MBa®

MORTGAGE BANKERS ASSOCIATION

October 13, 2022

Sandra L. Thompson
Director
Federal Housing Finance Agency
400 7th Street, SW
Washington, DC 20219

RE: Fintech Request for Input

Dear Director Thompson:

The Mortgage Bankers Association (MBA)[1] appreciates the opportunity to comment on the Federal Housing Finance Agency's (FHFA) Request for Information (RFI) on Fintech in Housing Finance. FHFA's focus on Fintech, and the creation of a new office to guide its work in this area, is timely and potentially beneficial to the mortgage ecosystem. We look forward to collaborating with FHFA as it increases its focus on how technology may address many of the issues and opportunities facing housing finance.

As FHFA considers its role in enabling technological innovation, it should be mindful of not inadvertently hindering innovation through choices made by its regulated entities. Multiple market participants, including lenders and technology vendors, are actively striving to provide solutions and meet their customers' needs. FHFA should ensure that it listens to many voices as it contemplates influencing the direction of the technology ecosystem.

MBA's reply to the FHFA Fintech RFI is intentionally wide-ranging while also providing specific examples that seek to provide context for our comments. Our reply can be summarized into five key themes:

- It is important to understand the industry's recent history and experience with respect to technology adoption and innovation, and the current focal points for single-family and multifamily lenders when it comes to technology expenditures.

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[1] The Mortgage Bankers Association (MBA) is the national association representing the real estate finance industry, an industry that employs more than 390,000 people in virtually every community in the country. Headquartered in Washington, D.C., the association works to ensure the continued strength of the nation's residential and commercial real estate markets, to expand homeownership, and to extend access to affordable housing to all Americans. MBA promotes fair and ethical lending practices and fosters professional excellence among real estate finance employees through a wide range of educational programs and a variety of publications. Its membership of more than 2,100 companies includes all elements of real estate finance: independent mortgage banks, commercial banks, mortgage brokers, thrifts, REITs, Wall Street conduits, life insurance companies, credit unions, and others in the mortgage lending field. For additional information, visit MBA's website: www.mba.org.

- The GSEs have an important role to play with respect to the direction of technology within the mortgage industry, but they need to work collaboratively with industry to ensure that solutions work beyond GSE-specific use cases.
- Data is the source of financial innovation. Without access to data, innovation is hindered. FHFA should endeavor to open up access to data to spur innovation.
- Standards can accelerate innovation in myriad and unexpected ways. FHFA and the GSEs should avoid proprietary solutions and utilize MISMO to develop collaborative, standards-based approaches to issues affecting the mortgage ecosystem.
- FHFA and the GSEs do not need to solve Fintech. Helping to identify issues, their root causes, and collaborating on solutions that work for the entire mortgage ecosystem will be a successful outcome of this initiative.

Prior to addressing the specific questions posed by FHFA in the RFI, we would like to share our perspective on the current environment. To accomplish this, MBA asks, and provides answers to, several broader questions below.

For single-family lending we consider the following questions:

1. What is the current state of the single-family mortgage industry and how does that inform the technology investments that are needed today?
2. What have lenders been spending their technology dollars on over the past decade, and what have been the benefits of these expenditures?

For multifamily lending we consider the following questions:

1. What is the current state of the commercial/multifamily industry and how does that inform technology investments that are needed today?
2. What are some of the key distinctions between the single-family and multifamily mortgage markets?
3. What is the technology landscape for commercial/multifamily real estate finance firms?

After answering the questions specific to either the single-family or multifamily sectors of the market, we then consider several additional questions that are relevant across both sectors.

1. How should FHFA define the boundaries of the GSEs and FHLBs as it relates to the development and deployment of Fintech solutions?
2. How do we ensure that technology development in the GSE space is broadly applicable to the entire market and does not unintentionally harm non-GSE business?
3. What role does data play in financial innovation and what can FHFA do to enhance the access to and usefulness of data?

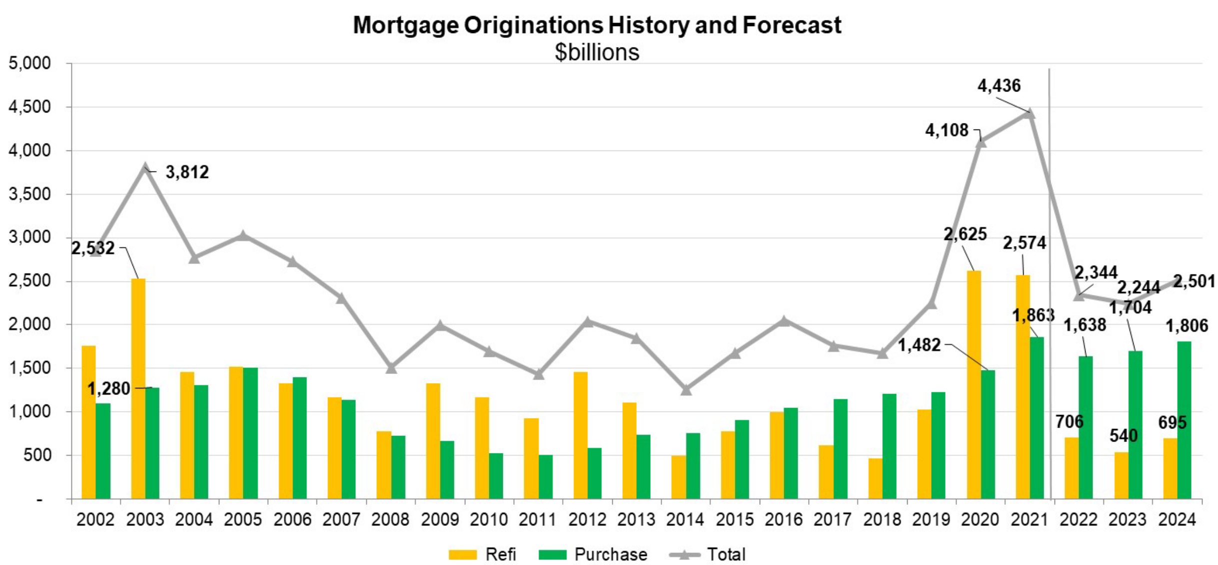
4. What are the industry's concerns with respect to tradeoffs between the adoption of new technology, consumer privacy, and cybersecurity?

<u>Single-Family Mortgage Market</u>

1. *What is the current state of the industry and how does that inform the technology investments that are needed today?*

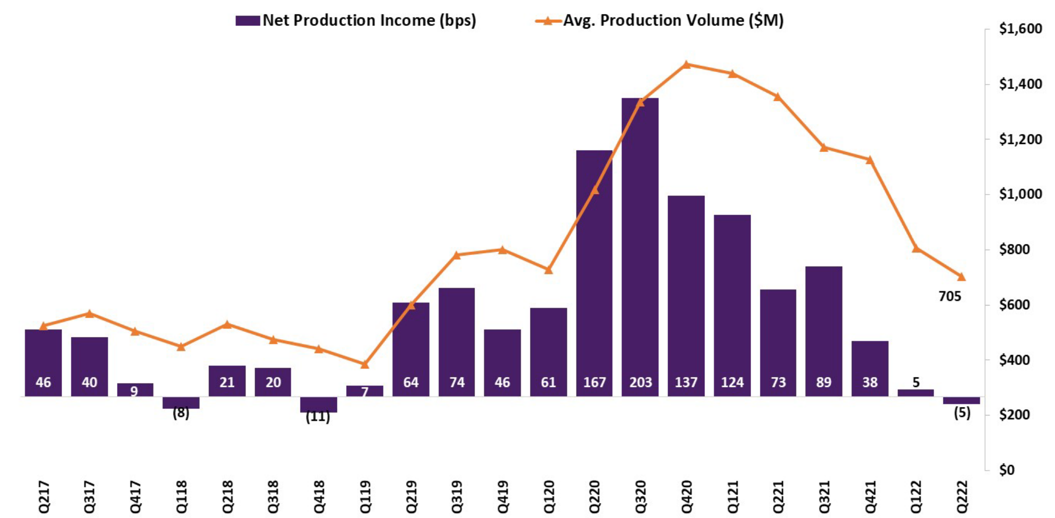
After two years of COVID-induced record business volume, the single-family mortgage sector is undergoing a rapid retrenchment. Origination volume, after jumping to record numbers in 2020, has declined rapidly and is projected to fall almost 50% in 2022 (Chart 1). Production profitability, which reached a record high in 2020, has declined sharply, with independent mortgage banks (IMBs) averaging a loss of 5 basis points on each loan originated in the second quarter of 2022 (Chart 2).

Chart 1: Mortgage Originations to Decline Almost 50% in 2022



Source: MBA's Mortgage Finance Forecast

Chart 2: IMB Average Net Production Income (bps) and Average Production Volume [2]

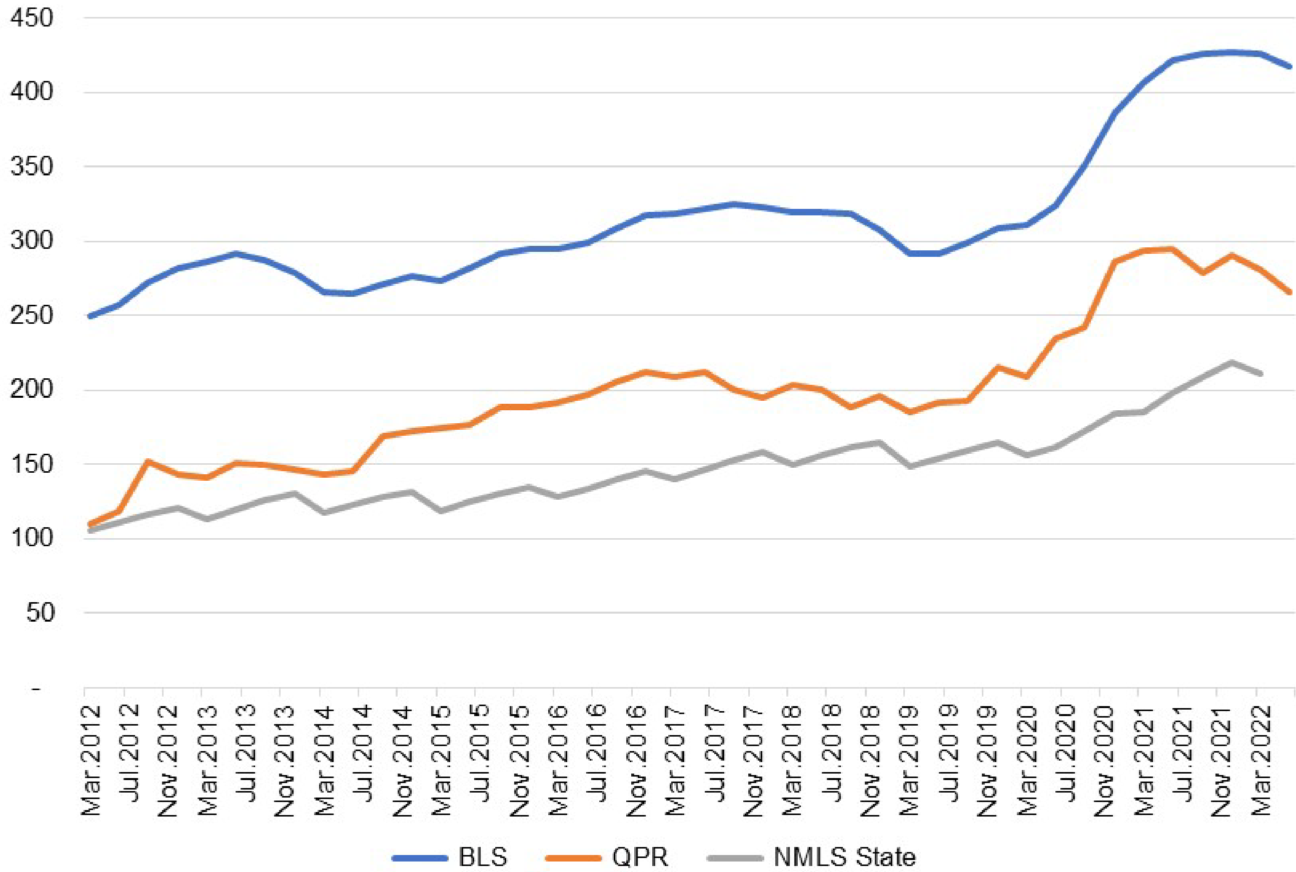


Source: MBA's Quarterly Mortgage Bankers Performance Report

[2] **Chart 2** shows average net production income for IMBs as well as average production volume. The average pre-tax production *loss* was 5 bps in the second quarter of 2022, down from an average net production *profit* of 5 bps in the first quarter of 2022, and down from 73 basis points in the second quarter of 2021. The only other quarters in the survey's history to record net production *losses* were: first quarter of 2014 (8 basis points); first quarter of 2018 (8 basis points), and the fourth quarter of 2018 (11 basis points).The average quarterly pre-tax production profit, from the third quarter of 2008 to the most recent quarter, is 54 basis points.

Concurrent with the rapid decline in volume, employment within the industry is also declining (Chart 3). According to a recent article by MBA economists published in HousingWire, employment may be expected to drop much further before it reaches a level consistent with the origination volumes projected for the next few years.[3]

Chart 3: Mortgage Employees: BLS vs QPR vs NMLS

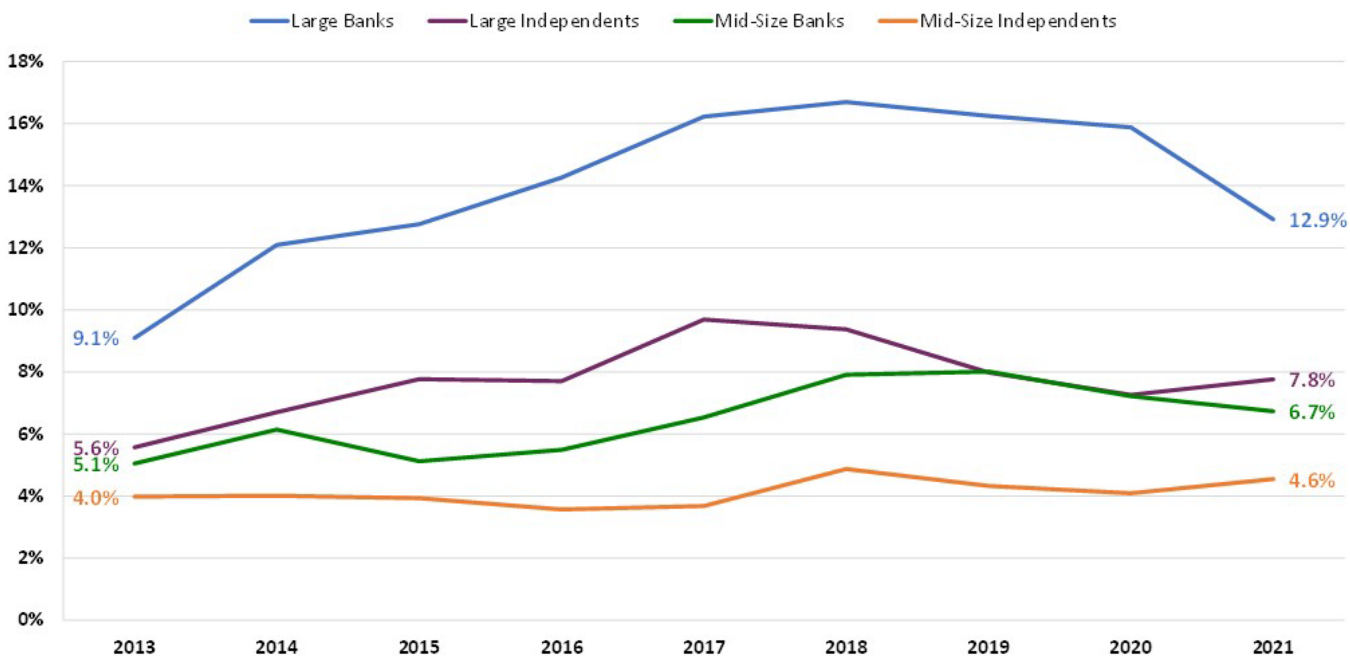


Source: Bureau of Labor Statistics, Nationwide Multistate Licensing System, MBA Quarterly Performance Report

[3] https://www.housingwire.com/articles/mba-economists-the-overcapacity-that-still-needs-to-be-cut/

Single-family lenders have increased the percentage of funds spent on technology over the past decade (Chart 4). Although technology expenditures have leveled off in recent years, they had previously increased noticeably across all types of financial institutions.

Chart 4: Technology Costs as % of Total Mortgage Company Costs[4]

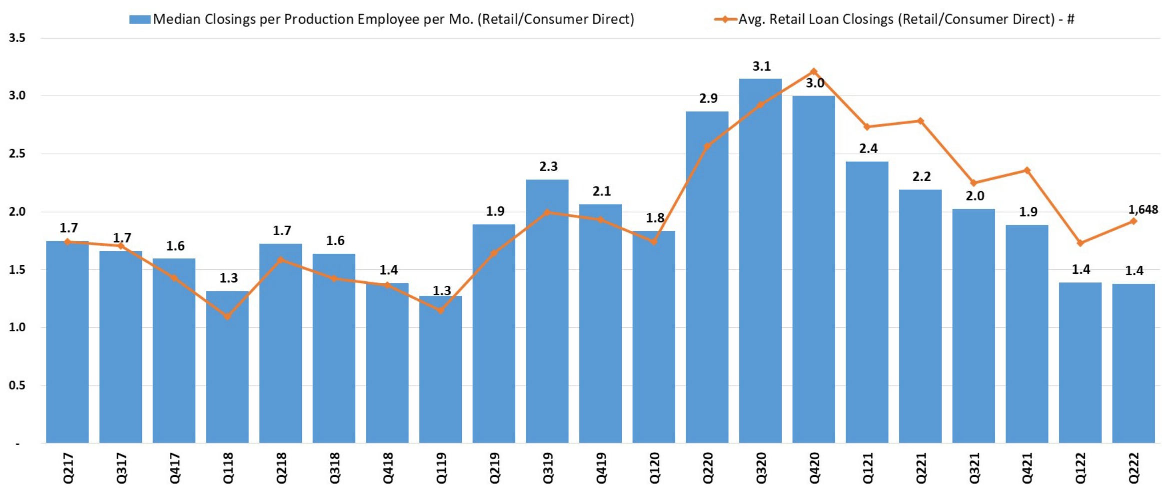


Source: PGR: MBA and STRATMOR Peer Group Roundtables

[4] **Chart 4** looks at technology costs as a % of total mortgage company costs across four different peer groups. For purposes of this chart, technology includes corporate, production and servicing technology costs. Historically, large banks have had the highest proportion of technology related expense. In 2021, on average 12.9 percent of bank's total cost was technology related. The majority of technology spend for large banks is on corporate technology. Mid-size IMBs had the lowest proportion of technology related expense. In 2021, on average, 4.6% of mid-size IMB's total cost was technology related.

Productivity across single-family lenders increased rapidly during the early months of the pandemic, as employees worked longer hours to address the rapid growth in volume (Chart 5). However, as the pandemic and the refinance wave extended longer than initially expected, employers began to hire to relieve their overburdened employees. Productivity gradually dropped as these new employees came on board. With the rapid drop in business volume in early 2022, productivity dropped below longer-term averages. Many employers could not adjust their staffing quickly enough for these rapid changes in business volume.

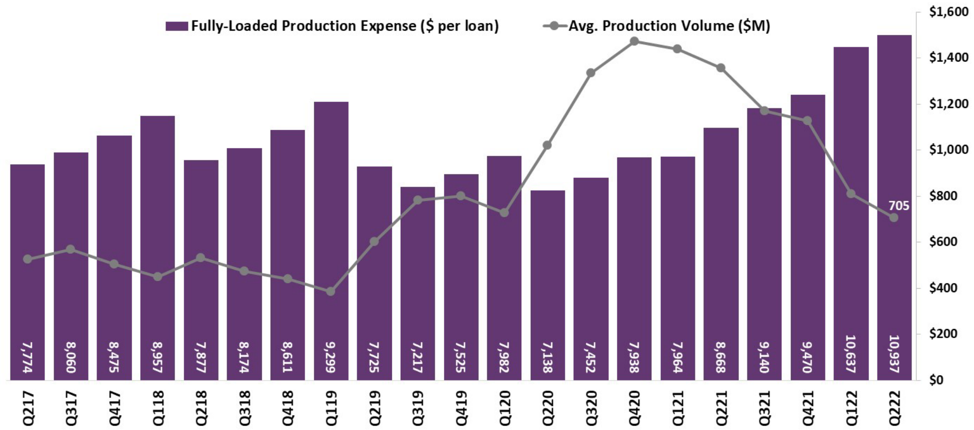
Chart 5: Loans Closed per Production Employee per Month (Retail/Consumer Direct)



Source: MBA's Quarterly Mortgage Bankers Performance Report

Several of the factors noted above combined to result in much higher costs of production. Costs have risen to an all-time high of almost $11,000 per loan in the second quarter of 2022 (Chart 6).

Chart 6: IMB Fully Loaded Production Expense ($ per loan) and Average Production Volume[5]



Source: MBA's Quarterly Mortgage Bankers Performance Report

Although technology spending has increased, the average total cost of originating a mortgage has not decreased. This increased spending has also not consistently increased the measured productivity of employees within single-family lenders. Nor has it noticeably decreased the cyclicality of the industry.

2. *What have lenders been spending their technology dollars on over the past decade, and what have been the benefits of these expenditures?*

Dodd/Frank Regulations – Although most of the regulations emanating from Dodd/Frank have now been implemented, the mortgage industry expended significant amounts of time, effort, and money to implement the necessary system changes to comply with the regulations. From the Qualified Mortgage to TRID to HMDA, these changes required a significant focus on developing new or updating existing systems. As can be seen in Chart 4, technology expenditures began to rise a decade ago as new or updated systems were developed to comply, only leveling off once the last of the regulations were implemented. These expenditures helped lenders to comply with the new regulations, but no measured improvements were noted in cost savings or productivity.

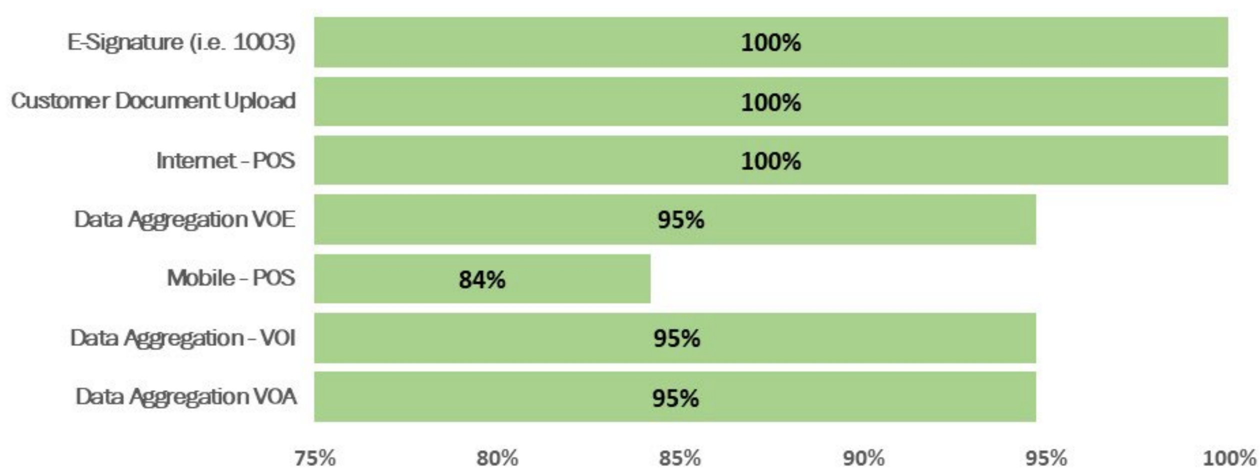
GSE Reporting Mandates – Over the past decade the GSEs have mandated significant reporting changes for lenders. These changes range from entirely new appraisal

[5] **Chart 6** shows Independent Mortgage Bankers (IMBs) reached a study-high average of $10,937 per loan in fully loaded production expenses in the second quarter of 2022. Fully loaded expenses include commissions, compensation, occupancy, equipment, technology related expenses, other production expenses and corporate allocations. From the third quarter of 2008 through Q2 2022, fully loaded production expenses have averaged $6,902 per loan. Average volume for these IMBs averaged $705 million, which represents a more than 50 percent decline compared to the study high of $1,472 million seen in the fourth quarter of 2020.

reporting requirements to loan delivery requirements, application reporting requirements, and consumer disclosure requirements. Complying with these new requirements resulted in significant technology expenditures for the lending community. As evidenced by the overall cost of origination, lenders have not experienced an aggregate improvement in costs as a result of complying with the GSE mandates. Appraisal waivers and other appraisal-related policy changes have resulted in process improvements, especially during the COVID pandemic. However, many of the costs associated with these improvements have been passed through directly to consumers (e.g. appraisal waivers) and have not contributed significantly to cost improvements for lenders. As the business alternative was to stop doing business with the GSEs, lenders took on these additional costs.

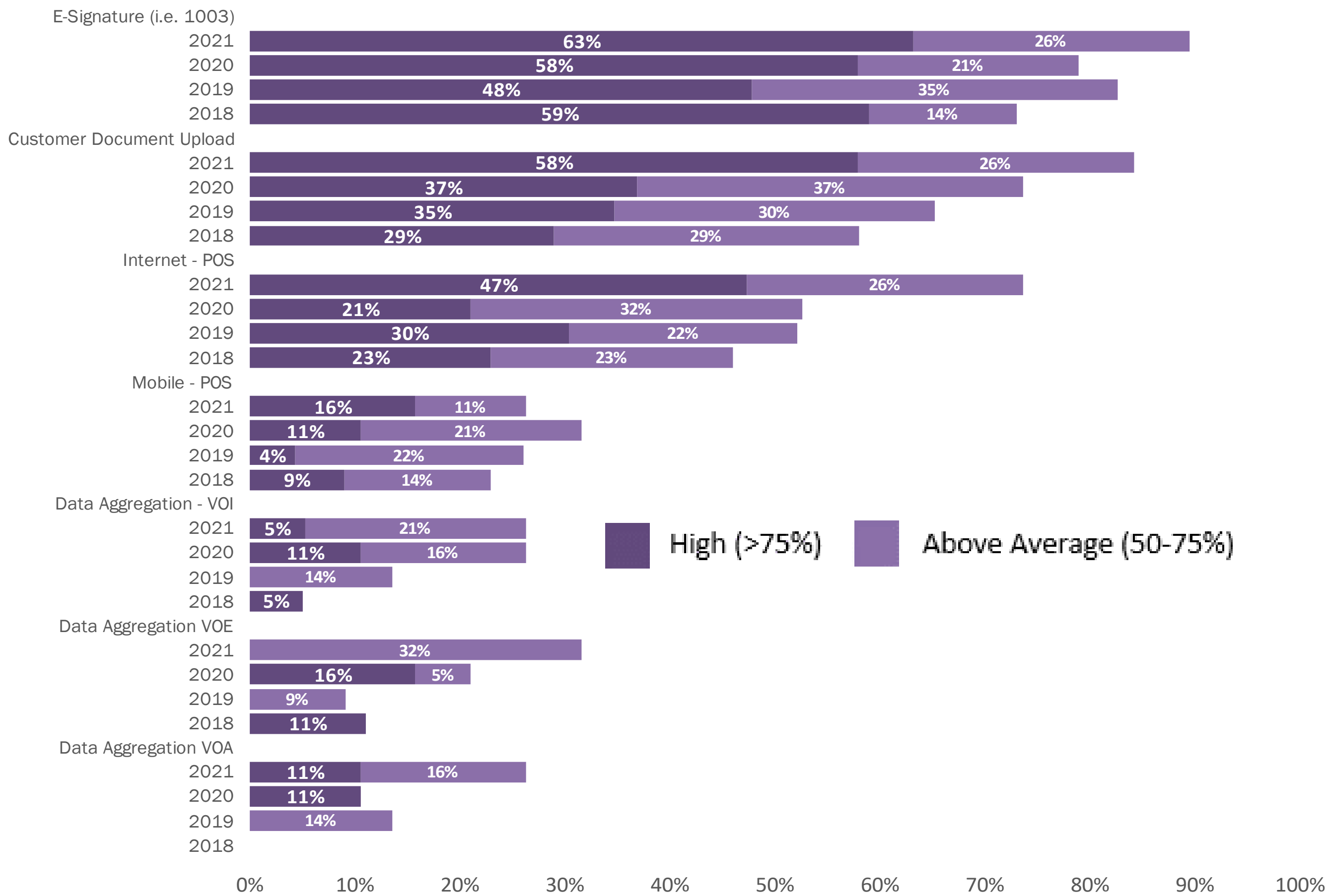
Consumer-facing Application Technology – For the past several years MBA has surveyed its lender members regarding adoption of certain technologies as well as consumer usage of those technologies. Although lenders have almost universally adopted the surveyed technologies (Chart 7), consumer utilization of those same innovations has varied (Chart 8). Consumers have readily adapted to the use of electronic signatures, portals and online Point of Sale (POS) platforms. Based on feedback from lenders, it is safe to say that consumers have appreciated these innovations, resulting in improved consumer satisfaction.

Chart 7: 2021 Lender Adoption of Application Technologies



Source: MBA's Technology Profile Survey

Chart 8: Mortgage Applicant Usage of Technology – Application Process 2018-2021



Source: MBA's Technology Profile Survey

Adoption of various automated verifications (e.g. Verification of Assets (VOA), Verification of Income (VOI) and Verification of Employment (VOE)) has lagged the adoption of other application oriented technologies. There are likely several reasons for this. Consumers may be reluctant to participate in these services due to privacy and security concerns, even though the technology might be a time-saver for them. Automated verifications may vary greatly in their coverage of various individuals, which in turn may result in lenders' deciding not to offer the service to consumers who are unlikely to be covered by these services. But perhaps most pertinent to FHFA, the absence of a collaborative standards-based approach may have inadvertently contributed to the lag in adoption.

Although automated verifications existed prior to Fannie Mae's deployment of its Day 1 Certainty initiative, that initiative brought greater attention to the possibilities of automation. Some in the industry colloquially even refer to all automated valuations as Day 1 Certainty. Unfortunately, Fannie Mae did not collaborate with Freddie Mac or others across the industry during the development and rollout of this program. Fannie Mae designed a process based on internal specifications and after a pilot period, rolled out its program requiring the use of a single vendor. Notwithstanding the potential benefits, many lenders determined that the cost of switching to a mandated vendor was not worth the potential benefits.

Many lenders prefer to follow a common process regardless of the type of loan or secondary market execution. Given that borrowers might be better served by an FHA, VA, USDA, Freddie Mac, PLS or portfolio loan, many lenders chose to forgo a change that only benefits loans sold to Fannie Mae. A process designed collaboratively, that would work for many alternative executions, likely would have resulted in higher levels of utilization for Fannie Mae and other insurers/investors.

Information Security – Although information security may not be a primary focus of this new FHFA initiative, we would be remiss not to note that spending on information security is significant in the mortgage industry. A data breach or system disruption can have company-threatening impacts on a lender as it could result in lost business, reputational harm, and the potential for legal and regulatory consequences. Lenders are and should be both aware and cautious regarding assuring appropriate levels of information security with each new technology that is implemented.

In summary, although technology spending has increased in the past decade, much of that spending has been focused on complying with new regulations, GSE reporting requirements and customer experience rather than on efficiency improvements that would lower the overall cost of origination.

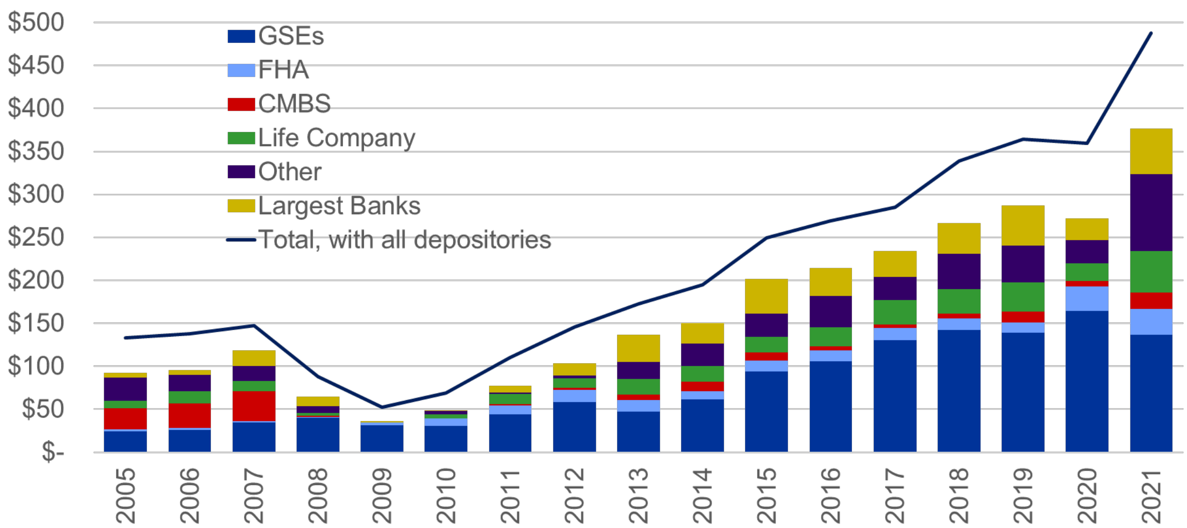
MULTIFAMILY MORTAGE MARKET

1. *What is the current state of the industry and how does that inform technology investments that are needed today?*

The multifamily mortgage market experienced a record year for originations in 2021, with a total of $487 billion of multifamily loans closed. While the GSEs account for about 50 percent of single-family mortgage lending activity, in 2021 they provided 28 percent ($137 billion) of multifamily lending, less than the 34 percent ($164 billion) that came from depository portfolios.

The GSE share of multifamily lending was down in 2021, driven by record growth in multifamily lending while the GSEs' activity was restricted as a result of the FHFA lending caps of $70 billion for each Enterprise (Chart 9). In 2019, for example, the GSEs' $164 billion of lending accounted for nearly half (46%) of all multifamily lending. Even so, there are a range of other capital sources actively engaged in the multifamily market, including depositories, life insurance companies, FHA, the commercial mortgage-backed securities market and more.

Chart 9: Total Multifamily Mortgage Lending, by Capital Source ($billions)



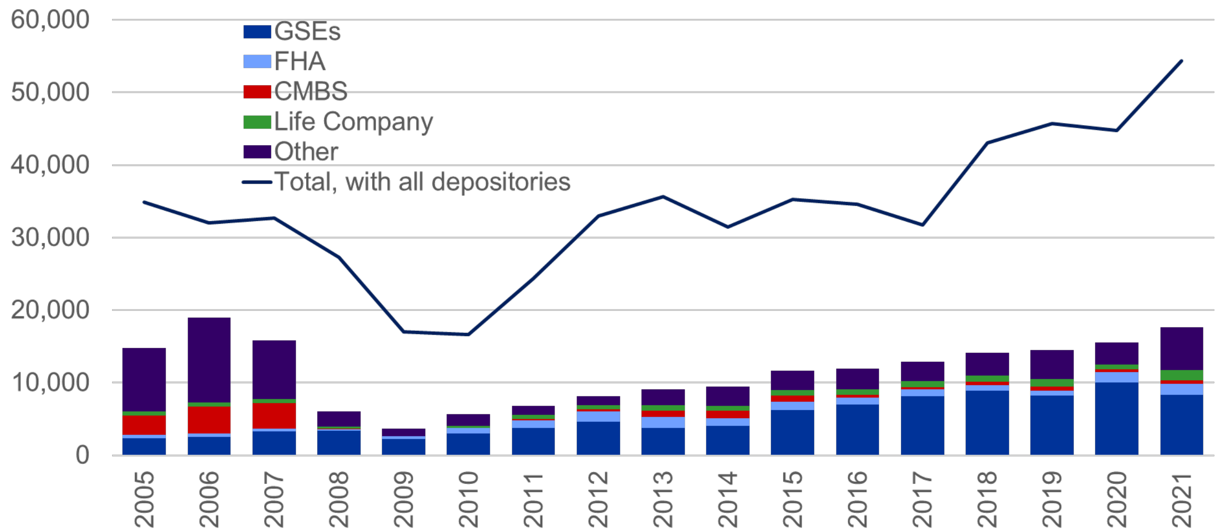
Source: MBA CREF Database

The numbers in Chart 9 show the market by the total dollar volume. It is important to note, however, that there is significant variation in the size of loans. In 2021, for example, the average loan sizes (in millions) for different capital sources were:

1. Fannie Mae – $17.2
2. Freddie Mac – $15.9
3. FHA – $18.9
4. Life company – $33.6
5. CMBS – $41.3
6. Depositories – $3.0
7. Others – $15.2
8. Total – $6.8

Note that larger loan sizes do not necessarily imply more expensive apartments. The differences are largely driven by different properties having more or fewer units, with depositories making a large number of loans on extremely small properties. As a result, when looking at the number of multifamily transactions across different capital sources (Chart 10), the numbers are heavily weighted toward depository portfolios. In 2021, for example, depositories accounted for three-quarters (75 percent) of all multifamily loans, followed by the GSEs with 12 percent. In 2020 the GSEs were responsible for 17 percent of all multifamily loans.

Chart 10: Total Multifamily Mortgage Lending, by Capital Source (# of Loans)



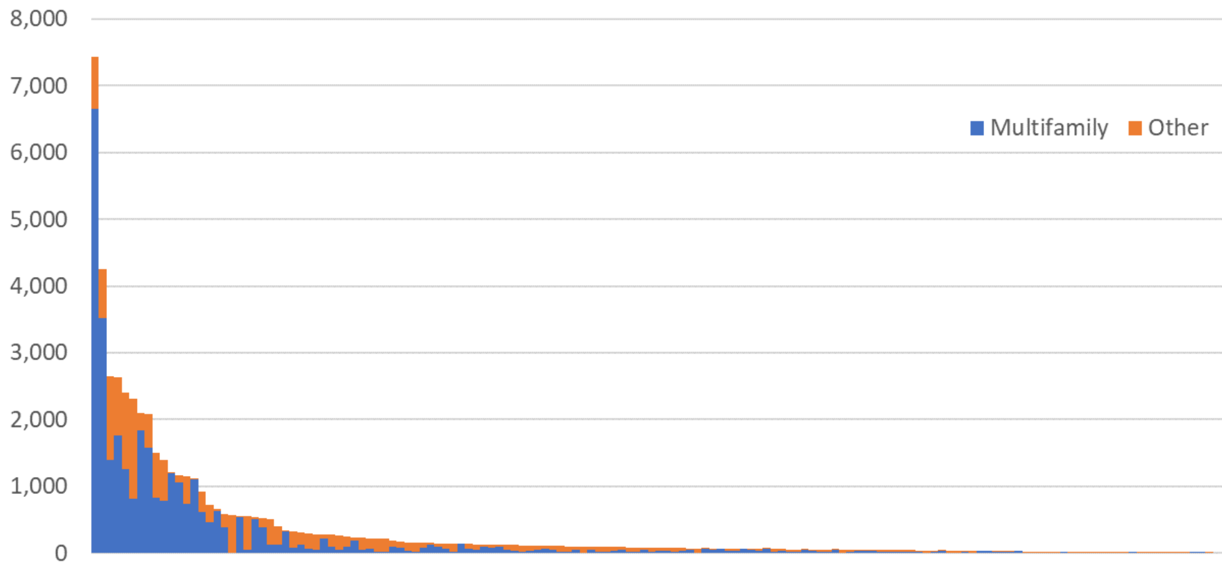
Source: MBA CREF Database

It is also important to note that multifamily lending is part (in recent years the largest part) of the broader commercial real estate finance (CREF) market. While each property type in the CREF market has its own unique characteristics, the fundamental approaches to sourcing, underwriting, closing and servicing the loans are highly interrelated.

Chart 11 shows the number of commercial and multifamily mortgage originations by each of the largest mortgage bankers[6] in 2021 (each bar represents one firm). Note that even during a period in which multifamily mortgages accounted for more than half of total mortgage bankers' originations, 56 percent of the typical mortgage banking firm's originations loan count are not multifamily loans.

[6] Note that when discussing the commercial real estate finance market, the data covering "mortgage banker" does not include many small and mid-sized depositories that make a large number of small and very small loans.

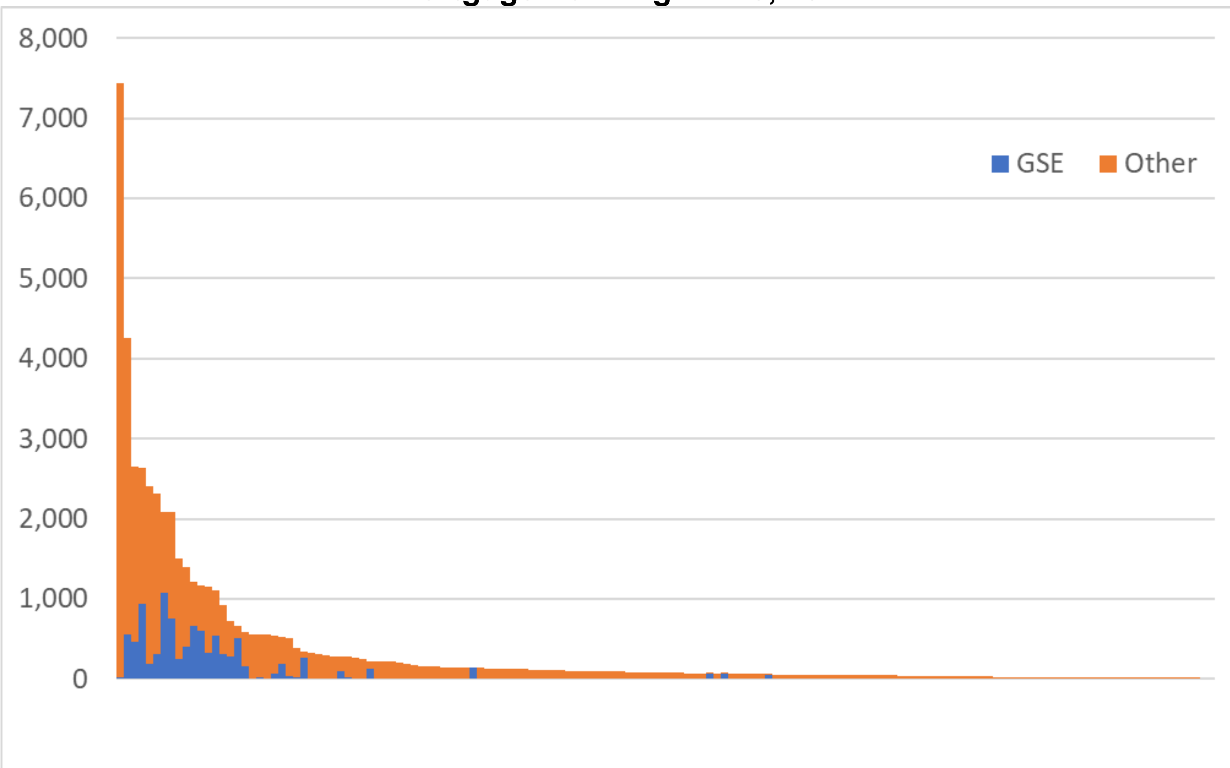
Chart 11: Count of Commercial and Multifamily Mortgage Originations by Each of the Largest Mortgage Banking Firms, 2021



Source: MBA Annual Commercial/Multifamily Mortgage Originator Rankings

When it comes to GSE loans as a share of total originations, the numbers fall further, with 19 percent of all 2021 reported mortgage bankers' commercial and multifamily loans being GSE loans and the typical originator not originating for a GSE.

Chart 12: Count of GSE and Other Mortgage Originations by Each of the Largest Mortgage Banking Firms, 2021



Source: MBA Annual Commercial/Multifamily Mortgage Originator Rankings

MBA's forecast anticipates that commercial and multifamily mortgage borrowing and lending volumes are likely to decline this year.

2. *What are some of the key distinctions between the single-family and multifamily mortgage markets?*

According to MBA's analysis, in 2021 there were more than 13.5 million single-family mortgage loans made.[7] In contrast there were fewer than 72,000 multifamily loans made.[8] The average single-family loan amount was roughly $300,000 compared to $6.8 million for multifamily.

While single-family loans are made to individuals and underwritten based on the borrower's income, multifamily loans are business-to-business loans, typically made to an LLC or similarly structured business entity. Multifamily loans, particularly from the GSEs, tend to be non-recourse and bankruptcy remote, dependent on the income

[7] MBA Mortgage Finance Forecast, August 22, 2022
[8] MBA Annual Report on Multifamily Lending, 2021

generated by property itself. Assessing a multifamily loan requires an in-depth assessment of the property's past and potential future income, built on an understanding of local rental market conditions and that property's place in it, as well as detailed reviews of a property's current and future rent rolls, physical needs, environmental risks and more.

The heterogeneity of properties and owners means that key data – including property income statements – are often structured differently from one property to another and that qualitative aspect of relevant information remains a central piece of multifamily loan underwriting.

Because a multifamily loan is backed by the cash flows of the property as well as the physical structure of the building (among other things), on-going servicing of loans entails a great deal of surveillance, including regular collection of data on property operations, inspections, insurance and more. That ongoing servicing relies on a strong relationship between commercial and multifamily loan servicers and their borrowers to collect the information, with the servicer collecting, analyzing and passing the information along to end investors, including the GSEs.

The largest commercial/multifamily servicer manages approximately 52,000 loans, with the next two overseeing approximately 27,000 and 20,000. Within that, the largest concentration of Freddie Mac loans is 6,000 and 2,800 for Fannie Mae.
Because of the heterogeneous set of end investors – many of whom have their own unique wants and needs in terms of information for monitoring loan performance – there are a host of different forms and data sets used throughout the industry, some specialized for specific lenders while others are for specific property types or products. The information flow is highly choreographed with originators and servicers acting as a key bridge.

3. *What is the technology landscape for commercial/multifamily real estate finance firms?*

While the relatively small number of originators, servicers, and loans limits the flow of outside technology resources to the commercial and multifamily market, commercial and multifamily mortgage banking firms are active in building out technology platforms to support their businesses, often integrating a number of activity-centric solutions to create an end-to-end system.

In MBA's 2022 CREF Technology Catalog, companies recorded systems responsible for:

- Accounting
- API Management

- Application Integration
- Asset/Portfolio Management
- Business Analytics
- Business Intelligence
- Business Intelligence & Reporting
- Cash-flow Analysis
- Construction Management
- Content/Document Management
- Corporate Budgeting/Forecasting
- CRM
- Data Loss Prevention (DLP)
- Email
- Extract Transform and Load (ETL)
- Human Resources Management
- Identity & Access Management (IAM)
- Insurance Compliance
- Machine Learning (ML)
- Optical Character Recognition (OCR)
- Origination/Pipeline Management
- Other
- Property Management on the Equity Side
- Reconciliation
- Remote Access
- Reporting
- Robotic Process Automation (RPA)
- Servicing
- SPAM/Content Filtering
- Threat Detection and Response
- Treasury Management
- Underwriting
- User Adoption & Training
- Workflow/Task Management/Orchestration

As mentioned earlier, these systems typically must support mortgage banking activities across various property types and capital sources, as well as across roles from sourcing to underwriting to closing to servicing to investor reporting and more.

Multifamily lenders have been active in using technology (e.g. robotic process automation, document management automation, direct data capture, APIs) to reduce and/or eliminate time- and labor-intensive activities.

Affordability, climate and other challenges are also bringing with them new technology needs – whether in the form of data capture, modeling or other requirements. As other new technologies such as the use of drones for property inspections increase, further information capture and storage changes will occur.

<u>Questions Relevant to Both Single-Family and Multifamily Mortgage Markets</u>

1. *How should FHFA define the boundaries of the GSEs and FHLBs as it relates to the development and deployment of Fintech solutions?*

The mortgage industry is a large ecosystem, with thousands of organizations doing their part to offer services in the lending process. Given their large roles in the market, the GSEs' technological and operational requirements for seller/servicers and other market participants can have a disproportionate impact on the industry, even including transactions to which they are not a party. One positive example is the development of common forms, such as the Uniform Residential Loan Application (URLA). The URLA, especially before the advent of more modern digital technologies, provided a common way for lenders to collect information from consumers applying for loans. This type of form helped to develop consistency in the collection and dissemination of information. The benefit of the URLA has been somewhat superseded in recent years through the advent of more modern financial technologies imbedded in point of sale and other systems, which permit lenders to collect the necessary information from multiple sources at different points in time.

However, there can also be a downside when these tools are developed by parties that are not considering the impact on the entire ecosystem. One example would be in the appraisal space.

Appraisers provide an independent assessment of the value of properties. For many years, appraisers in the single-family market have utilized appraisal forms developed jointly by the GSEs. These forms provided a common way for appraisers to document the factors involved in their assessment of value. Since most organizations do not like to have bifurcated processes for different types of transactions, the GSE appraisal forms were utilized for loans that were not delivered to the GSEs. They were even utilized for non-mortgage appraisal transactions. Appraisers, who utilized the same forms regardless of where the loan would be sold, were able to develop consistent patterns in documenting their results.

The current GSE effort to develop a new appraisal form and related data exchange, although it is likely to add value in certain ways, will impact all who are currently using the existing forms. Use of the new form could cause confusion for appraisers who perform appraisals for non-mortgage transactions. A best practice approach would be to more consistently utilize MISMO, the industry standards organization, as the central convening entity to obtain broad input before moving initiatives in a certain direction. To be clear, although the GSE's today collaborate through MISMO to define common terminology, our suggestion is for forms and data exchanges to be developed and issued by MISMO. Given that the forms and data exchanges are utilized more broadly than solely by the GSEs, industry would be better served by a collaborative standards-based approach that addressed the needs of all organizations early in the process.

Many of these concerns are also germane in the commercial/multifamily space, in which the GSEs are a less-dominant overall force.

We mention the positive and negative effects of various GSE-led initiatives because we believe it is important to understanding the proper boundaries for GSE activities. We recommend that FHFA remain cognizant of the roles of both the GSEs and other participants in the mortgage market. The collective knowledge and skills within the employee base of product vendors, service providers, financial institutions, new entrants and other organizations means that creative ideas are likely to be generated from these organizations that will benefit everyone. FHFA should encourage this creativity across the mortgage ecosystem while avoiding the belief that the GSEs need to develop solutions on behalf of the industry.

Over the decades, multiple technology providers serving the mortgage industry have competed to provide the best business solutions for lenders and their customers. This dynamism benefits the system as it leads to innovative solutions. Having the ability to choose from a variety of vendors is important to financial institutions. This flexibility enables multiple business models that serve consumers in different ways.

As a principle, the GSEs should avoid solutions that confer benefits to those who work with single vendors. Granting such monopolies, even if temporary, either directly or indirectly, cuts off the ability of other competitors to innovate and provide even better solutions. The GSEs have sometimes limited choice in the primary market, not recognizing that a solution that works for the secondary market investor might not be the best choice for the entire market over the long run.

While the GSEs certainly should control the adoption of financial technologies that are utilized purely for their internal purposes, when it comes to forms and data exchanges, the GSEs should consider reorienting their approach. Instead of the GSEs owning and making decisions on revisions to forms and data exchanges, responsibility could instead convey to MISMO. MISMO could assume responsibility for collaborating with all parties to incorporate necessary changes. It is important that FHFA and the GSEs realize that if they are asking for data (via a form or data exchange), other entities in the ecosystem will likely need or benefit from that same data. The delivered solution will address the needs of the broader ecosystem if managed by an entity focused on the needs of every user.

Given the size and scope of the mortgage market, the GSEs should work towards an open architecture framework that sets core operating, performance and security standards for their activities in the secondary market and allows lenders and private sector providers to implement them in the primary market. By facilitating “many-to-many” competition for the development and marketing of new technologies, an open architecture framework ensures continuous improvement, not calcification on a single technology.

For initiatives that do not neatly fit within primary or secondary market categories, we believe that these should be evaluated based on a series of questions that address the secondary market character of the activity for single-family and multifamily and evaluate whether the market is best served through an open architecture. FHFA and the GSEs should consider asking the following questions whenever they are assessing their approach to address an issue or opportunity:

- Does the initiative involve direct contact with consumers or owners of real estate?
- How much influence is the initiative exerting upon the primary market and the lending process? What is the current role of private sector firms in the space?
- Could the initiative effectively create winners and losers in the primary market?
- Does the ability to develop and deliver the product or service depend on the GSEs' unique ownership of mortgage and transactional data? To what extent is access to such data permitted?
- How is the product, service or initiative being branded, marketed or advertised and to which types of audiences? How is website/online marketing and branding being used?

We believe pilots are an essential component for working through new concepts. We recognize the need to develop new programs, products and processes that may require working with a small number of initial risk takers willing and capable of making the investment of time/resources. However, there should be clear guidelines on how participants are chosen and the length, scope and nature of "pilot" programs.

- Selection criteria for participation in pilot programs should be transparent and should be designed to involve diverse participation from organizations of various sizes and business models whenever possible.
- Once a proof of concept is achieved, there should be a clear plan for the rollout to the broader market. FHFA and the GSEs should take care that the rollout does not designate winners and losers simply because of participation in a pilot program.

2. *How do we ensure that technology development in the GSE space is broadly applicable to the entire market and does not unintentionally harm non-GSE business?*

While FHFA acts as conservator and regulator of Fannie Mae and Freddie Mac, and regulator of the Federal Home Loan Banks, it is important that FHFA's approach to financial technology and innovation ensures that all market participants may benefit from technological advances. At present, there are significant technological differences in how mortgages are originated based on their destination in the secondary market: consumers and originators must navigate disparate systems based on whether or not a loan will be sold to Fannie Mae or Freddie Mac, pledged as collateral for advances to a Federal Home Loan Bank, held in portfolio, insured or guaranteed by FHA, the VA, or USDA, be packaged in MBS guaranteed by Ginnie Mae, or securitized in the private market. This can create confusion and inefficiency in the market, particularly if a loan's execution is different than originally anticipated.

At its core, FHFA's approach to financial technology and innovation should not reinforce existing silos, but rather, should aim to provide industrywide solutions. Doing so has the greatest potential to reduce costs, improve cycle times, and provide consumers with more transparency. In addition, FHFA's approach should also aim to benefit all mortgage market participants, regardless of size and business model, in order to ensure a level playing field and maximum consumer choice.

Standards can play a powerful role in both spurring innovation and enabling new players in a market. The mortgage industry, through MISMO, has made significant progress over the last two decades in developing and promoting the adoption of standardized data elements, terms, and definitions in the primary and secondary mortgage markets. MISMO counts among its members originators, issuers, servicers, mortgage insurers, title insurers, settlement companies, technology vendors, service providers, the GSEs, and government agencies and regulators. It is the central forum for collaboration among all segments of the mortgage industry to develop standards that reduce friction in the exchange of information. Today, nearly every loan manufactured leverages MISMO standards in some fashion. However, more can be done through MISMO to advance innovation, particularly when it comes to promoting true interoperability, or the ability of systems to seamlessly exchange information.

One area for potential improvement is ensuring that there is consistency in the way that data is ingested, processed, and analyzed by market participants. For example, Fannie Mae and Freddie Mac rely upon the standardized MISMO data model, but do not always adopt it in the same structure and sometimes require different supplemental data points; each GSE requires loan application data to be structured differently to accommodate differences in systems and processes. This bifurcation can cause increased time, costs, and errors by originators and make it challenging to build technological solutions that serve the entire marketplace. If standardized data is being utilized, it should be consistently structured and exchanged in order to provide maximum efficiency. As a result, it is important that industry standards, including standardized datasets, are developed through the voluntary, consensus standards development process and are adopted consistently, rather than being left open to different interpretations. The open standards development process allows all interested parties and stakeholders to contribute to and influence the outcome of MISMO's work.

If approached from a view of true interoperability and consistency, then standardization could help spur significant innovation and benefits in areas such as scaling the private label market and easing transfers of servicing.

3. *What role does data play in financial innovation and what can FHFA do to enhance the access to and usefulness of data?*

Analysis of "Big Data," along with the utilization of various artificial intelligence methods, can provide insights that are simply not possible without access to the underlying data. The GSEs have invested heavily in collecting information for their individual or collective needs. Models to manage various risks are built from analyses of historical performance data. For example, the automated underwriting engines of the GSEs would not be possible without this historical Big Data. More recent developments from the GSEs are based on access to appraisal data.

Since 2010 the GSEs have collaborated on the standardization and collection of appraisal data. This information is provided to the GSEs through a joint mechanism known as the Uniform Collateral Data Portal (UCDP). Analyses of this rich appraisal data have provided the GSEs with insights on many aspects of the appraisal process. Recent initiatives around appraisal waivers and desktop appraisals are based on insights gleaned from evaluation of these large datasets. Automated Valuation Models (AVMs) also benefit from this data.

A question arises as to whether greater innovation may have occurred had other organizations been permitted to analyze the appraisal data that is currently restricted to the GSEs. Could other parties have developed new products that address issues or create new opportunities? Based on the interest in the GSE appraisal data expressed to MBA, it appears likely that innovative ideas could be unlocked by providing this access.

It is evident that access to large data sources, utilized though various forms of artificial intelligence and other technological analysis, can help identify issues and solutions that might not be apparent without access to these data.

FHFA should consider the development of a formal process to assess the circumstances under which data should be made public vs those under which data should be considered proprietary. Possible questions to be considered follow:

- Can the data be utilized to identify individuals?
- Can the data be anonymized to prevent identification of individuals?

The goal of such a process should be to release more data more rapidly. The GSEs should not have to analyze the data prior to its release. That would require valuable time and therefore delay innovation.

Further innovation will be greatly constrained without access to the data held by the GSEs. Providing access to the data would likely unleash multiple creative solutions to issues facing consumers and the lending community. Too often the GSEs have used concerns about the release of personally identifiable information. These concerns can be addressed in multiple ways. FHFA should move forthwith to make GSE data available to spur innovation.

4. *What are the industry's concerns with respect to tradeoffs between the adoption of new technology, consumer privacy, and cybersecurity?*

MBA members are strong proponents of protecting consumer data and privacy. Protecting consumer financial data is a cornerstone of the trust customers place in those with whom they do business. Our members have been subject to extensive federal privacy and data protection laws and regulations for several decades.

FHFA should be careful about creating additive privacy or security requirements directly or through the Enterprises. There is already a federal regulatory structure that governs data privacy for these companies and many of those rules are currently under revision by the relevant regulators – or those regulators are in the process of proposing and promulgating new rules. Congress is also considering sweeping privacy legislation, as are many state legislatures. FHFA is not a primary regulator for the entities impacted by these developments and should seek to avoid adding burdensome or conflicting requirements.

MBA stresses the need for all entities to be held to the same privacy and data security standards. These regulations should be consistent but must also be flexible enough to be technologically agnostic as we do not believe that particular technologies should be mandated. These determinations are best left to market participants, who are better positioned to react to technological changes while acting within the guidelines.

Prudent regulations should minimize the cost of data sharing among mortgage originators, loan administrators, and the secondary market. All third-party data users with valid consumer consent should have access to the consumer-authorized data sharing ecosystem, subject to appropriate limitations and as necessary to complete the mortgage transaction. Consumer financial data plays a crucial role in the modern financial services market. For the housing finance industry, technologies that allow businesses to rapidly access and assess consumer financial information have created substantial consumer benefits. As the Enterprises are certainly aware, streamlined access to consumer financial data allows for faster and more reliable verification of borrower income and assets for underwriting. Barriers to entry should only exist at the point of ensuring appropriate data security and privacy standards are met when accessing data necessary for the transaction.

Responses to Specific Questions from the Request for Information

A. Fintech and Innovation

Question A1. How do primary and secondary mortgage market participants define fintech in the housing finance sector? What key factors should be considered?

MBA believes Fintech should be defined broadly as the technology that supports and enables the entire mortgage market. It should include the technology used by established firms as well as new entrants. It should include existing technologies as well as emerging technologies. It should include the technology used to run tried-and-true activities as well as new approaches to solving business issues. Importantly, this means that feedback and participation in various discussions should include participants from across the mortgage ecosystem – we should not be limiting the discussion to specific lenders, vendors or technologies.

Question A2. How could FHFA facilitate adoption of “responsible innovation”?

FHFA can facilitate responsible innovation in many ways. One key value point would be to help define issues and opportunities clearly, to enable innovators to understand and attack issues. A clearly defined problem often can be solved by creative individuals, but only if they understand the issue to be addressed.

FHFA could also collaborate with others to host webinars, workshops, hackathons, and similar collaborative events. Events such as these often can stimulate the creative juices that are inside many individuals.

FHFA could increase its collaboration with standards organizations, especially MISMO. FHFA could use its influence to encourage participation to address issues undertaken by MISMO. And FHFA could help ensure the broad and consistent adoption of MISMO standards.

And finally, FHFA should understand that facilitating something does not mean making decisions. The best facilitators in the world don’t make decisions – they make sure the right questions are asked to spark others towards solutions.

Question A3. What factors currently inhibit the adoption of fintech and innovation in the primary and secondary housing finance sector? Are there specific challenges related to privacy laws, industry standards, or current practices?

There are likely a multitude of reasons that innovative solutions are not adopted. Certainly, one key issue is the ability of systems and organizations to communicate with each other; this is often referred to as interoperability. Without a standards-based approach, each organization creates custom interfaces with other parties. Even with the advent of Application Programming Interfaces (APIs), custom interfaces are the norm. This makes it virtually impossible for new entrants to enter the market, as they must get in line to create linkages with established participants. And this issue is compounded by vendor oversight requirements – organizations tend not to want to work with new counterparties to avoid some of the oversight requirements. Enhancing interoperability across the ecosystem while finding efficiencies in third party oversight would greatly reduce obstacles standing in the way of technology adoption.

B. Identifying Fintech Opportunities in the Housing Finance Ecosystem

Question B1. What kind of fintech activities have the greatest potential to positively impact the housing finance sector? Describe several situations in which a product or service has been or could be used, the factors considered in determining importance, and associated impacts.

We believe that standards hold great value towards unleashing innovation. Standards create common ways of accomplishing something. Innovation happens on top of the standards. Bluetooth® is a great example of a standard that has enabled innovation. Thousands of different types of devices are interoperable with other devices – without the underlying Bluetooth standard none of this would have been possible.

Another area of great value would be to enhance the ability to trust data. One of the most common refrains used in the industry is the need for the “checkers to check the checkers.” Each party who receives information independently validates the data. This is extremely costly. For example, in private label securitizations, 100% manual review of the data is the norm. Multiplied across the entire ecosystem, these costs greatly contribute to the high costs of origination. The utilization of the MISMO Version 3 Verifiable Profile SMART Doc®, blockchain, trusted repositories or other solutions could help to rebuild trust in data and therefore reduce costs.

Question B2. What are the typical time requirements of each process within the mortgage lifecycle? What are the “critical path” activities that drive the mortgage timeline and borrower expense? How could fintech be applied to improve efficiency, reduce costs, reduce time requirements, or facilitate equitable outcomes for borrowers?

In single-family lending, it can take weeks to finalize an appraisal, which defers the lender's ability to determine the implications to the credit decision. In certain situations, this delay causes an individual homebuyer to lose the house to another bidder who may pay cash for the home. Lessons learned during the COVID pandemic revealed many situations where non-traditional valuation methods could be utilized. For example, the GSEs offered appraisal waivers and permitted desktop appraisals. Greater use of alternative valuation tools and the use of non-appraisers and drones to perform certain functions would improve the experience and outcomes for borrowers.

Question B3. What are the typical drivers of repetitive requests to borrowers or reevaluation of underwriting information by the lender in the mortgage process, and what opportunities exist to automate processes?

Repetitive requests occur because consumers often do not provide information requested by lenders, or neglect to approve access to the needed information. Or lenders lose documents, especially if provided in paper form. These issues result in much back and forth between consumers and lenders to rectify the situation, resulting in an undesirable consumer experience. Identifying and standardizing required data from the source (e.g. employment data) while adding trust as the source data is shared (for example via MISMO Version 3 Verifiable Profile SMART Doc®) would address some of these issues, while also addressing some of the "checkers checking the checkers" issues previously mentioned.

Question B4. What are the existing data challenges that most prevent data-driven decision-making in the mortgage lifecycle?

Data is not typically generated or exchanged in true digital formats. Data is often captured on forms, re-keyed or "digitized" by Optical Character Recognition software. If true digital data could be obtained from the source, it could more readily be passed along to other parties. And if data could be passed along without reconstituting them into large data exchanges (such as the Uniform Loan Application Dataset), it would eliminate the need for unnecessary processing.

Question B5. What are the existing regulatory and policy barriers to adopting and implementing fintech within the mortgage lifecycle?

Although there are likely several other barriers, we would like to highlight one barrier that we believe arises from GSE policies and another barrier that may be more of a regulatory interpretation.

<u>Policy Barrier</u>

Presently, Fannie Mae publishes a list of service providers that "have entered into an agreement with Fannie Mae to participate in the DU validation service" while Freddie Mac publishes a list of “AIM Service Providers.” In the electronic mortgage space, although vendors do not appear to require GSE approval, Fannie Mae publishes a list of vendors that “indicate that they offer technology services that enable the creation and submission of electronic mortgages to Fannie Mae,” while Freddie Mac maintains a list of vendors for which it has “completed a basic security and technical review… to save time for Seller/Servicers seeking to get approved to do eMortgage business with Freddie Mac.”

Inclusion in one of the GSE lists is usually based on a specific set of requirements for the respective GSE. A vendor wishing to offer a product or service is likely to be required to meet the specific yet differing needs of each GSE, and potentially the requirements of other non-GSE organizations. Complying with the different needs of various organizations is a costly and painful process. Vendors often need to choose which entity to work with first – a decision that is often driven by the market share of whichever party is doing the approval.

It appears that the GSEs may have formal or informal policies in place that require each organization to perform independently some type of validation of a product or service. Rather than executing this oversight independently and publishing resulting lists of vendors, FHFA should consider whether it would promote innovation in technology, streamline due diligence, and reduce bifurcation in the marketplace to rely on a standardized set of criteria for mortgage service providers. In order to promote transparency and consistency to the market, the regulated entities should consider leveraging technology certifications that evaluate whether vendors’ products and processes conform with industry standards and requirements.

An example of a certification program that is working in the mortgage industry is the one MISMO has developed for Remote Online Notarization (RON). MISMO’s certification evaluates platforms against voluntary, consensus industry standards developed for conducting RON transactions. Currently, there are more than two dozen platforms that have been certified or are undergoing review for certification. In addition, there are currently eight providers that have been certified or are undergoing review for certification for compliance with MISMO’s eClosing technology requirements.

Reliance upon certifications, and the underlying industry standards and requirements, can help eliminate confusion for technology platforms and lenders alike as they navigate this evolving aspect of the mortgage market. It would also greatly open up the opportunities for innovation, as creators could conform to one agreed upon standard and know that their solution would work for any other party that utilizes that standard.

<u>Regulatory Barrier</u>

To properly manage risk, all organizations must oversee their relationships with third parties. To remind organizations of the importance of this oversight, regulations and guidance have been issued by multiple regulatory bodies. Due to a well-founded fear of examination findings, each entity independently oversees each of its third-party providers. As can be imagined, this oversight, as currently executed, is inefficient and expensive for both the lender and the vendor. To manage costs, many organizations have limited the number of parties they do business with. The result is that innovative solutions may have been ignored or delayed.

A better approach to third-party oversight would be to utilize qualified parties to perform some oversight activities. Utilizing qualified reviewers is likely a better risk mitigant, and considerably more efficient. FHFA could help coordinate a consensus across regulatory agencies that would encourage the usage of more efficient and effective oversight.

C. Equitable Access to Mortgage Credit

Question C1. What new fintech tools and techniques are emerging that could further equitable access to mortgage credit and sustainable homeownership? Which offer the most promise? What risks do the new technologies present?

Although there are likely many techniques that are in development to improve access to mortgage credit and sustainable homeownership, we will address three innovations. They are credit score modernization, the inclusion of rent payment information in the underwriting decision, and homebuyer education.

Credit Score Modernization

We believe that modernization of credit scoring requirements may result in innovation that addresses these issues. The utilization of credit scores in mortgage origination has existed for a quarter century. In the 1990s, the GSEs began to require the submission of the scores by loan applicants. Given that the scores were provided by third party sources based on certain factors reported to credit reporting agencies, we possibly could consider this one of the first “Fintech” innovations. The use of credit scores is now imbedded in the loan origination process.

Different models utilize different data to assess potential outcomes. Different credit scoring models may utilize previously excluded data to assess a borrower’s ability to repay their loan. This could help address some of the issues with equitable access to mortgage credit. MBA has long encouraged the utilization of other credit models.

Inclusion of Rent Payment Information

Individuals who have a history of renting rather than homeownership may not have the same credit payment history that has typically been included in credit scores. A history of on-time rental payments may indicate that an individual has the ability and willingness to make regular payments on debt. The willingness of creditors, including the GSEs, to assess, model, and accept rental payment history may help individuals with thin or non-existent credit files become scorable.

Homebuyer Education

Education provided to homebuyers perhaps may not be considered a "Fintech" innovation, but the development of innovative online education may help consumers to better understand the homebuying and borrowing process. Innovative education, perhaps through software programs targeted to different constituencies, could help consumers to better understand their rights, obligations, and choices.

Question C2. What emerging techniques are available to facilitate or evaluate fintech compliance with fair lending laws? What documentation, archiving, and explainability requirements are needed to monitor compliance and to facilitate understanding of algorithmic decision-making?

The requirement for compliance with fair lending laws is the same for an automated algorithmic decision-making system (e.g. Automated Underwriting System (AUS)) as it is for human underwriters. The GSEs, regulators and others have spent more than 20 years evaluating their AUS platforms for fair lending concerns. Evaluating compliance is not an easy process. Evaluators must assess a myriad of factors. It is both an art and a science, as evaluators must understand many factors, not least of which is that correlation is not the same as causation. The advent of various forms of artificial intelligence can make it even more difficult to perform these assessments. To ensure that compliance with fair lending laws can be evaluated, any data used in the development of underwriting practices or models needs to be retained, as does testing and analysis of results and the linkage to resultant guides or models.

Question C3. Are there effective ways to identify and reduce the risk of discrimination, whether during development, validation, revision, and/or use fintech models or algorithms? Please provide examples if available.

Please see our response to Question C2.

D. Identifying and Mitigating Fintech Risks

Question D1. What risks do fintech and fintech firms present to the economy and the financial sector? To the housing finance sector? To FHFA-regulated entities? To counterparties of FHFA-regulated entities and other third parties? To mortgage borrowers and consumers?

We do not believe that financial technology or the firms that provide it inherently create any additional risk. However, we acknowledge that innovators by definition are doing something new. New developments contain the risk that not all potential negative factors have been fully discovered and assessed. And the mantra of some organizations is to "fail fast and learn fast." In many circumstances, learning from failure is a very positive experience, especially if there are limited or no downsides. However, when it comes to the delivery of credit, failure could mean that an individual was harmed in some manner. In addition, undetected issues within widely adopted technologies (or human practices) could manifest into issues that have greater effects on entire companies or the housing system as a whole.

Question D2. What risk management practices do industry participants use to address the risks posed by fintech and innovation in housing finance?

To minimize the risk of individual technologies or products, quality control and regulatory assessments need to be performed on a regular basis. And although failing fast and learning has its virtue, we must recognize that faster does not necessarily mean better.

Organizations will need to identify the risks of the activity that is being performed. They will need to determine if there additional or different risks as a result of the new technology that is utilized. Once risks are determined, an assessment will need to be made on the likelihood of a negative event and its potential impact. Organizations will need to determine the preventative and detective controls necessary to manage the risks. And finally, organizations will need to monitor the performance of the business function and related technologies and revise as necessary.

Question D3. What particular risks to consumer privacy have been associated with fintech? What practices are being used to manage these risks?

Obtaining consumer consent for the use of information is likely the biggest risk. It is important that consumers know how their information is being used. It is important that consumers have the right to opt out. However, in a financial transaction, the consumer cannot retroactively request that their data be deleted. Retention of data utilized in a financial transaction, even if the individual is denied credit, is required for regulatory purposes.

E. Regtech

Question E1. What are the most promising areas for applying technology to regulatory and compliance functions? Please describe opportunities for "regtech" to simplify or improve compliance with FHFA, Enterprise, or FHLBank requirements.

RegTech has existed in many forms for a while, as technology enables mortgage companies to automate some of the compliance and quality control functions necessary to comply with regulatory requirements. Many loan origination systems will perform checks to ensure that a loan complies with both investor guidelines and certain aspects of the CFPB's QM rule. Other systems will check HMDA data for accuracy and errors, and the provision of many regulatory notices or disclosures is provided by technologies – in-house and vendor – that populate and provide them within the required time frames.

Continued advances in RegTech should be encouraged by FHFA, and the Enterprises should endeavor to make their requirements "automatable" to the extent possible and practical. They should also be aware of the need for systems changes when they make changes to existing requirements and calibrate the implementation dates accordingly.

F. Office of Financial Technology Activities and Stakeholder Engagement

Question F1. What forms of stakeholder engagement are most effective in facilitating open, timely, and continuous discussion on the challenges and opportunities presented by the application of fintech to housing finance?

The specific form of stakeholder engagement should vary based on the particular issue being addressed. The most important focus should be to define clearly the challenges and opportunities. This can be accomplished in meetings, workshops, hackathons and other forums, depending upon the issue at hand. To obtain the innovative solutions desired, these forums should be open to wide participation. Conducting these engagement forums under an open collaborative organization such as MISMO should be the default approach.

Question F2. What are some topics for a housing finance-focused "tech sprint" and how could FHFA encourage participation?

We would encourage FHFA to collaborate with MISMO regarding tech sprint activities. FHFA and the GSEs could help to identify individuals/companies that have certain knowledge/skills and encourage them to attend. MISMO, FHFA and the GSEs could explore providing small prizes to those with creative ideas. As an example, several years ago MBA sponsored an event with the IRS to encourage creative ideas to an IRS issue. MBA provided approximately $25,000 in prize money. There are many topics that could benefit from creative events like these. Although we would encourage FHFA to first collaborate with industry to identify the most pressing issues, we offer a list of possible topics below:

- Do the GSEs have policies that are based on paper-centric notions of the world?
- Can Automated validations (e.g. income and employment) be better utilized?
    - How could the successful hit rate be increased?
    - How could we make it easier for organizations to exchange data (interoperability)?

- Would converting forms (e.g. URLA) to MISMO Version 3 Verifiable Profile SMART Docs significantly reduce the checkers checking the checkers issue?
- What would it take to convert forms and data exchanges to MISMO Version 3 Verifiable Profile SMART Docs?
- Would various forms of certifications result in greater trust in the system and resulting data? For example, does the data agree with what is in the document? Has a third party attested to compliance with a regulation?

MBA's reply to the FHFA Fintech RFI is intentionally wide-ranging while also providing specific examples that seek to provide context for our comments. Our reply can be summarized into five key themes:

- It is important to understand the industry's recent history and experience with respect to technology adoption and innovation, and the current focal points for single-family and multifamily lenders when it comes to technology expenditures.
- The GSEs have an important role to play with respect to the direction of technology within the mortgage industry, but they need to work collaboratively with industry to ensure that solutions work beyond specific GSE use cases.
- Data is the source of financial innovation. Without access to data innovation is hindered. FHFA should endeavor to open up access to data to spur innovation.
- Standards can accelerate innovation in myriad and unexpected ways. FHFA and the GSEs should avoid proprietary solutions and utilize MISMO to develop collaborate standards-based approaches to issues affecting the mortgage ecosystem.
- FHFA and the GSEs do not need to solve Fintech. Helping to identify issues, their root causes, and collaborating on solutions that work for the entire mortgage ecosystem will be a successful outcome of this initiative.

MBA appreciates your consideration of our comments on this request for information. We welcome the opportunity to meet and discuss our feedback. Should you have any questions or wish to discuss any aspects of these comments, please contact Rick Hill (rhill@mba.org).

Sincerely,

Robert D. Broeksmit, CMB
President and Chief Executive Officer
Mortgage Bankers Association