Fannie Mae Disclosure Technical Specification
for Multiclass Securities
Version 1.0 - September 2018

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Appendix A	34	The appendix listing the enumerations for property state.

Revision History		
Date	Version	Action
9/1/2018	1.0	Single-Family Disclosure Technical Specification Multiclass published

For each disclosure file, we provide the following information:

File Attributes	
Column Name	Description
ID	The identifier for the data attribute.
Attribute Name	The business name for the data attribute.
Attribute Definition	The business definition for the data attribute.
Enumerations	If applicable, the allowable values for the data attribute.
Data Type	The classification for the data - numeric, string or date.
Format	The presentation of the data type.
Max Length	The maximum number of characters for the data attribute.
Implementation Notes	Additional information related to the data attribute for further clarification of assistance in processing the data.

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File Release Schedule
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File	Description	Fannie Mae Issuance Timing
Final Data Statement	The file containing the collateral details supporting the resecuritization.	Daily as applicable 2 hour Sweeps - 7:30 am - 5:30 pm
Excess Servicing Fee Security Factor File	The file containing factor and weighted averages for the pseudo pools in the excess servicing resecuritizations.	Daily as applicable Sweeps - 7:30 am - 5:30 pm
Excess Servicing Fee Security Supplemental File	The file containing deciles and the stratifications for the pseudo pools in the excess servicing resecuritizations.	Daily as applicable Sweeps - 7:30 am - 5:30 pm

File	Description	Fannie Mae Monthly Timing
REMIC Factor File [1]	The file containing factor and distribution amounts for the multiclass resecuritizations and Ginnie Mae backed resecuritizations.	Business Day 4 at 4:30 Ginnie Mae collateral - Business Day 8 at 4:30
REMIC Component File [1]	The file containing the factor for the components in the multiclass resecuritizations and Ginnie Mae backed resecuritizations.	Business Day 4 at 4:30 Ginnie Mae collateral - Business Day 8 at 4:30
REMIC Shortfall File [1]	The file containing the shortfall amount for applicable multiclass resecuritizations.	Business Day 4 at 4:30 Ginnie Mae collateral - Business Day 8 at 4:30
SMBS Factor File	The file containing factor and distribution amounts for the stripped multiclass resecuritizations.	Business Day 4 at 4:30 pm
Excess Servicing Fee Security Factor File	The file containing factor and weighted averages for the excess servicing resecuritizations.	
Excess Servicing Fee Security Supplemental File	The file containing quartiles and the stratifications for the mortgage-backed security and single-class resecuritizations.	Business Day 4 at 4:30 pm
Ginnie Mae Collateral Mega Factor File	The file containing factor and weighted averages for the mortgage-backed single-class resecuritizations.	Business Day 8 at 4:30 pm
Reset Indices File - No Delay [1]	The file containing monthly indices for the multiclass resecuritizations.	Multiple dates during month - 4:30 pm
Reset Indices File - Delay [1]	The file containing monthly indices for the multiclass resecuritizations.	Multiple dates during month - 4:30 pm

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File	Description	Fannie Mae Issuance Timing
Reset Rates File - No Delay [1]	The file containing monthly interest rates based on the indices for the multiclass resecuritizations.	Descoped - June 2018
Reset Rates File - Delay	The file containing monthly interest rates based on the indices for the multiclass resecuritizations.	Descoped - June 2018

[1] - Additional files may be processed later in the month as stated in the prospectus supplement / offering circular.

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
CL-01	Trust Identifier	The unique alpha and/or numeric designation assigned to each deal.		String		50	
CL-02	Issue Date	The date on which the security was issued.		Date	MMDDCCYY	8	
CL-03	Collateral Issuer	The issuer for each security that directly underlies the resecuritization.	FNM = Fannie Mae FRE = Freddie Mac GM = Ginnie Mae	String		3	
CL-04	Collateral Prefix	For each security that directly underlies the resecuritization, the designation assigned by the issuer denoting the type of the loans and the security at the time of resecuritization.		String		3	
CL-05	Collateral Security Identifier	For each security that directly underlies the resecuritization, the unique designation assigned to the security by the issuer.		String		6	
CL-06	Collateral CUSIP	For each security that directly underlies the resecuritization, the unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
CL-07	Collateral Current WA Net Interest Rate	For each security that directly underlies the resecuritization, the weighted average interest rate of the loans in effect during the current reporting period less servicing fees and guarantor fees.		Numeric	2.3	6	
CL-08	Collateral Issue Date	For each security that directly underlies the resecuritization, the date on which the security was issued.		Date	MMDDCCYY	8	
CL-09	Collateral Maturity Date	For each security that directly underlies the resecuritization, the month and year that the final scheduled payment on the loan is due at the time of resecuritization.		Date	MMCCYY	6	
CL-10	Collateral Issuance Investor Security UPB	For each security that directly underlies the resecuritization, the unpaid principal balance of the loans as they contribute to the balance of the security.		Numeric	12.2	15	
CL-11	Collateral Issuance Contributing Investor Security UPB	For each security that directly underlies the resecuritization, the pro-rata share of the Investor Issuance Security UPB amount.		Numeric	12.2	15	
CL-12	Collateral Current Contributing Investor Security UPB	For each security that directly underlies the resecuritization, the pro-rata share of the Current Investor Security UPB amount.		Numeric	12.2	15	
CL-13	Collateral WA Interest Rate at Settlement	For each security that directly underlies the resecuritization, the weighted average interest rate at the time of resecuritization.		Numeric	2.3	6	
CL-14	Collateral WA Remaining Months to Maturity at Settlement	For each security that directly underlies the resecuritization, the weighted average number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero at the time of resecuritization. *For fixed-rate loans, this value takes into account the impact of any curtailments.*		Numeric		3	

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
CL-15	Collateral WA Loan Age at Settlement	For each security that directly underlies the resecuritization, the weighted average number of scheduled payments from the time the loan was originated or modified up to and including the current reporting period at the time of resecuritization.		Numeric		3	
CL-16	Collateral Trust Identifier	An identifier assigned to the trust when established into a multiclass resecuritization.		String		50	Applicable only for underlying REMIC
CL-17	Collateral Class Identifier	An identifier assigned to the class when established into a multiclass resecuritization.		String		5	Applicable only for underlying REMIC collateral
CL-18	Group Identifier	An identifier assigned to the group when established into a multiclass resecuritization.		String		5	Applicable only for underlying REMIC and

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
RF-01	Trust Identifier	An identifier assigned to the trust when established into a multiclass resecuritization.		String		50	
RF-02	Class Identifier	An identifier assigned to the class when established into a multiclass resecuritization.		String		5	
RF-03	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
RF-04	Maturity Date	The month and year in which the final payment on the security is scheduled to be made at the time the security was issued.		Date	MMCCYY	6	
RF-05	Class Issuance Investor Security UPB	The unpaid principal balance of the security at the time the security was issued.		Numeric	14.2	17	
RF-06	Security Factor	The decimal value that, when multiplied by the Class Issuance Investor Security UPB amount, equals the Class Current Investor Security UPB amount.		Numeric	9.8	18	
RF-07	Class Current Investor Security UPB	The unpaid principal balance of the security as of the current reporting period.		Numeric	14.2	17	
RF-08	Interest Rate	The rate at which interest is calculated to be paid on the security during the current period.		Numeric	12.6	19	
RF-09	Interest Factor	The decimal value that, when multiplied by Class Investor Security UPB amount (for prior reporting period), equals the amount of interest paid in the current period.		Numeric	9.8	18	
RF-10	Interest Paid	The amount of interest paid in the period to the certificateholder.		Numeric	14.2	17	
RF-11	Principal Paydown Factor	The decimal value that, when multiplied by Class Investor Security UPB - Issuance amount, equals the amount of principal paid in the current period.		Numeric	9.8	18	
RF-12	Principal Paydown Amount	The amount of principal paid in the period to the certificateholder.		Numeric	14.2	17	
RF-13	Accretion Factor	The decimal value that, when multiplied by Class Investor Security UPB - Issuance, equals the amount of accrued but unpaid interest that has been added in the current period to the unpaid principal balance of the security.		String	9.8	18	
RF-14	Accretion Amount	The amount of accrued but unpaid interest that has been added in the current period to the unpaid principal balance of the security.		String	14.2	17	
RF-15	Scheduled Distribution Date	The date of the scheduled investor payment.		Date	MMCCYY	6	
RF-16	Yield Maintenance Premium/ Penalty Amount	The prepayment premium allowing investors to attain the same yield as if the borrower made all scheduled mortgage payments until maturity.		Numeric	14.2	17	Not applicable for Fannie Mae issued securities
RF-17	Notes	Additional information about the loans in the security.		String		2048	

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
SF-01	Trust Identifier	An identifier assigned to the trust when established into a multiclass resecuritization.		String		50	
SF-02	Class Identifier	An identifier assigned to the class when established into a multiclass resecuritization.		String		5	
SF-03	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SF-04	Maturity Date	The month and year in which the final payment on the security is scheduled to be made at the time the security was issued.		Date	MMCCYY	6	
SF-05	Class Issuance Investor Security UPB	The unpaid principal balance of the security at the time the security was issued.		Numeric	14.2	17	
SF-06	Security Factor	The decimal value that, when multiplied by the Class Issuance Investor Security UPB amount, equals the Class Current Investor Security UPB amount.		Numeric	9.8	18	
SF-07	Class Current Investor Security UPB	The unpaid principal balance of the security as of the current reporting period.		Numeric	14.2	17	
SF-08	Interest Rate	The rate at which interest is calculated to be paid on the security during the current period.		Numeric	12.6	19	
SF-09	Interest Factor	The decimal value that, when multiplied by Class Investor Security UPB amount (for prior reporting period), equals the amount of interest paid in the current period.		Numeric	9.8	18	
SF-10	Interest Paid	The amount of interest paid in the period to the certificateholder.		Numeric	14.2	17	
SF-11	Principal Paydown Factor	The decimal value that, when multiplied by Class Investor Security UPB - Issuance amount, equals the amount of principal paid in the current period.		Numeric	9.8	18	
SF-12	Principal Paydown Amount	The amount of principal paid in the period to the certificateholder.		Numeric	14.2	17	
SF-13	Accretion Factor	The decimal value that, when multiplied by Class Investor Security UPB - Issuance, equals the amount of accrued but unpaid interest that has been added in the current period to the unpaid principal balance of the security.		Numeric	9.8	18	
SF-14	Accretion Amount	The amount of accrued but unpaid interest that has been added in the current period to the unpaid principal balance of the security.		Numeric	14.2	17	
SF-15	Scheduled Distribution Date	The date of the scheduled investor payment.		Date	MMCCYY	6	

SF-16	Yield Maintenance Premium/ Penalty Amount	The prepayment premium allowing investors to attain the same yield as if the borrower made all scheduled mortgage payments until maturity.		Numeric	14.2	17	Not applicable for Fannie Mae issued securities
SF-17	Notes	Additional information about the loans in the security.		String		2048	Applicable only for Fannie Mae issued securities

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
CF-01	Trust Identifier	The unique alpha and/or numeric designation assigned to each deal.		String		50	
CF-02	Class Identifier	The unique alpha and/or numeric designation assigned to each sub-deal.		String		5	
CF-03	Component Identifier	The unique alpha and/or numeric designation assigned to each group in the sub-deal.		String		3	Last Character in Class in current state
CF-04	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
CF-05	Class Issuance Investor Security UPB	The unpaid principal balance of the security as of issuance at the component level.		Numeric	14.2	17	
CF-06	Security Factor	The decimal value that, when multiplied by the Class Issuance Investor Security UPB amount, equals the Class Current Investor Security UPB amount at the component level.		Numeric	9.8	18	
CF-07	Interest Rate	The rate at which interest is calculated to be paid on the security during the current period at the component level.		Numeric	12.6	19	

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
SFF-01	Trust Identifier	The unique alpha and/or numeric designation assigned to each deal.		String		50	
SFF-02	Class Identifier	The unique alpha and/or numeric designation assigned to each sub-deal.		String		5	
SFF-03	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
SFF-04	Current Shortfall Amount	The difference between the interest payments received from the underlying collateral and the interest distribution to be paid to investors in the security in the current reporting period.		Numeric	14.2	17	
SFF-05	Cumulative Shortfall Amount	The cumulative difference between the interest payments received from the underlying collateral and the interest distributions paid to investors in the security.		Numeric	14.2	17	

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Ginnie Mae Collateral Mega Factor File
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ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
GM-01	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
GM-02	Issue Date	The date on which the security was issued.		Date	MMDDCCYY	8	
GM-03	Issuance Investor Security UPB	The aggregate unpaid principal balance of the loans as they contribute to the balance of the security at the time the security was issued.		Numeric	14.2	17	
GM-04	WA Current Interest Rate	The weighted average interest rate of the loans in effect during the current reporting period.		Numeric	2.3	6	
GM-05	WA Current Remaining Months to Maturity	The weighted average number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero. *For fixed-rate loans, this value takes into account the impact of any curtailments.*		Numeric		3	
GM-06	Prefix	The designation assigned by the issuer denoting the type of the loans and the security.		String		3	
GM-07	Product	The indicator denoting the type of security.	Mega	String		4	
GM-08	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
GM-09	WA Net Interest Rate	The weighted average interest rate of the loans at the time the security was issued less servicing fees and guarantor fees.		Numeric	2.5	8	
GM-10	Maturity Date	The month and year in which the final payment on the security is scheduled to be made at the time the security was issued.		Date	MMCCYY	6	
GM-11	Security Factor	The decimal value that, when multiplied by the Issuance Investor Security UPB amount, equals the Current Investor Security UPB amount.		Numeric	1.8	10	
GM-12	WA Loan Age	The weighted average number of scheduled payments from the time the loans were originated or modified up to and including the current reporting period.		Numeric		3	
GM-13	Scheduled Distribution Date	The date of the scheduled investor payment.		Date	MMCCYY	6	
GM-14	WA Issuance Interest Rate	The weighted average interest rate of the loans in effect at the time the security was issued.		Numeric	2.3	6	
GM-15	WA Issuance Remaining Months to Maturity	The weighted average number of scheduled monthly payments that will reduce the Investor Loan UPB to zero, at the time the security was issued. *For fixed-rate loans, this value takes into account the impact of any curtailments.*		Numeric		3	

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
X-01	Trust Identifier	The unique alpha and/or numeric designation assigned to each deal.		String		50	
X-02	Class Identifier	The unique alpha and/or numeric designation assigned to each sub-deal.		String		5	
X-03	Issuer	The name of the entity that issued the security.	FNM = Fannie Mae	String		3	
X-04	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
X-05	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
X-06	Issue Date	The date on which the security was issued.		Date	MMDDCCYY	8	
X-07	WA Class Identifier	The indicator denoting the pseudo pool is a weighted average or a fixed strip percentage.	Y = Yes N = No	String		1	
X-08	WA Excess Strip Percent	The weighted average percentage of excess servicing stripped from the collateral.		Numeric	2.9	12	
X-09	Maturity Date	The month and year in which the final payment on the security is scheduled to be made at the time the security was issued.		Date	MMCCYY	6	
X-10	Updated Longest Maturity Date	The updated month and year in which the final payment on the security is scheduled to be made based on the longest maturity date of the remaining loans in the security.		Date	MMCCYY	6	
X-11	Issuance Investor Security UPB	The aggregate unpaid principal balance of the loans as they contribute to the balance of the security at the time the security was issued.		Numeric	14.2	17	
X-12	Current Investor Security UPB	The aggregate unpaid principal balance of the loans as they contribute to the current balance of the security.		Numeric	14.2	17	
X-13	WA Net Interest Rate	The weighted average interest rate of the loans at the time the security was issued less servicing fees and guarantor fees.		Numeric	2.5	8	
X-14	WA Net Interest Rate with excess contribution percent	The weighted average interest rate of the loans at the time the security was issued less servicing fees and guarantor fees, which is additionally weighted by the applicable Excess Yield Rates of those loans.		Numeric	2.3	6	
X-15	WA Issuance Interest Rate	The weighted average interest rate of the loans in effect at the time the security was issued.		Numeric	2.3	6	
X-16	WA Issuance Interest Rate with excess contribution percent	The weighted average interest rate of the loans in effect at the time the security was issued, which is additionally weighted by the applicable Excess Yield Rates of those loans.		Numeric	2.3	6	

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
X-17	WA Current Interest Rate	The weighted average interest rate of the loans in effect during the current reporting period.		Numeric	2.3	6	
X-18	WA Current Interest Rate with excess contribution percent	The weighted average interest rate of the loans in effect during the current reporting period, which is additionally weighted by the applicable Excess Yield Rates of those loans.		Numeric	2.3	6	
X-19	WA Issuance Remaining Months to Maturity	The weighted average number of scheduled monthly payments that will reduce the Investor Loan UPB to zero, at the time the security was issued. *For fixed-rate loans, this value takes into account the impact of any curtailments.*		Numeric		3	
X-20	WA Issuance Remaining Months to Maturity with excess contribution percent	The weighted average number of scheduled monthly payments that will reduce the Investor Loan UPB to zero, at the time the security was issued, which is additionally weighted by the applicable Excess Yield Rates of those loans. *For fixed-rate loans, this value takes into account the impact of any curtailments.*		Numeric		3	
X-21	WA Current Remaining Months to Maturity	The weighted average number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero. *For fixed-rate loans, this value takes into account the impact of any curtailments.*		Numeric		3	
X-22	WA Current Remaining Months to Maturity with excess contribution percent	The weighted average number of scheduled monthly payments that will reduce the Investor Loan UPB to zero, at the time the security was issued, which is additionally weighted by the applicable Excess Yield Rates of those loans. *For fixed-rate loans, this value takes into account the impact of any curtailments.*		Numeric		3	
X-23	WA Loan Age	The weighted average number of scheduled payments from the time the loans were originated or modified up to and including the current reporting period.		Numeric		3	
X-24	WA Loan Age with excess contribution percent	The weighted average number of scheduled payments from the time the loans were originated or modified up to and including the current reporting period, which is additionally weighted by the applicable Excess Yield Rates of those loans.		Numeric		3	
X-25	WA Loan Term	The weighted average number of months in which regularly scheduled borrower payments are due.		Numeric		3	

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
X-26	WA Loan Term with excess contribution percent	The weighted average number of months in which regularly scheduled borrower payments are due, which is additionally weighted by the applicable Excess Yield Rates of those loans.		Numeric	3	3	
X-27	WA Mortgage Loan Amount	The weighted average dollar amount of the loans as stated on the notes at the time the loans were originated or modified. *For reperforming, modified fixed-rate and modified step-rate loans, this value represents both the interest bearing and non-interest bearing amount.*		Numeric	9.2	12	
X-28	WA Mortgage Loan Amount with excess contribution percent	The weighted average dollar amount of the loans as stated on the notes at the time the loans were originated or modified, which is additionally weighted by the applicable Excess Yield Rates of those loans. *For performing, modified fixed-rate and modified step-rate loans, this value represents both the interest bearing and non-interest bearing amount.*		Numeric	9.2	12	
X-29	Average Mortgage Loan Amount	The simple average dollar amount of the loans as stated on the notes at the time the loans were originated or modified. *For reperforming, modified fixed-rate and modified step-rate loans, this value represents both the interest bearing and non-interest bearing amount.*		Numeric	9.2	12	
X-30	WA Loan-To-Value (LTV)	The weighted average ratio, expressed as a percentage, obtained by dividing the amount of the loans at origination by the value of the properties. Property value reflects either the lesser of the sales price or the appraised property value for a purchase, or the appraised property value for a refinance. *For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.*		Numeric		3	

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
X-31	WA Loan-To-Value (LTV) with excess contribution percent	The weighted average ratio, expressed as a percentage, obtained by dividing the amount of the loans at origination by the value of the properties, which is additionally weighted by the applicable Excess Yield Rates of those loans. Property value reflects either the lesser of the sales price or the appraised property value for a purchase, or the appraised property value for a refinance. *For performing, modified fixed-rate and modified step-rate loans, this value will be blank.*		Numeric		3	
X-32	WA Combined Loan-To-Value (CLTV)	The weighted average ratio, expressed as a percentage, obtained by dividing the amount of all known outstanding loans at origination by the value of the properties. Property value reflects either the lesser of the sales price or the appraised property value for a purchase, or the appraised property value for a refinance. *For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.*		Numeric		3	
X-33	WA Combined Loan-To-Value (CLTV) with excess contribution percent	The weighted average ratio, expressed as a percentage, obtained by dividing the amount of all known outstanding loans at origination by the value of the properties, which is additionally weighted by the applicable Excess Yield Rates of those loans. Property value reflects either the lesser of the sales price or the appraised property value for a purchase, or the appraised property value for a refinance. *For performing, modified fixed-rate and modified step-rate loans, this value will be blank.*		Numeric		3	
X-34	WA Debt-To-Income (DTI)	The weighted average ratio obtained by dividing the total monthly debt expenses by the total monthly incomes of the borrowers at the time the loans were originated or modified.		Numeric		3	
X-35	WA Debt-To-Income (DTI) with excess contribution percent	The weighted average ratio obtained by dividing the total monthly debt expenses by the total monthly incomes of the borrowers at the time the loans were originated or modified, which is additionally weighted by the applicable Excess Yield Rates of those loans.		Numeric		3	

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
X-36	WA Borrower Credit Score	The weighted average standardized credit score used to evaluate the borrower during the loan origination process. *For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.*		Numeric		4	
X-37	WA Borrower Credit Score with excess contribution percent	The weighted average standardized credit score used to evaluate the borrower during the loan origination process, which is additionally weighted by the applicable Excess Yield Rates of those loans. *For performing, modified fixed-rate and modified step-rate loans, this value will be blank.*		Numeric		4	
X-38	Loan Count	The total number of loans in the security.		Numeric		9	
X-39	Third Party Origination UPB Percent	The percentage of the aggregate Investor Loan UPB that were originated by a third party, to include Broker and Correspondent originations.		Numeric	3.2	6	
X-40	Seller Name	The name of the entity that sold the loans to the issuer.		String		100	
X-41	Servicer Name	The name of the entity that services the loan during the current reporting period.		String		100	
X-42	Delinquent Loans Purchased (Loan Count)	The number of loans that were purchased from the security due to delinquency status during the current reporting period.		Numeric		9	Applicable only for Monthly Disclosure
X-43	Delinquent Loans Purchased (Prior Month UPB)	The aggregate prior period Investor Loan UPB of the loans that were purchased from the security due to delinquency status during the current reporting period.		Numeric	14.2	17	Applicable only for Monthly Disclosure
X-44	Security Factor Date	The month and year on which the corresponding factor is effective.		Date	MMCCYY	6	
X-45	Notes	Additional information about the loans in the security.		String		2048	

Fannie Mae Disclosure Technical Specification
for Multiclass Securities
Fannie Mae Excess Servicing Fee Security Supplemental Record Type File
Version 1.0 - September 2018

Security Supplemental File Record Type Description			
Record Type #	Record Type Description	Record Type #	Record Type Description
1	Deciles	11	Number of Units Stratification
2	Loan-To-Value (LTV) Not Available Stratification	12	Property Type Stratification
3	Combined Loan-To-Value (CLTV) Not Available Stratification	13	Channel Stratification
4	Debt-To-Income (DTI) Not Available Stratification	14	Property State Stratification
5	Borrower Credit Score Not Available Stratification	15	Seller Name Stratification
6	Days Delinquent Stratification	16	Servicer Name Stratification
7	Number of Borrowers Stratification	17	Mortgage Insurance Coverage Stratification
8	First Time Home Buyer Stratification	18	Mortgage Insurance Cancellation Indicator Stratification
9	Loan Purpose Stratification	19	Government Insured/Guarantee Stratification
10	Occupancy Status Stratification	20	Origination Year Stratification

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
XI-01	Record Type = 1	Deciles		String		2	
XI-02	Trust Identifier	The unique alpha and/or numeric designation assigned to each deal.		String		50	
XI-03	Class Identifier	The unique alpha and/or numeric designation assigned to each sub-deal.		String		5	
XI-04	Issuer	The name of the entity that issued the security.	FNM = Fannie Mae	String		3	
XI-05	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
XI-06	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
XI-07	Decile	Based on the Current Investor UPB for all of the active loans in a security, distributed across the following decile data points: MIN, 10%, 20%, 30%, 40%, MED, 60%, 70%, 80%, 90%. MAX	MAX 90 80 70 60 MED 40 30 20 10 MIN	String		3	
XI-08	Mortgage Loan Amount	The dollar amount of the loan as stated on the note at the time the loan was originated or modified. *For reperforming, modified fixed-rate and modified step-rate loans, this value represents both the interest bearing and non-interest bearing amount.*		Numeric	9.2	17	
XI-09	Interest Rate	The interest rate of the loan in effect during the current reporting period.		Numeric	2.3	6	
XI-10	Current Net Interest Rate	The interest rate of the loan in effect during the current reporting period less servicing fees and guarantor fees.		Numeric	2.3	6	
XI-11	Loan Term	The number of months in which regularly scheduled borrower payments are due.		Numeric		3	
XI-12	Remaining Months to Maturity	The number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero. *For fixed-rate loans, this value takes into account the impact of any curtailments.*		Numeric		3	
XI-13	Loan Age	The number of scheduled payments from the time the loan was originated and modified up to and including the current reporting period.		Numeric		4	

XI-14	Loan-To-Value (LTV)	The ratio, expressed as a percentage, obtained by dividing the amount of the loan at origination by the value of the property. *Property value reflects either the lesser of the sales price or the appraised property value for a purchase, or the appraised property value for a refinance.* *For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.*		Numeric		3	
XI-15	Combined Loan-To-Value (CLTV)	The ratio, expressed as a percentage, obtained by dividing the amount of all known outstanding loans at origination by the value of the property. *Property value reflects either the lesser of the sales price or the appraised property value for a purchase, or the appraised property value for a refinance.* *For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.*		Numeric		3	
XI-16	Debt-To-Income (DTI)	The ratio obtained by dividing the total monthly debt expense by the total monthly income of the borrower at the time the loan was originated or modified.		Numeric		3	
XI-17	Borrower Credit Score	The standardized credit score used to evaluate the borrower during the loan origination process. *For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.*		Numeric		4	

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
XI-18	Record Type = 2	Loan-To-Value (LTV) Not Available Stratification *For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.*		String		2	Applicable only if security characteristics apply.
XI-19	Trust Identifier	The unique alpha and/or numeric designation assigned to each deal.		String		50	
XI-20	Class Identifier	The unique alpha and/or numeric designation assigned to each sub-deal.		String		5	
XI-21	Issuer	The name of the entity that issued the security.	FNM = Fannie Mae	String		3	
XI-22	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
XI-23	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
XI-24	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
XI-25	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
XI-26	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
XI-27	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
XI-28	Record Type = 3	Combined Loan-To-Value (CLTV) Not Available Stratification *For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.*		String		2	Applicable only if security characteristics apply.
XI-29	Trust Identifier	The unique alpha and/or numeric designation assigned to each deal.		String		50	
XI-30	Class Identifier	The unique alpha and/or numeric designation assigned to each sub-deal.		String		5	
XI-31	Issuer	The name of the entity that issued the security.	FNM = Fannie Mae	String		3	
XI-32	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
XI-33	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
XI-34	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
XI-35	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
XI-36	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
XI-37	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
XI-38	Record Type = 4	Debt-To-Income (DTI) Not Available Stratification		String		2	Applicable only if security characteristics apply.
XI-39	Trust Identifier	The unique alpha and/or numeric designation assigned to each deal.		String		50	

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
XI-40	Class Identifier	The unique alpha and/or numeric designation assigned to each sub-deal.		String		5	
XI-41	Issuer	The name of the entity that issued the security.	FNM = Fannie Mae	String		3	
XI-42	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
XI-43	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
XI-44	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
XI-45	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
XI-46	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
XI-47	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	
ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
XI-48	Record Type = 5	Borrower Credit Score Not Available Stratification		String		2	Applicable only if security characteristics apply.
XI-49	Trust Identifier	The unique alpha and/or numeric designation assigned to each deal.		String		50	
XI-50	Class Identifier	The unique alpha and/or numeric designation assigned to each sub-deal.		String		5	
XI-51	Issuer	The name of the entity that issued the security.	FNM = Fannie Mae	String		3	
XI-52	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
XI-53	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
XI-54	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
XI-55	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
XI-56	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
XI-57	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
XI-58	Record Type = 6	Days Delinquent Stratification		String		2	Applicable only for monthly disclosure
XI-59	Trust Identifier	The unique alpha and/or numeric designation assigned to each deal.		String		50	
XI-60	Class Identifier	The unique alpha and/or numeric designation assigned to each sub-deal.		String		5	
XI-61	Issuer	The name of the entity that issued the security.	FNM = Fannie Mae	String		3	
XI-62	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
XI-63	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
XI-64	Days Delinquent	The number of days for which a mortgage loan has been reported delinquent.	1 = 30-59 2 = 60-89 3 = 90-119 4 = 120+	String		1	
XI-65	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
XI-66	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
XI-67	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
XI-68	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
XI-69	Record Type = 7	Number of Borrowers Stratification		String		2	
XI-70	Trust Identifier	The unique alpha and/or numeric designation assigned to each deal.		String		50	
XI-71	Class Identifier	The unique alpha and/or numeric designation assigned to each sub-deal.		String		5	
XI-72	Issuer	The name of the entity that issued the security.	FNM = Fannie Mae	String		3	
XI-73	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
XI-74	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
XI-75	Number of Borrowers	The number of borrowers who, at the time the loan is originated, are obligated to repay the loan.	1 2 > 2 99 = Not Available	String		2	
XI-76	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
XI-77	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
XI-78	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
XI-79	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
XI-80	Record Type = 8	First Time Home Buyer Stratification		String		2	
XI-81	Trust Identifier	The unique alpha and/or numeric designation assigned to each deal.		String		50	
XI-82	Class Identifier	The unique alpha and/or numeric designation assigned to each sub-deal.		String		5	
XI-83	Issuer	The name of the entity that issued the security.	FNM = Fannie Mae	String		3	
XI-84	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
XI-85	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
XI-86	First Time Home Buyer	The indicator denoting whether a borrower on the loan qualifies as a first-time homebuyer.	Y = Yes N = No 9 = Not Available	String		1	
XI-87	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
XI-88	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
XI-89	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
XI-90	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
XI-91	Record Type = 9	Loan Purpose Stratification		String		2	
XI-92	Trust Identifier	The unique alpha and/or numeric designation assigned to each deal.		String		50	
XI-93	Class Identifier	The unique alpha and/or numeric designation assigned to each sub-deal.		String		5	
XI-94	Issuer	The name of the entity that issued the security.	FNM = Fannie Mae	String		3	
XI-95	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
XI-96	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	

XI-97	Loan Purpose	The classification describing the purpose of the loan.	C = Refinance - Cash Out N = Refinance - No Cash Out R = Refinance - Not Specified P = Purchase M = Modified - Loss Mitigation 9 = Not Available	String		1	
XI-98	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
XI-99	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
XI-100	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
XI-101	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
XI-102	Record Type = 10	Occupancy Status Stratification		String		2	
XI-103	Trust Identifier	The unique alpha and/or numeric designation assigned to each deal.		String		50	
XI-104	Class Identifier	The unique alpha and/or numeric designation assigned to each sub-deal.		String		5	
XI-105	Issuer	The name of the entity that issued the security.	FNM = Fannie Mae	String		3	
XI-106	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
XI-107	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
XI-108	Occupancy Status	The classification describing the property occupancy status at the time the loan was originated. *For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.*	P = Primary Residence S = Second Home I = Investment Property 9 = Not Available	String		1	
XI-109	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
XI-110	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
XI-111	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
XI-112	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
XI-113	Record Type = 11	Number of Units Stratification		String		2	

XI-114	Trust Identifier	The unique alpha and/or numeric designation assigned to each deal.		String		50	
XI-115	Class Identifier	The unique alpha and/or numeric designation assigned to each sub-deal.		String		5	
XI-116	Issuer	The name of the entity that issued the security.	FNM = Fannie Mae	String		3	
XI-117	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
XI-118	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
XI-119	Number of Units	The number of dwelling units in the mortgaged property at the time the loan was originated.	1 = 1 2 = 2 3 = 3 4 = 4 99 = Not Available	Numeric		2	
XI-120	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
XI-121	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
XI-122	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
XI-123	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
XI-124	Record Type = 12	Property Type Stratification		String		2	
XI-125	Trust Identifier	The unique alpha and/or numeric designation assigned to each deal.		String		50	
XI-126	Class Identifier	The unique alpha and/or numeric designation assigned to each sub-deal.		String		5	
XI-127	Issuer	The name of the entity that issued the security.	FNM = Fannie Mae	String		3	
XI-128	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
XI-129	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
XI-130	Property Type	The classification describing the type of property that secures the loan.	CP = Cooperative CO = Condominium PU = Planned Unit Development SF = Single-Family MH = Manufactured Housing 99 = Not Available	String		2	
XI-131	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
XI-132	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
XI-133	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
XI-134	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
XI-135	Record Type = 13	Channel Stratification		String		2	
XI-136	Trust Identifier	The unique alpha and/or numeric designation assigned to each deal.		String		50	
XI-137	Class Identifier	The unique alpha and/or numeric designation assigned to each sub-deal.		String		5	
XI-138	Issuer	The name of the entity that issued the security.	FNM = Fannie Mae	String		3	
XI-139	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
XI-140	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
XI-141	Channel	The origination channel used by the party that delivered the loan to the issuer. *For reperforming, modified fixed-rate and modified step-rate loans, this value will be blank.*	R = Retail B = Broker C = Correspondent T = Third Party Origination - Not Specified 9 = Not Available	String		1	
XI-142	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
XI-143	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
XI-144	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
XI-145	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
XI-146	Record Type = 14	Property State Stratification		String		2	
XI-147	Trust Identifier	The unique alpha and/or numeric designation assigned to each deal.		String		50	
XI-148	Class Identifier	The unique alpha and/or numeric designation assigned to each sub-deal.		String		5	
XI-149	Issuer	The name of the entity that issued the security.	FNM = Fannie Mae	String		3	
XI-150	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
XI-151	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	

XI-152	Property State	The abbreviation denoting the location of the property securing the loan.	See Appendix A	String		2	
XI-153	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
XI-154	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
XI-155	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
XI-156	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
XI-157	Record Type = 15	Seller Name Stratification		String		2	
XI-158	Trust Identifier	The unique alpha and/or numeric designation assigned to each deal.		String		50	
XI-159	Class Identifier	The unique alpha and/or numeric designation assigned to each sub-deal.		String		5	
XI-160	Issuer	The name of the entity that issued the security.	FNM = Fannie Mae	String		3	
XI-161	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
XI-162	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
XI-163	Seller Name	The name of the entity that sold the loan to the issuer.		String		100	Will not be updated after issuance, regardless of mergers/acquisitions
XI-164	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
XI-165	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
XI-166	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
XI-167	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	
XI-168	Minimum Loan Age	For the stratified attribute, the minimum number of scheduled payments from the time the loan was originated or modified up to and including the current reporting period.		Numeric		3	
XI-169	Maximum Loan Age	For the stratified attribute, the maximum number of scheduled payments from the time the loan was originated or modified to and including the current reporting period.		Numeric		3	
XI-170	Minimum Interest Rate	For the stratified attribute, the minimum interest rate of the loan in effect during the current reporting period.		Numeric	2.3	6	

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
XI-171	Maximum Interest Rate	For the stratified attribute, the maximum interest rate of the loan in effect during the current reporting period.		Numeric	2.3	6	
XI-172	Minimum Remaining Months to Maturity	For the stratified attribute, the minimum number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero.		Numeric		3	
XI-173	Maximum Remaining Months to Maturity	For the stratified attribute, the maximum number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero.		Numeric		3	

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
XI-174	Record Type = 16	Servicer Name Stratification		String		2	
XI-175	Trust Identifier	The unique alpha and/or numeric designation assigned to each deal.		String		50	
XI-176	Class Identifier	The unique alpha and/or numeric designation assigned to each sub-deal.		String		5	
XI-177	Issuer	The name of the entity that issued the security.	FNM = Fannie Mae	String		3	
XI-178	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
XI-179	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
XI-180	Servicer Name	The name of the entity that services the loan during the current reporting period. *Will reflect servicer names contributing > 1% of the Current Investor Security UPB.*	<1%	String		100	Servicer names contributing < 1% of the Current Investor Security UPB will be aggregated and reflected in the < 1% enumeration
XI-181	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
XI-182	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
XI-183	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
XI-184	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	
XI-185	Minimum Loan Age	For the stratified attribute, the minimum number of scheduled payments from the time the loan was originated or modified up to and including the current reporting period.		Numeric		3	
XI-186	Maximum Loan Age	For the stratified attribute, the maximum number of scheduled payments from the time the loan was originated or modified up to and including the current reporting period.		Numeric		3	
XI-187	Minimum Interest Rate	For the stratified attribute, the minimum interest rate of the loan in effect during the current reporting period.		Numeric	2.3	6	
XI-188	Maximum Interest Rate	For the stratified attribute, the maximum interest rate of the loan in effect during the current reporting period.		Numeric	2.3	6	
XI-189	Minimum Remaining Months to Maturity	For the stratified attribute, the minimum number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero.		Numeric		3	
XI-190	Maximum Remaining Months to Maturity	For the stratified attribute, the maximum number of scheduled monthly payments that will reduce the Current Investor Loan UPB to zero.		Numeric		3	

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
XI-191	Record Type = 17	Mortgage Insurance Coverage Stratification		String		2	
XI-192	Trust Identifier	The unique alpha and/or numeric designation assigned to each deal.		String		50	
XI-193	Class Identifier	The unique alpha and/or numeric designation assigned to each sub-deal.		String		5	
XI-194	Issuer	The name of the entity that issued the security.	FNM = Fannie Mae	String		3	
XI-195	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
XI-196	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
XI-197	Mortgage Insurance Coverage	The mortgage insurance coverage in effect at the time the security was issued.	WITHMI = Loans With Mortgage Insurance NOMI = Loans Without Mortgage Insurance 99 = Not Available	String		6	
XI-198	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
XI-199	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
XI-200	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
XI-201	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
XI-202	Record Type = 18	Mortgage Insurance Cancellation Indicator Stratification		String		2	
XI-203	Trust Identifier	The unique alpha and/or numeric designation assigned to each deal.		String		50	
XI-204	Class Identifier	The unique alpha and/or numeric designation assigned to each sub-deal.		String		5	
XI-205	Issuer	The name of the entity that issued the security.	FNM = Fannie Mae	String		3	
XI-206	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
XI-207	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
XI-208	Mortgage Insurance Cancellation Indicator	The indicator denoting whether the mortgage insurance has been cancelled after the security was issued.	Y = Yes N = No 7 = Not Applicable	String		1	
XI-209	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
XI-210	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
XI-211	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
XI-212	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
XI-213	Record Type = 19	Government Insured/Guarantee Stratification		String		2	Applicable only to Government Insured/Guarantee loans.
XI-214	Trust Identifier	The unique alpha and/or numeric designation assigned to each deal.		String		50	
XI-215	Class Identifier	The unique alpha and/or numeric designation assigned to each sub-deal.		String		5	

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
XI-216	Issuer	The name of the entity that issued the security.	FNM = Fannie Mae	String		3	
XI-217	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
XI-218	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
XI-219	Government Insured/Guarantee	The classification describing the Government Insured/Guarantee Program, if any, covering the loan.	FH = FHA VA = Veterans Affair RH = Rural Housing IH = Section 184 Indian Home 99 = Not Available	String		2	
XI-220	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
XI-221	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
XI-222	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
XI-223	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
XI-224	Record Type = 20	Origination Year Stratification		String		2	
XI-225	Trust Identifier	The unique alpha and/or numeric designation assigned to each deal.		String		50	
XI-226	Class Identifier	The unique alpha and/or numeric designation assigned to each sub-deal.		String		5	
XI-227	Issuer	The name of the entity that issued the security.	FNM = Fannie Mae	String		3	
XI-228	CUSIP	The unique designation assigned to the security by the Committee on Uniform Securities Identification Procedures (CUSIP).		String		9	
XI-229	Security Identifier	The unique designation assigned to the security by the issuer.		String		6	
XI-230	Origination Year	The year of origination of the loans in the security.		Date	CCYY	4	
XI-231	Aggregate Investor Loan UPB	For the stratified attribute, the sum of the Investor Loan UPB for the loans in the security.		Numeric	14.2	17	
XI-232	Percentage Investor Loan UPB	For the stratified attribute, the percentage of the Investor Loan UPB for the loans in the security.		Numeric	3.2	6	
XI-233	Aggregate Loan Count	For the stratified attribute, the total number of loans in the security.		Numeric		9	
XI-234	Percentage Loan Count	For the stratified attribute, the percentage of loans in the security.		Numeric	3.2	6	

ID	Attribute Name	Attribute Definition	Enumerations	Data Type	Format	Max Length	Implementation Notes
FI-01	Index	The index code on which adjustments to the interest rate are based.		String		10	
FI-02	Index Value	The value of the index on which adjustments to the interest rate are based.		Numeric	2.5	8	
FI-03	Index Description	The description of the index on which adjustments to the interest rate are based.		String		50	

Property State Code Enumerations			
Enumeration	Enumeration Name	Enumeration	Enumeration Name
AK	Alaska	MO	Missouri
AL	Alabama	MS	Mississippi
AR	Arkansas	MT	Montana
AZ	Arizona	NC	North Carolina
CA	California	ND	North Dakota
CO	Colorado	NE	Nebraska
CT	Connecticut	NH	New Hampshire
DC	District of Columbia	NJ	New Jersey
DE	Delaware	NM	New Mexico
FL	Florida	NV	Nevada
GA	Georgia	NY	New York
GU	Guam	OH	Ohio
HI	Hawaii	OK	Oklahoma
IA	Iowa	OR	Oregon
ID	Idaho	PA	Pennsylvania
IL	Illinois	PR	Puerto Rico
IN	Indiana	RI	Rhode Island
KS	Kansas	SC	South Carolina
KY	Kentucky	SD	South Dakota
LA	Louisiana	TN	Tennessee
MA	Massachusetts	TX	Texas
MD	Maryland	UT	Utah
ME	Maine	VA	Virginia
MI	Michigan	VI	Virgin Islands
MN	Minnesota	VT	Vermont
MO	Missouri	WA	Washington
MS	Mississippi	WI	Wisconsin
MT	Montana	WV	West Virginia
NC	North Carolina	WY	Wyoming