	VantageScore® 4.0 Historical Scores for MBS Disclosures - Glossary and File Layout						
ID	Field Name	Attribute Name	Attribute Definition	Data Type	Format	Max Length	Average / Average Methodology Calculation
VM-01	prefix	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.	String		3	
VM-02	security_identifier	Security Identifier	The unique designation assigned to the security by the issuer.	String		6	
VM-03	issue_date	Issue Date	The date on which the security was issued.	Date	MM/DD/CCYY	8	
VM-04	loan_identifier	Loan Identifier	The unique designation assigned to the loan by the issuer as represented in the MBS loan level disclosures.	String		12	
VM-05	vs4_current_method	Current Method	The VantageScore® 4.0 Loan Representative Credit Score (LRCS), determined by using the GSEs' current methodology: The LRCS is based on the VantageScore 4.0 Borrower Representative Credit Score (BRCS). The BRCS of an individual borrower is either i) the lower of two scores if a score is received from two Credit Score Repositories for the borrower, or ii) the middle of three scores if a score is received from the three Credit Score Repositories for the borrower. This evaluation is done for each borrower on the loan. The VantageScore 4.0 LRCS represents the lowest of all the VantageScore 4.0 BRCS.	Numeric		4	Borrower Representative Credit Score (BRCS): For each borrower on the loan, select the middle score of three scores received or the lower score of two scores received: BRSC = MEDIAN (CRS A, CRS B, CRS C), or BRSC = LOWER (CRS A, CRS B) Loan Representative Credit Score (LRCS): LRCS = LOWEST (BRCS 1, BRCS 2, BRCS 3, BRCR 4) Where: CRS = Credit Repository Score 1 = Borrower 1 2 = Borrower 2 (if applicable) 3 = Borrower 3 (if applicable) 4 = Borrower 4 (if applicable)
VM-06	vs4_trimerge	Tri-Merge	The VantageScore 4.0 Loan Representative Credit Score (LRCS), determined by using the "Tri-Merge/Average-then-Average" methodology: The LRCS is based on the VantageScore 4.0 Borrower Representative Credit Score (BRCS). The BRCS of an individual borrower is the simple average of the three scores received from the three Credit Score Repositories. If less than three scores are received, then a simple average of the scores received is calculated. This calculation is performed for each borrower on the loan. Then, the simple average of the BRCS of all the borrowers is calculated. The VantageScore 4.0 LRCS represents the simple average of all the VantageScore 4.0 BRCS.	Numeric		4	Borrower Representative Credit Score (BRCS): For each borrower on the loan, calculate the simple average of the scores received: BRCS AVG (CRS A + CRS B + CRS C)/3 Loan Representative Credit Score (LRCS): LRCS = AVG (BRCS 1 + BRCS 2 + BRCS 3 + BRCS 4)/No. of Borrowers Where: CRS = Credit Repository Score 1 = Borrower 1 2 = Borrower 2 (if applicable) 3 = Borrower 3 (if applicable) 4 = Borrower 4 (if applicable)

VantageScore® 4.0 Historical Scores for MBS Disclosures - Glossary and File Layout

ID	Field Name	Attribute Name	Attribute Definition	Data Type	Format	Max Length	Average / Average Methodology Calculation
VM-07	vs4_bimerge_lowest	Bi-Merge Lowest	The lowest VantageScore 4.0 Loan Representative Credit Score (LRCS), determined by using the "Bi-Merge/ Average-then-Average" methodology: The LRCS is based on the VantageScore 4.0 Borrower Representative Credit Score (BRCS). The BRCS of an individual borrower is the simple average of the two scores received from each pairing of the three Credit Score Repositories. If less than two scores are received, then the only score received is utilized. This calculation is performed for each borrower on the loan for each pairing of the three Credit Score Repositories. Then, the simple average of the BRCS of all the borrowers for each Credit Score Repository pairing is calculated. The VantageScore 4.0 LRCS represents the lowest value of the three simple average calculations of all the VantageScore 4.0 BRCS using the same Credit Score Repository pairing.	Numeric		4	Borrower Representative Credit Score (BRCS): For each borrower on the loan, calculate the simple average of the scores received from each paring of the Credit Repositories: BRCS X = AVG (CRS A + CRS B)/2 BRCS Y = AVG (CRS B + CRS C)/2 BRCS Z = AVG (CRS A + CRS C)/2 Loan Representative Credit Score (LRCS): The lowest value of the following three computations: LRCS X = AVG (BRCS 1X + BRCS 2X + BRCS 3X + BRCS 4X)/No. of Borrowers LRCS Y = AVG (BRCS 1Y + BRCS 2Y + BRCS 3Y + BRCS 4Y)/No. of Borrowers LRCS Z = AVG (BRCS 1Z + BRCS 2Z + BRCS 3Z + BRCS 4Z)/No. of Borrowers Where: CRS = Credit Repository Score 1 = Borrower 1 2 = Borrower 2 (if applicable) 3 = Borrower 3 (if applicable) 4 = Borrower 4 (if applicable)
VM-08	vs4_bimerge_median	Bi-Merge Median	The median VantageScore 4.0 Loan Representative Credit Score (LRCS), determined by using the "Bi-Merge/ Average-then-Average" methodology: The LRCS is based on the VantageScore 4.0 Borrower Representative Credit Score (BRCS). The BRCS of an individual borrower is the simple average of the two scores received from each pairing of the three Credit Score Repositories. If less than two scores are received, then the only score received is utilized. This calculation is performed for each borrower on the loan for each pairing of the three Credit Score Repositories. Then, the simple average of the BRCS of all the borrowers for each Credit Score Repository pairing is calculated. The VantageScore 4.0 LRCS represents the median value of the three simple average calculations of all the VantageScore 4.0 BRCS using the same Credit Score Repository pairing.	Numeric		4	Borrower Representative Credit Score (BRCS): For each borrower on the loan, calculate the simple average of the scores received from each paring of the Credit Repositories: BRCS X = AVG (CRS A + CRS B)/2 BRCS Y = AVG (CRS B + CRS C)/2 BRCS Z = AVG (CRS A + CRS C)/2 Loan Representative Credit Score (LRCS): The median value of the following three computations: LRCS X = AVG (BRCS 1X + BRCS 2X + BRCS 3X + BRCS 4X)/No. of Borrowers LRCS Y = AVG (BRCS 1Y + BRCS 2Y + BRCS 3Y + BRCS 4Y)/No. of Borrowers LRCS Z = AVG (BRCS 1Z + BRCS 2Z + BRCS 3Z + BRCS 4Z)/No. of Borrowers Where: CRS = Credit Repository Score 1 = Borrower 1 2 = Borrower 2 (if applicable) 3 = Borrower 3 (if applicable) 4 = Borrower 4 (if applicable)

VantageScore® 4.0 Historical Scores for MBS Disclosures - Glossary and File Layout

ID	Field Name	Attribute Name	Attribute Definition	Data Type	Format	Max Length	Average / Average Methodology Calculation
VM-09	vs4_bimerge_highest	Bi-Merge Highest	The highest VantageScore 4.0 Loan Representative Credit Score (LRCS), determined by using the "Bi-Merge/ Average-then-Average" methodology: The LRCS is based on the VantageScore 4.0 Borrower Representative Credit Score (BRCS). The BRCS of an individual borrower is the simple average of the two scores received from each pairing of the three Credit Score Repositories. If less than two scores are received, then the only score received is utilized. This calculation is performed for each borrower on the loan for each pairing of the three Credit Score Repositories. Then, the simple average of the BRCS of all the borrowers for each Credit Score Repository pairing is calculated. The VantageScore 4.0 LRCS represents the highest value of the three simple average calculations of all the VantageScore 4.0 BRCS using the same Credit Score Repository pairing.	Numeric		4	Borrower Representative Credit Score (BRCS): For each borrower on the loan, calculate the simple average of the scores received from each paring of the Credit Repositories: BRCS X = AVG (CRS A + CRS B)/2 BRCS Y = AVG (CRS B + CRS C)/2 BRCS Z = AVG (CRS A + CRS C)/2 Loan Representative Credit Score (LRCS): The highest value of the following three computations: LRCS X = AVG (BRCS 1X + BRCS 2X + BRCS 3X + BRCS 4X)/No. of Borrowers LRCS Y = AVG (BRCS 1Y + BRCS 2Y + BRCS 3Y + BRCS 4Y)/No. of Borrowers LRCS Z = AVG (BRCS 1Z + BRCS 2Z + BRCS 3Z + BRCS 4Z)/No. of Borrowers Where: CRS = Credit Repository Score 1 = Borrower 1 2 = Borrower 2 (if applicable) 3 = Borrower 3 (if applicable) 4 = Borrower 4 (if applicable)

VantageScore® 4.0 Historical Scores for CRT Dataset - Glossary and File Layout

ID	Field Name	Attribute Name	Attribute Definition	Data Type	Format	Max Length	Average / Average Methodology Calculation
VCRT-01	deal_name	Deal Name	The title of the series issuance	String		20	
VCRT-02	loan_identifier	Loan Identifier	The unique designation assigned to the loan by the issuer as represented in the Credit Risk Transfer (CRT) loan level disclosures.	String		12	
VCRT-03	vs4_current_method	Current Method	The VantageScore® 4.0 Loan Representative Credit Score (LRCS), determined by using the GSEs' current methodology: The LRCS is based on the VantageScore 4.0 Borrower Representative Credit Score (BRCS). The BRCS of an individual borrower is either i) the lower of two scores if a score is received from two Credit Score Repositories for the borrower, or ii) the middle of three scores if a score is received from the three Credit Score Repositories for the borrower. This evaluation is done for each borrower on the loan. The VantageScore 4.0 LRCS represents the lowest of all the VantageScore 4.0 BRCS.	Numeric		4	Borrower Representative Credit Score (BRCS): For each borrower on the loan, select the middle score of three scores received or the lower score of two scores received: BRSC = MEDIAN (CRS A, CRS B, CRS C), or BRSC = LOWER (CRS A, CRS B) Loan Representative Credit Score (LRCS): LRCS = LOWEST (BRCS 1, BRCS 2, BRCS 3, BRCR 4) Where: CRS = Credit Repository Score 1 = Borrower 1 2 = Borrower 2 (if applicable) 3 = Borrower 3 (if applicable) 4 = Borrower 4 (if applicable)
VCRT-04	vs4_trimerge	Tri-Merge	The VantageScore 4.0 Loan Representative Credit Score (LRCS), determined by using the "Tri-Merge/Average-then-Average" methodology: The LRCS is based on the VantageScore 4.0 Borrower Representative Credit Score (BRCS). The BRCS of an individual borrower is the simple average of the three scores received from the three Credit Score Repositories. If less than three scores are received, then a simple average of the scores received is calculated. This calculation is performed for each borrower on the loan. Then, the simple average of the BRCS of all the borrowers is calculated. The VantageScore 4.0 LRCS represents the simple average of all the VantageScore 4.0 BRCS.	Numeric		4	Borrower Representative Credit Score (BRCS): For each borrower on the loan, calculate the simple average of the scores received: BRCS AVG (CRS A + CRS B + CRS C)/3 Loan Representative Credit Score (LRCS): LRCS = AVG (BRCS 1 + BRCS 2 + BRCS 3 + BRCS 4)/No. of Borrowers Where: CRS = Credit Repository Score 1 = Borrower 1 2 = Borrower 2 (if applicable) 3 = Borrower 3 (if applicable) 4 = Borrower 4 (if applicable)

			VantageScore® 4.0 Historical Scores for CRT Dataset - Glossary and File Layout				
ID	**Field Name**	**Attribute Name**	**Attribute Definition**	**Data Type**	**Format**	**Max Length**	**Average / Average Methodology Calculation**
VCRT-05	vs4_bimerge_lowest	Bi-Merge Lowest	The lowest VantageScore 4.0 Loan Representative Credit Score (LRCS), determined by using the "Bi-Merge/ Average-then-Average" methodology: The LRCS is based on the VantageScore 4.0 Borrower Representative Credit Score (BRCS). The BRCS of an individual borrower is the simple average of the two scores received from each pairing of the three Credit Score Repositories. If less than two scores are received, then the only score received is utilized. This calculation is performed for each borrower on the loan for each pairing of the three Credit Score Repositories. Then, the simple average of the BRCS of all the borrowers for each Credit Score Repository pairing is calculated. The VantageScore 4.0 LRCS represents the lowest value of the three simple average calculations of all the VantageScore 4.0 BRCS using the same Credit Score Repository pairing.	Numeric		4	Borrower Representative Credit Score (BRCS): For each borrower on the loan, calculate the simple average of the scores received from each paring of the Credit Repositories: BRCS X = AVG (CRS A + CRS B)/2 BRCS Y = AVG (CRS B + CRS C)/2 BRCS Z = AVG (CRS A + CRS C)/2 Loan Representative Credit Score (LRCS): The lowest value of the following three computations: LRCS X = AVG (BRCS 1X + BRCS 2X + BRCS 3X + BRCS 4X)/No. of Borrowers LRCS Y = AVG (BRCS 1Y + BRCS 2Y + BRCS 3Y + BRCS 4Y)/No. of Borrowers LRCS Z = AVG (BRCS 1Z + BRCS 2Z + BRCS 3Z + BRCS 4Z)/No. of Borrowers Where: CRS = Credit Repository Score 1 = Borrower 1 2 = Borrower 2 (if applicable) 3 = Borrower 3 (if applicable) 4 = Borrower 4 (if applicable)
VCRT-06	vs4_bimerge_median	Bi-Merge Median	The median VantageScore 4.0 Loan Representative Credit Score (LRCS), determined by using the "Bi-Merge/ Average-then-Average" methodology: The LRCS is based on the VantageScore 4.0 Borrower Representative Credit Score (BRCS). The BRCS of an individual borrower is the simple average of the two scores received from each pairing of the three Credit Score Repositories. If less than two scores are received, then the only score received is utilized. This calculation is performed for each borrower on the loan for each pairing of the three Credit Score Repositories. Then, the simple average of the BRCS of all the borrowers for each Credit Score Repository pairing is calculated. The VantageScore 4.0 LRCS represents the median value of the three simple average calculations of all the VantageScore 4.0 BRCS using the same Credit Score Repository pairing.	Numeric		4	Borrower Representative Credit Score (BRCS): For each borrower on the loan, calculate the simple average of the scores received from each paring of the Credit Repositories: BRCS X = AVG (CRS A + CRS B)/2 BRCS Y = AVG (CRS B + CRS C)/2 BRCS Z = AVG (CRS A + CRS C)/2 Loan Representative Credit Score (LRCS): The median value of the following three computations: LRCS X = AVG (BRCS 1X + BRCS 2X + BRCS 3X + BRCS 4X)/No. of Borrowers LRCS Y = AVG (BRCS 1Y + BRCS 2Y + BRCS 3Y + BRCS 4Y)/No. of Borrowers LRCS Z = AVG (BRCS 1Z + BRCS 2Z + BRCS 3Z + BRCS 4Z)/No. of Borrowers Where: CRS = Credit Repository Score 1 = Borrower 1 2 = Borrower 2 (if applicable) 3 = Borrower 3 (if applicable) 4 = Borrower 4 (if applicable)

VantageScore® 4.0 Historical Scores for CRT Dataset - Glossary and File Layout

ID	Field Name	Attribute Name	Attribute Definition	Data Type	Format	Max Length	Average / Average Methodology Calculation
VCRT-07	vs4_bimerge_highest	Bi-Merge Highest	The highest VantageScore 4.0 Loan Representative Credit Score (LRCS), determined by using the "Bi-Merge/ Average-then-Average" methodology: The LRCS is based on the VantageScore 4.0 Borrower Representative Credit Score (BRCS). The BRCS of an individual borrower is the simple average of the two scores received from each pairing of the three Credit Score Repositories. If less than two scores are received, then the only score received is utilized. This calculation is performed for each borrower on the loan for each pairing of the three Credit Score Repositories. Then, the simple average of the BRCS of all the borrowers for each Credit Score Repository pairing is calculated. The VantageScore 4.0 LRCS represents the highest value of the three simple average calculations of all the VantageScore 4.0 BRCS using the same Credit Score Repository pairing.	Numeric		4	Borrower Representative Credit Score (BRCS): For each borrower on the loan, calculate the simple average of the scores received from each paring of the Credit Repositories: BRCS X = AVG (CRS A + CRS B)/2 BRCS Y = AVG (CRS B + CRS C)/2 BRCS Z = AVG (CRS A + CRS C)/2 Loan Representative Credit Score (LRCS): The highest value of the following three computations: LRCS X = AVG (BRCS 1X + BRCS 2X + BRCS 3X + BRCS 4X)/No. of Borrowers LRCS Y = AVG (BRCS 1Y + BRCS 2Y + BRCS 3Y + BRCS 4Y)/No. of Borrowers LRCS Z = AVG (BRCS 1Z + BRCS 2Z + BRCS 3Z + BRCS 4Z)/No. of Borrowers Where: CRS = Credit Repository Score 1 = Borrower 1 2 = Borrower 2 (if applicable) 3 = Borrower 3 (if applicable) 4 = Borrower 4 (if applicable)

VantageScore® 4.0 Historical Scores for Historical Loan Performance Dataset - Glossary and File Layout							
ID	Field Name	Attribute Name	Attribute Definition	Data Type	Format	Max Length	Average / Average Methodology Calculation
VHLP-01	acquisition_quarter	Acquisition Quarter	The acquisition quarter that represents the Single Family Historical Loan Performance file in which the loan was acquired.	String	YYYYQX	6	
VHLP-02	loan_identifier	Loan Identifier	The unique designation assigned to the loan by the issuer as represented in the Single-Family Historical Loan Performance disclosures.	String		12	
VHLP-03	vs4_current_method	Current Method	The VantageScore® 4.0 Loan Representative Credit Score (LRCS), determined by using the GSEs' current methodology: The LRCS is based on the VantageScore 4.0 Borrower Representative Credit Score (BRCS). The BRCS of an individual borrower is either i) the lower of two scores if a score is received from two Credit Score Repositories for the borrower, or ii) the middle of three scores if a score is received from the three Credit Score Repositories for the borrower. This evaluation is done for each borrower on the loan. The VantageScore 4.0 LRCS represents the lowest of all the VantageScore 4.0 BRCS.	Numeric		4	Borrower Representative Credit Score (BRCS): For each borrower on the loan, select the middle score of three scores received or the lower score of two scores received: BRSC = MEDIAN (CRS A, CRS B, CRS C), or BRSC = LOWER (CRS A, CRS B) Loan Representative Credit Score (LRCS): LRCS = LOWEST (BRCS 1, BRCS 2, BRCS 3, BRCR 4) Where: CRS = Credit Repository Score 1 = Borrower 1 2 = Borrower 2 (if applicable) 3 = Borrower 3 (if applicable) 4 = Borrower 4 (if applicable)
VHLP-04	vs4_trimerge	Tri-Merge	The VantageScore 4.0 Loan Representative Credit Score (LRCS), determined by using the "Tri-Merge/Average-then-Average" methodology: The LRCS is based on the VantageScore 4.0 Borrower Representative Credit Score (BRCS). The BRCS of an individual borrower is the simple average of the three scores received from the three Credit Score Repositories. If less than three scores are received, then a simple average of the scores received is calculated. This calculation is performed for each borrower on the loan. Then, the simple average of the BRCS of all the borrowers is calculated. The VantageScore 4.0 LRCS represents the simple average of all the VantageScore 4.0 BRCS.	Numeric		4	Borrower Representative Credit Score (BRCS): For each borrower on the loan, calculate the simple average of the scores received: BRCS AVG (CRS A + CRS B + CRS C)/3 Loan Representative Credit Score (LRCS): LRCS = AVG (BRCS 1 + BRCS 2 + BRCS 3 + BRCS 4)/No. of Borrowers Where: CRS = Credit Repository Score 1 = Borrower 1 2 = Borrower 2 (if applicable) 3 = Borrower 3 (if applicable) 4 = Borrower 4 (if applicable)

VantageScore® 4.0 Historical Scores for Historical Loan Performance Dataset - Glossary and File Layout							
ID	Field Name	Attribute Name	Attribute Definition	Data Type	Format	Max Length	Average / Average Methodology Calculation
VHLP-05	vs4_bimerge_lowest	Bi-Merge Lowest	The lowest VantageScore 4.0 Loan Representative Credit Score (LRCS), determined by using the "Bi-Merge/ Average-then-Average" methodology: The LRCS is based on the VantageScore 4.0 Borrower Representative Credit Score (BRCS). The BRCS of an individual borrower is the simple average of the two scores received from each pairing of the three Credit Score Repositories. If less than two scores are received, then the only score received is utilized. This calculation is performed for each borrower on the loan for each pairing of the three Credit Score Repositories. Then, the simple average of the BRCS of all the borrowers for each Credit Score Repository pairing is calculated. The VantageScore 4.0 LRCS represents the lowest value of the three simple average calculations of all the VantageScore 4.0 BRCS using the same Credit Score Repository pairing.	Numeric		4	Borrower Representative Credit Score (BRCS): For each borrower on the loan, calculate the simple average of the scores received from each paring of the Credit Repositories: BRCS X = AVG (CRS A + CRS B)/2 BRCS Y = AVG (CRS B + CRS C)/2 BRCS Z = AVG (CRS A + CRS C)/2 Loan Representative Credit Score (LRCS): The lowest value of the following three computations: LRCS X = AVG (BRCS 1X + BRCS 2X + BRCS 3X + BRCS 4X)/No. of Borrowers LRCS Y = AVG (BRCS 1Y + BRCS 2Y + BRCS 3Y + BRCS 4Y)/No. of Borrowers LRCS Z = AVG (BRCS 1Z + BRCS 2Z + BRCS 3Z + BRCS 4Z)/No. of Borrowers Where: CRS = Credit Repository Score 1 = Borrower 1 2 = Borrower 2 (if applicable) 3 = Borrower 3 (if applicable) 4 = Borrower 4 (if applicable)
VHLP-06	vs4_bimerge_median	Bi-Merge Median	The median VantageScore 4.0 Loan Representative Credit Score (LRCS), determined by using the "Bi-Merge/ Average-then-Average" methodology: The LRCS is based on the VantageScore 4.0 Borrower Representative Credit Score (BRCS). The BRCS of an individual borrower is the simple average of the two scores received from each pairing of the three Credit Score Repositories. If less than two scores are received, then the only score received is utilized. This calculation is performed for each borrower on the loan for each pairing of the three Credit Score Repositories. Then, the simple average of the BRCS of all the borrowers for each Credit Score Repository pairing is calculated. The VantageScore 4.0 LRCS represents the median value of the three simple average calculations of all the VantageScore 4.0 BRCS using the same Credit Score Repository pairing.	Numeric		4	Borrower Representative Credit Score (BRCS): For each borrower on the loan, calculate the simple average of the scores received from each paring of the Credit Repositories: BRCS X = AVG (CRS A + CRS B)/2 BRCS Y = AVG (CRS B + CRS C)/2 BRCS Z = AVG (CRS A + CRS C)/2 Loan Representative Credit Score (LRCS): The median value of the following three computations: LRCS X = AVG (BRCS 1X + BRCS 2X + BRCS 3X + BRCS 4X)/No. of Borrowers LRCS Y = AVG (BRCS 1Y + BRCS 2Y + BRCS 3Y + BRCS 4Y)/No. of Borrowers LRCS Z = AVG (BRCS 1Z + BRCS 2Z + BRCS 3Z + BRCS 4Z)/No. of Borrowers Where: CRS = Credit Repository Score 1 = Borrower 1 2 = Borrower 2 (if applicable) 3 = Borrower 3 (if applicable) 4 = Borrower 4 (if applicable)

VantageScore® 4.0 Historical Scores for Historical Loan Performance Dataset - Glossary and File Layout

ID	Field Name	Attribute Name	Attribute Definition	Data Type	Format	Max Length	Average / Average Methodology Calculation
VHLP-07	vs4_bimerge_highest	Bi-Merge Highest	The highest VantageScore 4.0 Loan Representative Credit Score (LRCS), determined by using the "Bi-Merge/ Average-then-Average" methodology: The LRCS is based on the VantageScore 4.0 Borrower Representative Credit Score (BRCS). The BRCS of an individual borrower is the simple average of the two scores received from each pairing of the three Credit Score Repositories. If less than two scores are received, then the only score received is utilized. This calculation is performed for each borrower on the loan for each pairing of the three Credit Score Repositories. Then, the simple average of the BRCS of all the borrowers for each Credit Score Repository pairing is calculated. The VantageScore 4.0 LRCS represents the highest value of the three simple average calculations of all the VantageScore 4.0 BRCS using the same Credit Score Repository pairing.	Numeric		4	Borrower Representative Credit Score (BRCS): For each borrower on the loan, calculate the simple average of the scores received from each paring of the Credit Repositories: BRCS X = AVG (CRS A + CRS B)/2 BRCS Y = AVG (CRS B + CRS C)/2 BRCS Z = AVG (CRS A + CRS C)/2 Loan Representative Credit Score (LRCS): The highest value of the following three computations: LRCS X = AVG (BRCS 1X + BRCS 2X + BRCS 3X + BRCS 4X)/No. of Borrowers LRCS Y = AVG (BRCS 1Y + BRCS 2Y + BRCS 3Y + BRCS 4Y)/No. of Borrowers LRCS Z = AVG (BRCS 1Z + BRCS 2Z + BRCS 3Z + BRCS 4Z)/No. of Borrowers Where: CRS = Credit Repository Score 1 = Borrower 1 2 = Borrower 2 (if applicable) 3 = Borrower 3 (if applicable) 4 = Borrower 4 (if applicable)

Historical Credit Score File Calculation Examples

Step 1: Calculate Borrower Representative Credit Score (BRCS) Options based on VantageScore® 4.0

Borrowers	Loan Identifier	Bureau 1	Bureau 2	Bureau 3	Current Median/Lower of Bureaus	Tri-Merge Average of 3 Bureaus	Bi-Merge Average of Bureau 1 & 2	Bi-Merge Average of Bureau 2 & 3	Bi-Merge Average of Bureau 1 & 3
Borrower 1	Loan 1	700	710	720	710	710	705	715	710
Borrower 2		680	685	695	685	687	683	690	688
Borrower 1	Loan 2	740	745	N/A	740	743	743	745	740
Borrower 2		775	780	N/A	775	778	778	780	775
Borrower 1	Loan 3	640	660	670	660	657	650	665	655
Borrower 1	Loan 4	N/A	660	670	660	665	660	665	670
Borrower 1	Loan 5	740	755	N/A	740	748	748	755	740
Borrower 2		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Borrower 1	Loan 6	740	N/A	760	740	750	740	760	750
Borrower 2		785	N/A	780	780	783	785	780	783
Borrower 3		800	N/A	810	800	805	800	810	805

Step 2: Calculate Loan Representative Credit Score (LRCS) Options based on VantageScore® 4.0

Loan Identifier	Current Median/Lower of Bureaus then lowest of Borrowers	Tri-Merge Average of 3 Bureaus then Average of Borrowers	Bi-Merge Average of Bureaus 1 & 2 then Average of Borrowers	Bi-Merge Average of Bureaus 2 & 3 then Average of Borrowers	Bi-Merge Average of Bureaus 1 & 3 then Average of Borrowers
Loan 1	685	699	694	703	699
Loan 2	740	761	761	763	758
Loan 3	660	657	650	665	655
Loan 4	660	665	660	665	670
Loan 5	740	748	748	755	740
Loan 6	740	779	775	783	779

Step 3: Sort Bi-Merge Loan Options from lowest to highest for the VantageScore® 4.0 historical credit score file

Loan Identifier	VS4 Current Method	VS4 Tri-Merge	VS4 Bi-Merge Lowest	VS4 Bi-Merge Median	VS4 Bi-Merge Highest
Loan 1	685	699	694	699	703
Loan 2	740	761	758	761	763
Loan 3	660	657	650	655	665
Loan 4	660	665	660	665	670
Loan 5	740	748	740	748	755
Loan 6	740	779	775	779	783