cannot be used for any purpose other than this Credit Score Solicitation.

Each Enterprise will conduct its own integrity assessment of each Model to determine whether the Model uses relevant data that reasonably encompasses the borrower's credit history and financial performance and is demonstrably and statistically predictive of an individual's creditworthiness. This assessment will include, but is not limited to, a review of the following information:

- whether the Model includes legally permissible data;
- the impact, if any, on the Model due to data elements that have been smoothed, truncated, censored or aggregated;
- whether certain data elements have been omitted, modified, or discounted in the Model.

Each Applicant must include a properly executed certification in the form attached as Appendix D, which will be considered as part of this criterion.

VII. Process and Criteria for Conducting Enterprise Business Assessment

Each Enterprise will undertake an Enterprise Business Assessment of each Application that the Enterprise determines to have passed the Credit Score Assessment.

Through the Enterprise Business Assessment, each Enterprise will determine, in its sole discretion, the value, ability, need, and effort associated with incorporating the Credit Score being assessed into its business, systems, and operational processes, pursuant to 12 C.F.R. § 1254.8 and this Credit Score Solicitation, including: accuracy and reliability; a fair lending assessment; the impact of a Model on Enterprise operations and risk management; impact on industry; competitive effects; and the Enterprise's third party provider review.

The areas of focus as part of the Enterprise Business Assessment will include, but are not limited to:

- AUS – Model/Scoring;
- Credit Policy;
- Product Eligibility;
- Pricing (Loan-Level Price Adjustments / Delivery Fees);
- Affordable Lending;
- Securities Disclosure;
- Accounting/Finance;
- Servicing; and
- Operations.

The use of Credit Scores to support the business processes listed above are critical to each Enterprise. Current practices rely upon Credit Scores that can be obtained from approved CRAs. To the extent a Model does not utilize credit report data from the three CRAs already approved by the Enterprises (Experian, Equifax, and TransUnion), there may be significant costs and operational challenges associated with implementation of that Model, which will be evaluated during the Enterprise Business Assessment phase.

The Enterprises currently disclose Credit Scores for numerous business purposes. Examples include, but are not limited to:

- Enterprise Selling guides and all exhibits;
- Loan-level disclosure and pool-level disclosure datasets; and
- Securities and Exchange Commission disclosures and investor disclosures.

If the Applicant's contract terms do not support these disclosure requirements, there may be significant business risks and costs associated with the implementation of that Model which will be evaluated during the Enterprise Business Assessment.

As part of the Enterprise Business Assessment, each Enterprise may use outside counsel and other advisors, as necessary.

a. Accuracy, Reliability Standard

Each Enterprise will assess whether the Credit Score being evaluated is accurate and reliable for each Enterprise's purpose(s) pursuant to 12 C.F.R. § 1254.8(b)(1). This could include the need and/or ability to calibrate internal models, thresholds and processes to a new Credit Score beyond the accuracy evaluation done during the Credit Score Assessment. Statistical measures, including but not limited to the following, will likely be considered when evaluating the performance of each Model:

- Kolmogorov–Smirnov (“KS”) test;
- Gini coefficient;
- bad capture in the lowest scoring tail; or
- other testing the Enterprises, in their sole discretion, deem appropriate.

Subgroup testing may be applied to loan-to-value groups, Credit Score groups, and thin credit file loans at origination, as well as new credit files and files with a past delinquency.

b. Fair Lending Assessment Standard

Each Enterprise will evaluate the fair lending risk and fair lending impact of the Model in accordance with standards and requirements related to the Equal Credit Opportunity Act (15 U.S.C. 1691(a)(1)), the Fair Housing Act (42 U.S.C. 3605(a)), and the Safety and Soundness Act (12 U.S.C. 4545(1)) (including identification of potential impact, comparison of the Model with any credit score model currently in use, and consideration of potential methods of using the new Model). This evaluation will consider credit scores as used by the Enterprise within its systems or processes that use a credit score for mortgage purchases, as well as any impact on access to credit related to the use of the Model.

The fair lending assessment for each Model submitted will evaluate the impact of that Model's Credit Score on various borrower demographic groups, including assessment of:

- Credit Score value
 - Do some borrower demographic groups receive less accurate and lower/higher Credit Scores than other borrower demographic groups?
 - Does the answer to the previous question differ for borrowers overall versus at relevant points in the distribution, such as near eligibility cutoffs?
- Performance – What is the impact on outcomes for different borrower demographic groups for the following Enterprise business uses:
 - Underwriting models

- Credit Policies
- Pricing
- Access to credit – What is the impact on access to credit for different borrower demographic groups in Enterprise business uses?

The fair lending assessment may be conducted on each Enterprise’s historical loan applications and loan purchases, during differing economic conditions.

The fair lending assessments will be undertaken at the direction of each Enterprise’s Legal Division and will be protected by all applicable legal privileges, including the attorney-client privilege. The fair lending assessments will be performed in a manner consistent with the recognition and preservation of all applicable privileges.

c. Impact on Enterprise Operations and Risk Management, and Impact on Industry Standard

Each Enterprise will evaluate the impact using the Model would have on Enterprise operations (including any impact on purchase eligibility criteria and loan pricing) and risk management (including counterparty risk management) in accordance with standards and requirements related to prudential management and operations and governance set forth at 12 C.F.R. parts 1236 and 1239.

This evaluation will consider whether the benefits of using Credit Scores can reasonably be expected to exceed the adoption and ongoing costs of using such Credit Scores, considering projected benefits and costs to the Enterprises. Each Enterprise will evaluate the impact of using Credit Scores on industry operations and mortgage market liquidity, including costs associated with implementation of a newly approved Credit Score. The timing of any changes across industry will also be considered as part of this evaluation.

This evaluation will also consider potential costs and benefits across the entire mortgage industry—origination, servicing, and securitization—of adopting a newly validated and approved Model. This evaluation will further consider whether the benefits of using Credit Scores can reasonably be expected to exceed the adoption and ongoing costs of using such Credit Scores, considering projected benefits and costs to the Enterprise and borrowers, including market liquidity and cost and availability of credit.

As part of this evaluation, each Enterprise will consider, among other things, the following areas:

- availability of Credit Scores, and method(s) for mortgage industry participants to obtain Credit Scores at the loan level or in batch processes (mortgage industry participants include but are not limited to mortgage lenders, brokers/correspondents, mortgage insurers, guarantors, Enterprises, servicers, investors, and reinsurers);
- use of the Credit Score within Enterprise systems;
- external financial reporting and regulatory reporting;
- securities disclosure, including any related impacts on Uniform Mortgage Backed Securities or credit risk transfer transactions;
- ability to incorporate Credit Scores in models necessary to support various functions including but not limited to:
 - evaluation of loans in AUS,
 - determination of Capital requirements,

- valuation and loan loss reserves,
- Private Mortgage Insurer Eligibility Requirements,
- servicer counter-party risk, and
- loan-level price adjustments / delivery fees;
- borrower Credit Score coverage and accuracy (across the Credit Score range and in the tails of the Credit Score distribution) with a focus on:
 - very low-income borrowers and low-income borrowers;
 - underserved markets; and
 - borrowers in different demographic groups and generations.
- ability to incorporate Credit Scores for product eligibility and pricing purposes; and
- ability of the Credit Score to offer predictive lift over the Enterprise's non-score AUS solution.

The cost of adoption and/or transition to new Credit Scores and ongoing maintenance of a new Credit Score for both the Enterprises and the industry will also be assessed. The extent to which the Credit Score is currently being used by the industry will be a significant factor for understanding industry costs and benefits. The ability for various constituents, including but not limited to borrowers, consumer groups, lenders, and investors, to easily understand the new Credit Scores and how they are derived under the Model will be a factor in the assessment.

d. Competitive Effects

Each Enterprise will evaluate whether using a Model could have an impact on competition in the industry. This evaluation will consider whether use of the Model could have an impact on competition due to any ownership or other business relationship between the Model developer and any other institution. The review of a Model's competitive effect will be considered in conjunction with all other criteria established for the Enterprise Business Assessment.

e. Third-Party Vendor Reviews

Each Enterprise will evaluate each Applicant under each Enterprise's own standards of approval of third-party providers. Among other things, this review will address any financial, governance, operational, compliance, legal, and reputational risks associated with the Applicant.

Applicants should expect a comprehensive vendor review to be completed by each Enterprise to ensure the Applicant will be able to perform its role for the foreseeable future. The level of review, and documentation required, will vary depending on the financial risk to an Enterprise.

Disclaimer

This Credit Score Solicitation is a request for applications from credit score model developers and is intended only to provide prospective applicants with information that may be useful when completing their application submissions.

The Credit Score Solicitation and the evaluation of Models are subject to, among other things, processes set out in federal regulations that can be found at 12 C.F.R. part 1254. FHFA may make determinations under those regulations that impact the evaluation of and decisions regarding any applications that have been submitted.

The Credit Score Solicitation is not an agreement or offer and the information contained in this document is non-binding on the Enterprises and on FHFA. Subject to FHFA review and approval, the Enterprises may update, amend, or supplement the information contained in the Credit Score Solicitation at any time. To the extent that this Credit Score Solicitation is updated, Applicants will be afforded an opportunity to update their applications.

Submission of an application in response to this Credit Score Solicitation does not guarantee selection of that Model. A Model may not be selected even if it passes all tests for the Credit Score Assessment related to accuracy, reliability, or integrity of the Model.

The Enterprise Business Assessment includes a comparative assessment of Models based on a variety of criteria, and a Model may not be selected even if it meets the minimum criteria for the Enterprise Business Assessment. The Enterprises reserve the right to disapprove, in their absolute discretion, any or all prospective Model applications provided in response to this Credit Score Solicitation, consistent with the requirements of 12 C.F.R. part 1254.

Appendix A: Fannie Mae Addendum

Instructions for Submitting the Application

a. ProcureOne Registration

Your ability to provide the required documentation in a timely manner helps to avoid delays in onboarding your firm so that Fannie Mae can assess your application. Please read the attached instructions carefully. Any missing information on, or missing attachments to, the registration form will result in processing delays.

All applications and supporting documentation must be submitted to Fannie Mae's ProcureOne system. Please follow instructions in the link below to create and/or update your profile in ProcureOne. Please do not create a record with the same tax identification number - if the tax identification number already exists, update the existing record. Please register only one time.

[Click here for ProcureOne](#)

Please ensure that the following documents are attached to your registration in the **Legal Documents** section of the ProcureOne registration form:

1. **Signed W9** – Complete, scan, and attach the W9 form.
2. **Conflict of Interest Verification** – Complete, scan, and attach the Fannie Mae Supplier Conflict of Interest Verification.

Once you have submitted your registration via ProcureOne, you will receive a system-generated e-mail from the tool, confirming that your company has been successfully registered. **You may use your password to make changes to the original registration at any time.**

Should you experience difficulty signing onto the ProcureOne website, cannot locate your User ID, or otherwise require additional assistance, please send an email to corporate_supplier_requests@fanniemae.com.

b. Application Fee

Each Applicant that submits one or more Models will pay the Application Fee to Fannie Mae. The Application Fee includes an Upfront Application Fee and an Assessment of Remaining Fees. The Application Fee may also include a Multiple Model Fee and a New CRA Fee, if applicable. As shown in the table below, the total Application Fee is dependent on the number of Models submitted by an Applicant and reimburses Fannie Mae for the work associated with the review of each Applicant's

qualifications, the acquisition of historical consumer credit data, and other expenses associated with the assessment of each applicant’s Model(s).

Application Fees	
Breakdown of Fee Components	Amount Paid to Fannie Mae
a. Upfront Application Fee	\$200,000
b. Assessment of Remaining Fees	TBD ⁽¹⁾
c. Multiple Model Fee (per additional model)	\$100,000 ⁽²⁾
d. New CRA Fee	\$400,000 ⁽³⁾

- (1) The Assessment of Remaining Fees amount will be determined based on a number of factors including the number of applicants received by the Enterprise (which impacts the per-applicant cost of the acquisition of historical consumer credit data). The Assessment of Remaining Fees is expected to be as much as \$450,000 per applicant.
- (2) In the event an Applicant chooses to submit more than three Models, the Applicant will be charged an additional \$250,000 for each additional Model submitted after the third Model.
- (3) For each new CRA that must be reviewed and approved by Fannie Mae, the Applicant shall pay Fannie Mae a New CRA Fee of \$400,000. The New CRA Fee is in addition to any other Application Fees owed by an Applicant to Fannie Mae and any fees related to this solicitation owed to Freddie Mac.

Application Fees may be paid by ACH or check.

ACH wire instructions:

Bank Name: Federal Reserve Bank, NYC
 ABA: 021039500
 Account Name: Fannie Mae NYC
 Account Number: 169228007
 Reference: 3rd Party Credit Score Application

If paying by check, please include “3rd Party Credit Score Application” on the memo line. Checks may be mailed to the either address below.

Fannie Mae		Fannie Mae
P.O. Box 277672	<or>	1075 Loop Road LB277672
Atlanta, GA 30384-7672		College Park, GA 30337

c. Qualifications of Applicant

In order to begin the assessment process, you will need to complete a Supplier Risk Questionnaire (SRQ) and an Information Security Questionnaire (ISQ). Please note that some of the SRQ and ISQ questions refer to data or services being provided to Fannie Mae directly.

We understand that our relationship would not be a direct one so consider the questions a general inquiry to determine how you manage your partner data. Feel free to add any comments to the SRQ or ISQ that you feel clarify your answers if needed.

Also, when responding to either questionnaire, we ask that you provide comments/rationale where the selections are "No" and "N/A".

SRQ

The SRQ is available ONLINE in ProcureOne and consists of a set of questions from several critical risk domains including:

- Privacy
- Business Continuity
- Legal
- Fraud

Your feedback gives us further insight into your risk environments and helps us determine whether they meet our minimum requirements.

If you have any questions about the SRQ, please contact us at SupplierRisk_ManagementTeam@fanniemae.com.

ISQ

As part of Fannie Mae's Third Party Risk Management Program, all Third Parties are required to attest to the soundness of their Security Program through participation in a security risk assessment.

The questionnaire and the requested supporting documentation provide insight into a prospective and/or existing third party's adherence to best practices regarding information security. In addition, attach the following supporting documentation when returning your responses:

- Independent Audit Report
- External Network Penetration Test
- External Application Security Test

If you have any questions about the ISQ, please contact us at Thirdparty_securitymanagement@fanniemae.com

Additional Documentation

Please also submit the following documentation to the ProcureOne System as part of your application:

- most recent seven consecutive quarters of financial statements in a Microsoft Excel compatible format (PDF files will not be accepted) including balance sheet, income statement, and equity roll forward;

- most recent interim financial statements;
- related-party accounts receivable balance for the latest interim financial statements, if applicable;
- a description of your corporate structure;
- a list of key executives;
- a description of their ownership structure and if not publicly traded, key investors;
- the fair lending certification in the form attached as Appendix C;
- the compliance with law certification in the form attached as Appendix D.

[ProcureOne System Instructions: Supplier Guide to Registration and Profile Management](#)

[IRS Form W-9](#)

[Conflicts of Interest Disclosure](#)

[Sample Supplier Risk Questionnaire](#)

[Sample Information Security Questionnaire](#)

Appendix B: Freddie Mac Addendum

a. Applicant and Model Information

Each Applicant is required to submit information describing its organization and information related to each Model submitted for assessment. The file attached below describes the information expected from each Applicant and any Model.

For Freddie Mac to begin the assessment process, the Applicant will need to complete the attached document. Feel free to add any comments to the attached document that you feel succinctly describe the strengths of your organization and the benefits provided by each Model.

In addition to the *Freddie Mac Requested Information*, there may be supplementary details required related to those Models that are selected for evaluation during the Enterprise Business Assessment phase.

b. Application Fees

Each Applicant that submits one or more Models will pay the “Application Fee” to Freddie Mac. The Application Fee includes an Upfront Application Fee and an Assessment of Remaining Fees. The Application Fee may also include a Multiple Model Fee and a New CRA Fee, if applicable. As shown in the table below, the total Application Fee is dependent on the number of Models submitted by an Applicant and reimburses Freddie Mac for the work associated with the review of each Applicant’s qualifications, the acquisition of historical consumer credit data, and other expenses associated with the assessment of each applicant’s model(s).

Application Fees	
Breakdown of Fee Components	Amount Paid to Freddie Mac
a. Upfront Application Fee	\$200,000
b. Assessment of Remaining Fees	TBD*
c. Multiple Model Fee (per additional model)	\$100,000**
d. New CRA Fee	\$400,000***

* The Assessment of Remaining Fees amount will be determined based on a number of factors including the number of applicants received by the Enterprise. This amount is expected to be as much as \$450,000 per applicant.

**In the event an Applicant chooses to submit more than three Models, the Applicant will be charged an additional \$250,000 for each additional Model submitted after the third Model.

***For each new CRA that must be reviewed and approved by Freddie Mac, the Applicant shall pay Freddie Mac a New CRA Fee of \$400,000. The New CRA Fee is in addition to any other Application Fees owed by an Applicant to Freddie Mac and any fees related to this solicitation owed to Fannie Mae.

Payment of Application Fee

Pay application Fees by ACH.

ACH wire instructions:

Bank Name: Federal Reserve Bank, NYC

ABA: 071000013

Account Name: Freddie Mac

Account Number: 5557100

Reference: 3rd Party Credit Score Application

c. Solicitation Response Submission

Completed applications should be submitted to Freddie Mac via email at: kevin_barry@freddiemac.com.

Applicants that have questions for Freddie Mac related to this Credit Score Solicitation should contact the following Freddie Mac point-of-contact:

Name: Kevin Barry
eMail: kevin_barry@freddiemac.com
Work Phone: (703) 442-2787

Appendix C: Fair Lending Certification

Fair Lending Certification

As part of its application in response to the GSE Credit Score Solicitation dated _____,
[Date]

_____ (“Applicant”) hereby certifies that:

[Company Name]

- i. The Model does not include any variable or characteristic that would be considered a protected class or prohibited basis under the Equal Credit Opportunity Act, 15 U.S.C. §§ 1601-1691f and its implementing regulation, Regulation B, 12 C.F.R. part 1002, the Fair Housing Act, 42 U.S.C. §§ 3601-3631, and its implementing regulations, including 24 C.F.R. Subtitle B, Subchapter A, the Federal Housing Enterprises Financial Safety and Soundness Act of 1992, including 12 U.S.C. § 4545, and its implementing regulations, including 24 C.F.R. § 81.42 (the “Fair Lending Laws”).
- ii. No variable or characteristic that is based directly on or is highly correlated solely with a classification prohibited under the Fair Lending Laws is used as a factor in the Model to produce credit scores, including any variables that (a) would be considered proxies for a classification prohibited under the Fair Lending Laws or (b) are predictive solely due to their correlation with a classification prohibited under the Fair Lending Laws.
- iii. No variable or characteristic in (i) or (ii) above was used in the development of the Model.
- iv. A reasonable, causal, and understandable relationship exists between variables used in the Model and credit risk.
- v. The Model has been evaluated to support compliance with Fair Lending Laws. A description of this testing is attached to and incorporated into this certification.
- vi. The Applicant has policies and processes to support compliance with Fair Lending Laws. A description of these policies and processes is attached to and incorporated into this certification.

Name:

Title:

Date:

Appendix D: Compliance with Law Certification

Compliance with Law Certification

As part of its application in response to the GSE Credit Score Solicitation dated _____,
[Date]

_____ (“Applicant”) hereby certifies that:
[Company Name]

- i. Applicant has complied and will comply with all federal, state, and local laws (e.g., statutes, regulations, ordinances, directives, codes, administrative rules and orders that have the effect of law, and judicial rulings and opinions) with regard to its collection, derivation, analysis, use and/or sharing of any data elements used in the Model including, but not limited to, the Fair Credit Reporting Act (“FCRA”), the Equal Credit Opportunity Act (“ECOA”), the Gramm-Leach-Bliley Act (“GLBA”), the California Consumer Privacy Act (“CCPA”), the Fair Housing Act, and prohibitions against unfair, deceptive, and abusive acts and practices under Sections 1031 and 1036 of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Section 5 of the Federal Trade Commission Act.
- ii. All data elements used in the Model come from sources with appropriate infrastructure and processes in place to investigate and respond to consumer disputes in a timely manner.
- iii. Applicant has obtained permission for the use of the data elements used in its Model to the extent required under applicable law.
- iv. The Model has been evaluated for compliance with, and meets the requirements of, all applicable laws. A description of the evaluation testing conducted is attached to, and incorporated into, this certification.
- v. The Applicant has policies, processes and procedures for maintaining records and ensuring compliance with all applicable legal and regulatory requirements, including any required to identify and manage any changes to applicable legal and regulatory requirements. A description of these policies and processes is attached to, and incorporated into, this certification.

Applicant agrees to indemnify Freddie Mac and Fannie Mae for, and hold them harmless from, all losses, costs, damages and expenses (including court costs and attorney fees) that Freddie Mac or Fannie Mae sustain as a direct or indirect result of Applicant's (i) failure to comply with any applicable law, regulation, ordinance, directive, code, administrative rule or order, or (ii) other breach of this certification.

Name:

Title:

Date: