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LIBOR Transition Playbook

Single-Family Adjustable-Rate Mortgages (ARM)

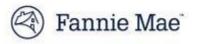
December 2023



Summary of Changes

The table below details the list of changes since the June 2023 version of the LIBOR Transition Playbook was published on the Fannie Mae and Freddie Mac websites.

Section		Summary of changes	
1.	Refinitiv Rebranding	 Updated data tables to reflect Refinitiv rebranding 	



Freddie Mac

Legal information and disclaimer

Information in the London Interbank Offered Rate ("LIBOR") Transition Playbook is preliminary and subject to revision and updates from time to time. This document is an indicative summary of our preliminary analysis regarding the potential upcoming LIBOR transition. This document and the analysis may be amended, superseded or replaced by subsequent summaries or actions. The analyses, 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 loan documentation, securities offering documents, operative documents, etc. in order to evaluate the rights and obligations for each such loan or security. As a reminder, Fannie Mae and Freddie Mac (the "GSEs") are in separate conservatorships and their conservator ("FHFA") has the authority to direct either or both GSEs to take whatever actions it deems appropriate in respect of any LIBOR transition and product or contract.

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Please be aware that the federal Adjustable Interest Rate (LIBOR) Act (the "LIBOR Act") became law on March 15, 2022. As required by the Act, the Board of Governors of the Federal Reserve System ("Board") published regulations identifying Board-selected benchmark replacement rates based on the Secured Overnight Financing Rate ("SOFR") on December 16, 2022. The regulations published by the Board have a significant impact on steps that the GSEs will take in connection with the transition from LIBOR-indexed products to SOFR-indexed products.

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2. SF ARMs and MBS/PCs

Fannie Mae Freddie Mac

2.1 Introduction

On December 22, 2022, the GSEs announced their selection of CME Term SOFR plus a tenor spread adjustment, published by LSEG (formerly Refinitiv Limited) as an all-in replacement rate, as the benchmark replacement for their LIBOR-indexed SF ARMs and MBS/PCs following the cessation of LIBOR. This decision aligns with the Board-selected benchmark replacements for consumer loans and is applicable to SF ARMs and MBS/PCs for which the GSEs are responsible for selecting the benchmark replacement.

The following section will help you understand:

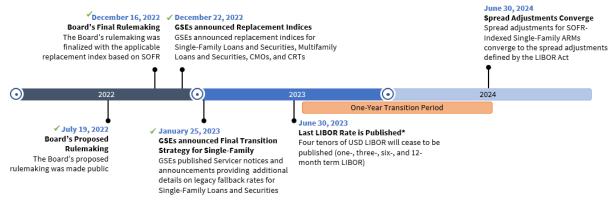
- Key milestone dates for transitioning LIBOR-indexed SF ARMs and MBS/PCs
- Guidance on when LIBOR-indexed SF ARMs will convert to SOFR-indexed SF ARMs
- Guidance on benchmark replacements and associated spread adjustments
- High-level considerations for transitioning legacy LIBOR-indexed ARMs
- Guidance on servicing legacy LIBOR-indexed SF ARMs
- Guidance on legacy SF MBS/PCs

More information on the legacy transition can be found on Fannie Mae's <u>LIBOR Transition website</u> and Freddie Mac's <u>Reference Rates Transition website</u>.

2.2 Transition milestones

The GSEs defined key dates related to the transition of legacy LIBOR-indexed ARMs and MBS/PCs. Milestones will continue to be updated as necessary. Figure 2-1 identifies these key transition milestones.

Figure 2-1: Single-Family LIBOR transition milestones



*The last LIBOR Rate will be calculated by the Intercontinental Exchange (ICE) on June 30th 2023, which will be published in The Wall Street Journal on July 3rd 2023.

2.3 Replacement rate determination and spread methodology

* Benchmark replacement determination

The LIBOR Act required the Board to publish regulations identifying a Board-selected benchmark



replacement based on SOFR. On December 16, 2022, the Board published its final rulemaking confirming the LIBOR benchmark replacements. For consumer products, the 1-, 3-, 6-, and 12-month LIBOR indices will fall back, respectively, to 1-, 3-, 6-, or 12-month CME Term SOFR with the applicable tenor spread adjustment, published by LSEG (formerly Refinitiv Limited) as an all-in replacement rate, as defined in the LIBOR Act.

SOFR spread adjustment methodology

Under the LIBOR Act, there will be a one-year phase-in period for consumer products in which the transition tenor spread adjustments defined in the LIBOR Act will be incorporated into the replacement rate. The spread adjustment immediately following the cessation of LIBOR will be the difference between the last published LIBOR rate and the corresponding SOFR replacement ("initial spread adjustment"). For every business day following the cessation of LIBOR, the initial spread adjustment will linearly converge to the corresponding transition tenor spread adjustments defined in the LIBOR Act. Figure 2-2 depicts the LIBOR benchmark replacements and spread adjustment methodology for consumer products as defined by the LIBOR Act.

For updates on regulatory and industry efforts to advance the legacy transition, refer to the Board's final rulemaking and ARRC's website.

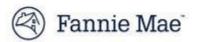
Board Final Rule Category	Current LIBOR Index	Spread-adjusted SOFR Replacement Index	RIC	All-In Replacement Rate Calculation
	1 Month LIBOR	FTSE USD IBOR Consumer Cash Fallback 1-Month	USDCFCFCTSA1M=	1M CME Term SOFR + Transition Tenor Spread Adjustment during the first year; 1M CME Term SOFR + Fixed Tenor Spread Adjustment (0.11448 percent) after first year
Consumer Loans	6 Month LIBOR	FTSE USD IBOR Consumer Cash Fallback 6-Month	USDCFCFCTSA6M=	6M CME Term SOFR + Transition Tenor Spread Adjustment during the first year; 6M CME Term SOFR + Fixed Tenor Spread Adjustment (0.42826 percent) after first year
	1 Year LIBOR	FTSE USD IBOR Consumer Cash Fallback 12-Month	USDCFCFCTSA1Y=	1Y CME Term SOFR + Transition Tenor Spread Adjustment during the first year; 1Y CME Term SOFR + Fixed Tenor Spread Adjustment (0.71513 percent) after first year

Figure 2-2: Benchmark replacement guidance for SF LIBOR ARMs and MBS/PCs

2.4 Preparation for the legacy transition

Converting LIBOR ARMs to SOFR ARMs

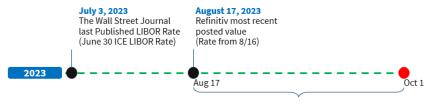
The transition date of each legacy LIBOR-indexed ARM will depend on the characteristics of the ARM, such as the next interest rate reset date and its related interest rate at the start of the lookback period.



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The scenarios included below provide the expected payments and interest rate reset mechanics for LIBOR-indexed ARMs with different characteristics. The scenarios are not intended to be exhaustive but are intended to provide the reader with representative examples, such that they are able to anticipate changes to ARMs which do conform to the examples included below. The examples should be used as a guide to help readers understand when the interest rate and payment calculations of LIBOR-indexed ARMs switch to the corresponding benchmark replacements for the first time.

For all Fannie Mae and Freddie Mac owned loans indexed to LIBOR with interest rate adjustments based on a lookback date that occurs after <u>July 3, 2023</u>, servicers must use the applicable, "all-in", "no floor" FTSE USD IBOR Cash Fallback, as published by LSEG (formerly Refinitiv Limited)v. <u>LSEG will</u> <u>be posting replacement indices on their consumer-facing website on a one-day delay, the same</u> <u>way The Wall Street Journal published LIBOR indices</u>. Servicers servicing LIBOR-indexed ARM Notes must use the same lookback date and the most recent index value posted by LSEG, consistent with the LIBOR Index selection today.

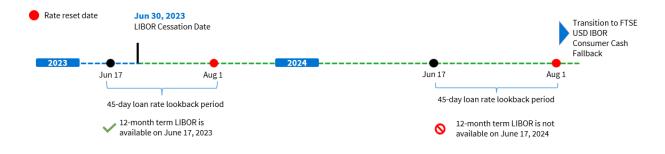




Scenario A: LIBOR-indexed ARM, with annual interest rate reset frequency, re-setting on August 1, 2023 and a 45-day loan interest rate lookback period

- Loan A is a 10-year seasoned ARM loan indexed to LIBOR, with an annual interest rate reset frequency and next interest rate reset date on August 1, 2023. Loan A has a 45-day loan interest rate lookback period.
- Since LIBOR is still available 45 days prior to the ARM's interest rate reset date (i.e., June 17, 2023), the interest rate calculations (and the related payment calculation) will use the applicable LIBOR index in effect on June 17, 2023.
- The respective benchmark replacement will be used on the subsequent annual interest rate reset date on August 1, 2024 and each reset date thereafter to calculate the interest rate and related payments.

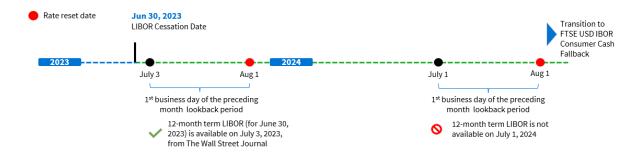
Figure 2-3: Scenario A





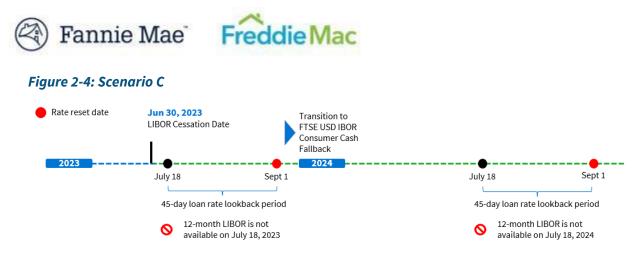
Scenario B: LIBOR-indexed ARM, with annual interest rate reset frequency, re-setting on August 1, 2023 and a 1st Business Day of the preceding month loan interest rate lookback period

- Loan B is a 10-year seasoned ARM loan indexed to LIBOR, with an annual interest rate reset frequency and next interest rate reset date on August 1, 2023. Loan A has a 1st Business Day of the preceding month loan interest rate lookback period.
- The interest rate calculations (and the related payment calculation) are based on the applicable index value posted on July 3, 2023. Given the one-day delay in index publications, the applicable index will be the LIBOR index posted in *The Wall Street Journal* on July 3, 2023, which will be the LIBOR index value effective June 30, 2023.
- The respective FTSE USD IBOR Consumer Cash Fallback will be used on the subsequent annual interest rate reset date on August 1, 2024 and each reset date thereafter to calculate the interest rate and related payments.



Scenario C: LIBOR-indexed ARM, with annual interest rate reset frequency, re-setting on September 1, 2023 and a 45-day loan interest rate lookback period

- Loan C is a 10-year seasoned ARM loan indexed to LIBOR, with an annual interest rate reset frequency and next interest rate reset date on September 1, 2023. Loan A has a 45-day loan interest rate lookback period.
- Since LIBOR is no longer published after the end of June 2023 and is not available 45 days prior to the ARM's interest rate reset date (i.e., July 18, 2023), the respective FTSE USD IBOR Consumer Cash Fallback will be used to calculate the new interest rate and the related new payment.
- Be sure to use the applicable FTSE USD IBOR Consumer Cash Fallback posted on Refinitiv's consumer-facing website on July 18, which is the value effective July 17.



2.5 Servicing legacy LIBOR-indexed SF ARMs

SF ARMs indexed to LIBOR will transition to the benchmark replacements, requiring borrower communications and updated interest rate calculations.

* Non-standard notes

If servicers identify any additional LIBOR ARM non-standard notes in their respective GSE servicing books, they are expected to contact the applicable GSE as soon as possible to discern if any specific accommodations are necessary. Servicers have been encouraged to initially focus their reviews on older vintages of loans, loans originated by Sellers no longer in business, and any loans originated under policies and procedures that are known to not require use of Fannie Mae/Freddie Mac uniform instruments. Identified non-standard loans may require a change to mortgage margin or designation to a specific benchmark replacement once LIBOR is no longer in effect. Fannie Mae and Freddie Mac will work with each servicer individually to determine how to best manage through the transition away from LIBOR on any non-standard notes.

* SOFR ARM index source

Refinitiv Limited has been selected as the publishing vendor for the Board-selected spread-adjusted term SOFR reference rates.

Figures 2-5 and 2-6 show the changes in the description of SF ARM indices for Fannie Mae and Freddie Mac servicing, respectively.

Active ARM indices	Pre-cessation index descriptions	Post-cessation index descriptions
45	6 MONTH WALL STREET JOURNAL LIBOR RATE	FTSE USD IBOR Consumer Cash Fallback 6-Month
51	6 MONTH WALL STREET JOURNAL LIBOR RATE – MONTHLY AVG	FTSE USD IBOR Consumer Cash Fallback 6-Month
58	6 MONTH WALL STREET JOURNAL LIBOR RATE - DAILY	FTSE USD IBOR Consumer Cash Fallback 6-Month

Figure 2-5: Updated servicing index descriptions for active Fannie Mae SF ARM indices



Active ARM indices Pre-cessation index descriptions		Post-cessation index descriptions
62	1 MONTH WALL STREET JOURNAL LIBOR - DAILY	FTSE USD IBOR Consumer Cash Fallback 1-Month
75	1 YEAR WALL STREET JOURNAL LIBOR – DAILY	FTSE USD IBOR Consumer Cash Fallback 12-Month
89	1 YR WSJ LIBOR-MONTHLY ON 1ST BUS. DAY	FTSE USD IBOR Consumer Cash Fallback 12-Month

Figure 2-6: Updated servicing index descriptions for active Freddie Mac SF ARM indices

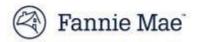
Active ARM indices Pre-cessation index description		Post-cessation index descriptions
007	LIBOR 6MO	LIBOR Rep 6M
011	LIBOR CO 6MO	LIBOR Rep 6M
017 FRBNY JCD 6M*		LIBOR Rep 6M
036	LIBOR 1MO	LIBOR Rep 1M
038 SLIBOR 6MO		LIBOR Rep 6M
039	SM CD 6MW*	LIBOR Rep 6M
041 LIBOR 1YR		LIBOR Rep 1Y

*Previously transitioned to 6-Month LIBOR

* Actions to consider

Servicers will need to incorporate the benchmark replacements into calculations and reconciliations for borrower payments. The calculations will need to be updated on an individual loan basis based on the terms of the ARM, which include:

- Payment adjustment frequency
- Rate adjustment frequency
- Loan payment lookback period
- Loan rate lookback period
- Initial/next payment reset date
- Initial/next interest rate reset date



Freddie Mac

Figure 2-7: Actions to consider when servicing SF ARMs

Focus areas	Actions to consider			
Borrower communications	 Provide timely notice of the change in the index to borrowers consistent with loan documents, applicable law and regulations, including those governing payment change notices under Regulation Z Retain a copy of the notice in the servicing file Send a copy of the borrower notice to the document custodian with an instruction to maintain the copy with the original LIBOR-indexed note. At least one such notice, must, at a minimum be sent on or after July 1, 2023, and prior to the loan's impacted interest-rate change date 			
	 Supplementary notices may be sent prior to July 1, 2023. Servicers may consider using, and amending as necessary, the <u>MBA Borrower</u> <u>Communication Template for Existing LIBOR ARMs (Notice) and MBA</u> Borrower Communication Template for Existing LIBOR ARMs (Letter) 			
Legal documentation	 Provide a copy of the note to the appropriate GSE if there are any variations to the Uniform ARM note's replacement language that was used just prior to recent revisions and request instructions on how to proceed 			
Use of a new index in rate and payment calculations	 Update and test systems, reporting and other processes or activities related to interest rate adjustment calculations to incorporate the benchmark replacements' product parameters Adjust interest accrual calculations for changes in the underlying index 			
Transfer of servicing	 Ensure that servicing transferees have the capability to service loans indexed to the benchmark replacements 			

2.6 Administering legacy LIBOR-indexed SF MBS/PCs

The LIBOR transition impacts MBS/PCs consisting of pools of LIBOR-indexed ARMs. Unless terminated at or prior to the time of the LIBOR transition, those outstanding MBS/PCs will also transition to the respective CME Term SOFR index and spread adjustment, published by LSEG (formerly Refinitiv Limited) as an all-in replacement rate.

* Actions to consider

Investors and vendors will need to maintain awareness of index and calculation changes. For Fannie Mae, SF MBS subtypes and index codes will not change; however, index descriptions associated with subtypes and index codes will be updated in Fannie Mae applications and disclosure reporting. Refer to Figure 2-8 for Fannie Mae index description changes. For Freddie Mac, prefixes and index codes will not change; however, index descriptions associated with prefixes and index codes will be updated to reflect the transition to the replacement indices. Refer to Figure 2-9 for Freddie Mac index description changes.



Figure 2-8: Updated Fannie Mae SF MBS/PC index descriptions for disclosure

Disclosure Index Code	Fannie Mae Existing Description	Updated Description
35	1-Month Wall Street Journal LIBOR Rate (Daily)	FTSE USD IBOR Consumer Cash Fallback 1-Month
42	6-Month Wall Street Journal LIBOR Rate	FTSE USD IBOR Consumer Cash Fallback 6-Month
43	6-Month Wall Street Journal LIBOR Rate (Daily)	FTSE USD IBOR Consumer Cash Fallback 6-Month
44	6-Month Wall Street Journal LIBOR Rate (Monthly AVG)	FTSE USD IBOR Consumer Cash Fallback 6-Month
37	1-Year Wall Street Journal LIBOR Rate (Monthly)	FTSE USD IBOR Consumer Cash Fallback 12-Month
38	1-Year Wall Street Journal LIBOR Rate (Daily)	FTSE USD IBOR Consumer Cash Fallback 2-Month

Figure 2-9: Updated Freddie Mac SF MBS/PC index descriptions for disclosure

Disclosure Index Code	Freddie Mac Existing Description	Updated Description
36	LIBOR_1MO_WSJ	FTSE USD IBOR Consumer Cash Fallback 1-Month
38	LIBOR_1YR_WSJ_DLY	FTSE USD IBOR Consumer Cash Fallback 12-Month
42	LIBOR_6MO_WSJ	FTSE USD IBOR Consumer Cash Fallback 6-Month
43	LIBOR_6MO_WSJ_DLY	FTSE USD IBOR Consumer Cash Fallback 6-Month
44	LIBOR_6MO_WSJ_MNTH_A VG	FTSE USD IBOR Consumer Cash Fallback 6-Month
02	CD_6MO_SEC_MRKT_MNT H_AVG*	FTSE USD IBOR Consumer Cash Fallback 6-Month

*Previously transitioned to 6-Month LIBOR

Figure 2-10: Actions to consider when administering SF MBS/PCs

Focus Areas	Actions to consider
Investor awareness	 Maintain awareness of the updates to impacted pools
Use of a new index in rate and payment calculations	 Update and test systems, reporting and other processes or activities related to interest rate adjustment calculations to incorporate the benchmark replacements' product parameters

Fannie Mae Freddie Mac

6. Appendix: Introduction to SOFR based new products

6.1 Introduction

To assist stakeholders in preparing for the transition from LIBOR to alternative reference rates ("ARRs"), information and guidance related to the issuance of new contracts have been consolidated into the following appendix sections. The following sections are targeted at readers who need information about the following products:

- Single-Family ("SF") Adjustable-rate Mortgages ("ARMs") and securities, i.e., Mortgage-backed Securities ("MBS") and Participation Certificates ("PCs")
- SF Credit Risk Transfer ("CRT") transactions
- Collateralized Mortgage Obligations ("CMOs")
- Fannie Mae Multifamily ("MF") ARMs and MBS
- Freddie Mac MF Floating-Rate Loans and securities
- MF CRT transactions

The following sections describe key transition milestones and recommended actions for stakeholders to consider as they manage the upcoming transition from LIBOR. The following sections serve as a tool to help plan and adapt business policies, procedures, and processes to support products linked to ARRs and prepare for discontinuing the use of LIBOR as an index.

Under the guidance of FHFA, the GSEs have been working together on several aspects of the LIBOR transition. Where appropriate, the GSEs have aligned policies and milestones. However, each GSE's timelines and product details may differ. Readers should take note of these differences, which are further explained in each chapter of this document.

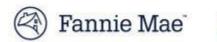
For more details and FAQs on each GSE's transition, refer to LIBOR transition webpages for <u>Fannie</u> <u>Mae</u> and <u>Freddie Mac</u>, respectively.

Please direct any additional questions to your Fannie Mae or Freddie Mac account management teams.

6.2 SOFR-indexed key milestones

The GSEs have established milestones leading to the transition from LIBOR, including timelines for beginning acquisition and issuance of SOFR-indexed products and ceasing acquisition and issuance of LIBOR-indexed products.

Transition timelines are defined for major products offered by the GSEs based on timing for finalizing transition strategies and external market dependencies. Milestones will continue to be updated as necessary. For more detailed timelines, refer to the individual chapters for each product.



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Figure 6-1: Key transition milestones

	Fannie Mae		Freddie Mac		
Product	Offer SOFR products	Cease LIBOR offering	Offer SOFR products	Cease LIBOR offering	
SF ARMs and MBS/PCs ¹	Aug. 2020	Dec. 2020 ²	Nov. 2020	 Dec. 2020: Last LIBOR ARM Guarantor PC Issue Date Dec. 2020²: Last LIBOR ARM Settlement Date 	
SF CRT transactions	Oct. 2021	Dec. 2020	Oct. 2020	Oct. 2020	
CMOs	Jul. 2020	Oct. 2020 ³	Jul. 2020	Oct. 2020 ³	
Fannie Mae MF ARMs and MBS ¹	Sep. 2020	Dec. 2020	N/A	N/A	
Freddie Mac MF Floating- Rate Loans and securities	N/A	N/A	 Dec. 20, 2019: K-deals Sep. 1, 2020: Floating-Rate Loans Dec. 17, 2020: K-deals backed only by SOFR- indexed Floating-Rate Loans 	 Dec. 2020: Ceased purchase of LIBOR-indexed Floating- Rate Loans and hybrid loans End of Q2 2021: Ceased issuance of LIBOR-indexed securities 	
MF CRT transactions	TBD	Dec. 2020	Jan. 2021	Dec. 2020	

¹ The underlying mortgages needed to have an application date no later than September 30, 2020. Effective June 30, 2022, the GSEs will no longer resecuritize LIBOR-indexed MBS/PCs and Megas/Giants into new issuance LIBOR-indexed bonds

² The GSEs stopped accepting LIBOR-indexed pool deliveries after this date.

³ The GSEs will no longer issue resecuritizations of previously issued LIBOR-indexed certificates (whether CMO or ARM certificates) into new LIBOR-indexed bonds that settle after June 30, 2022.



7. Appendix: Single-Family ARMs

7.1 Introduction

The GSEs have taken the following steps, under FHFA's guidance, to prepare for the transition from LIBOR for SF ARMs:

- Updated existing uniform ARM notes and riders to include fallback and trigger language as recommended by the ARRC
- Designed (in conjunction with the ARRC) new SF ARMs that use the NY Fed's 30-day compound average of SOFR ("30-day Average SOFR") as the underlying index
 - Fannie Mae began accepting delivery of SOFR-indexed ARMs on August 3, 2020, and Freddie Mac began underwriting SOFR-indexed ARMs on October 1, 2020 and accepting delivery of SOFR-indexed ARMs on November 9, 2020
- Stopped accepting delivery of LIBOR-indexed ARM MBS/Guarantor PCs (with the last issue date being December 1, 2020)
- Stopped cash/whole loan purchase of LIBOR-indexed ARMs after December 31, 2020
- Started discussing strategies for the transition of existing LIBOR-indexed ARMs

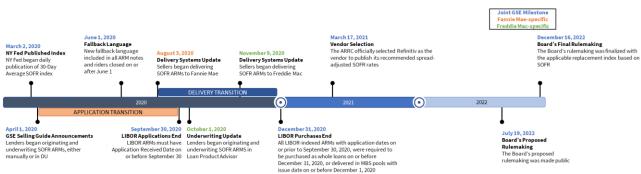
The following section will help you understand:

- Key milestones for the SF ARM LIBOR transition
- Differences and similarities between LIBOR-indexed and SOFR-indexed ARMs
- How to prepare for the origination, selling, servicing and securitization of SOFR-indexed ARMs
- High-level considerations for transitioning existing LIBOR-indexed ARMs

7.2 Transition milestones

The GSEs defined and met key dates related to the origination, commitment, pricing and delivery processes for SOFR-indexed ARMs, as well as dates for the cessation of LIBOR-indexed ARM and MBS/PCs purchases. Additional details and milestones for existing loans will be provided as they become available. Figure 7-1 identifies key transition milestones for SF ARMs.





7.3 SOFR-indexed ARM characteristics

Comparing LIBOR and SOFR ARMs

The GSEs designed SF SOFR-indexed ARM products in conjunction with other members of the ARRC



Consumer Products Working Group. These products are based on 30-day Average SOFR, as published by the <u>NY Fed.</u> Sellers and Servicers are instructed to use the final/revised values of the index which should be available no later than 3:00 p.m. ET.

The primary features of SOFR-indexed ARMs and MBS/PCs that differ from LIBOR-indexed ARMs and MBS/PCs are:

- Interest rate index: 30-day Average SOFR
- <u>Initial fixed period</u>: varies, with a minimum initial fixed period of 3 years for SOFR- indexed ARMs
- Interest rate adjustment period: 6 months
- Interest rate adjustment cap: +/-1 percentage point ("%") per subsequent adjustment period
- Margin: will likely differ due to basis and other market-based adjustments
- <u>New ARM plans</u>: introduced for SOFR (Fannie Mae)
- <u>New Cash Contract and Guarantor Pooling Products</u>: introduced to support SOFR- indexed ARMs (Freddie Mac)

Figure 7-2 summarizes key product features for both SOFR and LIBOR ARMs.

Figure 7-2: Key product features of LIBOR and SOFR ARMs

Product Features	LIBOR ARMs	SOFR ARMs
Interest rate index	1-Year WSJ LIBOR	30-day Average SOFR
Initial fixed period	1, 3, 5, 7 or 10 years	3, 5, 7 or 10 years (no 1-year initial fixed period)
Interest rate adjustment period	Changes every 1 year after initial fixed period	Changes every 6 months after initial fixed period
Lookback period New rate determined 45 days in advance		No change
Cap at first adjustment	+/-2% for 3- and 5-year ARMs +/-5% for 7- and 10-year ARMs	No change
Cap at subsequent adjustments	+/-2%	+/-1%
Life cap	Up to 5% for Fannie Mae Up to 5% for Freddie Mac	<i>No change for Fannie Mae</i> 5% for Freddie Mac
Margin (lender discretion)	2.25% for Fannie Mae Defined on Execution for Freddie Mac	Minimum 1%; Maximum 3%

Fannie Mae has updated ARM plans and a Special Feature code ("SFC") in support of the transition to SOFR, as detailed in Figure 7-3.



Plans and Codes	LIBOR ARMs		SOFR ARMs
ARM plans submitted to Desktop Underwriter® ("DU")	Import GEN3 GEN5 GEN7 GEN10	DU User Interface FM GENERIC, 3 YR FM GENERIC, 5 YR FM GENERIC, 7 YR FM GENERIC, 10 YR	No change
ARM plans submitted to Loan Delivery	2720-2729, 2737, 3252		4926, 4927, 4928, 4929
SFC for notes with fallback language	785		None: all SOFR-indexed ARM notes will contain fallback language

Figure 7-3: ARM plans and special feature codes for LIBOR and SOFR ARMs

Freddie Mac has updated Cash Contract Products, Guarantor Security Products, Guarantor Product Types and an Investor Feature Identifier ("IFI") in support of the transition to SOFR, as detailed in Figure 7-4.

Figure 7-4: Additional guarantor and investor features for LIBOR and SOFR ARMs

Feature	LIBOR ARMs	SOFR ARMs
Loan Product Advisor®	No product information is submitted	No changes
Contract products for Take Out ARM Cash Contract	1/1 1Y LIBOR ARM 2/2/6 3/1 1Y LIBOR ARM 2/2/5 or 6 5/1 1Y LIBOR ARM 2/2/5 or 6 7/1 1Y LIBOR ARM 5/2/5 10/1 1Y LIBOR ARM 5/2/5	3Y 6M 30D Avg. SOFR ARM 2/1/5 5Y 6M 30D Avg. SOFR ARM 2/1/5 7Y 6M 30D Avg. SOFR ARM 5/1/5 10Y 6M 30D Avg. SOFR ARM 5/1/5
Security Products for Take Out ARM Guarantor Contract	NonCnvrt 1/1 1Y LIBOR ARM 2/2/2-6 NonCnvrt 3/1 1Y LIBOR ARM 2/2/2-6 NonCnvrt 5/1 1Y LIBOR ARM 2/2/2-6 NonCnvrt 7/1 1Y LIBOR ARM 2/2/2-6 NonCnvrt 7/1 1Y LIBOR ARM 5/2/5-6 NonCnvrt 10/1 1Y LIBOR ARM 2/2/2-6	NonCnvrt 3Y 6M 30D Avg. SOFR ARM 2/1/5 NonCnvrt 5Y 6M 30D Avg. SOFR ARM 2/1/5 NonCnvrt 7Y 6M 30D Avg. SOFR ARM 5/1/5 NonCnvrt 10Y 6M 30D Avg. SOFR ARM 5/1/5
Product types for Take Out ARM Guarantor Contract	1/1 ARM LIBOR 3/1 ARM LIBOR 5/1 ARM LIBOR 7/1 ARM LIBOR 10/1 ARM LIBOR	3/6 SOFR ARM 5/6 SOFR ARM 7/6 SOFR ARM 10/6 SOFR ARM
IFI for notes with fallback language	J23	None: all SOFR-indexed ARM notes will contain fallback language

For more background on how the new SOFR-indexed ARM was developed, refer to Options for Using SOFR in Adjustable Rate Mortgages, published by the NY Fed in July 2019.



SOFR ARM index calculation

SOFR-indexed ARMs are based on 30-day Average SOFR, as published by the <u>NY Fed</u>, which is a compounded average of overnight SOFR over the preceding 30 calendar days.

SOFR ARM index source

The NY Fed publishes the 30-, 90- and 180-day compounded SOFR averages daily.

SOFR ARM interest rate calculation

There is no change as to how the borrower interest rate will be calculated when using 30-day Average SOFR.

7.4 Preparation for SF SOFR ARMs

Originating and underwriting SF SOFR ARMs

Generally, the processes for originating and underwriting SOFR ARMs are like the existing processes used to originate and underwrite ARMs tied to any other index, and all existing conventional ARM requirements apply to SOFR ARMs.

Key concepts

The GSEs have made multiple specification updates in the latest versions of their automated underwriting systems ("AUS") in support of SOFR ARMs, including adding a new enumeration to represent the use of 30-day Average SOFR.

Fannie Mae has applied the specification updates noted below to DU Specification MISMO 3.4 (DU Spec), while Freddie Mac applied specification updates to Loan Product Advisor specifications v5.0.06. Other existing data requirements (e.g., for margin and index value) will still be required unless otherwise noted.

Lenders should note the AUS updates in Figure 7-5 when preparing for the origination and underwriting of SOFR-indexed loans.

Requirements	Fannie Mae SOFR ARMs	Freddie Mac SOFR ARMs
Update timeline	Specification updates complete	Loan Product Advisor v5.0.06
AUS version	DU Specification MISMO 3.4 (DU Spec) ⁴	LPA v5.0.06

Figure 7-5: GSE automated underwriting systems supporting SOFR ARMs

⁴ Fannie Mae's EarlyCheck system also uses the DU input file. The guidance provided for DU submissions is also applicable to EarlyCheck.



Fannie Mae Freddie Mac

Requirements	Fannie Mae SOFR ARMs	Freddie Mac SOFR ARMs
Enumerations	 "30DayAverageSOFR" added for IndexSourceTypeDescription Note: Use of enumeration is optional, as DU does not require identification of a specific ARM index for underwriting evaluation 	"30DayAverageSOFR" added for IndexSourceTypeDescription
ARM index	 Populate IndexSourceType using "Other" in DU Users have the option to populate IndexSourceTypeOtherDescription with "30DayAverageSOFR" 	 Lenders to use the following data points in Loan Product Advisor: IndexSourceType = "Other" IndexSourceTypeOtherDescription = "30DayAverageSOFR" The data point IndexSourceType will continue to be required for all ARMs
ARM plan data	 Users are still required to submit ARM plans in DU for underwriting evaluation Submit generic ARM plans using the InvestorProductPlanIdentifier field Do not submit lender ARM plan data or SOFR ARM plan numbers 	N/A

In addition, Lenders should note the following with respect to Uniform MortgageData Program ("UMDP") requirements:

- No updates are necessary for the Uniform Loan Application Dataset ("ULAD"), since ARM indexes are not displayed on the Uniform Residential Loan Application ("URLA")
- There are no planned updates for the Uniform Closing Dataset ("UCD")
- The new SOFR index will be delivered using IndexType = "Other" and IndexTypeOtherDescription = SOFR
- Data point names for each GSE's AUS are different from the UCD

For more information on existing SOFR impacts on UMDP requirements, refer to the GSEs' announcements on UMDP updates.



Figure 7-6: Necessary actions for originating and underwriting SF SOFR ARMs

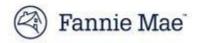
Focus area	Necessary actions	
Documentation	 Update FAQs and borrower ARM disclosure documentation Update closing instructions and/or train closing agents, escrow agents and closing attorneys Review differences in updated procedures for printed notes and eNotes Test printing of all updated documents (e.g., notes, riders, Closing Disclosure, other disclosures) Update training manuals for origination staff including originators, processors, underwriters, closers, post-closers, and QC Update broker and correspondent lending training manuals, policies and documentation 	
Lender systems, processes and training	 Maintain awareness of new field options for standard ARM enumerations (e.g., index type and rate reset period) Update Loan Origination System ("LOS")/vendor systems with new SOFR ARM-related enumerations Update LOS product, eligibility and pricing rules Develop and implement pricing, hedging and execution strategies Provide training for staff, including originators, processors, underwriters, closers, post-closers and QC SOFR adjusts every six months, not every year The minimum initial fixed period for SOFR loans is three years Provide communications and/or training for brokers, correspondents, eNote vaults, electronic registries, Document Preparation ("Doc Prep") and other third-party vendors 	
GSE systems	 Directly integrated lenders, LOS and other third-party vendors should be coordinating with each GSE to update their interfaces to accommodate new SOFR ARM products 	
Document custodian	 Remember that as part of the note certification process, the GSEs require that the Custodian verify, for ARM notes with the revision date "(rev. 2/20)", the lifetime floor is equal to the ARM's margin as stated in the note; if it does not, the discrepancy will be reported as a documentation issue and the note will not be certified for sale This information is reflected in Fannie Mae's ARM plans, and an annual update of Freddie Mac's Document Custody Procedures Handbook will reflect this requirement 	

* Helpful links

For more information on origination and underwriting, refer to the following resources:

Fannie Mae

- ARM Plan Matrix
- ARM Note Riders and Addenda





• Legal Documents

Freddie Mac

- Single-Family Seller/Servicer Guide, Chapter 4401
- <u>Single-Family Uniform Instruments</u>

Selling and delivering SOFR ARMs

Generally, the processes for selling and delivering SOFR ARMs is the same as the existing processes used to sell and deliver ARMs tied to any other index. Sellers will see additional dropdown options available in GSE systems to reflect the addition of new SOFR offerings, as applicable.

All existing, conventional ARM requirements apply to SOFR ARMs, including existing Uniform Loan Delivery Dataset ("ULDD") requirements. For more information on existing UMDP requirements as well as updates to support the transition to the SOFR ARM index, refer to the <u>GSEs' announcements</u> on ULDD updates.

Key concepts

The GSEs have updated their respective ULDD specifications in support of SOFR ARMs, similar to the updates made for AUS specifications. Users should note the updates outlined in Figure 7-7 when preparing to sell SOFR-indexed loans to the GSEs.

Requirements	Fannie Mae SOFR-indexed ARMs	Freddie Mac SOFR-indexed ARMs
Update timeline	 Loan Delivery system updates were made available August 3, 2020 	 Loan Selling Advisor system updates were made available November 9, 2020
Enumerations	 "30DayAverageSOFR" added to IndexSourceTypeDescription 	 "Other" added to IndexSourceType "30DayAverageSOFR" added to IndexSourceTypeDescription
ARM Index Data	 The new index will be delivered using IndexSourceType = "Other" IndexSourceTypeOtherDescription = "30DayAverageSOFR" 	 IndexSourceTypeDescription added as a data point The new index will be delivered using IndexSourceType = "Other" plus IndexSourceTypeOtherDescription = "30DayAverageSOFR"
ARM plan data	 Sellers should submit one of the published SOFR ARM plan numbers in the ULDD sent to Loan Delivery and/or EarlyCheck; do not submit "Lender ARM Plan" or DU generic ARM plans 	N/A

Figure 7-7: Updates for selling and delivering SOFR-indexed loans to the GSEs

The GSEs have also updated reference product labels, ARM plans, subtypes and pool prefixes as applicable for new SOFR-indexed MBS/PCs. Refer to the "Securitization of SF SOFR ARMs" section below for more detail.



Figure 7-8: Necessary actions for selling and delivering SOFR ARMs

Focus areas	Necessary actions	
Seller systems, processes and training	 Train Capital Markets/Secondary Marketing staff to use new pricing screens available for SOFR ARM whole loan commitments, including guaranty fee amounts ("G-fee" amounts for Fannie Mae and Credit Fee in Yield amounts for Freddie Mac) Identify source for current SOFR rates and update internal system feeds Ensure SOFR-indexed ARM interest rates are distributed via all existing methods to all channels Update LOS product, eligibility and pricing rules Develop and implement pricing, hedging and execution strategies Provide training for staff (e.g., capital markets/secondary, post-closers, shippers and investor relations) on all aspects of new products Provide communications and/or training for brokers, correspondents, document custodians, warehouse lenders, disbursement agents, eNote vaults, electronic registries, document file preparers and other third-party vendors GSEs' loan delivery UIs are available for manual data entry, if needed 	
GSE systems	 Maintain awareness of how SOFR ARM characteristics are reflected in existing pricing, execution, committing and delivery applications: Pricing menu options for cash execution G-fee pricing menu options for MBS execution Additional options for enumerations and ARM plans for SOFR-indexed ARMs (Fannie Mae) Additional Cash Contract Products, Guarantor Security Products and Guarantor Product Types for SOFR-indexed ARMs (Freddie Mac) 	

Helpful links

For more information on LIBOR transition impacts to selling and delivering SOFR ARMs, refer to the following resources:

Fannie Mae

- Selling Guide
- Single-Family Servicing Guide

Freddie Mac

• Single-Family Seller/Servicer Guide

Securitization of SF SOFR ARMs

The GSEs developed new pool prefixes, subtypes (Fannie Mae), and documentation language to support the securitization of SOFR-indexed ARMs. Impacted parties should be ready to operationalize these changes when involved in the purchase, trading or investor reporting of SOFR MBS/PCs and Megas/Giants.

Fannie Mae Freddie Mac

* Key concepts

The GSEs introduced new prefixes and subtypes for MBS/Megas and PCs/Giants, as outlined in Figure 7-9.

	Fannie Mae		Frede	lie Mac	
Product	Prefix	ARM plan number	ARM subtype	Prefix	Pool number range
3-Year	SO	4926	85A	8A	8A0001-8A9999
5-Year	SO	4927	85B	8B	8B0001-8B9999
7-Year	SO	4928	85C	8C	8C0001-8C9999
10-Year	SO	4929	85D	8D	8D0001-8D9999

Figure 7-9: New prefixes and subtypes for GSE MBS/Megas and PCs/Giants

Freddie Mac is using the existing pool prefix for 30-day Average SOFR ARM Giant PCs.

Figure 7-10: Existing Freddie Mac pool prefix for 30-day Average SOFR ARM Giant PCs

Product description	Prefix	Pool number range
Various indices, WAC ARM Giant	84	840001-849999

In addition, 30-day Average SOFR Hybrid ARM index codes were created by each GSE for MBS/PCs and Mega/Giants disclosure purposes.

- Fannie Mae introduced a new index code (061) and new subtypes for 30-day Average SOFR, which is reflected in its existing MBS disclosure files and referenced in its <u>Single-Family MBS</u> <u>Disclosures Guide</u> and <u>Subtype webpage</u>
- Freddie Mac added index code 61 for 30-day Average SOFR. This index code will be disclosed via the existing disclosure field for loan level (ID L-046) and security level (ID S-51). Refer to the <u>Single-Family Disclosure Guide</u> for disclosure file details

SF legal documentation, including MBS Disclosures, Prospectus and Prospectus Supplements have been updated to include SOFR as an index.

* Eligible collateral for Freddie Mac new issue ARM Giant PCs

The <u>45-day Fixed-rate and 75-day ARM Giant Collateral Prefix Eligibility Chart</u> has been updated to include 30-day Average SOFR-indexed ARMs. In addition, the existing <u>ARM Giant PC pooling rules</u> are available on Freddie Mac's MBS website. Effective June 30, 2022, the GSEs stopped resecuritizing existing LIBOR-indexed CMOs (both Single-Family and Multifamily) and MBS/PCs into new LIBOR-indexed securities. The resecuritization of LIBOR-indexed CMOs and MBS/PCs into appropriately structured new-issue SOFR indexed bonds will continue to be permitted.



Figure 7-11: Necessary actions for updates to eligible collateral for ARM Giant PC

Focus areas	Necessary actions
Documentation	Note updates to base language in prospectus documents, including new index codes
GSE systems	Note the inclusion of a new pool prefix, subtypes and index code to represent new SOFR ARM characteristics

Helpful links

For more information on LIBOR transition impacts on securitization of SOFR ARMs, refer to the following resources:

Fannie Mae

- Pool Prefix Glossary
- ARM MBS Subtypes
- <u>Updated MBS Prospectus language</u>

Freddie Mac

Prefix Library

Servicing SF SOFR ARMs

While a new underlying index will be used to calculate borrower payments, the calculations themselves will not change.

Key concepts

- Servicers will need to incorporate the new SOFR index into calculations and reconciliations for borrower payments; however, the calculations are not changing
- Servicers will need to incorporate the SOFR index into their current rate and payment adjustment processes

Figure 7-12: Necessary actions for servicing SOFR ARMs

Focus areas	Necessary actions
Use of a new index in rate and payment calculations	Update and test systems, reporting and other processes or activities related to interest rate adjustment calculations to incorporate SOFR into product parameters. These include initial fixed period, current index value, margin, lookback period and rounding method, plus the initial, subsequent and lifetime caps/ceilings and floors, underlying index, reset periods and subsequent caps
Transfer of servicing	Ensure that servicing transferees have the capability to service SOFR loans





Helpful links

For more information on LIBOR transition impacts on servicing of SOFR ARMs, refer to the following resources:

Fannie Mae

• Single-Family Servicing Guide

Freddie Mac

• Single-Family Seller/Servicer Guide

Cessation of purchase of SF LIBOR ARMs

As of December 31, 2020, the GSEs stopped purchasing LIBOR-indexed ARMs. Lenders, servicers and other relevant parties should have taken the necessary steps from a systems, process and training perspective to discontinue the origination and delivery of LIBOR ARMs.

Key concepts

- The GSEs no longer purchase LIBOR ARMs as whole loans for cash or in exchange for securities provided the related MBS/PC pools.
- Fannie Mae has instructed sellers to deliver SFC 785 for any non-SOFR-indexed ARMs with a note and rider containing new fallback language.

Helpful links

For more information on LIBOR transition impacts on the ability to sell and deliver LIBOR ARMs, refer to the following resources:

Fannie Mae

<u>Selling Guide</u>

Freddie Mac

• Single Family Seller/Servicer Guide



14. Summary of Prior Changes

Section	Summary of changes
August 2020	
2. Single-Family Adjustable-Rate Mortgages and Securities	 Updated language to reflect that Fannie Mae is now accepting delivery of SOFR-indexed ARMs
September 2020	Undeted the end of the end of the last MDC/Commute DC is a data to
2. Single-Family Adjustable-Rate Mortgages and Securities	 Updated the announcement regarding the last MBS/Guarantor PC issue date to indicate that it would be for LIBOR ARMs with a latest settlement date of Dec. 31, 2020 Changed date from Nov. 16, 2020 to Nov. 9, 2020 for Loan Selling Advisor system updates and made a minor word change (i.e., "similar to" to "like") Inserted language and dates regarding Loan Product Advisor's availability Deleted "Fannie Mae only" and "Freddie Mac only" language under actions to consider in GSE systems for preparation for SF SOFR ARMs section Made a minor word change (i.e., "accept" to "purchase") in Cessation of Purchase of SF LIBOR ARMs section
October 2020	
2. Single-Family Adjustable-Rate Mortgages and Securities	 Updated language to clarify that December 1, 2020 is the last issue date for LIBOR-indexed ARM MBS/Guarantor PCs to be delivered to the GSEs with a latest LIBOR-indexed ARM settlement date of December 31, 2020 Updated language to indicate that the GSEs have stopped accepting LIBOR ARMs with Application Received Dates after September 30, 2020 Updated the transition timeline graph to clarify the milestone description for December 31, 2020 Removed language calling out specific plan that the GSEs will stop purchasing after December 31, 2020
November 2020	
2. Single-Family Adjustable-Rate Mortgages and Securities	 Updated the transition timeline graph to clarify delivery milestones in December 2020 and updated the transition of existing LIBOR ARM loans to TBD
March 2021	
2. Single-Family Adjustable-Rate Mortgages and Securities	 Updated transition timelines to reflect latest market announcements and consultations Updated and removed language to reflect the GSEs no longer purchasing SF LIBOR-indexed ARMs
October 2021	
All Sections	 Updated formatting throughout document



Fannie Mae Freddie Mac

2. Single-Family Adjustable-Rate Mortgages and Securities	 Figure 2-1: Added a milestone for the ARRC's selection of Refinitiv as the vendor for benchmark replacements and updated language in timeline 2.4 Preparation for SF SOFR ARMs: Updated Freddie Mac's Loan Product Advisor timelines; updated language around 30-day Average SOFR Hybrid ARM Index codes and the SF MBS Disclosures Guide; removed Freddie Mac's guidance to sellers on IFI J23 for non-SOFR-indexed ARMs 2.5 Transition Existing SF LIBOR ARMs: Added a statement for servicers about non-standard notes
June 2022	
2. Single-Family Adjustable-Rate Mortgages and Securities	 Removed language about final LIBOR-indexed SF ARM settlement date Added milestones for the Board's proposed and final rulemaking and the rulemaking to the SF timeline Updated timeline to include year 2022 and tentative plans for a legacy transition announcement Updated margin features for Fannie Mae SF SOFR ARMs
January 2023	
All Sections	 Updated formatting, diction, and abbreviations throughout for consistency Updated language to reflect implementation of the Adjustable Interest Rate (LIBOR) Act Updated all sections to add details related to the legacy transition for each product Prior sections of the playbook focused on new products have been moved to the appendix
2. Single-Family Adjustable-Rate Mortgages and Securities	 Updated introduction to reflect GSE announcement of CME Term SOFR selection Updated transition milestones timeline Updated sections 2.3-2.6 to focus on legacy LIBOR-indexed SF products Updated milestones for the Board's final rulemaking on the SF timeline
April 2023	
All Sections	 Updated Replacement rate determination sections to include finalized replacement index names, Refinitiv Instrument Codes (for SF) and all-in replacement rate calculations
2. SF ARMs and MBS/PCs	 Updated index description and all-in replacement rate calculation information in Section 2.3
June 2023	
1. SF ARMs and MBS/PCs	 Updated scenarios illustrating the conversion of legacy LIBOR-indexed ARMs in Section 2.4 Updated servicing index descriptions for SF ARMs/MBS in Section 2.5 Updated index descriptions for SF/MBS disclosures in Section 2.6 3. Multifamily ARMs, Floating-Rate Loans, and Securities Updated loan and bond interest accrual timeline illustrations in Section 3.3