

Issuer Operational Performance Profile (IOPP) Definitions

Single Family and HMBS

OPERATIONAL METRICS

Metric	Definition	Formula	Applicable Program(s)
Insurance Matching	The percentage of loans that are found in agency endorsement guarantee data within 7 to 12 months of pool issuance.	Number of Matched Loans in Pools Issued 7 to 12 Months Ago / Number of Loans in Pools Issued 7 to 12 Months Ago.	SF, HMBS
Single Family Prepayment Rate	The annualized percentage of the existing mortgage pool that is expected to be prepaid in a year.	N/A	SF
Number of Don't Knows (DKs)	The number of Don't Knows over a 12 month period. A Don't Know is a failed transaction.	Number of DKs in Past 12 Months / Number of Pools Issued in Past 12 Months.	SF, MF, HMBS
Early Pool Terminations	The number of Pool Terminations over a 12 month period.	Number of Early Pool Terminations in Past 12 Months / Number of Pools Issued in Past 12 Months.	SF, HMBS
Manual Deletions	Pools requiring a manual removal from GinnieNet due to varying circumstances.	Number of Manual Deletions in the Past 3 Months.	SF, MF, HMBS
Failure to Purchase Participations when Mandatory Event Occurs	Number of participations related to a HECM not purchased when the outstanding principal balance of the related HECM equals or exceeds 98% of the maximum claim amount.	Number of Loans with UPB Greater Than 98% of Maximum Claims / Number of Loans.	HMBS

OPERATIONAL METRICS

Metric	Definition	Formula	Applicable Program(s)
Early Buyouts	The number of early buyouts from loans liquidated that were issued within the past 6 months.	Number of loans liquidated due to reason codes 1, 5, and 6 from loans that were issued within the past 6 months / Total issuances over the past 6 months.	SF
New Issuance Data Quality	The number of data quality instances with loans issued in the past 6 months.	<p>Number of pooled loans issued in the most recent 6 months where any of the following apply:</p> <ul style="list-style-type: none"> • Upfront MIP Rate is Invalid (FHA, Loan Purpose = 1 only) PLUS • Annual MIP Rate is Invalid (FHA, Loan Purpose = 1 only) PLUS • Credit Score in (100, 200) where Loan Purpose = 1 PLUS and Agency is not PIH • Debt to Income (DTI) > 65% where Loan Purpose = 1 PLUS • Debt to Income (DTI) < 10% where Loan Purpose = 1 PLUS • LTV > CLTV PLUS • LTV > 125 PLUS • LTV < 10 PLUS • CLTV > 200 PLUS • CLTV < 10 <p>/ Number of pooled loans issued in the past 6 months.</p>	SF, HMBS

DEFAULT MANAGEMENT METRICS SINGLE FAMILY

Metric	Definition	Formula
60 to 90+ Day Roll Rate	The percentage of loans that move from at least 60 days delinquent to 90 or more days delinquent within a given period based on a rolling 3 month average.	Rolling 3 Month Average of (Number of DQ60 that Transition to DQ90 + / Number of Initial Period DQ60 Loans)
DQP Ratio	Amount of cumulative delinquent principal and interest (P&I) divided by monthly P&I for all pooled loans.	Sum of Cumulative Delinquent P&I / Sum of Monthly P&I
Early Payment Default (EPD)	The percentage of loans that become 60 days or more delinquent in the first 6 months.	Number of DQ60+ Loan in Pools Issued within Past 6 Months / Number of Loans in Pools Issued within Past 6 Months
DQTime	The average number of months that loans remain delinquent from the point of last paid installment.	Average of (Reporting Date - Last Payment Date) for all Delinquent Loans
Percentage of Loans in Foreclosure	The percentage of loans with a foreclosure status.	Number of Foreclosed Loans in Pools / Total Number of Loans in Pools
Workout Effectiveness	The percentage of loan modifications current after 6 months.	Number of Current (Non-Delinquent) Loan Modifications Pooled in Past 6 Months / Number of Total Loan Modifications Pooled in Past 6 Months

Note: These factors are weighted by control groups that include geography, origination date and purpose code.

PEER GROUPS

Single family Issuers are grouped into nine groups based on institution type and total portfolio size as measured by total loans.

Grouping	Single Family
Very Small - Depository	Depository issuers with less than or equal to 2,500 loans
Very Small – Non-Depository	Non-Depository issuers with less than or equal to 2,500 loans
Small - Depository	Depository issuers with greater than 2,500 and less than or equal to 10,000 loans
Small – Non-Depository	Non-Depository issuers with greater than 2,500 and less than or equal to 10,000 loans
Medium - Depository	Depository issuers with greater than 10,000 and less than or equal to 75,000 loans
Medium – Non-Depository	Non-Depository issuers with greater than 10,000 and less than or equal to 75,000 loans
Large - Depository	Depository issuers with greater than 75,000 and less than or equal to 400,000 loans
Large – Non-Depository	Non-Depository issuers with greater than 75,000 and less than or equal to 400,000 loans
Mega	Issuers with greater than 400,000 loans

WEIGHTING (SF AND HMBS)

Grouping	Metric	Weight (SF)	Weight (HMBS)
Reporting	Failure to Report	10%	
	RPB Corrections	25%	
	RFS Exceptions (SF Only)	5%	n/a
	HRA Exceptions (HMBS Only)	n/a	5%
Certification and Compliance	Percentage of Pools not Certified	10%	
	Compliance Review Metric	10%	
	Failure to Purchase Participations when Mandatory Event Occurs (HMBS Only)	n/a	10%
	Insurance Matching	10%	
	Single Family Prepayment Rate	n/a	
Pooling and Issuance	Commitment Authority Shortage/Surplus	5%	
	Number of Don't Knows (DKs)	10%	5%
	Early Pool Terminations	10%	5%
	Manual Deletions	5%	
Default Management (SF Only)	60 to 90+ Day Roll Rate	14.167%	n/a
	DQP Ratio	24.167%	n/a
	Early Payment Default (EPD)	14.167%	n/a
	DQTime	14.167%	n/a
	% of Loans in Foreclosure	19.167%	n/a
	Workout Effectiveness	14.167%	n/a

ABSOLUTE TIERS (SF AND HMBS)

Metric	Tier 1-2 Cutoff	Tier 2-3 Cutoff	Tier 3-4 Cutoff
Failure to Report	Binary: If > 0 observations in 6 months, Tier 4, else Tier 1		
RPB Corrections	Binary: If > 0 observation in 3 months, Tier 4, else Tier 1		
RFS Exceptions	0.0133	0.0302	0.0782
HRA Exceptions	0.180004696	0.190002348	0.2
% of Pools not Certified	1.00%	7.50%	15.00%
Compliance Review Metric	2	3	4
Insurance Matching	99.85%	99.50%	99.00%
Failure to Purchase Participations when Mandatory Event Occurs	Binary: If > 0 observation in 12 months, Tier 4, else Tier 1		
Commitment Authority Shortage/Surplus	Binary: If < 20% of 4 month commitment authority usage remaining, Tier 4, else Tier 1		
Number of DKs	0.0225	0.04515	0.0903
Early Pool Terminations	0.02005	0.0251	0.0868
Manual Deletions	Binary: If > 0 observation in 3 months, Tier 4, else Tier 1		
60 to 90+ Day Roll Rate	30	36	43
DQP Ratio	8	15	30
Early Payment Default (EPD)	0.3	0.5	0.9
DQTime	1.6	2.7	3.7
% of Loans in Foreclosure	0.14	0.28	0.87
Workout Effectiveness	80%	70%	60%
Single Family Prepayment Rate	IOPP currently does not have absolute tier cutoffs for Single Family Prepayment Rate		
Early Buyouts	IOPP currently does not have absolute tier cutoffs for Early Buyouts		
New Issuance Data Quality	IOPP currently does not have absolute tier cutoffs for New Issuance Data Quality		