



Fannie Mae®

---



## Metric Dictionary

July 25, 2018



## STAR SCM Performance Metric Dictionary Purpose

The Fannie Mae Servicer Total Achievement and Rewards™ (STAR™) Program was created to provide consistent and specific servicing-related expectations for Fannie Mae's servicers along with a framework for measuring performance relative to those expectations. This Servicer Capability Model (SCM) Performance Metric Dictionary is designed to supplement the STAR Reference Guide in providing details around SCM performance metrics.

## SCM Performance Metric Dictionary Layout

Column	Column Definition	Valid Value	Valid Value Definition
Attribute	Name of SCM metric	Text	N/A
Definition	Defines the SCM metric	Text	N/A
Formula	Formula for calculating the SCM metric	Text	N/A
Valid Value	Valid value range for SCM metric	Number > 0	Number greater than or equal to zero
		Percent > 0	Percentage greater than or equal to zero
		\$ > 0	Dollar amount greater than or equal to zero
Source	Responsible party for reporting the data to the STAR Program Office and frequency the data is provided	STAR Self-Assessment	Data is collected annually through the Self-Assessment
		STARAGG	Data is collected monthly through the ASDF process via the STARAGG File
		Alternative Servicer Data File	Data is collected bi-monthly through the ASDF process
		Daily Aggregate Servicer File	Data is collected daily through the DASF process
		Equator	Loan level data is compiled monthly from Equator reporting
		Asset Management Network	Loan level data is compiled monthly from Asset Management Network reporting
		Compensatory Fee Payment tracking	Loan level data is compiled monthly from the Fannie Mae internal Compensatory Fee payment tracking
		STAR and SQR Action Plan tracking system	Action plan data is compiled monthly from the Fannie Mae internal STAR and SQR Action Plan tracking
		Default Management Reporting System	Loan level data is compiled monthly from mortgage default counsel and servicer reporting
		<i>For Investor Reporting Metrics</i>	Multiple systems and reports used to report to servicer
Metric Type	Type of SCM metric relative to assessment criteria	Primary	SCM metric has a direct effect on the performance rating for the respective Process Area
		Supplemental	SCM metric does not have a direct effect on the performance rating for the respective Process Area



Column	Column Definition	Valid Value	Valid Value Definition
Evaluation Type	Type of evaluation performed to measure performance	Threshold	SCM metric has a set threshold used to determine servicer performance
		Peer Comparison	SCM metric is compared across Peer group to determine servicer performance
		Comparable Book	Servicer performance is compared to a comparable book of loans based on STAR Scorecard comp
		Trending Analysis	SCM metric is evaluated by measuring month over month trending
Threshold	Set threshold for the SCM metric	Text, number, percent	N/A

### 6.1.1 Organizational Overview

Attribute	Definition	Formula	Valid Value	Source	Metric Type	Evaluation Type	Threshold
Total # of FTE Employees	Total number of Full-time Equivalent employees	N/A	Number $\geq 0$	STAR Self-Assessment	Supplemental	N/A	N/A
Total # of Contract Employees	Total number of contract employees	N/A	Number $\geq 0$	STAR Self Assessment	Supplemental	N/A	N/A
Training by Department	Average hours of new hire training required for each department	N/A	Number $\geq 0$	STAR Self-Assessment	Supplemental	Peer Comparison	N/A
Tenure by Department	Average tenure for non-executive positions by department	N/A	Number $\geq 0$	STAR Self-Assessment	Supplemental	Peer Comparison	N/A



## 7.1.1 Investor Reporting and Accounting

Attribute	Definition	Formula	Valid Value	Source	Metric Type	Evaluation Type	Threshold*
Beginning Hard Reject Rate	Percent of hard rejects which occurred in reporting cycle to total loans in portfolio	$(\# \text{ of hard rejects which occurred in reporting cycle}) / (\# \text{ of loans in portfolio})$	Percent $\geq 0$	Message Manager-Recurring Hard and Soft Rejects Report	Supplemental	Threshold	MIN: 0.0350% MAX: 0.1600%
Ending Hard Reject Rate	Percent of ending hard rejects to total loans in portfolio	$(\# \text{ of hard rejects at end of reporting period}) / (\# \text{ of loans in portfolio})$	Percent $\geq 0$	SURF- LAR Rejects / Message Manager- Loan Activity Rejects Report	Supplemental	Threshold	MIN: 0.0010% MAX: 0.0100%
Aged Recurring Hard Reject Rate	Percent of hard rejects that have occurred on individual loans over the span of five consecutive reporting periods, including the current reporting period	$(\# \text{ of hard rejects which occurred on individual loans over the span of four consecutive reporting periods, including the current reporting period}) / (\# \text{ of loans in portfolio})$	Percent $\geq 0$	Message Manager-Recurring Hard and Soft Rejects Report	Supplemental	Threshold	MIN: 0.0010% MAX: 0.0050%
Multi-Occurrence Hard Reject Rate	Percent of loans in portfolio with multi-occurrence hard rejects in reporting cycle to total loans in portfolio	$(\text{Multi-occurrence hard reject loan count}) / (\# \text{ of loans in portfolio})$	Percent $\geq 0$	Message Manager-Recurring Hard and Soft Rejects Report	Primary	Threshold	MIN: 0.0050% MAX: 0.0250%
Beginning Soft Reject Rate	Percent of soft rejects which occurred in reporting cycle to total loans in portfolio	$(\# \text{ of soft rejects which occurred in reporting cycle}) / (\# \text{ of loans in portfolio})$	Percent $\geq 0$	Message Manager-Recurring-Hard and Soft Rejects Report	Supplemental	Threshold	MIN: 0.3000% MAX: 0.8000%



Attribute	Definition	Formula	Valid Value	Source	Metric Type	Evaluation Type	Threshold
Ending Soft Reject Rate	Percent of ending soft rejects to total loans in portfolio	(# of soft rejects at end of reporting period) / (# of loans in portfolio)	Percent ≥ 0	SURF- LAR Rejects / Message Manager- Loan Activity Rejects Report	Supplemental	Threshold	MIN: 0.3000% MAX: 0.8000%
Aged Recurring Soft Reject Rate	Percent of soft rejects that have occurred on individual loans over the span of five consecutive reporting periods, including the current reporting period	(# of soft rejects which occurred on individual loans over the span of four consecutive reporting periods, including the current reporting period)/ (# of loans in portfolio)	Percent ≥ 0	Message Manager- Recurring Hard and Soft Rejects Report	Supplemental	Threshold	MIN: 0.0020% MAX: 0.0080%
Multi-Occurrence Soft Reject Rate	Percent of loans in portfolio with multi-occurrence soft rejects in reporting cycle to total loans in portfolio	(Multi-occurrence soft reject loan count) / (# of loans in portfolio)	Percent ≥ 0	Message Manager- Recurring Hard and Soft Rejects Report	Primary	Threshold	MIN: 0.0100% MAX: 0.0500%
Shortage Percent	Percent of cumulative total of month end cash shortage amount to total due for the period	(Month end cash shortage in the period(\$)) / (Sum of total amounts due during the period (\$))	Percent ≥ 0	SURF- Shortage/ Surplus report Message Manager- Current Cycle Shortage Surplus Adjustments	Primary	Threshold	MIN: 0.0020% MAX: 0.0500%



Attribute	Definition	Formula	Valid Value	Source	Metric Type	Evaluation Type	Threshold
Average Daily Shortage Amount	Average daily shortage amount (\$)	Lesser of: ((Total of delayed remittance + Ending shortage balance) for the activity month selected divided by the number of calendar days in the activity month) or ((Beginning shortage balance + Ending shortage balance) for the activity month selected divided by two)	\$ ≥ 0	As needed – Email from Investor Reporting Analyst	Supplemental	Threshold	MIN: \$17,000.00 MAX: \$150,000
Negative Pool Deficiency Average Amount	Average negative deficiency amount (\$) per pool	(Sum of negative pool deficiency amount (\$))/(Total * of pools)	\$ ≥ 0	Message Manager – Pool Deficiency Report	Supplemental	Threshold	MIN: \$0.50 MAX: \$1.00
Surplus Percent	Percent of total month-end cash surplus amount to total due for the period	Sum of month end cash surplus in the period(\$)/ (Sum of amounts due during the period (\$))	Percent ≥ 0	SURF- Shortage/ Surplus report Message Manager- Current Cycle Shortage Surplus Adjustments	Supplemental	Threshold	MIN: 0.1000% MAX \$75.00
Positive Pool Deficiency Average Amount	Average positive deficiency amount (\$) per pool	(Sum of positive pool deficiency amount (\$))	\$ ≥ 0	Message Manager- Pool Deficiency Report	Supplemental	Threshold	MIN: \$10.00 MAX: \$75.00

\*≤ MIN threshold is considered favorable performance;>MIN threshold and ≤MAX threshold is considered within threshold;>MAX threshold is considered unfavorable performance



Attribute	Definition	Formula	Valid Value	Source	Metric Type	Evaluation Type	Threshold
Positive Pool Deficiency Average Amount	Average positive deficiency amount (\$)/per pool	$\frac{\text{(Sum of positive pool deficiency amount (\$))}}{\text{(Total \# of pools)}}$	$\$ \geq 0$	Message Manager- Pool Deficiency Report	Supplemental	Threshold	MIN: \$10.00 MAX: \$75.00
Negative Pool Deficiency Rate	Percent of pools with a negative pools deficiency	$\frac{\text{(\# of pools with a negative pool deficiency)}}{\text{(\# of pools in portfolio)}}$	Percent $\geq 0$	Message Manager- Pool Deficiency Report	Supplemental	Threshold	MIN: 0.5000% MAX: 5.000%
Positive Pool Deficiency Rate	Percent of pools with a positive pools deficiency	$\frac{\text{(\# of pools with a positive pool deficiency)}}{\text{(\# of pools in portfolio)}}$	Percent $\geq 0$	Message Manager- Pool Deficiency Report	Supplemental	Threshold	MIN: 8.0000% MAX: 40.000%
Total # of IR&A FTE Employees	Total number of Full-time Equivalent employees performing investor reporting and accounting functions	N/A	Number $\geq 0$	STARAGG	Supplemental	Trending Analysis	N/A



### 7.1.3 Customer Service

Attribute	Definition	Formula	Valid Value	Source	Metric Type	Evaluation Type	Threshold
IVR Handle Rate	Percent calls handled* by automated interactive voice response (IVR), for loans less than 30 days delinquent  *Borrower did not speak to an agent	For loans less than 30 days delinquent: (Calls handled* by IVR)/ (All calls received by IVR)	Percent > 0	STARAGG	Supplemental	Trending Analysis/Peer Comparison	N/A
Total Calls Offered	Total number of inbound calls offered to customer service queues	N/A	Number > 0	STARAGG	Supplemental	Trending Analysis	N/A
Total Calls Answered	Total number of inbound calls received through a customer service queue answered by an agent	N/A	Number > 0	STARAGG	Supplemental	Trending Analysis	N/A
Total FTE Agents	Total number of Full-time Equivalent agents working customer service	N/A	Number > 0	STARAGG	Supplemental	Trending Analysis	N/A
Average Speed to Answer	Duration of time (sec) that calls wait in queue to be answered	(Total elapsed time to answer the phone) / (# of calls)	Number > 0	STARAGG	Primary	Threshold	≥60 (sec)
Abandonment Rate	Percent of the calls that are not intercepted by a live operator before the prospect/customer disconnects (pure data with no exclusions for service thresholds, service levels, call backoptions or call blocking)	(# of calls not answered) / (# of inbound calls)	Percent > 0	STARAGG	Primary	Threshold	≤5%
Average Handle Time	The sum of Average Talk Time and Average After-Call Work for a specified time period (applies to inbound calls)	(Total talk time in seconds) + (Total after-call work in seconds) / (Total # of calls)	Number > 0	STARAGG	Supplemental	Trending Analysis/Peer Comparison	N/A

\* ≤ MIN threshold is considered favorable performance ; > MIN threshold and ≤ MAX threshold is considered within threshold ; > MAX threshold is considered unfavorable performance





Attribute	Definition	Formula	Valid Value	Source	Metric Type	Evaluation Type	Threshold
Blockage Rate	Percent of calls that did not connect internally due to: 1) circuit unavailability or 2) a programmatic blockage of calls by the automated call distribution (ACD) system	$\frac{\text{\# of calls blocked}}{\text{\# of calls offered} + \text{\# calls blocked}}$	Percent > 0	STARAGG	Supplemental	Threshold	≥1%
ACH Enrollment	Percent of current customers using an automatic, recurring monthly payment option	$\frac{\text{\# of current customers using automatic, recurring monthly drafting for mortgage payment}}{\text{\# of current customers}}$	Percent > 0	STARAGG	Supplemental	Trending Analysis/ Peer Comparison	N/A
Volume of Written Correspondence	Total number of email and letter correspondences received from borrower for the reported month	N/A	Number ≥ 0	STARAGG	Supplemental	Trending Analysis	N/A
Average Response Time to Written Correspondence	Average days to respond to all written correspondence	$\frac{\text{\# of days to respond to all written correspondence}}{\text{\# of written correspondence responses}}$	Number ≥ 0	STARAGG	Supplemental	Threshold	≤15 (days)



Attribute	Definition	Formula	Valid Value	Source	Metric Type	Evaluation Type	Threshold
Volume of Escalations	Total number of borrower escalations received for the reported month	N/A	Number $\geq 0$	STARAGG	Supplemental	Trending Analysis	N/A
Average Resolution Time for Escalations	Average days to resolve all escalations for the reported month	(Total # of days to resolve all escalations / (Total # of escalations )	Number $\geq 0$	STARAGG	Supplemental	Threshold	$\leq 30$ (days)

#### 7.1.4 Collections

Attribute	Definition	Formula	Valid Value	Source	Metric Type	Evaluation Type	Threshold
Outbound Efficiency	Total right party contact (RPC) (borrower or authorized party) spoken to divided by the total outbound connects (dialing connects with a "live" phone number)	(# of outbound RPC) / (Total outbound connects)	Percent $\geq 0$	STARAGG	Supplemental	Trending Analysis/Peer Comparison	N/A
Penetration Ratio	Percent of delinquent loans that received a manned outbound attempt for the reported month	(Total delinquent loans that received a manned outbound attempt for the reported month) / (TDQ at month end for reported month)	Percent $\geq 0$	STARAGG	Supplemental	Threshold/ Trending Analysis	100%
Total FTE Agents	Total number of Full-time Equivalent agents working collections queues	N/A	Number $> 0$	STARAGG	Supplemental	Trending Analysis	N/A



Attribute	Definition	Formula	Valid Value	Source	Metric Type	Evaluation Type	Threshold
Success Rate of Payment Plans	Percent of borrower payments made in accordance with a repayment plan	(# of loans on an active payment plan that made a scheduled payment during the last month) / (# loans on active payment plan at start of month)	Percent > 0	ASDF	Supplemental	Peer Comparison	N/A
Current to Worse Roll Rate	The number of loans in a current status at the beginning of the month that migrated to a delinquent status at the end of the month divided by the beginning current loan count	(# current loans which transitioned to worse status) / (Beginning # of current loan population)	Percent > 0	SURF	Supplemental	Comparable Book	N/A
30 to Worse Roll Rate	The number of loans in a 30-day delinquent status at the beginning of the month that migrated to a more delinquent status at the end of the month divided by the beginning 30-day loan count	(# 30-day delinquent loans which transitioned to worse status) / (Beginning # of 30 day delinquent loan population)	Percent > 0	SURF	Supplemental	Comparable Book	N/A
Transition to 60+ Rate	See STAR Credit Performance Scorecard White Paper	See STAR Credit Performance Scorecard White Paper	Percent > 0	See STAR Credit Performance Scorecard White Paper	Primary	Comparable Book	N/A



## 7.2.1 Loss Mitigation Operations

Attribute	Definition	Formula	Valid Value	Source	Metric Type	Evaluation Type	Threshold
# of Single Point of Contact (SPOC) FTE Employees	Total number of SPOC Full-time Equivalent employees	N/A	Number $\geq$ 0	STARAGG	Supplemental	Trending Analysis	N/A
Average Speed to Answer	Duration of time represented as seconds that calls wait in queue to be answered	(Total elapsed time to answer the phone) / (# of calls)	Number > 0	STARAGG	Primary	Threshold	$\leq$ 60 (sec)
Abandonment Rate	Percent of the calls that are not intercepted by a live operator before the prospect/customer disconnects (pure data with no exclusions for servicer thresholds, service levels, call backoptions or call blocking)	(# of calls not answered) / (# of inbound calls)	Percent > 0	STARAGG	Primary	Threshold	$\leq$ 5%
Total Calls Offered	Total number of calls offered to inbound collection queues	N/A	Number > 0	STARAGG	Supplemental	Trending Analysis	N/A
Total Calls Answered	Total number of calls received through an inbound collections queue answered by an agent	N/A	Number > 0	STARAGG	Supplemental	Trending Analysis	N/A
Average Handle Time	The sum of average talk time and average after-call work for a specified time period (inbound calls)	(Total talk time in seconds) + (Total after-call work in seconds) / (Total # of calls)	Number > 0	STARAGG	Supplemental	Trending Analysis/ Peer Comparison	N/A
Blockage Rate	Percent of calls that did not connect internally due to: 1) circuit unavailability or 2) a programmatic blockage of calls by the automated call distribution (ACD) system	(# of calls blocked) / (Total calls offered + # calls blocked)	Percent > 0	STARAGG	Supplemental	Threshold	$\leq$ 1%



## 7.2.2 Retention

Attribute	Definition	Formula	Valid Value	Source	Metric Type	Evaluation Type	Threshold
# of Retention FTE Employees	Total number of Retention Full-time Equivalent employees	N/A	Number $\geq 0$	STARAGG	Supplemental	Trending Analysis	N/A
Retention Efficiency Ratio	See STAR Credit Performance Scorecard White Paper	See STAR Credit Performance Scorecard White Paper	Percent $\geq 0$	See STAR Credit Performance Scorecard White Paper	Primary	Comparable Book	N/A
Modification Conversion Rate – All Products	Based on a six-month look-back, the percentage of Trial Plans which converted into a Final Modification during the six month period.  Look-back example: Calculation month: February 2014 Trial Period Start Month: August 2013  Trial Period Start Month is the month in which the first Trial Plan Payment was due.	(# converted loans, using the denominator below as the source population) / (#Trial Plans initiated in the 1 month period 6 months prior)  See definition for details on look-back period	Percent $\geq 0$	Asset Management Network	Supplemental	Comparable Book	N/A
Retention Solution Timing	For HAMP or Non-HAMP modifications, along with any modifications completed where a Trial Period was not required, the percentage of cases “initiated” by the servicer prior to the 210th day of delinquency.  “Initiated” is defined as first payment received on a Trial Payment Plan or Modification completed, where no Trial Payment Plan was required.	For cases initiated prior to the 210th day of delinquency: sum (HAMP Trial Plans initiated + Non-HAMP Trial Plans initiated + Modifications Completed where no Trial Period was required) / (All retention cases initiated, without respect to timing)	Percent $> 0$	Asset Management Network	Supplemental	Comparable Book	N/A
12-Month Modification Performance	See STAR Credit Performance Scorecard White Paper	See STAR Credit Performance Scorecard White Paper	Percent $> 0$	See STAR Credit Performance Scorecard White Paper	Primary	Comparable Book	N/A



Attribute	Definition	Formula	Valid Value	Source	Metric Type	Evaluation Type	Threshold
60+ to Cure	See STAR Credit Performance Scorecard White Paper	See STAR Credit Performance Scorecard White Paper	Percent > 0	See STAR Credit Performance Scorecard White Paper	Primary	Comparable Book	N/A
60 to Worse Roll Rate	See STAR Credit Performance Scorecard White Paper	See STAR Credit Performance Scorecard White Paper	Percent > 0	SURF	Supplemental	Comparable Book	N/A
90+ to Worse Roll Rate	See STAR Credit Performance Scorecard White Paper	See STAR Credit Performance Scorecard White Paper	Percent > 0	SURF	Supplemental	Comparable Book	N/A
90+ to Better Roll Rate	See STAR Credit Performance Scorecard White Paper	See STAR Credit Performance Scorecard White Paper	Percent > 0	SURF	Supplemental	Comparable Book	N/A
Average Days from Closed to First Modification Payment Due Date	Average number of days from modification closed in HSSN to first modification payment due date	(Total # of days from loss mitigation solution closed in HSSN to modification first payment due date) / (Total # of modifications executed)	Number > 0	Asset Management Network	Supplemental	Peer Comparison	N/A
Average Days From Modification First Trial Payment Due Date to Modification Closed Date	Average number of days from first modification trial payment due date to modification closed date.	(Total # of days from first modification trail payment due date) / (Total # of modifications closed)	Number > 0	Asset Management Network	Supplemental	Peer Comparison	N/A



### 7.2.3 Retention

Attribute	Definition	Formula	Valid Value	Source	Metric Type	Evaluation Type	Threshold
# of Liquidation FTE Employees	Total number of Liquidation Full-time Equivalent employees	N/A	Number $\geq 0$	STARAGG	Supplemental	Trending Analysis	N/A
Liquidation Efficiency Ratio	See STAR Credit Performance Scorecard White Paper	See STAR Credit Performance Scorecard White Paper	Percent $> 0$	See STAR Credit Performance Scorecard White Paper	Primary	Comparable Book	N/A
Liquidation Solution Timing	For short sales and Mortgage Release™, including HAFA solutions, the percentage of cases completed by the servicer before the 210th day of delinquency. This metric uses a rolling three month total in both the numerator and denominator.	For cases completed prior to the 210th day of delinquency:  sum (short sales + Mortgage Release™ + HAFA) / (All liquidation cases completed, without respect to timing)	Percent $> 0$	Asset Management Network	Supplemental	Comparable Book	N/A



### 7.3.1 Bankruptcy

Attribute	Definition	Formula	Valid Value	Source	Metric Type	Evaluation Type	Threshold
# of New Bankruptcy Notifications Received	Total number of new bankruptcy notifications received, for each month	N/A	Number $\geq 0$	ASDF	Supplemental	Trending Analysis	N/A
# of Total Bankruptcy Cases Initiated	Total number of bankruptcies initiated (setup in bankruptcy tracking or servicer system), for each month	N/A	Number $\geq 0$	ASDF	Supplemental	Trending Analysis	N/A
Proofs of Claim Filed Timely	Percent of Proofs of Claim filed on or before to Proof of Claim deadline/bar date (excluding Amended Claims), for each month	(# of Proofs of Claim filed timely) / (Total # of Proofs of Claim filed)	Percent $\geq 0$	ASDF	Supplemental	Peer Comparison	$\geq 80\%$
Average Days in Bankruptcy Chapter 7	For bankruptcy loans identified as Chapter 7 no-asset cases, average number of days loans are in bankruptcy (from time of filing date loan removed from bankruptcy status)	Avg (bankruptcy removal date - bankruptcy filed date) for Chapter 7 no-asset cases	Number $\geq 0$	STARAGG	Supplemental	Peer Comparison	$\leq 180$ (days)
Average Days in Bankruptcy Chapter 13	For bankruptcy Chapter 13, average number of days loans are in bankruptcy (from time of filing date loan removed from bankruptcy status: exclude loans that have been discharged)	Avg (bankruptcy removal date - bankruptcy filed date) for non-discharged cases	Number $\geq 0$	STARAGG	Supplemental	Peer Comparison	$\leq 1080$ (days)





Attribute	Definition	Formula	Valid Value	Source	Metric Type	Evaluation Type	Threshold
Motions for Relief Referred Timely	Percent of Motion for Relief referrals submitted to bankruptcy attorney no later than two weeks after the 60th day of contractual delinquency for Chapter 7, or no later than two weeks after the 60 <sup>th</sup> day of post-petition delinquency for Chapters 12 and 13	(# of Motion for Relief referrals sent to attorney no later than two weeks after the 60th day of contractual delinquency for Chapter 7, or no later than two weeks after the 60th day of post-petition delinquency for Chapters 12 and 13) / (Total # of Motion for Relief referrals sent to attorney)	Percent $\geq 0$	STARAGG	Primary	Peer Comparison	$\geq 80\%$
Bankruptcy Loans with Full Contractual Payments in Unapplied Funds	Percent of bankruptcy loans with full contractual payments in unapplied funds	(Total # of bankruptcy loans with full contractual payments in unapplied) / (Total # of bankruptcy loans with funds in unapplied)	Percent $\geq 0$	ASDF	Supplemental	Trending Analysis/Peer Comparison	N/A
Bankruptcy no LPI Movement to Bankruptcy Inventory	Percent of bankruptcy loans without LPI movement	(Total # of bankruptcy loans without LPI movement) / (Total bankruptcy inventory)	Percent $\geq 0$	ASDF and Asset Management Network	Supplemental	Threshold	$\geq 3.5\%$



Attribute	Definition	Formula	Valid Value	Source	Metric Type	Evaluation Type	Threshold
# of Each Workout Type Completed per Month for Loans in Bankruptcy	Monthly reporting showing total number of workouts done during the month, broken out by workout/liquidation type	N/A	Number $\geq 0$	ASDF	Supplemental	Trending Analysis	N/A

### 7.3.2 Foreclosure

Attribute	Definition	Formula	Valid Value	Source	Metric Type	Evaluation Type	Threshold
# of Total Foreclosure Cases Initiated	Total number of foreclosures initiated during the evaluation period	N/A	Number $\geq 0$	ASDF/DMRS	Supplemental	Trending Analysis	N/A
% of Sales Held Inventory	The rate of sales in a month as a percent of total foreclosure inventory (includes third party sales, and excludes Mortgage Release™/Reverse)	$(\text{Total completed sales in the month}) / (\text{Total month-ending foreclosure inventory})$	Percent $\geq 0$	ASDF/DMRS	Supplemental	Peer Comparison	$\geq 3.5\%$
Pull-through Rate	Total foreclosure sales held over all scheduled foreclosure sales for the month, excluding Mortgage Release™ and Reverse Mortgages	$(\text{Total sales held}) / (\text{All scheduled sales for the month})$	Percent $\geq 0$	ASDF/DMRS/Asset Management Network	Supplemental	Threshold/Peer Comparison	$\geq 70\%$
180+ SDQ Not in a Foreclosure Status Code	Percent of loans that are 180+ SDQ and have not coded as a foreclosure compared to the servicer's total SDQ	$(\text{Total \# of loans 180+ SDQ Not In A Foreclosure Status Code}) / (\text{Total \# of loans SDQ})$	Percent $\geq 0$	ASDF/DMRS/Asset Management Network	Supplemental	Threshold/Peer Comparison	$\geq 2\%$



Attribute	Definition	Formula	Valid Value	Source	Metric Type	Evaluation Type	Threshold
Scheduled Sales to Foreclosure Inventory	Percent of total loans with a scheduled foreclosure sale	$\frac{\text{(Total \# of loans with a scheduled foreclosure sale)}}{\text{(Total \# of loans in Foreclosure)}}$	Percent $\geq 0$	ASDF/DMRS	Supplemental	Threshold/Peer Comparison	$\geq 5\%$
Foreclosures On Hold to Foreclosure Inventory	Percent of total loans with a foreclosure hold	$\frac{\text{(Total \# of loans with a foreclosure hold)}}{\text{(Total \# of loans in Foreclosure)}}$	Percent $> 0$	ASDF/DMRS	Supplemental	Trending Analysts/Peer Comparison	N/A
Beyond Time Frame Resolution	See STAR Credit Performance Scorecard White Paper	See STAR Credit Performance Scorecard White Paper	Percent $> 0$	See STAR Credit Performance Scorecard White Paper	Primary	Comparable Book	N/A
Average Age of Loans Beyond Allowable Foreclosure Time Frame	See STAR Credit Performance Scorecard White Paper	See STAR Credit Performance Scorecard White Paper	Number $> 0$	See STAR Credit Performance Scorecard White Paper	Primary	Comparable Book	N/A



### 7.3.3 Property Preservation and Post Foreclosure Management

Attribute	Definition	Formula	Valid Value	Source	Metric Type	Evaluation Type	Threshold
# of Total REOgrams for the Period	Number of total REOgrams processed for the evaluation period	N/A	Number ≥ 0	Asset Management Network	Supplemental	Trending Analysis	N/A
# of REOgrams Completed Within Timelines	Number of REOgrams submitted within 24 hours after the date of the foreclosure sale	N/A	Number ≥ 0	Asset Management Network	Supplemental	Trending Analysis	N/A
% of REOgrams Submitted Within Timelines	Percent of REOgrams submitted within 24 hours after the date of the foreclosure sale	$\frac{(\# \text{ REOgrams completed within 24 hours after the foreclosure sale})}{(\text{Total \# of REOgrams for the period})}$	Percent ≥ 0	Asset Management Network	Primary	Peer Comparison	≥90%
Average REO Notification Reporting Time	Average number of days to report REOgrams for the reporting period	$\frac{(\text{Total \# of days to submit all REOgrams within the reporting period})}{(\text{Total \# of REOgrams submitted with the reporting period})}$	Number ≥ 0	Asset Management Network	Supplemental	Trending Analysis/Peer Comparison	N/A
# of Servicer Elimination/ Rescission Notification Exceptions	Number of servicer elimination/rescission notifications sent that exceed 5 days after the foreclosure sale	N/A	Number ≥ 0	Equator	Supplemental	Trending Analysis	N/A



Attribute	Definition	Formula	Valid Value	Source	Metric Type	Evaluation Type	Threshold
# of Servicer Elimination/ Rescission Notification	Number of total servicer elimination/rescission notifications within the reporting month	N/A	Number $\geq 0$	Equator	Supplemental	Trending Analysis	N/A
% of Servicer Elimination Notification Exceptions	Percent of servicer elimination/rescission notification exceptions relative to all new REO cases, described above	$\frac{\text{(\# of servicer elimination/rescission notification exceptions)}}{\text{(Total \# REO cases)}}$	Percent $\geq 0$	Equator	Supplemental	Trending Analysis/Peer Comparison	N/A
# of Title Exceptions	Number properties conveyed to Fannie Mae with title issues	N/A	Number $\geq 0$	Equator	Supplemental	Trending Analysis	N/A
% of Title Exceptions	Percent of title exceptions for the reporting period	$\frac{\text{(\# of title exceptions)}}{\text{(\# of total properties conveyed to Fannie Mae)}}$	Percent $\geq 0$	Equator	Supplemental	Trending Analysis/Peer Comparison	N/A
# of HOA Title Issues	Number of homeowner association(HOA) title issues for the reporting period	N/A	Number $> 0$	Equator	Supplemental	Trending Analysis	N/A
# of Tax-Related Title Issues	Number of tax-related title issues for the reporting period	N/A	Number $\geq 0$	Equator	Supplemental	Trending Analysis	N/A
# of Foreclosure Deed Title Issues	Number of foreclosure deed title issues within the reporting period	N/A	Number $\geq 0$	Equator	Supplemental	Trending Analysis	N/A



Attribute	Definition	Formula	Valid Value	Source	Metric Type	Evaluation Type	Threshold
Average Days to Complete Foreclosure Deed Title Issue	Average days to resolve from initial discovery or notification for foreclosure deed title issues	$\frac{(\# \text{ of total days to resolve all foreclosure deed title issues from discovery or notification date for the reporting period})}{(\text{Total } \# \text{ of foreclosure deed title issues for the reporting period})}$	Number $\geq 0$	Equator	Supplemental	Trending Analysis/Peer Comparison	$\leq 45$ (days)
% of Foreclosure Deeds Resolved $\leq 45$ Days	Percent of completed foreclosure deed vesting issues resolved within 45 days of initial discovery or notification date	$\frac{(\# \text{ of foreclosure deed title issues resolved within 45 days})}{(\# \text{ of foreclosure deed title issues resolved for the reporting period})}$	Percent $\geq 0$	Equator	Supplemental	Peer Comparison	$\geq 66\%$
Average Days to Complete Seller Not in Title Issue	Average days to resolve from initial discovery or notification for seller not in title issues	$\frac{(\# \text{ of total days to resolve all seller not in title issues from discovery or notification date for the reporting period})}{(\text{Total } \# \text{ of seller not in title issues for the reporting period})}$	Number $\geq 0$	Equator	Supplemental	Threshold/Peer Comparison	$\leq 45$ (days)
% of Seller Not in Title Issues Resolved $\leq 45$ Day	Percent of completed seller not in title issues resolved within 45 days of initial discovery or notification date	$\frac{(\# \text{ of seller not in title issues resolved within 45 days})}{(\# \text{ of seller not in title issues resolved for the reporting period})}$	Percent $\geq 0$	Equator	Supplemental	Peer Comparison	$\geq 66\%$



Attribute	Definition	Formula	Valid Value	Source	Metric Type	Evaluation Type	Threshold
% of Title Issues Resolved in 90 days	Percent of title-related issues resolved within 90 days of initial discovery or notification date	(# of title-related issues resolved within 90 days) / (Total # of title-related issues resolved)	Percent $\geq$ 0	Equator	Primary	Threshold	TBD