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Federal Housing Finance Agency  
Office of Inspector General



## **An Overview of Enterprise Appraisal Waivers**

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White Paper • WPR-2018-006 • September 14, 2018



WPR-2018-006

September 14,  
2018

## Executive Summary

As part of the mortgage underwriting process, the value of the collateral securing the mortgage is assessed. Traditionally, an independent property appraisal, based on the appraiser's research and analysis of the property, has provided an estimated independent opinion of the market value of the property. In recent years, advances in technology and data availability have spurred innovation around appraisals. For example, an automated valuation model (AVM) estimates property value through computerized modeling of a variety of data, as compared to an appraisal report where the estimated value is based on an appraiser's observation and market analysis.

Each Enterprise has recently launched a data-driven appraisal waiver program for eligible loans. In December 2016, Fannie Mae began to offer the latest version of its appraisal waiver program for refinance transactions, which was expanded to mortgage purchase transactions in August 2017. Fannie Mae assesses whether an appraisal can be waived based on appraisals less than six years old on the same property from among the more than 29 million appraisals on file. In June 2017, Freddie Mac began to offer its version of an appraisal waiver, called Automated Collateral Evaluation (ACE) for refinance transactions, which it expanded to purchase transactions in September 2017. ACE assesses whether a property's estimated value can be used in place of an appraised value to underwrite a mortgage and is based on Freddie Mac's proprietary AVM, called Home Value Explorer. Both ACE and Fannie Mae's appraisal waiver program were approved by FHFA prior to roll out and expansion, and both programs may relieve lenders of representation and warranty obligations related to collateral value, which could force the repurchase of loans with such defects.

The Enterprises have reported that their appraisal waiver programs shorten the loan origination process, and eliminating the requirement for an appraisal can save money for borrowers. Appraisal waivers can also mitigate delays from appraiser shortages, and data and technology use on lower risk loans can free up appraisers to focus on more complex matters. However, model-based alternatives to traditional appraisals have certain limitations. For example, AVMs may be less reliable in areas where properties do not share similar characteristics, such as age and size, or where insufficient data exists for a particular area, such as a rural area. Under a system based on a prior appraisal, appraisals can "age out" of the system, requiring new appraisals to refresh the data.

A recent report from the U.S. Department of Treasury expresses support for the Enterprises' "limited adoption of appraisal waivers" but cautions that automated property valuations must be carefully monitored when they are



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used instead of traditional appraisals. FHFA will be monitoring key risk indicators and offer rates on a regular and ongoing basis. Because Fannie Mae's appraisal waiver program and ACE, as currently structured, are modest in size and include stringent eligibility standards, the risks from these programs are small.

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## ABBREVIATIONS .....

ACE	Freddie Mac’s Automated Collateral Evaluation Program
AVM	Automated Valuation Model
Enterprises	Fannie Mae and Freddie Mac, collectively
Fannie Mae	Federal National Mortgage Association
FHFA or Agency	Federal Housing Finance Agency
Freddie Mac	Federal Home Loan Mortgage Corporation
LTV	Loan-to-value ratio
OIG	Federal Housing Finance Agency Office of Inspector General

## BACKGROUND.....

Most homebuyers use mortgages to purchase their homes. The lender uses the underwriting process to evaluate the homebuyer’s ability to repay a mortgage and relies on the collateral—the value of the mortgaged property—to secure the mortgage and offset losses in the event the homebuyer defaults. Assessing the value of the collateral securing a mortgage is one of the pillars of the underwriting process. Traditionally, an independent property appraisal, based on the appraiser’s research and analysis of the property, has provided an estimated independent opinion of the market value of the property. Elements considered by an independent appraiser in developing the appraisal value include the condition of the property, neighborhood, market, and price of comparable properties. For single-family mortgages to be eligible for purchase by Fannie Mae and Freddie Mac (Enterprises), they must meet the requirements in seller/servicer guides (or master agreements) issued by the Enterprises. Historically, the Enterprises’ seller/servicer guides and master agreements have required independent appraisals in connection with mortgages they purchase. Among other things, the lender must order the independent appraisal, select the appraiser, and review the appraisal to determine if the property is adequate collateral for the mortgage loan.<sup>1</sup> Lenders seeking to sell mortgages to the Enterprises are also required to make **representations and warranties** related to the value of the property.

### **Representations and Warranties:**

A mortgage lender’s assurances that the mortgages it sells to the Enterprises comply with certain standards, such as underwriting and documentation standards. Violations of a representation or warranty entitles the Enterprise that purchased a loan to pursue certain remedies, including having the lender buy back, or repurchase, the loan.

In recent years, advances in technology and data availability have spurred innovation around appraisals. Particularly, the use and accuracy of automated valuation models (AVMs), facilitated by the development of large databases and improvements in valuation algorithms, has increased in recent years. Federal law defines an AVM as “any computerized model used by mortgage originators and secondary market issuers to determine the collateral worth of a mortgage secured by a consumer’s principal dwelling.” Unlike an appraisal report where the estimated value is based on an appraiser’s observation and market analysis, an AVM estimates the property’s value through mathematical modeling of a variety of data. Between

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<sup>1</sup> In addition, the Enterprises typically have required that the appraiser must be licensed or certified in the state where the property is located and must follow that state’s requirements and standards in conducting the appraisal.

the traditional appraisal and AVMs, hybrid appraisals leverage both database automation and a licensed or certified appraiser to develop an appraisal.<sup>2</sup>

## **ENTERPRISE APPRAISAL WAIVER PROGRAMS.....**

In 2010, FHFA directed the Enterprises to develop a uniform mortgage data program, including uniform standards for data reporting on mortgage loans and appraisals. Under the appraisal component, FHFA instructed the Enterprises to standardize data definitions and formats for appraisals, and develop a uniform collateral data portal for lenders to submit appraisal information. (Submission of appraisal information through the portal, in turn, would enable the Enterprises to build a standardized set of data points that would assist in the consistent appraisal reporting.) In 2012, the Enterprises required all lenders to use the collateral data portal for submission of appraisals.

Separately, in 2012, FHFA announced a new representation and warranty framework for the Enterprises to enhance certainty for lenders regarding when a mortgage could be subject to repurchase, potentially shifting some risk from lenders to the Enterprises. In 2014 and 2015, FHFA directed the Enterprises to consider and take steps to implement changes to this framework related to appraisals.

As we now discuss, each Enterprise has launched appraisal waiver programs that also provide relief to lenders from representation and warranty exposure for the values of affected properties for eligible loans.

### **Fannie Mae’s Appraisal Waiver Program**

In December 2016, Fannie Mae began to offer its latest version of appraisal waivers<sup>3</sup> for refinance transactions, after it received approval from FHFA.<sup>4</sup> Fannie Mae expanded its use of this appraisal waiver program for mortgage purchase transactions in August 2017.

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<sup>2</sup> Another source for an estimate of property value is a broker price opinion. In a broker price opinion, a real estate broker or sales person provides estimates of the probable sales or listing price of a property, which may also include some detail about a property’s condition, market, and neighborhood. Federal regulators note, however, that a broker price opinion itself is not an appraisal or evaluation, but could be used for monitoring the collateral value of an existing loan as appropriate.

<sup>3</sup> Previously, Fannie Mae appraisal waivers were known as Property Inspection Waivers (PIWs). On September 4, 2018, Fannie Mae announced the name had been updated to “appraisal waiver.”

<sup>4</sup> Previously, Fannie Mae had offered Property Inspection Waivers beginning in 2001. Under the prior PIW, loans were evaluated with an AVM, along with other factors. Eligible loans could have received an appraisal waiver or other alternative to a traditional appraisal, such as an exterior-only inspection.

### ***Fannie Mae Appraisal Waiver Eligibility***

In general, purchase mortgages, cash-out refinances, and limited cash-out refinances are all eligible for Fannie Mae appraisal waivers, as are primary residences and second homes. Purchase mortgages are capped at 80% loan-to-value (LTV), with other transaction types ranging from 60% to 90% maximum LTVs. Only one-unit properties are eligible for appraisal waivers, and the property value must be under \$1 million. See Figure 1, below, for additional information on appraisal waiver program eligibility requirements.

### ***How Fannie Mae Appraisal Waivers Work***

When a lender submits a mortgage through Fannie Mae’s automated underwriting system, Desktop Underwriter, the mortgage is automatically assessed for its eligibility for an appraisal waiver. First, Desktop Underwriter determines whether the mortgage meets the eligibility requirements related to the loan and property type. Next, Desktop Underwriter searches the appraisals previously submitted through the collateral data portal for prior Enterprise acquisitions at the same property address. (Over 29 million appraisal reports have been submitted through this portal.) If there is an appraisal on file that is more than 120 days old but less than six years old, that appraisal is assessed through proprietary analytics from Collateral Underwriter, Fannie Mae’s appraisal risk assessment tool, which evaluates the appraisal’s quality when the appraisal was originally submitted. [REDACTED]

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[REDACTED]

If the appraisal waiver offer is declined,<sup>5</sup> an appraisal must be performed. If an appraisal waiver is accepted, Fannie Mae accepts the lender’s property value estimate as the market value of the property and provides relief from enforcement of representation and warranty of value, condition, and marketability of the property.<sup>6</sup>

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<sup>5</sup> In some instances, this process may lead Fannie Mae to offer an appraisal waiver but the lender would not be able to exercise the option. These situations include when subsequent events, such as a natural disaster, occur and an appraisal must be conducted; a sales contract stipulates non-minor repairs are necessary to keep the property safe and sound; the law or mortgage insurance provider requires an appraisal; or the borrower chooses to obtain an appraisal. In these situations, the lender is responsible for disclosing this information and not accepting the appraisal waiver offer.

<sup>6</sup> The lender continues to provide representations and warranties regarding the accuracy of the underlying data.

## ***Fannie Mae Appraisal Waiver Results***

In March 2018, Fannie Mae offered appraisal waivers on approximately 10% of the mortgages submitted for purchase during that month. Lenders exercised Fannie Mae appraisal waiver offers on approximately 7% of those offers during March 2018. More than 90% of offers were not accepted because the lender obtained an appraisal. An appraisal waiver was offered much less frequently for purchase transactions compared to refinance transactions. Fannie Mae has indicated that the majority of mortgages will not receive offer and must obtain a traditional appraisal.

## **Freddie Mac's Appraisal Waiver Program**

In June 2017, Freddie Mac began to offer its version of an appraisal waiver, called Automated Collateral Evaluation (ACE) for refinance transactions (after FHFA approval), which it expanded to purchase transactions in September 2017.

ACE assesses whether a property's estimated value or sales price can be used in place of an appraised value to underwrite a mortgage, provides collateral representation and warranty relief for the lender, and is based on Freddie Mac's proprietary AVM, called Home Value Explorer.<sup>7</sup> According to Freddie Mac, ACE uses data, including appraisals, collected through the uniform collateral data portal as well as several other data sources and incorporates rules on property condition and marketability rather than just checking valuation.

### ***ACE Eligibility***

Under Freddie Mac's appraisal waiver program, only mortgages for single unit properties with a property value of \$1 million or less and an 80% LTV or less are eligible for ACE. However, unlike Fannie Mae's appraisal waivers, cash-out refinances are not eligible for ACE. See Figure 1, below, for additional information on appraisal waiver program eligibility requirements.

### ***How ACE Works***

When a lender submits a mortgage to Freddie Mac's automated underwriting system, Loan Product Advisor, the lender must supply either the estimated value or sales price of the mortgaged property. A loan submitted through Loan Product Advisor is automatically considered for ACE. ACE primarily relies on Freddie Mac's proprietary AVM, Home Value

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<sup>7</sup> Previously, Freddie Mac had offered appraisal relief beginning in 1999. Freddie Mac utilized a prior version of its AVM, Home Value Explorer, to estimate property value and determine whether a loan was eligible for an appraisal waiver or other alternative to a traditional appraisal, such as an exterior-only inspection.

Explorer, and combines the property valuation with other analytics based on prior appraisals and other data sources to determine whether a loan is ACE eligible.

The Home Value Explorer model leverages multiple data sources, such as existing appraisal data, Multiple Listing Service data, and public records, to assess valuation and condition risk. Home Value Explorer's algorithm blends different estimates returned by a repeat sales model, which uses property sale price data, and a hedonic model, which uses property characteristics data, to estimate a value for a property. According to Freddie Mac, ACE also incorporates rules that identify the vast majority of properties in poor condition. If ACE determines that the property value and condition are acceptable, the loan is eligible for an appraisal waiver.

If the ACE offer is declined,<sup>8</sup> an appraisal must be performed. If the ACE offer is accepted, Freddie Mac accepts the lender's property value estimate as the market value of the property and provides collateral representation and warranty relief.

### ***ACE Results***

In January 2018, approximately 3.7% of all Loan Product Advisor submissions received by Freddie Mac were eligible for ACE. ACE was accepted approximately 25% of the time it was offered during that month. An FHFA official explained to us that the Enterprises fell short of their expected take-up rates because some borrowers prefer to have full appraisals completed on their properties. A Freddie Mac official told us that Freddie Mac expects that the bulk of loans purchased by it would continue to be supported by an appraisal.

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<sup>8</sup> Similar to Fannie Mae's appraisal waiver program, there are instances when ACE may offer an appraisal waiver, but the lender should not accept it. During the course of normal business, a lender should not accept an appraisal waiver if the property warrants an appraisal for such reasons as: the property is contaminated or a hazardous substance exists affecting the property or its surrounding neighborhood, the property is located in an area recently affected by a disaster, or adverse physical property conditions are apparent or have been disclosed.

**FIGURE 1. SELECTED ENTERPRISE APPRAISAL WAIVER PROGRAM ELIGIBILITY STANDARDS**

Transaction Types	Fannie Mae Appraisal Waivers	Freddie Mac ACE
<b>Loan Types</b>		
<b>Purchases</b>		
Primary residence	Up to 80% LTV	Up to 80% LTV
Secondary residence	Up to 80% LTV	Up to 80% LTV
<b>Cash-out refinances</b>		
Primary residence	Up to 70% LTV	Ineligible
Secondary residence or investment property	Up to 60% LTV	Ineligible
<b>Limited cash-out refinances</b>		
Primary or secondary residence	Up to 90% LTV	Up to 80% LTV
Investment property	Up to 75% LTV	Ineligible
<b>No cash-out refinances</b>	Same as limited cash-out refinances	Up to 80% LTV
<b>Relief refinances</b>	Ineligible	Ineligible
<b>Construction conversion and renovation</b>	Ineligible	Ineligible
<b>Property Types</b>		
<b>Properties with estimated values greater than \$1 million</b>	Ineligible*	Ineligible
<b>Single-family 1-unit properties</b>	Eligible	Eligible
Condominiums	Eligible	Eligible
<b>2- to 4-unit properties</b>	Ineligible	Ineligible
<b>Manufactured homes and co-ops</b>	Ineligible	Ineligible
<b>Properties with resale restrictions</b>	Ineligible	Ineligible

\*Properties with an estimated value of exactly \$1 million are also ineligible for Fannie Mae’s appraisal waiver.

## **BENEFITS OF APPRAISAL WAIVERS .....**

Both Enterprises have reported that their appraisal waiver programs shorten the loan origination process. For example, Freddie Mac projects that loans can close seven to ten days faster with an appraisal waiver. Eliminating the requirement for an appraisal can also save money for borrowers. Freddie Mac estimates that a lender that accepts the offer of an appraisal waiver can save the borrower the costs of the appraisal, which it projects at \$300 to \$700. Under both appraisal waiver programs, the lender benefits from immediate relief from the representation and warranty obligation for collateral value.

Appraisal waivers also mitigate delays from appraiser shortages. According to the Appraisal Foundation, the number of certified and licensed appraisers fell by more than 20% between 2007 and 2017, with the Appraisal Institute predicting declines of up to 30% more. Appraiser shortages are especially acute in rural areas. Delays waiting to receive an appraisal can hold up the underwriting of a loan. Using data and technology on lower risk loans can free up appraisers to focus on more complex matters. According to the General Accountability Office, assessments based on AVMs also side step the pressure to overvalue properties reported by some appraisers and can deliver more objective and consistent appraisal values than human appraisers.

## LIMITATIONS AND RISKS OF CURRENT APPRAISAL WAIVER PROGRAMS .....

The Enterprises report that loans with appraisal waivers have historically performed as well as loans with traditional appraisals. Because Fannie Mae’s appraisal waiver program and ACE, as currently structured, are modest in size and include stringent eligibility standards, the risks from these programs are small. As discussed earlier, only a fraction of the Fannie Mae appraisal waivers or ACE offers have been accepted.

According to FHFA, the offer rate for Fannie Mae appraisal waivers and ACE will change as the proportion of purchase to refinance transactions changes. While the Enterprises have indicated that they may seek to expand the reach of these programs at some point in the future, when approving Fannie Mae appraisal waivers and ACE for purchase transactions FHFA expected that the offer rates for these programs would not exceed [REDACTED] of the Enterprises’ purchase volumes (by loan count).

Fannie Mae’s appraisal waiver program, which is based on prior appraisals rather than an AVM, may face limitations as appraisals “age out” of the system. As explained above, an appraisal on file must be less than six years old to be considered for an appraisal waiver. A Fannie Mae official told us that the majority of appraisals currently on file are less than six years old but recognized that many were generated during 2012 and 2013 and will age out shortly, at which point a Fannie Mae appraisal waiver would not be offered unless new data about the property has been obtained and submitted to Fannie Mae.

According to a recent report published by the U.S. Department of the Treasury, “the development of new appraisal technology offers the potential, when used responsibly, to relieve some of the pressures in the appraisal market,” including through the use of AVMs to estimate property value. The report expresses support for the Enterprises’ “limited adoption

of appraisal waivers” but cautions that automated property valuations must be carefully monitored when they are used instead of traditional appraisals.

An FHFA official reported that FHFA is monitoring Fannie Mae appraisal waivers and ACE and will follow up with the Enterprises as appropriate. In particular, FHFA will be monitoring key risk indicators and offer rates for purchase and refinance transactions on a regular and ongoing basis.

Model-based alternatives to traditional appraisals have certain limitations. For example, AVMs may be less reliable in areas where properties do not share similar characteristics, such as age and size. Where insufficient data exists for a particular area, such as a rural area, the model might be unable to produce reliable values for properties in that area. Freddie Mac indicates that these factors were considered when developing ACE, which is based on an AVM.

Appraisers have voiced concerns that technology is an inadequate substitute for experience, expertise, and on-site presence of an appraiser. The Appraisal Institute warned that eliminating humans from the process would create a “race to the bottom” on loan quality. Because the current appraisal waivers, when used, provide lenders with relief from certain representation and warranty obligations for collateral, failures in the technology create exposure for the Enterprises in the event of loan defaults.

As stated by an official from the Appraisal Foundation, in the future of appraisals, there will continue to be a need for highly qualified people, coupled with technology and analytics.

## CONCLUSION.....

Each Enterprise has launched an appraisal waiver program that provides relief to lenders from representation and warranty exposure for the values of affected properties for eligible loans. Because those programs, as currently structured, are modest in size and include stringent eligibility standards, the risks from these programs are small.

FHFA will be monitoring key risk indicators and offer rates on a regular and ongoing basis, and an FHFA official told us that the Agency will follow up with the Enterprises on Fannie Mae appraisal waivers and ACE as necessary. That information will be useful should the Enterprises seek to expand the reach of their appraisal waiver programs at some point in the future, as they have both indicated that they may.

## OBJECTIVE, SCOPE, AND METHODOLOGY .....

The objective of this white paper was to provide background information on the Enterprises' appraisal waiver programs and AVMs in those programs. To achieve this objective, we reviewed internal FHFA, Fannie Mae, and Freddie Mac documents as well as publicly available documents. We also interviewed FHFA, Fannie Mae, and Freddie Mac officials.

We provided FHFA with the opportunity to respond to a draft of this white paper. We appreciate the cooperation of FHFA staff, as well as the assistance of all those who contributed to the preparation of this white paper.

## ADDITIONAL INFORMATION AND COPIES.....

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