Frequently Asked Questions:
The Transition from LIBOR to SOFR

1. **Why is LIBOR going away?**
   There is a scarcity of actual transactions in the data underlying LIBOR, and concerns around the representative quality of the data have led to the announcement of its future cessation. In 2017, the Alternative Reference Rates Committee (ARRC) designated the Secured Overnight Financing Rate ("SOFR") as the alternative index for U.S. dollar LIBOR.

2. **What is SOFR?**
   SOFR is a nearly risk-free reference rate that is completely based on actual transactions. It is a broad measure of the cost of borrowing cash overnight collateralized by U.S. Treasury securities. SOFR covers the most volume of transactions of any rate based on the U.S. Treasury repurchase agreement (repo) market. It is based on transaction data from three segments of the Treasury repo market: (i) tri-party repo, (ii) General Collateral Finance (GCF) repo, and (iii) bilateral repo transactions cleared through the Fixed Income Clearing Corporation (FICC). As a good representation of conditions in the overnight Treasury repo market (over $700 billion transacted daily), SOFR reflects the economic cost of lending and borrowing by the wide array of market participants active in the market.

3. **What is the ARRC?**
   The Alternative Reference Rates Committee (ARRC) is a group of private-market participants convened by the Federal Reserve Board and the New York Fed to help ensure a successful transition from the U.S. dollar (USD) LIBOR to a more robust reference rate, its recommended alternative, the Secured Overnight Financing Rate (SOFR). The ARRC is comprised of a diverse set of private-sector entities that have an important presence in markets affected by USD LIBOR and a wide array of official-sector entities, including banking and financial sector regulators, as ex-officio members.

4. **Is it necessary to amend legacy LIBOR contracts?**
   To ensure an orderly, consistent, and coordinated transition and fallback from USD LIBOR to SOFR, the ARRC strongly recommends all LIBOR reference instruments be updated with appropriate fallback language. In its Paced Transition Plan (PTP), the ARRC recommended that Bilateral Business Loans be updated to include fallback language no later than October 31, 2020. In the same PTP, the ARRC recommended that all LIBOR derivative contracts adhere to the ISDA IBOR Fallback Protocol within 3-4 months of the protocol's publication.

5. **How is the alternative index referenced, applied, and sourced?**
   According to the ARRC's guidelines for hedged loans, the alternative index conventions will follow ISDA's approach. Below is how the alternative index will be referenced, applied and sourced:

How is it referenced?
"If an Index Cessation Effective Date has occurred at least two London Banking Days prior to the Reset Date, then the rate will be determined as if references to USD-LIBOR-BBA were references to Fallback Rate (SOFR)".

How is it applied?
*"**Fallback Rate (SOFR)**" means the term-adjusted SOFR plus the spread relating to USD LIBOR, in each case, for a period of the Designated Maturity provided by Bloomberg Index Services Limited (or a successor provider as approved and/or appointed by ISDA from time-to-time), as the provider of term-adjusted SOFR and the spread, on the Fallback Rate (SOFR) Screen (or by other means) or provided to, and published by, authorized distributors.*

How is it sourced?
*"**Fallback Rate (SOFR) Screen**" means the Bloomberg Screen corresponding to the Bloomberg ticker for the fallback for USD LIBOR for a period of the Designated Maturity accessed via the Bloomberg Screen <FBAK> <GO> Page (or, if applicable, accessed via the Bloomberg Screen <HP> <GO>) or any other published source designated by Bloomberg Index Services Limited (or a successor provider as approved and/or appointed by ISDA from time to time).*

While this may seem complex, it is actually just substituting one screen-based rate (LIBOR) for another (Fallback Rate (SOFR)). This approach (formulated by ISDA), avoids the complexities of manually calculating a term-adjusted SOFR (daily compounding with a two-day lookback) and adding a spread; the rate is just taken from the specified Bloomberg FBAK page. Bloomberg is responsible for publishing both the term-adjusted SOFR, the applicable spread, and the all-in Fallback Rate (SOFR) quotes. Bloomberg is making this data available daily on the Bloomberg LIBOR Transition website.

6. **How is the fallback rate calculated?**
   Fallback Rate (SOFR) is the sum of the Adjusted Reference Rate and the Spread Adjustment.

7. **Who determines the Adjusted Reference Rate and Spread Adjustment?**
   Per the definition of Fallback Rate (SOFR), Bloomberg Index Services Limited is doing the calculation. This is in line with the ISDA Protocol.

8. **How is the Adjusted Reference Rate determined?**
   The Adjusted Reference Rate is the alternative Reference Rate compounded daily over the accrual period subject to a two day lookback with regards to the payment date.
   For USD LIBOR, the Adjusted Reference Rate is the daily compounded SOFR over the accrual period (also referred to as term adjusted SOFR in the fallback definitions).

9. **Is the Adjusted Reference Rate Term-SOFR?**
   No, Term-SOFR does not currently exist. There is only overnight SOFR that is compounded daily over the corresponding loan accrual period.

10. How is the Spread Adjustment determined?
The Spread Adjustment is the median spread between the term adjusted SOFR and its related tenor LIBOR using a 5-year lookback.

11. Is the Spread Adjustment a constant number or does it change over time?
The Spread Adjustment is static and will set on a Cessation or Pre-Cessation Event. These events are defined in the agreement as “Index Cessation Event” (see question #16 for more information on “Index Cessation Event”).

12. Will the Spread Adjustment be the same adjustment for all LIBORs?
Each tenor LIBOR will have its own individual Spread Adjustment as stated in the definition of Fallback Rate (SOFR) *“in each case, for a period of the Designated Maturity”.*

13. Can a loan that is swapped use different replacement index versus the swap?
As recommended by the ARRC, the index on both the loan and swap should switch to the Fallback Rate (SOFR). Otherwise, the loan and swap will be mismatched. That mismatch creates monthly settlement issues that could ultimately necessitate an unwind of the swap.

14. When will the Fallback Rate go into effect?
The Fallback Rate (SOFR) will go into effect on an “Index Cessation Effective Date” (see question #16 for more information on “Index Cessation Event”).

15. What is an Index Cessation Event?
With regards to USD LIBOR:

(a) a public statement or publication of information by or on behalf of the administrator of USD LIBOR announcing that it has ceased or will cease to provide USD LIBOR permanently or indefinitely, provided that, at the time of the statement or publication, there is no successor administrator that will continue to provide USD LIBOR;

(b) a public statement or publication of information by the regulatory supervisor for the administrator of USD LIBOR, the central bank for the currency of USD LIBOR, an insolvency official with jurisdiction over the administrator for USD LIBOR, a resolution authority with jurisdiction over the administrator for USD LIBOR or a court or an entity with similar insolvency or resolution authority over the administrator for USD LIBOR, which states that the administrator of USD LIBOR has ceased or will cease to provide USD LIBOR permanently or indefinitely, provided that, at the time of the statement or publication, there is no successor administrator that will continue to provide USD LIBOR;

(c) a public statement or publication of information by the regulatory supervisor for the administrator of USD LIBOR announcing that USD LIBOR is, or as of a specified future date will be, Non-Representative.

16. Will the transition impact transaction value?

No one party is expected to benefit or be damaged by the change of index. When LIBOR ceases to be published, the economics under the fallback rate should be comparable to what would have been calculated under LIBOR. The fallback rate provision includes a spread adjustment to compensate for the change in index basis.

17. Will the loan yield be impacted with the change in index?
The loan yield should be consistent with that under the previous LIBOR index. The fallback rate is inclusive of a spread adjustment intended to offset the basis difference between the compounded SOFR and corresponding LIBOR term.

18. Will the current LIBOR accrual be affected when the change happens?
No. Since LIBOR is set in advance, the current accrual period will not be affected.

19. What is the actual cessation date for LIBOR?
As announced by the Financial Conduct Authority (FCA), the “Index Cessation Effective Date” or “Non-Representative” date is December 31, 2021 for 1-week and 2-month LIBORs, and June 30, 2023 is for the remaining LIBOR tenors.

20. What is the meaning of “Non-Representative”?
This means the regulatory supervisor for the administrator of LIBOR (a) has determined and announced that LIBOR is no longer representative of the underlying market and economic reality that LIBOR is intended to measure and that representativeness will not be restored and (b) is aware that the statement or publication will engage certain contractual triggers for fallbacks activated by pre-cessation announcements by such supervisor (howsoever described) in contracts

21. Can new LIBOR contracts be transacted until the June 2023 end date?
In general, there will be no new LIBOR swaps (unless they decrease risk) after December 31, 2021. On November 30, 2020, the Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation, and the Office of the Comptroller of the Currency in conjunction with the IBA’s announcement included the very strong statement:

> *“Given consumer protection, litigation, and reputation risks, the agencies believe entering into new contracts that use USD LIBOR as a reference rate after December 31, 2021, would create safety and soundness risks* ***and*** *(we)* ***will examine bank practices accordingly****."*

22. Is the LIBOR fallback rate applicable for new non-LIBOR transactions?
No. The fallback rate only applies to existing or legacy LIBOR transactions. New non-LIBOR loans that are indexed to SOFR will be based on daily compounded SOFR averages (or Term SOFRs when they become available).

23. What index is available after stoppage of new LIBOR contracts?
The Effective Fed Funds Rate (EFFR) is currently available for long-term swaps. A sufficiently liquid SOFR market for long-term swaps is expected to be available by the LIBOR cessation date.

24. Will LIBOR contracts be issued until Term SOFR is available?

The ARRC recommends stoppage of new LIBOR swaps by 6/30/2021 and no later than 12/31/2021.

25. What happens if systems are not yet set up for SOFR?

The fallback language only kicks in after the Index Cessation Effective Date, not on an Index Cessation Event. The fallback rate process also just substitutes one Bloomberg sourced screen rate (LIBOR) for another (Fallback Rate (SOFR)). The fallback rate will be provided as an all-in rate on the Bloomberg <FBAK><GO> screen and available publicly on Bloomberg's website. It is not necessary to manually calculate the components of the fallback rate. We recommend consulting with your documentation system and core vendors on their readiness and plans for the transition away from LIBOR.

26. Where can I access information on the related rates?

Existing/legacy LIBOR deals subject to transition: Fallback rate data is publicly available on Bloomberg's website:
https://www.bloomberg.com/professional/solution/libor-transition/.
At the link, scroll down to IBOR Fallback Rates (Delayed data) and select USD LIBOR.

New non-LIBOR deals indexed to SOFR: the compounded 30-day, 90-day, and 180-day averages are available at the FRB NY website:
https://apps.newyorkfed.org/markets/autorates/sofr-avg-ind.

ARRC publications: https://www.newyorkfed.org/arrc/publications.