LIBOR Index Transition Reference Guide

Date: February 8, 2022

Version 1

Table of Contents

Summary of Reference Guide Changes and Updates 1
Legal Information and Disclaimer 2
1. Introduction 3
1.1. Reference Guide Purpose 3
1.2. Reference Guide Scope 3
2. Ginnie Mae's LIBOR Transition Overview 5
2.1. Ginnie Mae's LIBOR Index Transition Roadmap 9
2.2. Ginnie Mae LIBOR Index Transition Timeline 10
3. LIBOR Index Transition Background 13
3.1. Alternative Reference Rates Committee (ARRC) 13
3.2. Secured Overnight Financing Rate (SOFR) 14
4. Single-Family Adjustable-Rate Mortgages and Securities 15
4.1. Prospective SF LIBOR ARMs 15
4.2. Transitioning Legacy SF LIBOR ARMs 16
5. Reverse Adjustable-Rate Mortgages and Securities 17
5.1. Prospective HECM ARMs 17
5.2. New HMBS SOFR Pool & SOFR Index Requirements 18
5.3. Legacy LIBOR HECM ARMs Transition 20
6. Multiclass Securities 21
6.1. Prospective Multiclass Securities 21
6.2. Legacy LIBOR Multiclass Securities Transition 23
7. Market Considerations 25
7.1. SOFR Term Rates and Spread Adjustment 25
7.2. Benchmark Transition Event 26
7.3. Accounting and Tax Considerations 26
References 27

Figures and Tables

Figure 1. LIBOR Transition Roadmap for Ginnie Mae Forward, HECM and Floating Rate Securities 9

Table 1: Version Reference Guide Changes and Updates 1
Table 2: Summary of Ginnie Mae Programs Impacted by the LIBOR Transition 4
Table 3: Ginnie Mae and FHA LIBOR Transition Policies 8
Table 4: Current Ginnie Mae Prospective Forward ARMs Eligible for MBS (CMT only) 15
Table 5: Ginnie Mae Forward LIBOR ARMs No Longer Eligible for MBS 15
Table 6: Current Legacy LIBOR ARMs Outstanding in Ginnie Mae MBS 16
Table 7: Current Eligible HMBS Pool Types 17

Summary of Reference Guide Changes and Updates

This LIBOR Index Transition Reference Guide will be revised as information is updated and changes are made. The table below lists the changes and updates per each version of the reference guide published on Ginnie Mae's website. This will not be an exhaustive list of changes and updates; therefore, we recommend that you review the current version of the LIBOR Index Transition Reference Guide in its entirety.

This is **Version 1** of the reference guide, published in February 2022.

Table 1: Version Reference Guide Changes and Updates

Version	Section	Summary of Changes & Updates
This table will be completed as of Version 2 of the Reference Guide.		

Legal Information and Disclaimer

Information in the LIBOR Index Transition Reference Guide is preliminary and subject to future revision and update. This document is an indicative summary of Ginnie Mae's preliminary analysis regarding LIBOR transition. This document and the analysis may be amended, superseded, or replaced by subsequent summaries or actions. The analysis, preliminary views and opinions expressed herein are based on certain assumptions that also are subject to change. Readers should rely on the information contained in the relevant loan documents, securities offering documents and operative transaction documents in order to evaluate the rights and obligations related to such loan or security.

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1. Introduction

1.1. Reference Guide Purpose

The purpose of this LIBOR Index Transition Reference Guide ("Reference Guide") is to assist stakeholders in preparing for the transition away from the London Interbank Offered Rate ("LIBOR") on the LIBOR index cessation date of June 30, 2023. It will serve as a guide for affected parties to adjust their business practices to best fit their interests amidst the transition.

This Reference Guide describes key transition milestones and recommended actions for stakeholders to consider as they manage the upcoming transition from LIBOR. This document serves as a tool to help plan and adapt business policies, procedures, and processes to support products linked to LIBOR and prepare for discontinuing the use of LIBOR as an index.

Ginnie Mae and the Federal Housing Administration ("FHA") have been partnered together in several aspects of the LIBOR transition. Where appropriate, Ginnie Mae and FHA have aligned LIBOR transition policies and milestones. However, adoption details may differ. Readers should reference FHA documents for additional information. This Reference Guide will also be revised as information is updated and changes are made.

This Reference Guide is intended to provide a consolidated source of information for voluntary use by impacted stakeholders in preparing for the LIBOR transition. This Reference Guide is not an exhaustive source of all LIBOR transition information or guidance. This Reference Guide is not a source of regulatory or supervisory expectations or requirements.

1.2. Reference Guide Scope

Ginnie Mae's Mortgage-Backed Securities ("MBS") comprised of LIBOR Adjustable-Rate Mortgages ("ARMs") and Ginnie Mae multiclass securities that reference the LIBOR index only, will be impacted by the LIBOR transition. Ginnie Mae MBS and multiclass securities that bear fixed rate interest or reference the Constant Maturity Treasury ("CMT") rate will not be impacted by the transition.

Ginnie Mae I MBS Program. The Ginnie Mae I MBS Program overall will not be impacted by the LIBOR transition as all securities under the Ginnie Mae I program must bear a fixed rate of interest. All multifamily MBS fall under the Ginnie Mae I program and thus will not be impacted by the transition.

Ginnie Mae II MBS Program. LIBOR ARMs were eligible under the Ginnie Mae II MBS Program.[1] MBS comprised of FHA Single-Family LIBOR ARMs and FHA HECM LIBOR ARMs only, will be impacted by the LIBOR transition. LIBOR ARMs were never eligible under the Veterans Affairs ("VA"), U.S. Department of Agriculture ("USDA") and Public and Indian Housing ("PIH") mortgage insurance programs.

Ginnie Mae Multiclass Securities Program. The Ginnie Mae Multiclass Securities Program overall will be impacted by the LIBOR transition. Under Ginnie Mae's Multiclass Securities Program, the mortgage rate index for the underlying mortgage loans may be different from the

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[1]Ginnie Mae stopped accepting the delivery of Single-Family Forward LIBOR ARMs on January 1, 2021, and Reverse LIBOR ARMs on March 1, 2021, for securitization under the Ginnie Mae MBS Program.

interest rate index for the related multiclass security. Thus, multiclass securities may include Classes comprised of underlying mortgage loans that reference LIBOR.

The table below highlights the Ginnie Mae MBS, and Multiclass Securities programs impacted by the LIBOR transition.

Table 2: Summary of Ginnie Mae Programs Impacted by the LIBOR Transition

<table>
<tr><th colspan="2">Ginnie Mae Program</th><th>Impacted by LIBOR Transition (Yes/No)</th><th>Product Types Impacted by the LIBOR Transition</th></tr>
<tr><td colspan="2">Ginnie Mae I MBS Program</td><td>No</td><td>N/A</td></tr>
<tr><td rowspan="3">Ginnie Mae II MBS Program</td><td>Single-Family (FHA only)</td><td>Yes</td><td>Single-Family Forward LIBOR ARMs (Custom & Multiple Issuer Pools)</td></tr>
<tr><td>Single-Family (VA, USDA, PIH)</td><td>No</td><td>N/A</td></tr>
<tr><td>FHA Reverse</td><td>Yes</td><td>HECM LIBOR ARMs (Custom Pools only)</td></tr>
<tr><td rowspan="2">Ginnie Mae Multiclass Securities</td><td>REMIC/HREMIC</td><td>Yes</td><td>LIBOR Floating Rate REMICs</td></tr>
<tr><td>Platinum</td><td>No</td><td>N/A</td></tr>
</table>

2. Ginnie Mae's LIBOR Transition Overview

Ginnie Mae has been evaluating the potential impacts of the LIBOR index cessation (extended from December 31, 2021, to June 30, 2023) on the overall MBS industry and on Ginnie Mae's business processes, systems, and stakeholders. We have worked closely with the Federal Housing Administration ("FHA") to ensure transition synergies and timeline alignment.

To date, the following LIBOR transition policy changes have been made across FHA and Ginnie Mae's programs:

Ginnie Mae Single-Family Forward Program. LIBOR-based single-family ARMs are no longer eligible for pooling into Ginnie Mae securities. Effective January 1, 2021, all single-family forward ARM loans that rely on LIBOR, including LIBOR-based ARM-to-ARM loan modifications and re-performing LIBOR-based ARMs, are ineligible for pooling into any Ginnie Mae I or Ginnie Mae II security.

Chapter 26 of the Ginnie Mae MBS Guide, Handbook 5500.3, Rev-1, has been amended in accordance with All Participant Memorandum ("APM") 20-12: Ineligibility of LIBOR Products for Single-Class MBS.

A joint FHA/Ginnie Mae transition plan for legacy LIBOR MBS is under analysis. No LIBOR transition policies with respect to legacy LIBOR MBS have been released.

Ginnie Mae Reverse Program. LIBOR-based HECM ARMs are no longer eligible for pooling into Ginnie Mae securities. Effective March 1, 2021, the first participation of any LIBOR-based HECM is ineligible to be securitized into HMBS. Subsequent Participations (that is participations other than the first participation) that are associated with a HECM loan that is backing HMBS with an Issue Date of February 1, 2021, or earlier will continue to be eligible for securitization without restriction until further notice.

Chapter 35 of the Ginnie Mae MBS Guide, Handbook 5500.3, Rev-1 has been amended in accordance with APM 20-19: Limited Extension to Securitization Deadline for LIBOR Based Home Equity Conversion Loans.

A transition plan for legacy LIBOR HMBS is under analysis. No LIBOR transition policies with respect to legacy LIBOR HMBS have been released.

The Ginnie Mae MBS Guide, Handbook 5500.03, Rev.1 and All Participants Memoranda can be found on the Ginnie Mae Website:
https://www.ginniemae.gov/issuers/program_guidelines/Pages/mbsguideapmslib.aspx

Ginnie Mae Multiclass Securities Program. LIBOR continues to be an available index for new issuance of floating rate Multiclass Securities. Effective January 1, 2022, Ginnie Mae will no longer permit the issuance of new Multiclass Securities that bear interest at a rate determined by reference to LIBOR, unless such Multiclass Securities are re-securitizations of existing LIBOR Classes that do not increase the total unpaid principal balance of outstanding LIBOR Classes. As of March 1, 2020, the Secured Overnight Financing Rate ("SOFR") has been an eligible index for new issuance of floating rate Multiclass Securities. Ginnie Mae has also adopted the

recommendations of the Alternative Reference Rates Committee (“ARRC”) relating to fallback language for all LIBOR floating rate securities.

For all LIBOR floating rate Multiclass Securities, Ginnie Mae will determine:

- if and when a transition event occurs with respect to LIBOR,
- the date on which LIBOR will be replaced for LIBOR Classes, and
- the applicable benchmark replacement for LIBOR and spread adjustment, in each case using, and subject to, the defined parameters or list of alternatives specified in the ARRC Recommendations, some of which contemplate or require action by other regulatory bodies.

The ARRC confirmed that a "**benchmark transition event**" occurred on March 5, 2021, when the U.K. Financial Conduct Authority and ICE Benchmark Administration announced that the LIBOR tenors relevant to the LIBOR classes will cease to be published or will no longer be representative after June 30, 2023. Consequently, effective June 30, 2023 (the related "**benchmark replacement date**"), Ginnie Mae will select a replacement interest rate, including index, methodology, spread or other related adjustment, in accordance with the ARRC Endorsed Terms.

The ARRC Endorsed Terms provide for various alternative benchmarks based on availability: the first two alternatives involve the SOFR published by the Federal Reserve Bank of New York, and the last two alternatives are not currently specified. Term SOFR, which is the first alternative benchmark specified in the ARRC Endorsed Terms, is a prospective term rate based on SOFR that is published by the CME Group. CME Group's Term SOFR rate is a relatively new rate that was recommended by the ARRC on July 29, 2021. If CME Group's Term SOFR remains available and recommended as of the benchmark replacement date and is operationally feasible, Ginnie Mae will select CME Group's Term SOFR as the benchmark replacement for LIBOR classes in accordance with the ARRC Endorsed Terms. If Term SOFR is unavailable as of the benchmark replacement date, the next alternative benchmark is compounded SOFR.

If a benchmark replacement other than Term SOFR is chosen because Term SOFR is not available, Term SOFR would become the benchmark replacement if it later becomes available, which could lead to further volatility in the interest rates on LIBOR classes. Moreover, a benchmark replacement adjustment will be applied to compensate for the foregoing effects of any benchmark replacement. However, no assurance can be provided that any benchmark replacement adjustment will be sufficient to produce the economic equivalent of the then-current benchmark, either at the benchmark replacement date or over the lives of LIBOR classes.

At any time, Ginnie Mae may, in its sole discretion and without the consent of any security holders, designate Term SOFR and related positive or negative adjustments, spreads or methodology changes as a Replacement Rate for Classes and instruct the Trustee in writing to replace simple/compounded SOFR with such Replacement Rate.

Ginnie Mae will have sole discretion with respect to certain elements of the benchmark replacement process, including determining which benchmark replacement is available, determining the earliest practicable index determination date for using the benchmark replacement, selecting a benchmark replacement in the event Term SOFR or compounded SOFR

is unavailable, determining benchmark replacement adjustments (if not otherwise determined by applicable governing bodies or authorities) and making benchmark replacement conforming changes (including potential changes affecting the business day convention and index determination date).

Participants are encouraged to read the current Single-Family Base Offering Circular and Multifamily Base Offering Circular, as applicable, for a detailed description of the fallback provisions adopted by Ginnie Mae. The specific terms set forth in the operative transaction documents for any issuance, including the related Trust Agreements and the applicable Standard Trust Provisions in the Ginnie Mae Multiclass Securities Guide (March 1, 2020) will be controlling.

The Ginnie Mae Multiclass Securities Guide (March 1, 2020), including the Base Offering Circulars, and Multiclass Participants Memoranda ("MPM") can be found on the Ginnie Mae Website:
https://www.ginniemae.gov/investors/multiclass_resources/pages/mpmslib.aspx

FHA Single-Family Program. No LIBOR transition policies have been released.

FHA HECM Program. According to Mortgagee Letter 2021-08, LIBOR-based HECM loans closed after May 3, 2021, are no longer acceptable for FHA insurance. FHA has also set zero as the "floor" for the index value used to determine the Note rate to mitigate against uncertainty and risks posed by negative index rates. The zero-interest rate floor index is effective for all HECMs closed on or after May 3, 2021.

FHA has also approved the SOFR index for annually adjustable rate HECMs. Mortgagees may use the 30-Day Average SOFR for annually adjustable HECMs where the HECM will close on or after May 3, 2021, provided that the 10-Year CMT is used to determine the expected average mortgage interest rate. The expected average mortgage interest rate is the sum of the mortgagee's margin plus the weekly average yield for U.S. Treasury securities adjusted to a constant maturity of 10 years. The index type (CMT or SOFR) used to calculate the initial Note rate must be the same index type used to calculate Note rate adjustments - commingling of index types for the Note rate and adjustments is not allowed, unless otherwise approved by the Secretary.

New model Note language has been established and included in the revised model loan documents to incorporate the changes in ML 2021-08. The revised model loan documents are available on the Single Family Mortgages Model Documents web page. The policy requirements for the revised model note are effective as follows: mortgagees may immediately begin use of the revised model note for all CMT indexed HECMs, mortgagees must use the revised model note for all SOFR indexed HECMs and mortgagees must use the revised Model Note for all HECMs closed on or after July 1, 2021.

The table below summarizes the LIBOR transition policies released to date.

Table 3: Ginnie Mae and FHA LIBOR Transition Policies

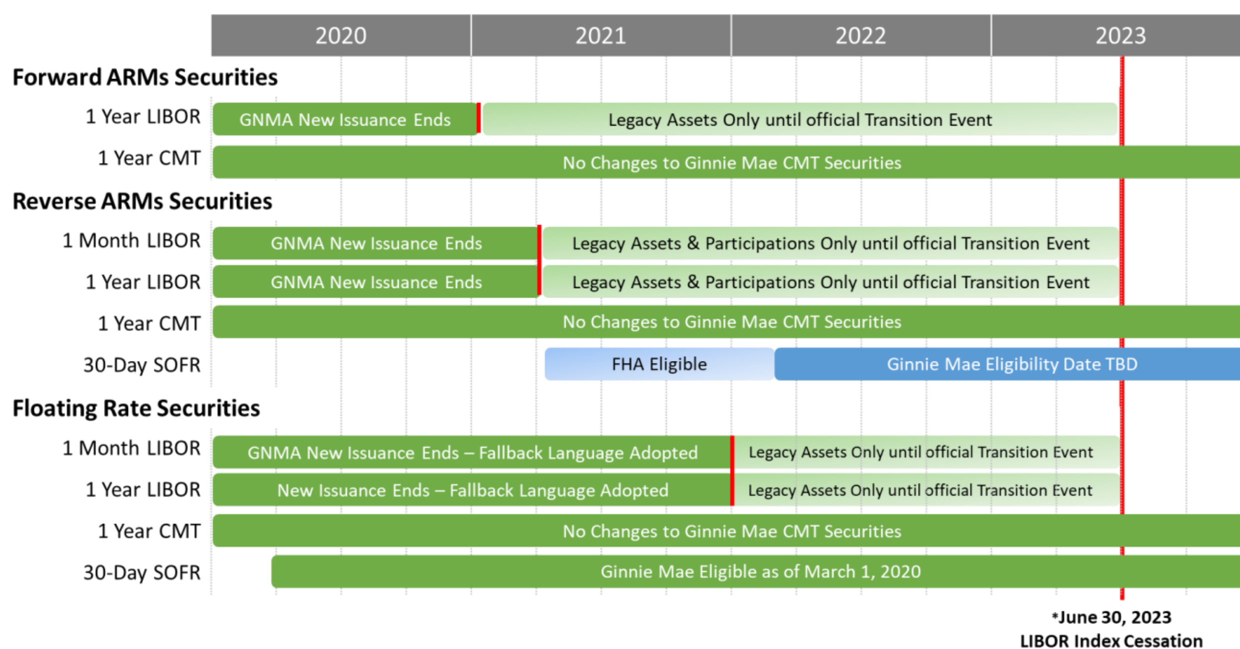
Policy	Summary of Policy	Released By	Release Date
MPM 20-01	1. Effective March 1, 2020, Ginnie Mae implements the following program enhancements: Adoption of the recommendations of the ARRC relating to fallback language for new issuances of LIBOR floating rate securities. 2. Addition of SOFR as an available index for new issuance of floating rate Multiclass Securities and adoption of the ARRC recommended SOFR fallback provision. 3. Removal of Cost of Funds Index (COFI) as an available index for new issuances.	Ginnie Mae (Multiclass)	March 19, 2020
APM 20-12	Effective with security issuances dated on or after January 1, 2021, Ginnie Mae restricts all LIBOR-based single-family forward ARM loans including LIBOR-based ARM-to-ARM loan modifications and re-performing LIBOR-based ARMs, and all LIBOR-based adjustable interest rate HECMs from pooling into any Ginnie Mae I or Ginnie Mae II security.	Ginnie Mae (MBS)	September 21, 2020
MPM 20-03	Ginnie Mae adopts the recommendations of the ARRC relating to fallback language for LIBOR floating rate securities issued before March 1, 2020. Accordingly, the fallback language for all Ginnie Mae LIBOR floating rate securities will be the same, regardless of when those securities were issued.	Ginnie Mae (Multiclass)	October 7, 2020
APM 20-19	Ginnie Mae extends the deadline for securitization of new LIBOR-based adjustable interest rate HECMs by restricting the eligibility of new loans for securitization into any HMBS pool type that relies on LIBOR effective with HMBS issued on or after March 1, 2021.	Ginnie Mae (HMBS)	December 16, 2020
ML 2021-08	For new HECM ARMs closed after May 3, 2021, FHA removes approval for use of the LIBOR index for adjustable interest rate HECMs. For new HECM ARMs closed on or after May 3, 2021, FHA establishes the acceptance of the SOFR index for annually adjustable interest rate HECMs and sets zero as the "floor" for the index value used to determine the HECM Note rate.	FHA (HECM)	March 11, 2021
MPM 21-01	Effective January 1, 2022, transactions, Ginnie Mae will no longer permit the issuance of new Multiclass Securities that bear interest at a rate determined by reference to LIBOR unless such Multiclass Securities are (i) re-securitizations of existing LIBOR Classes that (ii) do not increase the total unpaid principal balance of outstanding LIBOR Classes. This restriction will not apply to Platinum Securities.	Ginnie Mae (Multiclass)	September 20, 2021

Important to note that although Ginnie Mae and FHA have worked closely together to align their LIBOR transition policies, adoption details may differ. Readers should reference the FHA website and documents for additional information on FHA's LIBOR transition.

2.1. Ginnie Mae's LIBOR Index Transition Roadmap

The roadmap below illustrates the LIBOR index transition period for FHA Forward and Reverse adjustable-rate mortgages ("ARMs") and for REMIC Floating Rate securities. Ginnie Mae has officially announced that new issuances of Forward and Reverse (HECM) LIBOR securities are no longer eligible in Ginnie Mae's programs. Existing LIBOR ARMs and securities (legacy assets) will remain eligible in Ginnie Mae programs until the LIBOR Cessation Date on June 30, 2023. At the Cessation Date, the legacy Ginnie Mae LIBOR assets will transition from referencing the LIBOR index to referencing a comparable index (i.e., alternative reference rate).

Figure 1. LIBOR Transition Roadmap for Ginnie Mae Forward, HECM and Floating Rate Securities



As shown in Figure 1 above, Ginnie Mae no longer accepts the issuance and securitization of new LIBOR Forward and Reverse ARMs securities.[2] Ginnie Mae has issued two APMs (APM 20-12 and APM 20-19) specifying that Ginnie Mae no longer accepts security issuances comprised of Forward LIBOR ARMs issued on or after January 1, 2021 and no longer accepts security issuances comprised of Reverse LIBOR ARMs issued on or after March 1, 2021. FHA has also released a Mortgagee Letter (ML 2021-08) specifying that LIBOR-based HECMs must close on or before May 3, 2021, to be eligible for FHA insurance.[3]

[2] Ginnie Mae has established that it will no longer accept Forward FHA ARMs for securitization on or after January 1, 2021. FHA has not released official guidance on the eligibility of Forward LIBOR loans. The mortgage letter ML 2021-08 only refers to the HECM program.

[3] FHA allows LIBOR HECMs closed on or before May 3, 2021, for FHA insurance. However, per Ginnie Mae guidance, LIBOR HECMs closed on or after March 1, 2021, are not eligible for securitization under the Ginnie Mae MBS Program.

Legacy LIBOR ARMs and securities will remain eligible in Ginnie Mae's programs until an official Transition Event where existing LIBOR loans and securities will transition from referencing the LIBOR index to referencing a comparable index. FHA and Ginnie Mae are currently analyzing and preparing for the impacts of the Transition Event on legacy LIBOR ARMs and securities. FHA and Ginnie Mae will provide further guidance on the LIBOR transition process for legacy LIBOR assets (including HECM participations) for all impacted stakeholders once officially determined.

SOFR will be an eligible index for annually adjustable HECM ARMs and securities. Per ML 2021-08, SOFR HECMs are already eligible today for FHA insurance. However, SOFR HECMs are currently ineligible for securitization (Ginnie Mae HMBS). Ginnie Mae is in the process of developing a new HMBS SOFR product. Once the new HMBS SOFR product is developed, Ginnie Mae will begin accepting SOFR HECMs for securitization.

LIBOR-based floating rate securities continue to be available under the Multiclass Program for both new issuances and legacy assets. Effective January 1, 2022, transactions, Ginnie Mae will no longer permit the issuance of new Multiclass Securities that bear interest at a rate determined by reference to LIBOR unless such Multiclass Securities are re-securitizations of existing LIBOR Classes that do not increase the total unpaid principal balance of outstanding LIBOR Classes.

Ginnie Mae has adopted the ARRC Endorsed Terms for determining a Replacement Rate for all LIBOR Classes. Consequently, a Benchmark Transition Event has occurred with respect to all LIBOR Classes. As further described in **Section 6 Multiclass Securities** below, the related Benchmark Replacement Date is June 30, 2023, which means that absent further change in cessation date by the Financial Conduct Authority ("FCA") and the ICE Benchmark Administration Ltd. ("IBA"), Ginnie Mae will select a Replacement Rate for all LIBOR Classes effective June 30, 2023.

2.2. Ginnie Mae LIBOR Index Transition Timeline

The timeline below illustrates the key LIBOR transition dates for each of the impacted Ginnie Mae securities. The key FHA/Ginnie Mae events include:

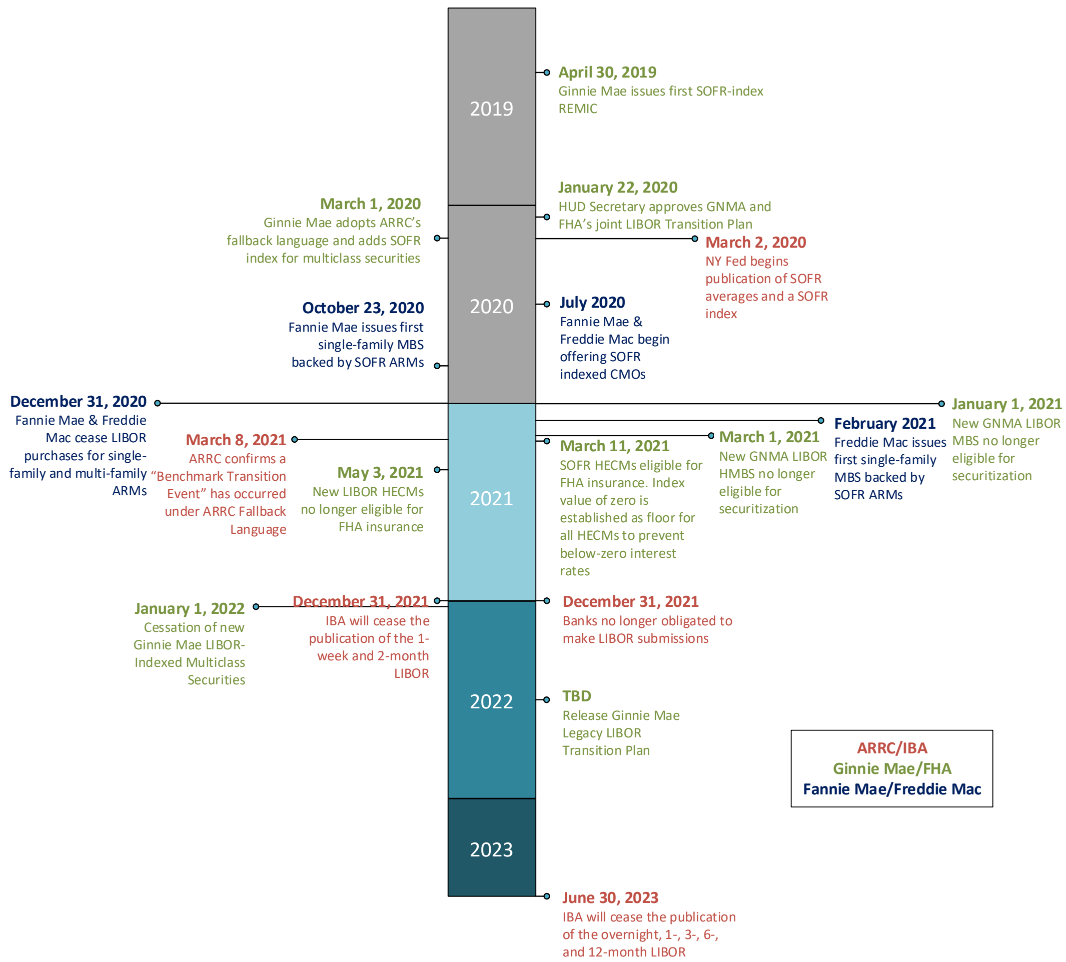
- On March 1, 2020, the Ginnie Mae Multiclass Securities Guide, including the Single-Family Base Offering Circular and Multifamily Base Offering Circular, have been updated to incorporate ARRC's recommended Fallback Language for New Issuance of LIBOR Multiclass Securities. SOFR also became an available index for new issuance of floating rate Multiclass Securities.
- Effective January 1, 2021, Ginnie Mae prohibits the securitization of new LIBOR-Based adjustable-rate Forward ARMs.
- Effective March 1, 2021, Ginnie Mae prohibits the securitization of new LIBOR-Based adjustable-rate HECMs.
- On March 11, 2021, FHA establishes the acceptance of SOFR for the annually adjustable interest rate HECMs and sets zero as the "floor" for the index value for all adjustable interest rate HECMs closed on or after May 3, 2021.
- On March 11, 2021, FHA removes approval of the LIBOR index for adjustable interest

rate HECMs closed after May 3, 2021, for FHA insurance under the HECM program.

- Effective January 1, 2022, Ginnie Mae will no longer permit the issuance of new Multiclass Securities that bear interest at a rate determined by reference to LIBOR unless such Multiclass Securities are re-securitizations of existing LIBOR Classes that do not increase the total unpaid principal balance of outstanding LIBOR Classes. This restriction will not apply to Platinum Securities.

For reference, the timeline below also includes key LIBOR transition dates established by the industry: Alternative Reference Rates Committee ("ARRC"), the ICE Benchmark Administration Ltd. ("IBA"), Fannie Mae and Freddie Mac.

Figure 2. *Ginnie Mae LIBOR Transition Timeline*



3. LIBOR Index Transition Background

LIBOR is the most widely used interest rate benchmark in the world. In response to the 2012 LIBOR scandal and concerns regarding the reliability and transparency of LIBOR and other reference rates across the globe, the Financial Stability Board ("FSB") and Financial Stability Oversight Council ("FSOC") called for the development of alternative risk-free benchmark interest rates supported by liquid, observable markets. In 2014, as a result of recommendations and objectives set forth by the FSB and FSOC to address risks related to U.S. Dollar ("USD") LIBOR, the Federal Reserve Board and the Federal Reserve Bank of New York established the ARRC, which in 2017, selected the SOFR index as the preferred alternative reference rate to USD LIBOR. The ARRC then published its Paced Transition Plan with specific steps and timelines designed to encourage adoption of SOFR.

On July 27, 2017, Andrew Bailey (Chief Executive of the United Kingdom's Financial Conduct Authority ("FCA") the regulator of LIBOR) announced that the FCA will not compel panel banks to submit to LIBOR beyond 2021, requiring transition of financial instruments from LIBOR to alternative risk-free rates. Since then, regulators and industry stakeholders have been working together on transition plans across asset classes. On November 30, 2020, the IBA, the administrator of the USD LIBOR benchmarks, extended the retirement date for 3-, 6- and 12-month USD LIBOR until late June 2023. Nevertheless, regulators are still pushing for banks to move away from the benchmarks by the end of 2021. Regulators remain adamant that USD LIBOR should not be used for new contracts after 2021 and they have warned banks that they will face scrutiny if they do, noting it would create potential risks to "safety and soundness," according to a statement from the Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation, and the Office of the Comptroller of the Currency.

On March 5, 2021, the FCA released an announcement regarding the end of LIBOR, which stated the following:

- 1-week and 2-month USD LIBOR either will cease to be published or will be deemed no longer representative immediately after December 31, 2021.
- All other USD LIBOR tenors either will cease to be published or will be deemed no longer representative immediately after June 30, 2023.
- The FCA does not expect that any USD LIBOR setting will become unrepresentative before the relevant dates set out above; and
- Spread adjustments for USD LIBOR fallback rates for non-cash products are set as of March 5, 2021.

3.1. Alternative Reference Rates Committee (ARRC)

The Alternative Reference Rates Committee ("ARRC") is a group of private market participants convened by the Board of Governors of the Federal Reserve System and the Federal Reserve Bank of New York ("NY Fed") to support a successful transition from USD LIBOR to an alternative reference rate. Together, under ARRC, participants identified a set of alternative reference interest rates that are more firmly based on transactions from a robust underlying market and comply with emerging standards, such as the International Organization of Securities Commissions' Principles for Financial Benchmarks. They also identified an adoption plan to

facilitate the acceptance and use of these alternative reference rates. The ARRC engaged in a multi-year process to evaluate a range of potential indices comparable to USD LIBOR, and on June 22, 2017, the ARRC identified the SOFR as the rate that represents best practice for use in certain new U.S. dollar derivatives and other financial contracts.

Ginnie Mae and FHA continue to work with the ARRC to define the timing and strategy for transitioning legacy LIBOR ARMs to an alternative reference rate (i.e., SOFR). Additional details (including details around servicing requirements, legal/document updates, and other impacts) will be released as the timeline and strategy are finalized.

3.2. Secured Overnight Financing Rate (SOFR)

SOFR is an overnight interest rate based on USD Treasury repurchase agreements ("repos"). The ARRC recommended SOFR because it is:

- Based on observable market transactions from a robust and well-defined market that was able to weather the global financial crisis
- Produced in a transparent, direct manner
- Produced by the NY Fed and meets international benchmark standards

On March 2, 2020, the NY Fed began daily publication of 30, 90 and 180-day compound historical averages of SOFR, which are also available from third party vendors (e.g., Bloomberg and Refinitiv). The Fed's calculator for computing compound averages of SOFR and a SOFR index also became available on March 2, 2020.

On March 17, 2021, the ARRC announced that it has selected Refinitiv to publish its recommended spread adjustments and spread-adjusted SOFR rates for cash products transitioning away from USD LIBOR.

On July 29, 2021, the ARRC announced that it is formally recommending CME Group's forward-looking SOFR Term rates. The ARRC's formal recommendation of SOFR Term Rates is a major milestone in the transition away from USD LIBOR. It provides market participants with an essential transition tool and marks the completion of the Paced Transition Plan that the ARRC outlined in 2017. The formal recommendation follows the ARRC's July 2021 announcement of conventions and recommended best practices for the use of the SOFR Term Rates. Market participants can now employ these materials when using the SOFR Term Rates in legacy fallbacks and new contracts to prepare for LIBOR's end. In conjunction with this development, the ARRC also released a factsheet outlining key steps leading to this point, SOFR's strengths, and upcoming milestones.

4. Single-Family Adjustable-Rate Mortgages and Securities

4.1. Prospective SF LIBOR ARMs

Effective January 1, 2021, new issuances of MBS backed by Forward LIBOR ARMs are no longer eligible for Ginnie Mae securitization. All single-family forward ARM loans that rely on LIBOR, including LIBOR-based ARM-to-ARM loan modifications and re-performing LIBOR-based ARMs, are ineligible for pooling into any Ginnie Mae I or Ginnie Mae II security as of the effective date.

As of today, the following single-family CMT ARM products are eligible to be issued for Ginnie Mae securitization: 1-Year ARMs and hybrid ARMs with initial interest rate periods of 3, 5, 7, and 10 years.

Table 4: Current Ginnie Mae Prospective Forward ARMs Eligible for MBS (CMT only)

Adjustable-Rate Mortgages: Custom Pool – CMT	
Pool Type	*Suffix*
Custom Pool – 1-Yr ARM	C AR
Custom Pool – 3-Yr ARM	C AT
Custom Pool – 5-Yr ARM	C AF or C FT
Custom Pool – 7-Yr ARM	C AS
Custom Pool – 10-Yr ARM	C AX
Adjustable-Rate Mortgages: Multiple Issuer Pool – CMT	
Pool Type	*Suffix*
Multiple Issuer Pool – 1-Yr ARM	M AR or AQ
Multiple Issuer Pool – 3-Yr ARM	M AT
Multiple Issuer Pool – 5-Yr ARM	M AF or M FT
Multiple Issuer Pool – 7-Yr ARM	M AS
Multiple Issuer Pool – 10-Yr ARM	M AX

Ginnie Mae single-family LIBOR ARMs are no longer eligible for prospective loans. Thus, the following Ginnie Mae II pool and loan package types are no longer accepted for issuance:

Table 5: Ginnie Mae Forward LIBOR ARMs No Longer Eligible for MBS

Adjustable-Rate Mortgages: Custom Pool – LIBOR	
Pool Type	*Suffix*
Custom Pool – 1-Yr ARM	C RL
Custom Pool – 3-Yr ARM	C TL
Custom Pool – 5-Yr ARM	C FL or C FB
Custom Pool – 7-Yr ARM	C SL
Custom Pool – 10-Yr ARM	C XL
Adjustable-Rate Mortgages: Multiple Issuer Pool – LIBOR	
Pool Type	*Suffix*
Multiple Issuer Pool – 1-Yr ARM	M RL
Multiple Issuer Pool – 3-Yr ARM	M TL
Multiple Issuer Pool – 5-Yr ARM	M FL or C FB
Multiple Issuer Pool – 7-Yr ARM	M SL
Multiple Issuer Pool – 10-Yr ARM	M XL

Chapter 26 of the MBS Guide, 5500.3, Rev-1, has been amended in accordance with APM 20-12: Ineligibility of LIBOR Products for Single-Class MBS.

Less than 0.002% of Ginnie Mae's Forward MBS program is currently backed by LIBOR ARMs and there have been no new issuances of LIBOR-backed Forward MBS since March 2020. More than 99% of Ginnie Mae's Forward MBS portfolio is fixed rate. Ginnie Mae no longer accepts LIBOR based securities and will not create a Forward SOFR program for prospective Forward SOFR ARMs securities.

4.2. Transitioning Legacy SF LIBOR ARMs

FHA and Ginnie Mae continue to work together and with the industry to define the strategy for transitioning legacy LIBOR ARMs and securities to an alternative reference rate. Additional details (including details around servicing requirements, program document updates, and other impacts) will be released as the timeline and strategy are finalized. For updates on industry efforts to advance the legacy transition, refer to the ARRC's website.

On October 5, 2021, HUD released an Advance Notice of Proposed Rulemaking requesting comment on the transition from LIBOR to alternate indices for adjustable rate mortgages. HUD seeks public comment on the best method of making a transition for legacy loans and new originations. The public comment ended on December 6, 2021.

Until the official Benchmark Replacement Date of the LIBOR index, legacy LIBOR Forward ARMs will remain in Ginnie Mae programs. As of today, Ginnie Mae's single-family legacy LIBOR program includes the following pools and loan packages below.

Table 6: Current Legacy LIBOR ARMs Outstanding in Ginnie Mae MBS

Adjustable-Rate Mortgages: Custom Pool – LIBOR		
Pool Type	*Suffix*	*Legacy Assets (Yes or No)*
Custom Pool – 1-Yr ARM	C RL	No
Custom Pool – 3-Yr ARM	C TL	No
Custom Pool – 5-Yr ARM	C FL or C FB	No
Custom Pool – 7-Yr ARM	C SL	No
Custom Pool – 10-Yr ARM	C XL	No
Adjustable-Rate Mortgages: Multiple Issuer Pool – LIBOR		
Pool Type	*Suffix*	*Legacy Assets (Yes or No)*
Multiple Issuer Pool – 1-Yr ARM	M RL	No
Multiple Issuer Pool – 3-Yr ARM	M TL	Yes
Multiple Issuer Pool – 5-Yr ARM	M FL or M FB	Yes
Multiple Issuer Pool – 7-Yr ARM	M SL	No
Multiple Issuer Pool – 10-Yr ARM	M XL	No

5. Reverse Adjustable-Rate Mortgages and Securities

5.1. Prospective HECM ARMs

As of March 1, 2021, Ginnie Mae restricted the eligibility of new adjustable rate HECMs for securitization into any HMBS pool type that relies on LIBOR. On March 11, 2021, FHA subsequently announced the removal of the use of the LIBOR index for adjustable interest rate HECMs that close on or after May 3, 2021 and established the acceptance of the SOFR index for newly originated annually adjustable interest rate HECMs closing on or after May 3, 2021.

Important to note, until a determined LIBOR cessation or transition event, LIBOR HECM participation issuances will be accepted in Ginnie Mae securities. This means that the first participation of any LIBOR-Based HECM is no longer accepted to be securitized into HMBS; however, ***Subsequent Participations***—that is participations other than the first participation—that are associated with a HECM loan that is backing HMBS with an Issue Date of February 1, 2021, or earlier will continue to be eligible for securitization without restriction until further notice. The transition of subsequent LIBOR participations is currently under analysis and changes will be part of the overall solution for the legacy HMBS portfolio (section 5.3 below).

HMBS pools may only be formed under the Ginnie Mae II Custom MBS Program. Multiple Issuer pools are ineligible for HMBS pooling. As of today, the HMBS pool suffix options are the following:

Table 7: Current Eligible HMBS Pool Types

Pool Type	Suffix	Parameters
Custom Pool – Fixed Rate	H RF	Fixed Rate HECM loans
Custom Pool – 1-Yr ARM, CMT Index	H RA	One-year adjustable rate HECM loans, one-year CMT index, 2/5 Cap structure
Custom Pool – Monthly Adjustable ARM, CMT Index	H RM	Monthly adjustable rate HECM loans, one-year CMT index, Lifetime Cap determined by Issuer
Custom Pool – 1-Yr ARM, LIBOR Index (***subsequent participations only***)	H AL	One-year adjustable rate HECM loans, one-year LIBOR index, 2/5 Cap structure
Custom Pool – Monthly Adjustable ARM, LIBOR Index (***subsequent participations only***)	H ML	Monthly adjustable rate HECM loans, one-month LIBOR index, Lifetime Cap determined by Issuer

Chapter 35 of the MBS Guide, 5500.3, Rev-1 has been amended in accordance with APM 20-19: Limited Extension to Securitization Deadline for LIBOR Based Home Equity Conversion Loans (HECM).

5.2. New HMBS SOFR Pool & SOFR Index Requirements

The new 1-Year SOFR HMBS pool type will follow the business rules similar to the current 1-Year LIBOR pool prefix, "AL". The AL is a Custom HMBS pool type comprised of one-year adjustable rate HECM loans that reference the one-year LIBOR index with a 2/5 Cap structure. As illustrated, the two differences between Ginnie Mae's current 1-Year LIBOR HMBS (pool prefix AL) and the new 1-Year SOFR HMBS are the interest rate index and the floor. The new HMBS pool is currently under development. Additional information on the pool parameters and business rules will be released at a later date.

New Ginnie Mae HMBS Pool Parameters

	ARRC Recommendations SOFR ARMS	Current GNMA HMBS LIBOR ARMs	New GNMA HMBS SOFR ARMS
Interest Rate Index	30- or 90-day (simple or compounded) SOFR average	1 Month LIBOR 1 Year LIBOR	30-day compounded average SOFR
Initial Fixed Period	N/A	N/A	N/A
Interest Rate Adjustment Period	1 year or 6 months after initial fixed period	1 Month 1 Year	1 Year
Lookback Period	45 days in advance	45 days in advance	45 days in advance
Initial Cap	2% for 3/1 ARMS 5% for longer fixed rate periods	N/A for monthly 2% for yearly	2%
Periodic Adjustment Cap	1% or 2%	N/A for monthly 2% for yearly	2%
Lifetime Cap	5%	Determined by lender for monthly 5% for yearly	5%
Margin	Range of 2.75% to 3%	1.25% to 3.25%	1.25% to 3.25%
Floor	N/A	No Floor	Index Rate Floor = 0

Per ML 2021-08, HECM ARMs must comply with the following index requirements for HECMs closed on or after May 3, 2021:

Eligible Index Types		
Adjustable Rate Types	**Expected Average Mortgage Interest Rate**	**Note Rate and Periodic Adjustments**
Annually Adjustable	10-Year CMT	1-Year CMT
		30-Day Average SOFR
Monthly Adjustable	10-Year CMT	1-Year CMT
		1-Month CMT

According to FHA, Mortgagees may no longer originate adjustable interest rate HECMs using the LIBOR index but may use the CMT or SOFR indexes[4]. For all adjustable interest rate HECMs, the mortgagee must use the 10-Year CMT to establish the expected average mortgage interest rate. For annual adjustable interest rate HECMs using the SOFR index, the mortgagee must use the 30-day compounded average SOFR, as published by the Federal Reserve Bank of New York. The Federal Reserve Bank of New York currently publishes the 30-day compounded average SOFR on their website at: https://apps.newyorkfed.org/markets/autorates/sofr-avg-ind. On March 17, 2021, the ARRC announced that it has selected Refinitiv to publish its recommended spread adjustments and spread-adjusted SOFR rates for cash products transitioning away from USD LIBOR.

Mortgagees may use the 30-Day Average SOFR for annually adjustable HECMs where the HECM closed on or after May 3, 2021, and the 10-Year CMT must be used to determine the expected average mortgage interest rate. The expected average mortgage interest rate means the interest rate used to calculate the principal limit established at closing. For fixed interest rate HECMs, the expected average mortgage interest rate is the same as the fixed Note rate and is set simultaneously with the fixed interest rate. For adjustable interest rate HECMs, the expected average mortgage interest rate is the sum of the mortgagee's margin plus the weekly average yield for U.S. Treasury securities adjusted to a constant maturity of 10 years.

For adjustable interest rate HECMs, the Note rate is calculated using either the CMT or SOFR index. The index type (CMT or SOFR) used to calculate the initial Note rate must be the same index type used to calculate Note rate adjustments. Commingling of index types for the Note rate and adjustments is not allowed, unless otherwise approved by the HUD Secretary. The margin is determined by the mortgagee and is defined as the amount that is added to the index value to compute the expected average mortgage interest rate. The mortgagee's margin is the same margin used to determine the initial Note rate and the periodic adjustments to the Note rate.

Annual Adjustable Interest Rate HECMs. Changes in the Note rate charged on an adjustable interest rate mortgage must correspond either to changes in the 30-day average SOFR or to changes in the weekly average yield on U.S. Treasury securities, adjusted to a constant maturity of one year. Each change in the Note rate must correspond to the upward and downward change in the index, except that the index value shall not be less than zero.

Monthly Adjustable Interest Rate HECMs. The mortgagee may also offer a mortgage which provides for monthly adjustments to the interest rate so that changes in the interest rate charged on an adjustable interest rate mortgage correspond to changes in the weekly average yield on U.S. Treasury securities, adjusted to a constant maturity of one year, or to the one-month CMT index, and which sets a maximum interest rate that can be charged. Each change in the Note rate must correspond to the upward and downward change in the index, except those downward changes in the index will not result in a Note rate that is less than zero. Per FHA, SOFR monthly adjustable interest rate HECMs are currently not permitted.

Floor Rate. FHA has established zero as the minimum for the index value used to determine the Note rate for all HECMs to prevent the possibility of negative interest rates in a low interest rate environment. For all HECMs, the index value used to determine the Note rate must not be set below zero. In the event

[4] SOFR is eligible under FHA's HECM Program. SOFR is currently ineligible under Ginnie Mae's HMBS Program. Ginnie Mae is currently creating on HMBS SOFR pool type to be able to accept SOFR HECM loans. Once the new HMBS SOFR pool type is released, SOFR HECMs will be eligible under Ginnie Mae's HMBS program.

the current index for an adjustable interest rate HECM falls below zero, the current index will be deemed to be zero for purposes of calculating the borrower's Note rate.

HUD has provided model loan documents to include the requirements defined in ML 2021-08, including the fallback language for future adjustable interest rate index transition events.

Model Loan Documents. FHA revised the model loan documents for the first and second HECM Adjustable Interest Rate Notes to incorporate the fallback language and other requirements of ML 2021-08. The revised model loan documents are accessible from the following website: https://www.hud.gov/program_offices/housing/sfh/model_documents.

As a reminder, mortgagees are responsible for adapting model documents to ensure compliance with other federal, state, and local laws, and may do so without HUD approval.

5.3. Legacy LIBOR HECM ARMs Transition

FHA and Ginnie Mae continue to work together and with the industry to define the strategy for transitioning legacy LIBOR ARMs and securities to an alternative reference rate. Additional details (including details around servicing requirements, legal/document updates, and other impacts) will be released as the timeline and strategy are finalized.

On October 5, 2021, HUD released an Advance Notice of Proposed Rulemaking requesting comment on the transition from LIBOR to alternate indices for adjustable rate mortgages by December 6, 2021.

For additional updates on industry efforts to advance the legacy transition, refer to the ARRC's website.

6. Multiclass Securities

6.1. Prospective Multiclass Securities

The 1-month LIBOR and 1-Year LIBOR continue to be available indices for new issuance of floating rate Multiclass Securities until December 31, 2021. Per MPM 21-01, effective January 1, 2022, Ginnie Mae will no longer permit the issuance of new Multiclass Securities that bear interest at a rate determined by reference to LIBOR unless such Multiclass Securities are (i) re-securitizations of existing LIBOR Classes that (ii) do not increase the total unpaid principal balance of outstanding LIBOR Classes.

On March 19, 2020, per MPM 20-01, Ginnie Mae announced the addition of SOFR as an available index for new issuance of floating rate Multiclass Securities and adoption of the ARRC recommended SOFR fallback provision provided in the Base Offering Circular. Ginnie Mae has also adopted the recommendations of the ARRC relating to fallback language for all LIBOR floating rate securities.

The ARRC confirmed that a "benchmark transition event" occurred on March 5, 2021, when the U.K. Financial Conduct Authority and ICE Benchmark Administration announced that the LIBOR tenors relevant to the LIBOR classes will cease to be published or will no longer be representative after June 30, 2023. Consequently, effective June 30, 2023 (the related "benchmark replacement date"), Ginnie Mae will select a replacement interest rate, including index, methodology, spread or other related adjustment, in accordance with the ARRC Endorsed Terms.

SOFR Classes. Unless otherwise provided in the applicable Offering Circular Supplement, the Trustee (or its agent) will obtain or calculate, as applicable, the SOFR specified in the applicable Offering Circular Supplement, which at issuance will be either (i) Simple SOFR or (ii) Compounded SOFR, but in either case, may at Ginnie Mae's sole discretion, be later converted to Term SOFR.

- *Simple SOFR* means the arithmetic average of SOFR obtained with respect to each SOFR Reset Date during the prior Accrual Period and the actual number of days in such prior Accrual Period.
- *Compounded SOFR* means the applicable compounded average of SOFR for the Corresponding Tenor as such rate appears on the NY Federal Reserve Website at 3:00 p.m. (New York time) on the second U.S. Government Securities Business Day before the Accrual Period (the applicable "Floating Rate Adjustment Date"); or if the average specified in clause (1) does not appear by 5:00 p.m. (New York time) on the Floating Rate Adjustment Date, unless otherwise specified in writing by Ginnie Mae in its sole discretion, the applicable compounded average of SOFR for the Corresponding Tenor on the last preceding U.S Government Securities Business Day before the Floating Rate Adjustment Date on which such average appeared on the NY Federal Reserve Website.

Conversion of Simple SOFR and Compounded SOFR Classes to Term SOFR. The ARRC Endorsed Terms provide for various alternative benchmarks based on availability: the first two alternatives involve the SOFR published by the Federal Reserve Bank of New York, and the last

two alternatives are not currently specified. Term SOFR, which is the first alternative benchmark specified in the ARRC Endorsed Terms, is a prospective term rate based on SOFR that is published by the CME Group. CME Group's Term SOFR rate is a relatively new rate that was recommended by the ARRC on July 29, 2021. If CME Group's Term SOFR remains available and recommended as of the benchmark replacement date and is operationally feasible, Ginnie Mae will select CME Group's Term SOFR as the benchmark replacement for LIBOR classes in accordance with the ARRC Endorsed Terms. If Term SOFR is unavailable as of the benchmark replacement date, the next alternative benchmark is compounded SOFR.

If a benchmark replacement other than Term SOFR is chosen because Term SOFR is unavailable, Term SOFR would become the benchmark replacement if it later becomes available, which could lead to further volatility in the interest rates on LIBOR classes. Moreover, a benchmark replacement adjustment will be applied to compensate for the foregoing effects of any benchmark replacement. However, no assurance can be provided that any benchmark replacement adjustment will be sufficient to produce the economic equivalent of the then-current benchmark, either at the benchmark replacement date or over the lives of LIBOR classes.

At any time, Ginnie Mae may, in its sole discretion and without the consent of any security holders, designate Term SOFR and related positive or negative adjustments, spreads or methodology changes as a Replacement Rate for Classes and instruct the Trustee in writing to replace simple/compounded SOFR with such Replacement Rate.

Ginnie Mae will have sole discretion with respect to certain elements of the benchmark replacement process, including determining which benchmark replacement is available, determining the earliest practicable index determination date for using the benchmark replacement, selecting a benchmark replacement in the event Term SOFR or compounded SOFR is unavailable, determining benchmark replacement adjustments (if not otherwise determined by applicable governing bodies or authorities) and making benchmark replacement conforming changes (including potential changes affecting the business day convention and index determination date).

SOFR Benchmark Replacement. Ginnie Mae has adopted the ARRC recommended provisions for selecting a Replacement Rate for SOFR Classes if SOFR becomes unavailable. Ginnie Mae’s Benchmark Replacement waterfall for SOFR is the first alternative set forth in the order below:

1. the sum of: (a) the alternate rate of interest that has been selected or recommended by the Relevant Governmental Body as the replacement for the then-current Benchmark and (b) the Benchmark Replacement Adjustment.
2. the sum of: (a) the ISDA Fallback Rate and (b) the Benchmark Replacement Adjustment; and
3. the sum of: (a) the alternate rate of interest that has been selected by Ginnie Mae as the replacement for the then-current Benchmark giving due consideration to any industry accepted rate of interest as a replacement for the then-current Benchmark for U.S. dollar denominated floating rate securities at such time and (b) the Benchmark Replacement Adjustment.

Additional information on the Replacement Rate is provided in the legacy LIBOR section below.

6.2. Legacy LIBOR Multiclass Securities Transition

Per MPM 20-01, Ginnie Mae has adopted ARRC LIBOR fallback recommendations for LIBOR classes of Ginnie Mae Multiclass Securities issued on or after March 1, 2020. Per MPM 20-03, Ginnie Mae has adopted the same ARRC fallback recommendations for issuances of LIBOR floating rate securities issued before March 1, 2020. Accordingly, for all LIBOR floating rate securities, Ginnie Mae will determine:

- If and when a transition event occurs with respect to LIBOR,
- The date on which LIBOR will be replaced for LIBOR Classes, and
- The applicable benchmark replacement for LIBOR and spread adjustment.

Replacement Rate. In the event (i) an applicable index becomes unavailable or (ii) in the case of SOFR Classes, Ginnie Mae elects to convert such SOFR Classes to Term SOFR, Ginnie Mae will select a replacement interest rate, including replacement index, methodology, spread or other related positive or negative adjustment, as applicable (a "Replacement Rate"). In connection with the implementation of such Replacement Rate, Ginnie Mae will have the right to make "Conforming Changes" from time to time without the consent of security holders or any other party and will notify the Trustee of such Conforming Changes in writing. Conforming Changes include, with respect to any Replacement Rate, any technical, administrative or operational changes (including changes to Accrual Period, timing and frequency of determining rates and making payments of interest, rounding of amounts or tenor, changes to applicable tenor when such tenor is longer than the Accrual Period and other administrative matters) that Ginnie Mae decides may be appropriate to reflect the adoption of such Replacement Rate in a manner substantially consistent with market practice (or, if Ginnie Mae decides that adoption of any portion of such market practice is not administratively feasible or if Ginnie Mae determines that no market practice for use of the Replacement Rate exists, in such other manner as Ginnie Mae determines is reasonably necessary).

Any determination, decision or election that may be made by Ginnie Mae with respect to a Replacement Rate, including any determination with respect to a rate, index, methodology, spread, tenor or other positive or negative adjustment or of the occurrence or non-occurrence of an event, may be made in Ginnie Mae's sole discretion, and will become effective without consent from security holders or any other party.

LIBOR Benchmark Replacement. Ginnie Mae will determine when the transition event occurs, and the date of which LIBOR will be replaced for LIBOR classes. Provided that if Ginnie Mae cannot determine the Replacement Benchmark as of the Benchmark Replacement Date, then Benchmark Replacement will be determined by the following waterfall – the first alternative set forth in the order below:

1. The sum of: Term SOFR and the Benchmark Replacement Adjustment
2. The sum of: Compounded SOFR and the Benchmark Replacement Adjustment
3. The sum of the alternate rate of interest that has been selected or recommended by the Relevant Governmental Body as the replacement for the then-current Benchmark for the applicable Corresponding Tenor and the Benchmark Replacement Adjustment
4. The sum of the ISDA Fallback Rate and the Benchmark Replacement Adjustment
5. The sum of the alternate rate of interest that has been selected by Ginnie Mae as the replacement for the applicable Corresponding Tenor giving due consideration to any industry-accepted rate of interest as a replacement for the then-current Benchmark for U.S. dollar denominated floating rate securities at such time and the Benchmark Replacement Adjustment.

Benchmark Replacement Adjustment. The Benchmark Replacement Adjustment will be determined as the first alternative set forth in the order below as of the Benchmark Replacement Date:

1. The spread adjustment, or method for calculating or determining such spread adjustment that has been selected, endorsed, or recommended by the Relevant Governmental Body for the applicable Unadjusted Benchmark Replacement
2. The applicable Unadjusted Benchmark Replacement is equivalent to the ISDA Fallback Rate, then the ISDA Fallback Adjustment
3. The spread adjustment that has been selected by Ginnie Mae giving due consideration to any industry-accepted spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of the then-current Benchmark with the applicable Unadjusted Benchmark Replacement for U.S. dollar denominated floating rate securities at such time.

7. Market Considerations

Ginnie Mae encourages all market participants to conduct an operational assessment and start their operational builds as early as possible. Key resources include but are not limited to:

- ARRC User's guide to SOFR
- ARRC Vendor survey and buy-side checklist
- ARRC Recommended Best Practices for Vendors on Completing the Transition from LIBOR
- CFPB's Consumer handbook on adjustable-rate mortgages

7.1. SOFR Term Rates and Spread Adjustment

In 2017, the ARRC selected SOFR as the rate that represents best practice for use in certain new USD derivatives and other financial contracts, representing the ARRC's preferred alternative to USD LIBOR. The New York Fed, in cooperation with the Office of Financial Research, began publishing SOFR on April 3, 2018. According to the ARRC, SOFR is a much more resilient rate than LIBOR because of how it is produced and the depth and liquidity of the markets that underlie it. As an overnight secured rate, SOFR better reflects the way financial institutions fund themselves today. The transaction volumes underlying SOFR regularly are around $1 trillion in daily volumes. The volumes underlying SOFR are far larger than the transactions in any other U.S. money market. This makes it a transparent rate that is representative of the market across a broad range of market participants and protects it from any attempts of manipulation. Also, the fact that it is derived from the U.S. Treasury repo market means that, unlike LIBOR, it's not at risk of cessation. However, the adoption of SOFR is still in its infancy phase as sufficient liquidity has not yet been developed. Thus, below are some important SOFR future state adoption considerations:

SOFR Term Rates. SOFR ARM products are still in their infancy phase. As of October 2021, the GSEs have issued 565 SOFR pools, $10 billion UPB. The SOFR ARM market appetite is still to be determined. In addition, as the GSEs reference the 30-day compounded SOFR index, SOFR Term Rates are still in the process of being evaluated and developed.

On July 29, 2021, the ARRC announced that it is formally recommending CME Group's forward-looking SOFR Term Rates. The ARRC's formal recommendation of SOFR Term Rates is a major milestone in the transition away from USD LIBOR, providing market participants with an essential transition tool and marking the completion of the Paced Transition Plan that the ARRC outlined in 2017 and has been working toward since. The formal recommendation follows the ARRC's July 2021 announcement of conventions and recommended best practices for the use of the SOFR Term Rates. Market participants can now employ these materials when using the SOFR Term Rates in legacy fallbacks and new contracts to prepare for LIBOR's end. In conjunction with this development, the ARRC also released a factsheet outlining key steps leading to this point, SOFR's strengths, and upcoming milestones.

Spread Adjustment. There are potentially two different methodologies for the LIBOR/SOFR spread adjustment that are currently being evaluated by the ARRC for recommendation: the ISDA Method and the ISDA Value. There are Pros and Cons to both methods as shown below.

Pros and Cons of ISDA Model

Method	Value
Pros: • Some increase in historical accuracy • More timely calculation of the spread (would be calculated in June 2022 rather than Feb/Mar 2021) • Based on specific fallback rate	Pros: • Same treatment across different products • No period of uncertainty about what the long-run spread will be • May be easy to explain ("we chose the same spread adjustment that borrowers in business loans or investors in floating rate debt will receive").
Cons: • May result in a higher spread and rate to consumers than to other market participants • May be difficult to explain why that is the case	Cons: • Not tailored to the fallback rate (which may be difficult to explain) • May be some risk that the spread adjustment would have declined by June 2023.

Although term rates in the industry may change, there will be minimal impact to Ginnie Mae's processes and systems (other than the addition of a new HECM pool type). It is anticipated that the chosen SOFR tenor will be handled the same way through Ginnie Mae's systems as LIBOR. Currently with LIBOR, the security rate is provided to Ginnie Mae by the Issuer using the Reporting & Feedback System ("RFS") HRA module. Ginnie Mae's systems do not independently verify or validate the calculated security rate provided during the RPB processing on a monthly basis.

7.2. Benchmark Transition Event

On March 8, 2021, the ARRC confirmed that in its opinion the March 5, 2021, announcements by ICE Benchmarks Administration and the U.K. Financial Conduct Authority on future cessation and loss of representativeness of the LIBOR benchmarks constitutes a "Benchmark Transition Event." This includes all USD LIBOR settings pursuant to the ARRC recommendations regarding more robust fallback language for new issuances or originations of LIBOR floating rate notes, securitizations, syndicated business loans, and bilateral business loans. For additional information, see the ARRC FAQs Regarding the Occurrence of a Benchmark Transition Event.

7.3. Accounting and Tax Considerations

The transition may have an impact on the accounting treatment for existing contracts, hedge accounting relationships or other transactions that reference LIBOR. The Financial Accounting Standards Board ("FASB") issued a final accounting standard update to provide temporary optional guidance to ease the potential burden in transitioning from LIBOR. Ginnie Mae encourages market participants to evaluate the accounting standards update and the accounting relief that can be applied for transition. See below for the issued accounting standard update and additional implementation information: FASB Project – Reference Rate Reform.

The transition of legacy LIBOR-indexed transactions in the future may result in tax implications. Ginnie Mae encourages all stakeholders to review the regulations issued by the Internal Revenue Service ("IRS") and Treasury to identify potential impacts due to transitioning from LIBOR: IRS proposed rule.

References

Reference	Agency	Link
Ineligibility of LIBOR Products for Single-Class MBS	Ginnie Mae	APM 20-12
Ineligibility of LIBOR Products for HECM MBS	Ginnie Mae	APM 20-19
FHA HECM changes to LIBOR and establishes acceptance of the SOFR index for annually adjustable interest rate HECMs	FHA	ML 2021-08
Revised FHA Single Family Model Loan Documents	FHA	Single Family Mortgages Model Documents
Adoption of ARRC LIBOR Fallback Language for new issuances of LIBOR floating rate securities, addition of SOFR as an available index for new issuance of floating rate Multiclass Securities, and removal of COFI as an available index for new issuances	Ginnie Mae	MPM 20-01
Adoption of ARRC Fallback Language for LIBOR floating rate securities issued before March 1, 2020	Ginnie Mae	MPM 20-03
Cessation of New LIBOR-Indexed Multiclass Securities	Ginnie Mae	MPM 21-01
Multiclass Base Offering Circular	Ginnie Mae	March 2021
ARRC Paced Transition Plan	ARRC	NY Fed
ARRC A User's Guide to SOFR	ARRC	April 2019
ARRC An Updated User's Guide to SOFR	ARRC	February 2021

ARRC Vendor Survey and Buy-Side Checklist	ARRC	January 2020
ARRC Recommended Best Practices for Vendors on Completing the Transition from LIBOR	ARRC	May 2020
Consumer Handbook on Adjustable-Rate Mortgages	CFPB	Handbook
FASB Project – Reference Rate Reform	FASB	Website
IRS Proposed Rule: Guidance on the Transition from Interbank Offered Rates to Other Reference Rates	IRS	Federal Register
HUD Advance Notice of Proposed Rulemaking on Transitioning from LIBOR to Alternate Indices	HUD	Federal Register