

Investor Reporting Performance Metrics

REFERENCE GUIDE VERSION 5.0



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I. About This Document

This document serves as a reference guide to the Investor Reporting Performance Metrics. This document will be updated from time to time as the program continues to evolve.

This document provides additional context for servicers as they evaluate their results as represented in the STAR Program Scorecard. Details regarding the Investor Reporting performance metrics can be found in the Metrics Definitions and Performance Measurement Methodology section of this document.

The Investor Reporting Performance Metric Guide primarily examines the following topics:

- Investor Reporting Performance Metrics Definitions
- Performance Measurement Methodology

The Lender Marketing ID referred to in this document is a unique identifier that is common to every counterparty Fannie Mae does business with. It is a five-character designation that uniquely identifies a common corporate family relationship. Marketing identifiers are a mechanism used to organize lenders into groups for tracking purposes. It is the counterparty that Fannie Mae is exposed to from either a lending or servicing perspective.

II. Introduction

Investor Reporting (IR) Performance Metrics

Servicers are evaluated based on their performance related to Investor Reporting metrics which measure servicer efficiency of their reporting and remittance functions.

The IR Performance Metrics are designed to help our servicers quickly identify opportunities for improvement. Overall, the IR Performance Metrics monitor servicers' progress and trends against key indicators selected to reflect Investor Reporting's current business objectives.

III. Investor Reporting Performance Metric Definitions

| Metric No | Fannie Mae Performance Metrics | Metric No | Fannie Mae Supplemental Metrics |
|-----------|---------------------------------|-----------|-------------------------------------|
| 1 | Ending Hard Reject Rate | 5 | Surplus Percent |
| 2 | Aged Recurring Hard Reject Rate | 6 | Loans Not Reported Rate |
| 3 | Aged Recurring Soft Reject Rate | 7 | LAR 83 Discrepancy Rate |
| 4 | Shortage Percent | 8 | Average Days Reporting Liquidations |

NOTE: Fannie Mae reserves the right to revise the threshold ranges assigned per metric.



Fannie Mae Performance Metrics:

1. Ending Hard Reject Rate:

Percentage of loans in portfolio with ending hard rejects for the activity month selected. It measures the number of loans that stayed as hard reject at the end of the processing period (i.e. hard rejects that occurred during the processing period which were not resolved by the end of the processing period) as a percentage of the Total Loan Count¹. For summary loans, the numerator is the count of unique loans which had an occurrence of a payment hard reject for the activity month selected that exists at the end of reporting cycle. If the loan is an A/A bi-weekly loan and had a hard reject, it is included if the payment due date falls within the selected activity month, but it is only included once even if there are multiple payment due dates or hard reject occurrences within the selected activity month.

Ending Hard Reject Rate = {(Ending Hard Reject Loan Count) / (Total Loan Count)} * 100

If the numerator is zero, then display Ending Hard Reject Rate as zero.

Example:

If the ending hard reject loan count is 105 and the total loan count at the beginning of the reporting cycle is 100,000 then the Ending Hard Reject Rate would be .105%.

2. Aged Recurring Hard Reject Rate:

Percentage of loans in portfolio with aged recurring hard rejects for the activity month selected. Aged recurring hard rejects are hard rejects that have occurred on individual loans over the span of five consecutive reporting periods, including the current activity period.

Aged Recurring Hard Reject Rate = {(Aged Recurring Hard Reject Loan Count) / (Total Loan Count)} * 100

If the numerator is zero, then display Aged Recurring Hard Reject Percentage as zero.

Example:

If the aged recurring hard reject loan count is 8 and the total loan count 100,000 then the Aged Recurring Hard Reject Rate for the reporting period would be .008%.

3. Aged Recurring Soft Reject Rate:

Percentage of loans in portfolio with aged recurring soft rejects for the activity month selected. Aged recurring soft rejects are soft rejects that have occurred on individual loans over the span of five consecutive reporting periods, including the current activity period.

Aged Recurring Soft Reject Rate = {(Aged Recurring Soft Reject Loan Count) / (Total Loan Count)} * 100

If the numerator is zero, then display Aged Recurring Soft Reject Percentage as zero.

Example:

If the aged recurring soft reject loan count is 5 and the total loans in portfolio at the beginning of the reporting cycle is 100,000 then the Aged Recurring Soft Reject Rate for the reporting period would be .005%.

4. Shortage Percent:

Measures the rate at which a servicer's monthly remittance is less than the total amount expected to be remitted by Fannie Mae's Investor Reporting System (SIR). Shortage Percent is Total Shortage Amount divided by Total Due where Total Due is equal to Total Monthly Remittances plus the Total Shortage Amount less the Total Surplus Amount. Total Shortage Amount is the shortage balance at the close of cash reconciliation activity period for A/A remittance.

¹ Total Loan Count – Total loans in the beginning of the cycle + readds + new acquisitions



Shortage Percent = {Sum (Total A/A Shortage Amount)} / ({Sum (Total Monthly Remittance for A/A loans)} + {Sum (Total A/A Shortage Amount)} - {Sum (Total AA Surplus Amount)}) * 100

Example:

| 9-Digit Servicer Numbers for Lender Marketing ID | Total Shortage Amount (A/A) | Total Surplus Amount (A/A) | Monthly Remittance Amount (A/A) |
|---|-----------------------------------|-------------------------------|------------------------------------|
| 12340-000-6 | \$0.02 | \$0.00 | \$4,026,622.08 |
| 12340-001-4 | \$0.00 | \$1,019,391.85 | \$76,521,300.63 |
| 12340-002-2 | \$0.00 | \$3.21 | \$3,568,114.34 |
| 12340-004-9 | \$112.15 | \$0.00 | \$866,679.64 |
| 12340-005-7 | \$0.00 | \$13,982.84 | \$4,175,189.45 |
| 12340-007-3 | \$0.00 | \$97,581.77 | \$1,828,378.68 |
| 12340-012-0 | \$1,396.09 | \$1,490.47 | \$12,697,546.97 |
| 12340-015-4 | \$0.00 | \$0.00 | \$0.00 |
| 23456-004-8 | \$0.00 | \$2,168.56 | \$0.00 |
| Total | \$1,508.26 | \$1,134,618.70 | \$103,683,831.79 |

Shortage Percent = {\$1,508.26/ (\$103,683,831.79 + \$1,508.26 - \$1,134,618.70)} *100 **=0.0014%**

Fannie Mae Supplemental Metrics:

1. Surplus Percent:

Measures the rate at which a servicer's monthly remittance is more than the total amount expected to be remitted by Fannie Mae's Investor Reporting System (SIR). Surplus Percent is Total Surplus Amount divided by Total Due where Total Due is equal to Total Monthly Remittance plus the Total Shortage amount less the Total Surplus Amount. Total Surplus amount is the surplus balance at the close of cash reconciliation activity period for A/A cash remittance type.

Surplus Percent = {Sum (Total A/A Surplus Amount)} / ({Sum (Total Monthly Remittance for A/A loans)} + {Sum (Total A/A Shortage Amount)} - {Sum (Total AA Surplus Amount)}) * 100

Example:

| 9-Digit Servicer Numbers for Lender Marketing ID | Total Shortage Amount (A/A) | Total Surplus Amount (A/A) | Monthly Remittance Amount (A/A) |
|---|-----------------------------------|-------------------------------|------------------------------------|
| 12340-000-6 | \$0.02 | \$0.00 | \$4,026,622.08 |
| 12340-001-4 | \$0.00 | \$1,019,391.85 | \$76,521,300.63 |
| 12340-002-2 | \$0.00 | \$3.21 | \$3,568,114.34 |
| 12340-004-9 | \$112.15 | \$0.00 | \$866,679.64 |
| 12340-005-7 | \$0.00 | \$13,982.84 | \$4,175,189.45 |
| 12340-007-3 | \$0.00 | \$97,581.77 | \$1,828,378.68 |
| 12340-012-0 | \$1,396.09 | \$1,490.47 | \$12,697,546.97 |
| 12340-015-4 | \$0.00 | \$0.00 | \$0.00 |
| 23456-004-8 | \$0.00 | \$2,168.56 | \$0.00 |
| Total | \$1,508.26 | \$1,134,618.70 | \$103,683,831.79 |

Surplus Percent = {\$1,134,618.70/ (\$103,683,831.79 + \$1,508.26 - \$1,134,618.70)} * 100

=1.1063% (Surplus Percent)



2. Loans Not Reported Rate:

Percentage of unique active loans in portfolio which were not reported (missing LAR) in a timely manner as per Fannie Mae's policies and guidelines. It measures the number of loans not reported as a percentage of the total loans in portfolio for a given month.

Loans Not Reported Loan Count is comprised of:

- a) Loans not reported as of Interim Reporting End Date² close and
- b) Loans not reported as of Reporting Cycle Close (i.e. BD2)

Loans Not Reported Rate = [(Loans Not Reported Loan Count) / (Total Loans in Portfolio) *100]

Example:

If the unique number of Loans Not Reported is 6, and the total number of loans in the portfolio is 100, the Loans Not Reported Rate would be 6%.

| Activity Month: 03/2023 | | | |
|----------------------------------|------------|---------------|----------------|
| Loans Not Reported as of Interim | Reporting | End Date C | lose i.e. CD22 |
| Fannie Mae Loan Number | | | |
| 411111111 | | | |
| 1611111111 | | | |
| 4211111111 | | | |
| 4131111111 | | | |
| | | | |
| Loans Not Reported as of Reporti | ng Cycle C | lose i.e. BD2 | 2 |
| Fannie Mae Loan Number | | | |
| 411111111 | | | |
| 1635111111 | | | |
| 1636111111 | | | |
| | | | |
| Loans Not Reported Loan Count | 4+2 = 6 | | |
| (unique count) | 412-0 | | |
| Total loans in portfolio | 100 | | |
| | | | |
| Loans Not Reported Rate = 6/10 | 0 = 6% | | |

² Interim Reporting End Date missing LAR population:

Excludes 'missing loans due to reclass activity'

Excludes missing loans acquired two business days prior to Interim Reporting End Date

[•] Excludes missing loans with acquisition date of last business day of the activity month

[•] Excludes delinquency modification loans that were completed or closed in the current cycle with a reversed payment LAR (LAR 96/97) as of Interim Reporting End Date + 1 day



3. LAR 833 Discrepancy Rate4:

Percentage of unique active ARM loans in portfolio with outstanding note rate and/or payment change discrepancies (those due for a scheduled change but missing LAR 83 and those with LAR 83 exceptions) at any point in a given activity month. It measures the number of ARM loans with note rate and/or payment change discrepancies (outstanding 5 business days after the note rate and/or payment projection date) as a percentage of total number of ARM Projections for the activity month.

LAR 83 Discrepancy Rate = [(LAR 83 Discrepancy ARM Loan Count) / (Number of ARM Projections for the activity month) *100]

Example: If the number of LAR 83 Discrepancy ARM Loan Count is 10 and the number of ARM Projections for the activity month is 100, then the LAR 83 Discrepancy Rate would be 10%.

4. Average Days Reporting Liquidations:

Average days for a servicer to report a liquidation LAR in an accepted state.

Average Days Reporting Liquidations = Total business days (Action Date - Accepted Date)/ Number of liquidated loans **Example:**

| FANNIE MAE LOAN NUMBER | Action Code | Action Date | Accepted Date | Difference (action date - accepted date) |
|------------------------------|----------------|----------------|------------------|--|
| 1111111112 | 60 | 4/20/2015 | 4/21/2015 | 1 Business Day |
| 222222223 | 65 | 4/10/2015 | 4/13/2015 | 1 Business Day |
| 444444445 | 70 | 3/21/2015 | 4/20/2015 | 21 Business Days |
| 2222221223 | 60 | 4/20/2015 | 4/21/2015 | 1 Business Day |
| 444444444 | 60 | 4/20/2015 | 4/21/2015 | 1 Business Day |
| 6666666667 | 60 | 4/20/2015 | 4/21/2015 | 1 Business Day |
| 888888889 | 60 | 4/20/2015 | 4/21/2015 | 1 Business Day |
| 1111111111 | 60 | 4/20/2015 | 4/21/2015 | 1 Business Day |
| 1333333333 | 60 | 4/20/2015 | 4/21/2015 | 1 Business Day |
| 155555555 | 60 | 12/2/2014 | 4/20/2015 | 80 Business Days |
| 1777777777 | 60 | 4/20/2015 | 4/21/2015 | 1 Business Day |
| 1999999999 | 60 | 4/20/2015 | 4/21/2015 | 1 Business Day |
| 555555556 | 71 | 4/24/2015 | 4/30/2015 | 4 Business Days |

NOTE: Each of the metrics above is displayed at Lender Marketing ID level (i.e. metric data is rolled up for nine-digit servicers by Marketing ID).

Example:

Beginning Hard Reject Rate = {(Beginning Hard Reject Loan Count) / (Total Loan Count)} * 100 = {(123/279,146) * 100} = .0440%

01/2015 Activity:

9-digit detail for Lender Marketing ID ABCDE:

³ LAR 83 - Loan Activity Report (LAR) Transaction 83: Interest Rate/Payment Change Reporting

⁴ LTSC (Long Term Standby Commitment) loans are excluded from this metric



| Activity Month | Peer Group | Lender Mktg ID | Servicer Family Name | 9-Digit Servicer Numbers for Lender Marketing ID | Total Portfolio Loans | Beginning Hard Reject Count |
|----------------|---------------|-------------------|----------------------|--|-----------------------------|-----------------------------------|
| 12015 | 2 | ABCDE | ABC Banks, Inc. | 12345-000-1 | 60259 | 68 |
| 12015 | 2 | ABCDE | ABC Banks, Inc. | 12345-000-2 | 942 | 0 |
| 12015 | 2 | ABCDE | ABC Banks, Inc. | 12345-000-3 | 68 | 0 |
| 12015 | 2 | ABCDE | ABC Banks, Inc. | 12345-005-0 | 2936 | 2 |
| 12015 | 2 | ABCDE | ABC Banks, Inc. | 12345-005-1 | 214939 | 53 |
| 12015 | 2 | ABCDE | ABC Banks, Inc. | 12345-005-2 | 2 | 0 |
| | | | | Total | 279146 | 123 |

Lender Marketing ID Data:

| Peer Group | Servicer Name | Lender Mktg ID | Total Portfolio Loans | Beginning Hard Reject Count | Beginning Hard Reject Rate |
|------------|-----------------|----------------|-----------------------|-----------------------------|----------------------------|
| 1 | ABC BANKS, INC. | ABCDE | 279,146 | 123 | 0.0440% |

Servicing Transfer Grace Period

A two-month grace period will be provided for **aged rejects** on loans which are transferred from one servicer to another. Any of these reject types inside a grace period will not count toward metric calculations. The historical reject counter for loans will also be reset upon transfer. This pertains to both hard and soft reject types. For a more detailed illustration, see **Appendix A**.

S/S Bi-weekly Loan Exclusion

Scheduled Interest/Scheduled Principal bi-weekly loans are excluded from the following metric calculations:

- Aged Recurring Hard Reject Rate
- Aged Recurring Soft Reject Rate
- Ending Hard Reject Rate
- Loans Not Reported Rate

IV. Performance Measurement Methodology

Measurement Criteria

Each of the 8 performance metrics below is measured against pre-defined thresholds to provide insight into servicer performance relative to Fannie Mae expectations. These thresholds have been established for 2019 activity (*The thresholds set forth in this document are not determined on a preset schedule and are subject to periodic adjustments based on an evaluation of current strategic importance to Fannie Mae*). For servicers to clearly understand how they are performing on each of the metrics, a performance indicator will be provided each month. For example, if the threshold for metric A was 1.0%, and the servicer exceeded that value for the given period, an un-favorable to threshold indicator would be assigned for metric A.

Score Grid

Score grid constitutes current thresholds for each metric:

| Effective Date | Metric Item | MIN | MAX |
|----------------|-------------------------|---------|---------|
| 3/1/2019 | Ending Hard Reject Rate | 0.0010% | 0.0100% |
| 3/1/2019 | Shortage Percent | 0.0020% | 0.0500% |
| 3/1/2019 | Surplus Percent | 0.1000% | 1.0000% |



| 3/1/2019 | Aged Recurring Hard Reject Rate | 0.0010% | 0.0050% |
|----------|-------------------------------------|---------|---------|
| 3/1/2019 | Aged Recurring Soft Reject Rate | 0.0020% | 0.0080% |
| 3/1/2019 | Loans Not Reported Rate | | |
| 3/1/2019 | LAR 83 Discrepancy Rate | | |
| 3/1/2019 | Average Days Reporting Liquidations | | |

NOTE: Metrics highlighted above in blue are the Fannie Mae Performance metrics.

NOTE: Fannie Mae reserves the right to revise the threshold ranges assigned per metric.

Each of the 5 metrics above with Min/Max thresholds follow the rules below:

| | | Rating |
|-----------------|------------------|-------------------|
| Above Threshold | > MAX | Red / Unfavorable |
| At Threshold | > MIN and =< MAX | Yellow / Neutral |
| Below Threshold | =< MIN | Green / Favorable |

V. Resources and Appendix Servicer Support

For servicer support or additional information related to the Investor Reporting Servicer Performance Metrics:

• Contact your Investor Reporting Analyst. Should you need assistance retrieving your Analyst's contact information, you may call 1-800-2FANNIE and select option "5" for Investor Reporting.

Appendix A

Servicing Transfer Grace Period Example:

A two-month grace period will be provided for *aged rejects* on loans which are transferred from one servicer to another. The spreadsheet linked below illustrates how rejects are counted after a transfer in servicing.

https://www.fanniemae.com/content/tool/investor-reporting-metrics-servicing-transfer-example.xlsx