



30-YEAR FIXED RATE CONFORMING INDEX METHODOLOGY

Business Unit Issuing Handbook: Data Solutions

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Introduction

As a leading provider of mortgage rates in the U.S. residential mortgage market, Optimal Blue is committed to ensuring the integrity, reliability, and transparency of our data. Optimal Blue policies and procedures comply with applicable laws, regulations, and mandates while championing consistent corporate policy and standard management practices that meet business objectives and requirements across the Company.

Optimal Blue serves as the Administrator of the Optimal Blue Mortgage Market Indices (OBMMI) 30-Year Fixed Rate Conforming Index (herein referred to as “the Index”).

The Index is a benchmark designed to measure the average interest rates for 30-year fixed rate Conforming Loan Mortgages in the United States. This methodology document outlines the procedures and standards used to ensure the Index is transparent, reliable, and compliant with [IOSCO principles](#).

Handbook

In addition to this methodology document, Optimal Blue maintains the [Optimal Blue 30-Year Fixed Rate Conforming Index Handbook](#). The handbook contains further detail on the topics below.

- Index Cessation
- Record Retention
- Audit
- Complaints
- Index Oversight Committee
- Methodology Review
- Stakeholder Consultation

Key Terms

- Conforming Loan: A mortgage that meets the funding criteria of Fannie Mae and Freddie Mac.
- FHFA: Federal Housing Finance Agency, which sets the conforming loan limits.
- Product and Pricing Engine: software tool used by mortgage originators to determine pricing options and eligible mortgage products for a given borrower and lending scenario
- Rate Lock: An agreement between a borrower and lender that allows the borrower to lock in the interest rate on a mortgage for a specified period.
- Simple Average: An arithmetic mean where all data points are equally weighted.
- Index Value: The final calculated figure representing the benchmark rate.



- Index Oversight Committee: A committee responsible for overseeing the methodology, ensuring compliance with regulatory standards, and addressing exceptional market conditions and significant changes to the index.
- IOSCO: International Organization of Securities Commissions
- Optimal Blue Website: [Optimal Blue 30-Year Fixed Rate Conforming Index webpage](#)

Design

The design of the Index seeks to achieve an accurate and reliable representation of the economic realities it aims to measure. The methodology takes the following factors into consideration:

- Adequacy of the sample used to represent the interest
- Size and liquidity of the relevant market
- Relative size of the underlying market in relation to the volume of trading in the market that references the benchmark
- The distribution of trading among market participants (market concentration)
- Market dynamics (e.g., to ensure that the benchmark reflects changes to the assets underpinning a Benchmark)

By incorporating these key design elements, the Index calculation methodology aims to provide an accurate, reliable, and representative benchmark for the mortgage market.

Data Collection

Optimal Blue collects Rate Lock data from its Product and Pricing Engine platform, which currently captures roughly one-third of all residential mortgage transactions in the United States. This data includes all variables relevant for determining pricing and eligibility for a given loan scenario as well as loan product details such as interest rate, loan type, loan amount, credit score, and loan-to-value ratio.

Calculation

Data Filtering

Time Window

Rate Locks included in the daily Index Value will have been collected from the Optimal Blue Product and Pricing Engine between 12:00 am and 11:59 pm Central Time on the previous non-holiday, business day (Monday through Friday, no published Index Values for Saturday or Sunday). The list of applicable holidays is available on the Optimal Blue Website.



Outlier Removal

Extreme values that could distort the index are identified and removed using statistical techniques.

- Loan Amount > 10,000,000
- Lock Period < 1 or > 360
- LTV < 0 or > 210
- Note Rate < .25 or > 20
- Price < 90 or > 110

Index Filters

The collected data is filtered to include only loans that meet the Conforming Loan limits established by the FHFA. Further, to increase the homogeneity of the rates in each index, a consistent set of variables representing the most common loan scenarios is used. This ensures the Index accurately reflects the Conforming Loan mortgage market. Rate Locks included in the calculation have the following characteristics:

- Single family property type
- Purchase and rate/term refinances (cash-out refinances are excluded)
- Conventional loans
- Loan amounts are below the conforming loan limits by county and year
- Fixed rate loans
- 1-unit properties
- Primary residences
- 30-year amortization term
- Retail and correspondent originations (excludes wholesale channel originations)

Calculation

Simple Average

Optimal Blue calculates a Simple Average interest rate from the filtered rate lock data. Each rate lock contributes equally to the average, providing a straightforward measure of the market rate.

Index Value

The final Index Value is the Simple Average interest rate for the qualifying 30-year Conforming fixed-rate mortgages.

Minimum Data

Optimal Blue monitors the number of Rate Locks included in the Simple Average calculation on a daily basis to ensure that there is sufficient data to produce an Index Value. At a minimum, there must be 100 Rate Locks in order to publish an Index Value using the primary calculation method



described herein. If there is inadequate data, whether as a result of market disruption, technical challenges, or other unforeseen circumstances, the Index Value published will revert to the value from the most recent publication date.

Publication

The Index is published in the morning (Tuesday through Saturday), typically before 7 am Central Time, based on the Rate Locks from the previous non-holiday business day (no published Index Values for Saturday or Sunday or holidays listed on the Optimal Blue Website). The Index Values are disseminated through the Optimal Blue Website, data vendors, and other designated channels. Historical Index data is also available on the Optimal Blue Website.

Deviations from Primary Methodology

The Index Values published by Optimal Blue will always adhere to the calculation methodology described herein unless otherwise stated. If an Index Value is calculated using an alternative method such as expert judgement or reversion to the previous day Index Value due to lack of observations, a description of the methodology used in the value determination will be published on the Optimal Blue Website.

Index Value Verification

To ensure the integrity and accuracy of the Index, a second Index calculation is performed daily to validate there are no errors with the primary Index calculation. If any discrepancies are identified between the two calculations, troubleshooting is initiated and if necessary, a ticket is opened in Optimal Blue's issue/incident ticketing system for tracking and resolution.

Exceptional Market Conditions

In exceptional market conditions, such as extreme volatility or disruptions in data collection, Optimal Blue may delay or suspend the publication of the index. Any such decisions will be communicated promptly via the Optimal Blue Website, with a clear explanation of the circumstances and expected duration of the disruption. Any delays or suspensions of the Index will be subsequently reviewed by the Index Oversight Committee.

Errors and Corrections

Any identified errors in the index calculation or publication process are corrected promptly and the corrected Index Values are republished. If the error is greater than 0.1 basis point and identified within 5 business days from the original date of the Index Value publication, a notification of the correction is posted to the Optimal Blue Website. A log of errors and corrections is maintained for audit purposes. Errors and corrections are reviewed by the Index Oversight Committee.



Expert Judgement

Given the rules-based nature of the methodology, the daily calculation of the Index does not require expert judgment. However, Optimal Blue reserves the right to use expert judgment to generate an Index Value where unforeseen market conditions prevent the use of the methodology or fallback value publication described in this document. Documentation of the use of expert judgment includes the reasons for its application and the potential impact on the Index Value. All instances of application of expert judgment are published via the Optimal Blue Website and subject to retrospective review by the Index Oversight Committee. Other areas of discretion, such as methodology changes, are not, for the purposes of this document, considered expert judgment.

Benchmark Limitations

The Index represents the average rates for 30-year fixed rate Conforming mortgages based on the available data in the Optimal Blue Product and Pricing Engine. It may not capture all market nuances or account for every factor influencing mortgage rates. Users should be aware of these limitations when utilizing the Index for financial or investment decisions.



Methodology Approvers

REDACTED for Confidentiality Reasons

Methodology Revision History

REDACTED for Confidentiality Reasons