TESTIMONY TO APPRAISAL SUBCOMMITTEE
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Introduction and summary

Thank you for inviting me to testify before the Appraisal Subcommittee. I am Danny Wiley, Freddie Mac's Senior Director of Collateral Risk Policy. I am a state certified residential appraiser, and I have worked in the appraisal profession since the early 1980s. I spent over 25 years as an independent fee appraiser. I also worked as the Chief Valuation Officer at a national appraisal management company for several years. I have been in my current position at Freddie Mac for four years.

Appraisals play a critical role in the residential real estate purchase and financing processes. Homebuyers, lenders and investors rely on appraisers to develop credible, professional opinions of property values in an independent, objective and impartial manner. Accordingly, the appraisal profession and process are regulated at the state level to ensure appraisers are properly trained, credentialed, and independent.

Freddie Mac has been asked to address four topics in our testimony. I'll briefly summarize our responses to each. We provide our detailed answers beginning on page 5.

The first topic is Freddie Mac's role and responsibility in addressing appraisal bias. Congress created Freddie Mac to support the housing finance system by purchasing and guaranteeing home mortgages originated in the primary market. Moreover, Congress prohibited Freddie Mac from engaging in activities such as originating mortgages. In our statutorily defined role, we set requirements for the mortgages we purchase from approved lenders operating in the primary market, including requirements for appraisals and appraisal reports. Lenders must satisfy those requirements or the mortgages they sell to us are subject to repurchase and/or other remedies. Our requirements include identifying unacceptable appraisal practices for mortgages sold to us. Those unacceptable practices related to appraisal bias (which also are prohibited under federal law) include:

- Considering race, color, religion, sexual orientation and other similar characteristics of current or prospective occupants of a property
- Using terminology or language that could indicate underlying bias about the racial or ethnic composition of the neighborhood or community
- Considering the age or location of a dwelling or the surrounding neighborhood in a manner that has a discriminatory effect

Lenders represent and warrant to us and are responsible for ensuring that appraisals of homes funded by mortgages purchased by Freddie Mac fully comply with our requirements. Evidence of unacceptable practices in an appraisal would be considered a breach of these representations and warranties. Additionally, and discussed below, we monitor and assess appraisal reports delivered to us, which can indicate patterns of bias, and we provide lenders the results of our assessments. We also communicate to appraisers and others in the appraisal community thematic opportunities for improvement.

Freddie Mac also goes beyond setting our appraisal requirements by working collaboratively with industry stakeholders in several ways to promote appraisal quality. For example, we are leading a Reconsideration of Value (ROV) subgroup within OCC's Project REACh, which is designed to create a standardized ROV process with clear roles for borrowers, lenders and appraisers. We also have been working with Fannie Mae and HUD to develop consistent ROV policies, which will benefit lenders and borrowers.

Additionally, we provide input to the Appraisal Foundation's Appraisal Standards Board and its Appraiser Qualifications Board to establish and improve standard practices, qualification criteria and education requirements. We also are working with The Appraisal Institute and Fannie Mae as a core participant in the Appraiser Diversity Initiative (ADI). Through ADI, we work with industry participants to help increase diversity among residential appraisers.

The second issue we were asked to address is how Freddie Mac tools can identify appraisal deficiencies and/or patterns of bias. Freddie Mac's Loan Collateral Advisor® is our automated tool that assesses appraisal reports submitted to the Uniform Collateral Data Portal to identify quality trends and issues. We enhanced it to help detect undervaluation and thereby promote fairness. We also added rules to detect potentially discriminatory language in appraisal reports. This information, provided to lenders to share with appraisers, creates a feedback loop that helps appraisers use more objective language.

Freddie Mac also developed an Appraisal Quality Monitoring (AQM) framework with a dedicated team to identify, assess, monitor and mitigate risks, such as undervaluation of a property. We leverage results from Loan Collateral Advisor to identify trends related to quality and fairness concerns reflected on appraisals from individual appraisers.

The third issue we were asked to discuss is the results of Freddie Mac's "appraisal gap" research. In recent years, there has been extensive discussion as to whether bias in the appraisal process is a driving factor in the price differential between similar homes in differing locations. In 2018, Freddie Mac began examining data on home purchase transactions to compare the results of appraisal value opinions to contracted sales prices. Unlike value, the contracted sale price is a readily available and verifiable factual data point.

In 2021, we published a research paper in which we identified an "appraisal gap" where a higher percentage of appraised values in Black and Latino neighborhoods were lower than the sales prices compared to white neighborhoods. The data showed that as the concentration of Black or Latino residents in a census tract increases, the appraisal gap increases.

In May 2022, we published a follow-up research note that built on the prior research with a modeling approach. The model results indicate that, even after controlling for important factors that affect house values and appraisal practices, appraisal outcomes still differ for properties in predominantly Black and Latino tracts relative to those in predominantly white tracts.

Freddie Mac's research contributes to an ongoing national conversation about the causes and frequency of undervaluation. Freddie Mac continues research to identify causes and explore potential solutions to the appraisal gap. In the meantime, we established the aforementioned AQM framework to help address potential bias by identifying patterns in appraisal reports. We also are developing alternative valuation methods to bring greater standardization and increased objectivity.

Finally, we were asked to address the goals of the Uniform Appraisal Database Redesign Project, and how the redesign will improve accuracy and reduce potential for bias. Freddie Mac and Fannie Mae have announced an update to the Uniform Appraisal Dataset (UAD) that, when fully implemented, will bring increased objectivity and uniformity to reports for all property types, facilitating better analysis of reports and improving overall risk management capability.

These and other issues relevant to this hearing are discussed in detail below. Freddie Mac is committed to working with the appraisal industry, lenders, and other stakeholders to help improve the appraisal process and help ensure it is fundamentally fair for all borrowers.

Background on the role of appraisals of in the homebuying process

Before addressing the Subcommittee's questions in more detail, I will begin by briefly reviewing what an appraisal is, its purpose, and why it is needed. A real estate appraisal is a professional opinion of a property's value. This opinion is communicated in an appraisal report prepared by an appraiser. Appraisers are trained professionals whose job it is to develop opinions of value in an independent, objective, and impartial manner, using recognized methods and techniques to objectively analyze data. The appraiser's opinion of the property's value might differ from the actual sale price of the property, which reflects the agreement between the buyer and seller of the property.

This raises the question of why an appraisal is needed. Consider that certain types of highly liquid assets – such as common stock in publicly traded companies and Treasury bonds – are bought and sold many times on a daily basis. The high volume of these transactions between buyers and sellers provides a reliable measure of the market value of these assets at any given point in time. In contrast, real estate is an illiquid asset. A particular property might not be offered for sale for years at a time. And while each share of common stock in a company is the same, each property differs in location, lot and dwelling size, and features, all of which help determine a property's value.

Furthermore, most residential property buyers finance their purchases with home mortgages. Lenders and investors use information in appraisal reports to evaluate the risk of accepting the property as collateral for a mortgage loan. The three primary types of collateral risk are:

- Value risk – the risk that loan-to-value ratio, a key risk measure in the mortgage process, is not reliable.
- Condition risk – the risk that the property condition makes the property unsuitable for collateral for a mortgage.
- Marketability risk – the risk that the property has features that would make it difficult to sell or otherwise dispose of, in the event of borrower default and foreclosure.

Appraisal reports include information relevant to all three of these risk categories, not only protecting the interests of lenders and investors but also providing useful information to homebuyers.

Appraisers may develop various types of value opinions. For mortgage-related appraisals, the value developed is an opinion of "market value," which Freddie Mac defines in Section 5605.2 of our Seller/Servicer Guide as,

> *The most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller, each acting prudently, knowledgeably and assuming the price is not affected by undue stimulus.*[1]

In simple terms, the market value of a property is the most probable price one could sell the property for in the open market under the normal conditions of sale.

Real estate appraisers are regulated primarily at the state level. The individual states issue credentials to real estate appraisers based on criteria adopted in those states. The national registry of appraisers, maintained by the Appraisal Subcommittee, indicates that there are currently over 94,000 active appraiser credentials in the United States representing approximately 70,000 appraisers. Some appraisers have credentials in multiple states, and some appraisers do not appraise residential properties. Over the past ten years, appraisal reports from approximately 30,000 to 40,000 unique appraiser credentials have been submitted to the Uniform Collateral Data Portal (UCDP)[2] in any given month.

Because of the importance of credible appraisals and accurate appraisal report content, Congress included in the Dodd-Frank financial reform law a requirement for appraisers to operate independently, free from pressure or undue influence. Freddie Mac and Fannie Mae (the Enterprises) have instituted appraiser independence requirements consistent with the requirements of Dodd-Frank.

For originations of home mortgages sold to the Enterprises, appraisers are selected and engaged by the lender or an agent acting on behalf of the lender. Such agents are known as appraisal management companies (AMCs). The Enterprises have jointly adopted standard formats for residential appraisal reports for properties to be used as collateral. This allows appraisers to work more efficiently. It also allows lenders, AMCs, and the Enterprises to develop automated tools to assist in evaluating appraisals and appraisal reports.

After accepting an assignment, an appraiser collects and analyzes the data necessary to develop a credible opinion of value. Data sources used may include personal observations and records, MLS data, data from public sources (tax records, deeds, permits, etc.), or any other source that the appraiser deems credible. A summary of the analyses and conclusions is communicated via an appraisal report created by the appraiser, using software specially designed to assist the appraiser in the analysis and to produce a report in the proper format.

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[1] Section 5605.2 of our Guide adds: *Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:*

1. *Buyer and seller are typically motivated*
2. *Both parties are well informed or well advised, and each acting in what he or she considers his or her own best interest*
3. *A reasonable time is allowed for exposure in the open market*
4. *Payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto, and*

The price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.

[2] The UCDP provides a single portal for electronically submitting appraisal files to Freddie Mac and Fannie Mae.

Upon completion, the appraisal report is transmitted to the lender or AMC, which examines it to ensure that it meets applicable guidelines. This is often done using a combination of manual and automated processes. Both Enterprises have developed tools to assist in the examination process for any appraisal report, not just for mortgages sold to the Enterprises, as discussed in our response to question 2 below.

If the examination reveals errors or areas that require additional analysis or commentary, the report is returned to the appraiser for revision. When the Seller of a mortgage to an Enterprise, whom the Enterprises hold accountable for appraisal quality, is satisfied that the appraisal report meets necessary requirements, it can then be used by the lender and submitted in support of the loan.

Question 1: Freddie Mac's role and responsibility in addressing appraisal bias

The Subcommittee asked us to discuss our role and responsibility in addressing appraisal bias. As discussed above, Congress created Freddie Mac to support the housing finance system by purchasing and guaranteeing home mortgages originated in the primary market. Moreover, Congress prohibited Freddie Mac from engaging in activities such as originating mortgages. In our statutorily defined role, we set requirements for the mortgages we purchase from approved lenders operating in the primary market, including requirements for appraisals and appraisal reports. Lenders must satisfy those requirements or the mortgages they sell to us are subject to repurchase and/or other remedies. Our requirements include identifying unacceptable appraisal practices for mortgages sold to us. Freddie Mac also supports making improvements in the appraisal process, and we work collaboratively with industry stakeholders to identify and address any bias that negatively impacts the accuracy, fairness and credibility of appraised home values.

Prohibition of unacceptable appraisal practices

Freddie Mac's policies clearly define unacceptable appraisal practices for mortgages sold to us. Section 5603.4 of our Seller/Servicer Guide identifies 12 types of unacceptable practices, including:

- Considering race, color, religion, sexual orientation, and other similar characteristics of current or prospective occupants of a property
- Using terminology or language that could indicate underlying bias about the racial or ethnic composition of the neighborhood or community in which the property is located (including terms like "pride of ownership," "desirable neighborhood or location" or "up and coming") or reference to amenities geared to specific racial, ethnic or religious groups
- Considering the age or location of a dwelling or the surrounding neighborhood in a manner that has a discriminatory effect

Lenders represent and warrant to us, and are responsible for ensuring that, appraisals of homes funded by mortgages purchased by Freddie Mac fully comply with our requirements. Evidence of such unacceptable practices in an appraisal report would be considered a breach of the Seller's warranty of the professional quality of the appraisal and could result in the Seller's repurchase of the loan. Additionally, and discussed below, we continuously monitor and assess appraisal reports delivered to us, which can indicate patterns of bias, and we provide lenders the results of our assessments. We also communicate to appraisers and others in the appraisal community thematic opportunities for improvement.

Ongoing engagement with the appraisal industry

Freddie Mac also goes beyond setting our appraisal requirements by working collaboratively with stakeholders to help address bias. We also have long supported efforts to partner with the industry to strengthen collateral evaluations. For example, in recent years we have partnered with the Appraisal Institute, the National Urban League, and Fannie Mae to lead the Appraiser Diversity Initiative (ADI), a group focused on attracting new entrants to the real estate appraisal field while fostering diversity in the profession.

ADI offers workshops virtually, and at locations around the country, where interested people can learn more about the appraisal profession and what it takes to become a credentialed appraiser. The program includes scholarships to cover the educational costs, additional training and mentorship from appraisers employed by Freddie Mac, Fannie Mae and others, and regular meetings with scholarship recipients for progress updates and sharing of industry news. A stipend is also provided to allow attendance at an industry conference for educational and networking purposes.

More than 500 people have been awarded scholarships through ADI, with many actively working to complete the education requirements before finding positions of employment.

ADI also constantly evaluates the program to look for opportunities for improvement. It currently focuses on increasing the percentage of scholarship recipients who complete the educational requirements and possibly expanding economic aid and other support offered to those who do complete the training.

Engagement in Project REACh

Third, Freddie Mac also is engaged in the Office of the Comptroller of the Currency's Roundtable for Economic Access and Change (Project REACh). Large bank lenders, secondary market participants, appraisal industry representatives, community advocates, civil rights organizations, and other entities have reviewed appraisal-related practices in the lending industry. Its goal is to better understand what borrowers and lenders experience when appraisal issues, including allegations of appraisal bias, emerge during the lending process.

Freddie Mac has been leading Project REACh's subgroup on Reconsiderations of Value (ROV). In this subgroup, Freddie Mac joined large bank lenders, appraisal industry representatives, community advocates, civil rights organizations, and other entities to review certain appraisal-related practices in the lending industry. The goal was to better understand the current dynamics that both borrowers and lenders experience when appraisal topics, including allegations of appraisal bias, emerge during the lending process. As a result of these conversations, Project REACh is publishing informal Best Practices guidance developed by its appraisal bias working groups, which incorporate recommendations from the industry stakeholders. These Best Practices are not binding, but they are intended to accelerate conversations for those who are eager to improve practices related to appraisals, including efforts to prevent appraisal bias from negatively impacting consumers and eroding confidence in the financial system.

Question 2: Freddie Mac tools for identifying deficiencies in appraisals

The Subcommittee asked us to describe how Freddie Mac tools can be used to identify appraisal deficiencies. For purposes of addressing this request, we will discuss not only tools such as Loan Collateral Advisor (LCA), which provides automated evaluations of appraisal report content, but also organizational processes we have in place.

Loan Collateral Advisor

LCA is designed to examine individual appraisal reports. It automatically assesses reports submitted by lenders or their authorized agents to the Uniform Collateral Data Portal (UCDP). Freddie Mac uses the results of our analyses of individual appraisal reports to identify any trends in quality issues. Trends may be analyzed by lender, by region, by property type, and other criteria. Industry communications are developed to address observed issues and are delivered via email lists, web site and social media postings, event presentations, and other means.

Freddie Mac has enhanced LCA by adding text detection capabilities. Appraisal report content is examined for the presence of certain words or phrases that may be deemed unacceptable appraisal practices per 5603.4 section of the Freddie Mac Selling Guide. As noted above, Freddie Mac policy prohibits the use of terminology that is discriminatory, overly subjective without context, or classified as a "code word" for race or ethnicity. Evidence of such unacceptable practices in an appraisal report would be considered a breach of the Seller's warranty of the professional quality of the appraisal and could result in the Seller's repurchase of the loan.

Freddie Mac personnel and lenders submitting appraisal reports can access the LCA user interface. The interface provides information including:

Document details – A summary of key data points, including the value conclusion, the appraiser, and the property parcel number.

Risk Score – This measures the risk that the property has been overvalued. The score is based on a scale from 1 to 5, with 1 being very low risk and 5 being very high risk. Properties that cannot be scored for risk are assigned a score of 99. The risk score is based on key report content and comparison of the value opinion reported in the appraisal with a predicted price from Freddie Mac' automated valuation model, Home Value Explorer (HVE).

LCA findings – These are messages provided to the lender regarding LCA findings. There are seven categories of messages:

- LCA Risk Score - Provides visibility into potential overvaluation risk
- Valuation Messaging - Highlights specific valuation concerns based on information available to Freddie Mac and/or information provided on the appraisal. This includes messages on potential undervaluation
- Comparable selection/Adjustments Messaging - Highlights comparable selection and/or adjustment issues

- Report Completeness Messaging - Highlights incorrectly completed or incomplete sections of the report
- Report Consistency Messaging - Highlights areas within the report that contain inconsistent information
- Data Discrepancy Messaging - Highlights areas where data on the appraisal conflicts with data from historical appraisals or other data sources available to Freddie Mac
- Eligibility Messaging - Highlights potential issues with loan or property eligibility in meeting Freddie Mac's guidelines

Comparable Sales – A list of sales in the subject area that may be relevant to the valuation of the subject property.

Document Center – Storage of the appraisal report and related documents.

LCA feedback messages address a variety of potential issues, including potential bias that may be expressed through a pattern of undervaluation or overvaluation, or the use of language contrary to Freddie Mac's Selling Guide requirements. As noted previously, the messages are intended primarily to aid the lender (or AMC) in evaluating the appraisal report. Messages also can be reviewed via the LCA user interface and are also returned via UCDP on the Submission Summary Report.

Appraisal Quality Monitoring (AQM) framework and team

In addition to LCA results, the Freddie Mac AQM framework, and the team doing the work, also use a variety of tools and data sources to analyze groups of appraisal reports. They use it, for example, to ingest all appraisal reports an appraiser has submitted and mathematically evaluate them to determine whether the analyses and results of the appraiser vary from location to location. The tool can be used to analyze data regarding percentage of appraisals above or below a contracted sale price, how the final value is reconciled from the indicated value range derived from the comparable properties, consistency in adjusting for changing market conditions, and how differences in size are accounted for.

Results of findings from automated systems are compiled and are often used in conjunction with detailed manual examinations of appraisal reports by appraisal quality monitoring team members. The team is staffed with appraisers who hold state certifications, have many years of experience in examination and review of appraisal reports, and, in some cases, have formal education in data science.

The team may assess appraisers' work based on multiple types of evaluations. For example, appraisers producing a volume of appraisal reports that far exceeds the typical volume of appraisal work in their area may be targeted for additional review to determine if the increased volume is attributable to efficiency in process, unacceptable appraisal practices, or some other reason.

If the team's analyses reveal areas of concern for an identified appraiser, the data and analyses creating that concern are compiled and presented to an appraisal quality monitoring committee that meets at least once per quarter. The committee members, who represent multiple departments within Freddie Mac's Single-Family Acquisition Division, consider the findings and formally vote on a recommended action. Typically, the first course of action is to contact the appraiser and provide an opportunity to respond. If an appraiser is contacted, and that appraiser provides a response, the response is considered prior to the committee reaching a final decision. If quality concerns continue, in most cases we notify the appraiser and afford them an opportunity to respond before taking further action. Ultimately, the committee may decide to refer an appraiser to their state regulator or to the Department of Justice and/or HUD, in the case of an issue related to fair lending.

<u>Modernization and enhancement of tools and policies</u>

Under FHFA guidance, Freddie Mac is assessing enhancements for new and existing collateral valuation methods modernizing the appraisal process. Our goal is to effectively manage risk while simplifying the loan manufacturing process, reducing borrower costs, and promoting consistent and fair valuation outcomes.

This is particularly important given an ongoing structural problem in meeting fluctuating demand for appraisal services. The process to obtain appraiser credentials, which was discussed in the previous Appraisal Subcommittee hearing on this subject, mandates formal education, documented experience, and testing. For a new entrant, it typically takes one to five years to obtain state-issued credentials as a real estate appraiser. Hence, while the demand for appraisal services is fluid and can change rapidly due to changing economic conditions, the supply of real estate appraisers is relatively static and cannot change quickly. This means that in periods of peak demand, the time required to obtain an appraisal report lengthens, and the costs for appraisal services rise. This negatively affects lenders and consumers, especially by lengthening the amount of time needed to originate a loan, which could prevent locking in an interest rate within the specified term period.

In 2017 Freddie Mac introduced Automated Collateral Evaluation (ACE). ACE leverages our proprietary models, along with historical data and public records, to assess the value, condition and marketability of a property. When a loan qualifies for ACE, lenders are not required to obtain a traditional appraisal, and in lieu of the appraised value, we accept the contract price on a purchase loan or an estimated value on a refinance loan submitted by the lender. For loans acquired via ACE, loan performance exceeds the performance of loans with similar risk characteristics but funded based on an appraisal.[3] Because ACE is more efficient and reduces costs to the consumer, we think this is a great development.

As ACE relies on data and models to predict value and condition, there are times when a property may not qualify for ACE because there is insufficient property data. In other cases, risk tolerances may dictate that existing data should be verified via a personal observation.

The Enterprises have both tested the use of trained data collectors who visit a home and collect significant data about the property and provide a property data report (PDR) that includes a detailed floorplan, information on features and amenities, and numerous photographs. Comparison of data gathered using trained data collectors compared to data from appraisal reports indicates that using PDR data does not increase collateral risk.

Initially, each GSE used its own proprietary property collection dataset. However, to promote consistency and fungibility, the Enterprises recently announced the adoption of a Uniform Property Dataset. The industry is currently transitioning to use of this joint data standard.

In addition to the use in the ACE program, a PDR may also be provided to an appraiser to use in lieu of a personal visit to the property by the appraiser. This is often referred to as a hybrid appraisal. In times of

[3] *Does Freddie Mac's Automated Collateral Evaluation Lower Mortgage Credit Risk Relative to Home Appraisals*?, Kadiri Karamon and Doug McManus, Freddie Mac, June 2022

high demand for appraisal services, the hybrid appraisal process can allow appraisers to produce appraisal reports more efficiently due to the elimination of the time required to arrange and conduct the property visit.

In response to the COVID-19 pandemic, the Enterprises adopted temporary flexibilities for appraisals. For certain transactions, we approved appraisals created without visiting and personally observing the property (a desktop appraisal) or appraisals created after only observing the exterior of a home from the street (exterior-only appraisal). This allowed the Enterprises to acquire and evaluate desktop appraisal reports and compare them to traditional appraisal reports. When the COVID-related appraisal flexibilities expired, analysis of the desktop appraisal reports that had been submitted indicated no increase in collateral-related risk, and the Enterprises adopted desktop appraisals as a permanent option for certain purchase appraisals.

Freddie Mac is also currently testing appraisals developed using alternative quantitative methods in lieu of the traditional sales comparison approach (which relies on comparable properties chosen by an appraiser). Rather than applying the traditional adjustment process to a small dataset, regression and trend line analysis is applied to a larger dataset. Though it requires more data, our analysis indicates that the valuation results can be produced more efficiently, and the conclusions are more transparent and better suited for quantitative analysis by the users of appraisal reports.

As tools used by appraisers to create appraisal reports and the tools used by users to evaluate those reports evolve, technological advancement will likely enable improved processes. For example, natural language processing can be used to analyze text in an appraisal report, and computer vision can be used to evaluate images in an appraisal report.

Additionally, advancements in home-scanning technology will also likely have a broad impact in many aspects of real estate. For many years now, there has been equipment and software that can scan a home and produce a floor plan, a virtual tour, or even a three-dimensional model. Wide use of this technology has been hampered by the time and special equipment required. However, advancements in mobile devices now means that in some cases scans can be produced using personal mobile devices, promoting wider adoption and use.

Question 3: Appraisal gap research

The subcommittee requested we describe the results of any studies Freddie Mac has undertaken on appraisals. In recent years, there has been extensive discussion as to whether bias in the appraisal process is a driving factor in the price differential between very similar homes in differing locations.

In 2018, Freddie Mac formed an internal working group from several divisions within the company, including our fair lending and equitable housing teams, to examine data on purchase transactions and compare the results of appraisals to the contracted sale price. Unlike value, the contracted sale price is a readily available and verifiable factual data point.

In September 2021, Freddie Mac published a research note, *Racial and Ethnic Valuation Gaps in Home Purchase Appraisals*.[4] The research involved examination of more than 12 million appraisal reports that were submitted to Freddie Mac from January 1, 2015, to December 31, 2020. The appraised value was compared to the contract price, and the percentage of appraisals where the value was less than the contract price is referred to as the "appraisal gap."

Looking at the first appraisal report submitted for each property, the data showed that as the concentration of Black or Latino residents in a census tract increases, the appraisal gap increases. We also examined individual appraiser behavior in this research note. We found that for approximately half of individual appraisers with a meaningful volume of work, the appraisal gap percentage in White tracts was significantly different from the appraisal gap percentage in Latino or Black tracts.

In May 2022, we published a follow-up research note, *Racial & Ethnic Valuation Gaps in Home Purchase Appraisals – A Modeling Approach*[5], which built on the prior research but used a modeling approach. The model results indicate that, even after controlling for important factors that affect house values and appraisal practices, appraisal outcomes still differ for properties in predominantly Black and Latino tracts relative to those in predominantly white tracts.

Freddie Mac's research contributes to an ongoing national conversation about the causes and frequency of undervaluation. Freddie Mac continues research to identify causes and explore potential solutions to the appraisal gap. In the meantime, we established the aforementioned AQM framework to help address potential bias by identifying patterns in appraisal reports. Additionally, as noted above, we are developing alternative valuation methods less dependent on individual judgments.

Question 4: UAD and Forms Redesign

The Subcommittee asked us to provide details about the UAD Redesign Project, specifically asking our goals in redesigning appraisal forms and how the redesign will improve the accuracy of and/or reduce the potential for bias in appraisals.

The Enterprises have long been engaged in standardizing appraisal reports; they introduced the first Uniform Residential Appraisal Report (URAR) in the late 1980s. In 2010, the Enterprises introduced the Uniform Appraisal Dataset (UAD), which established standardized data fields and enumerated responses for certain sections of certain forms. Originally, the UAD applied only to portions of the report, not the entire report. It also applied only to one-unit single family and condominium homes.

After several years of development under FHFA's guidance, the Enterprises recently announced an updated version of UAD that addresses reporting in a fundamentally different way. Currently, the URAR (form 1004/70) is the most commonly used appraisal report form, but there are a dozen different forms, with the specific form for an assignment dictated by property type and scope of work. In the updated UAD, a single dataset will be used as the basis for all residential appraisal reporting, with final report

[4] The full paper is located at https://www.freddiemac.com/research/insight/20210920-home-appraisals

[5] The full paper is located at https://www.freddiemac.com/research/insight/20220510-racial-ethnic-valuation-gaps-home-purchase-appraisals-modeling-approach

content being driven by property type, property characteristics, and the appraiser's scope of work. As a result, there will be uniformity in reports for all property types, facilitating better analytics and improved risk management. The new UAD also will promote greater objectivity in reporting through the use of more discrete data fields and less reliance on narrative text.

Updating the current forms requires considerable collaborative efforts between the Enterprises and other stakeholders. Currently, appraisers often are forced to address key issues in narrative addenda. The new UAD contains data fields to address such issues, limiting the need for narrative text and focusing instead on supplying discrete data, often using fixed enumerations (i.e., pick lists instead of text fields for responses). And, if future changes are necessary, that can be accomplished by changing a single dataset rather than publishing twelve new forms. Using discrete data fields and enumerated responses increases consistency and reduces the possibility for bias.

An independent study of the new report output showed that users and consumers found the new format easier to read. This is attributable to the adoption of new formatting and a more logical layout. For example, relevant photographs, maps, etc. are imbedded within the body of the report instead of being in an addendum.

Transition to a new UAD will not be without challenges. The existing forms-based reporting system has been in place for several decades, and industry participants have designed operational systems around that framework. All aspects of an appraisal assignment will be affected. However, implementation of the new UAD will bring more uniform data to all appraisal report types, a report format that is easier to read and use, more discrete data and less discretionary text, and greater flexibility to respond when updates are needed.

Conclusion

On behalf of Freddie Mac, I wish to express my appreciation to the Appraisal Subcommittee for inviting me to testify today – and for your close attention to this important area. As I have detailed in my remarks today, Freddie Mac has taken several concrete steps to help improve the accuracy, fairness and credibility of appraisals. We remain fully committed to working with the appraisal industry, lenders and additional stakeholders to help continue improving the appraisal process. Thank you again, and with that I am happy to answer your questions.