

## Understanding the Impact of Mortgage Insurance Coverage on Credit Risk Transfer

Fannie Mae has a longstanding practice of sharing credit risk associated with high loan-to-value (LTV) ratio mortgage loans with its mortgage insurance partners through primary mortgage insurance (MI). Primary MI is loan-level coverage that is designed to compensate mortgage investors for credit losses due to borrower default on a mortgage loan<sup>1</sup>.

In 2013, we launched our Connecticut Avenue Securities® (CAS) and Credit Insurance Risk Transfer™ (CIRT™) credit risk transfer (CRT) programs, adding to our suite of credit risk-sharing vehicles. Investors in these programs are subject to credit losses should the referenced loans default; in the case of CRT transactions that reference high LTV loans, investors may benefit from MI coverage that reduces the severity of these credit losses. In order to help investors quantify the benefit of MI coverage on their investments, Fannie Mae provides a comprehensive [dataset on historical loan performance](#).

This commentary provides guidance on how to use the dataset to analyze the historical benefit of MI coverage, also known as MI proceeds. Historical trends may be helpful to help inform expectations of MI benefits for insured loans that are referenced in CRT transactions. For this purpose, we walk investors through potential calculations for:

1. Their total exposure to credit losses related to a defaulted loan.
2. The amount of credit losses eligible to be submitted to the MI provider as a claim, also referred to as the Claim Amount.
3. Expected MI proceeds depending on the type of claim outcome.

In addition, we provide insights into MI claim settlement trends. Terms that are underlined throughout this commentary are defined in the commentary [Glossary](#).

Investors in CAS and CIRT transactions that reference high LTV loans benefit from MI coverage, which reduces the severity of credit losses.

This commentary provides guidance on how to use the historical dataset to calculate the benefit of MI coverage and provides insights into MI claim settlement trends identified in Fannie Mae's Single-Family Historical Loan Performance Dataset.

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<sup>1</sup> Fannie Mae's Charter requires credit enhancement for any loan with a loan-to-value (LTV) ratio of 80 percent or more at the time of acquisition by Fannie Mae.



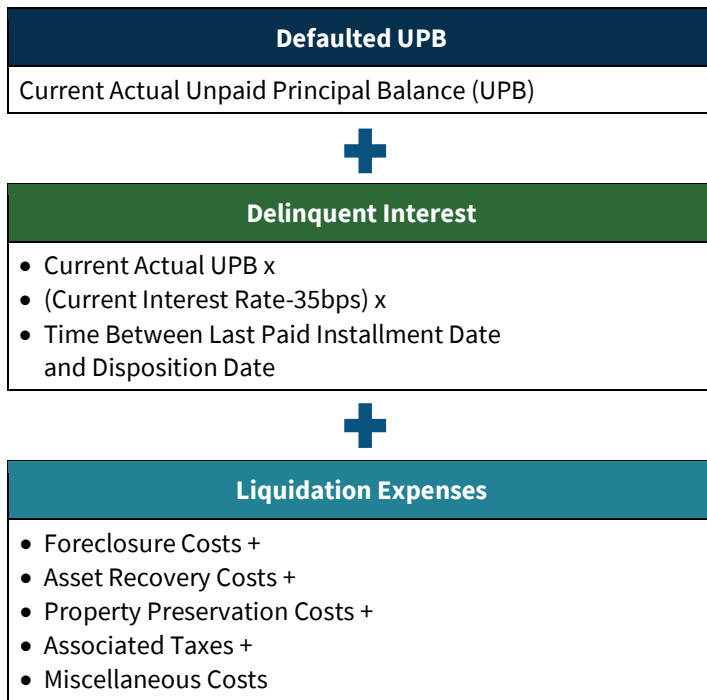
## Calculating Total Loss Exposure

From the perspective of a CRT investor, the total exposure to credit losses related to a defaulted loan is composed of:

1. **Defaulted unpaid principal balance (UPB):** The total balance of unpaid principal, including any amounts forgiven as a result of loss mitigation efforts.
2. **Delinquent interest:** The total accrued interest at the current accrual rate from the time of borrower default through the earliest of (1) short sale, (2) third-party sale, (3) REO property sale, (4) note sale, or (5) charge-off. The current accrual rate is the mortgage rate less 35 basis points.
3. **Liquidation expenses:** The sum of all expenses incurred by the servicer in connection with the liquidation of the loan and/or REO property.

Using the historical dataset, investors can calculate total loss exposure in **Exhibit 1** below.

### Exhibit 1: Calculation of Total Loss Exposure Using Fields in Historical Dataset



## Calculating the MI Claim Amount

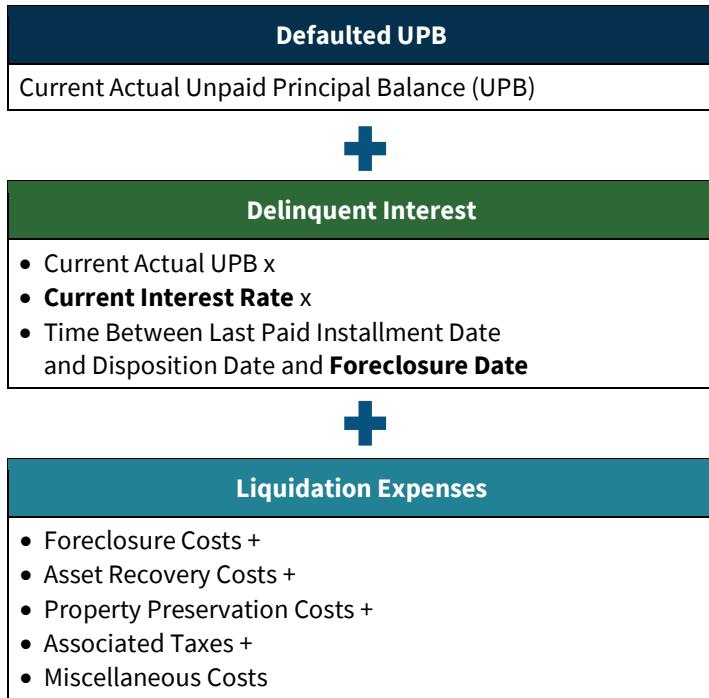
The terms of coverage for loans with MI are governed by a contract called the master policy, which sets time limits and caps on the delinquent interest and expenses eligible for coverage. Master policies are unique to each mortgage insurer but must adhere to standardized requirements promulgated by Fannie Mae. In recent years, Fannie Mae worked with the mortgage insurance industry to modernize and strengthen the pre-existing MI framework. The most recent master policies, which went into effect in October 2014, established clear timelines for claims processing and clarified the conditions of coverage, enhancing the protection that MI provides against credit losses.

When a mortgage carrying an active MI policy defaults, the servicer submits a claim to the MI provider in the amount of the eligible loss incurred on the defaulted loan. In most cases, the claim must be submitted within 60 days of foreclosure completion, and, generally, only expenses incurred through the submission of the MI claim are eligible for coverage under the new master policies.

Investors can estimate the Claim Amount as illustrated in **Exhibit 2** below.



## Exhibit 2: Estimation of MI Claim Amount Using Fields in Historical Dataset



The primary drivers of the difference between total loss exposure and the MI Claim Amount are (1) limits on the amount of time that delinquent interest can accrue and (2) eligibility and capping of liquidation expenses.

To address the first point, investors may want to consider making the following adjustments to the total loss exposure formula in order to estimate the Claim Amount:

1. Accrue delinquent interest between the Last Paid Installment (LPI) Date and the Foreclosure Date rather than the Disposition Date.<sup>2</sup>
2. Accrue delinquent interest at the full mortgage rate.

These interest adjustments produce an estimated Claim Amount that is on average 1.7 percent lower than total loss exposure. This haircut has been smaller in more recent origination vintages due to shorter resolution timelines between foreclosure completion and property disposition and lower mortgage interest rates.

To address the second point, investors should be aware that the liquidation expense fields in the historical dataset (e.g., Property Preservation Costs, Associated Taxes) reflect the total expenses incurred through property disposition (rather than just through claim submission), as well as expenses that may not be covered under the master policy or are subject to a cap. Such costs include MI premiums and repairs of physical damage to the property.<sup>3</sup> As a result, using the historical dataset may overstate the MI Claim Amount. Historically, the actual Claim Amount that was submitted to the MI provider – which should include only eligible losses – has been an average of 4.6 percent lower than the estimate calculated using the historical dataset in the manner described above.<sup>4</sup>

<sup>2</sup> MI master policies cap the amount of delinquent interest eligible for coverage at 36 months from loan default, even if foreclosure has not yet been completed. If the foreclosure process takes longer than 36 months, the Claim Amount should include a maximum of 36 months of delinquent interest. Separately, MI master policies cover delinquent interest through claim submission, which can occur up to 60 days after foreclosure completion, so investors may consider adding 60 days to the foreclosure date when calculating accrued delinquent interest.

<sup>3</sup> It is the servicer's responsibility to adjust the claim it submits to the MI Provider to exclude ineligible/capped costs. As we will discuss later in the commentary, the MI Provider may find that the servicer erroneously included ineligible costs in the MI claim; these would be subject to [curtailment/disallowance](#).

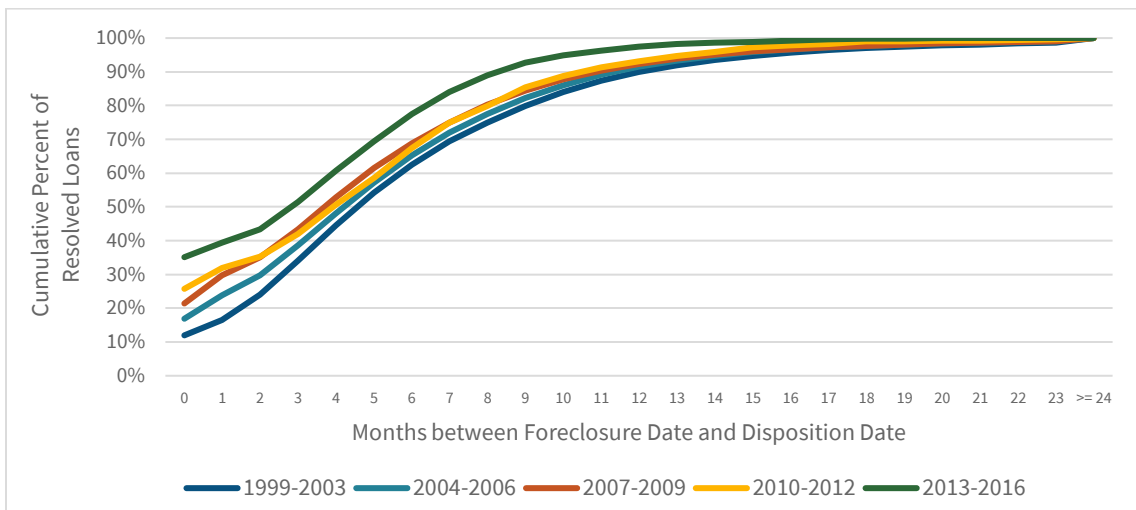
<sup>4</sup> Source: Fannie Mae internal reporting.



## Understanding the Impact of Disposition Timelines on MI Coverage

As the previous section suggests, to the extent that there is a significant lag between (1) the completion of foreclosure and subsequent submission of the MI claim and (2) the ultimate disposition of the REO property, there may be a mismatch between the loss coverage under the MI policy and the exposure of CRT investors. This timing mismatch has affected a smaller share of defaulted loans that have been resolved from recent origination vintages compared to older vintages. As illustrated in **Exhibit 3** below, fewer loans have experienced a lag between foreclosure completion and property disposition. Although this analysis only accounts for loans that have been resolved, a strong housing market could theoretically continue to support shorter resolution timelines.

**Exhibit 3: Cumulative Resolutions by Disposition Timeline and Origination Year Cohort**



Note: Shown for all loans with original LTV greater than 80 percent with an MI policy at origination, independent of whether the MI was in place at time of default. We exclude loans that were disposed through a note sale, as CRT investors would not receive MI proceeds. Loans resolved via short sale are included here even if there was no foreclosure; the foreclosure date field is populated with the sale date.

As the portion of loans resolved via short sale/third-party sale has increased and disposition timelines have shortened, the portion of total loss exposure composed of variable costs, such as delinquent interest, has declined (**Exhibit 4**).

**Exhibit 4: Components of Total Loss Exposure by Origination Vintage**

	Origination Vintage				
	1999-2003	2004-2006	2007-2009	2010-2012	2013-2016
<b>% Short Sale/Third-Party Sale</b>	15%	23%	29%	32%	39%
<b>% REO Property Sale</b>	85%	77%	71%	68%	61%
<b>WA Months Foreclosure to Disposition</b>	6.2	5.5	5.0	4.9	3.8
<b>Defaulted Balance</b>	81%	82%	84%	86%	87%
<b>Delinquent Interest</b>	9%	9%	9%	5%	5%
<b>Foreclosure Cost</b>	4%	3%	2%	2%	3%
<b>Property Preservation Cost</b>	3%	2%	2%	3%	3%
<b>Asset Recovery Cost</b>	0%	0%	0%	1%	0%
<b>Misc. Costs</b>	1%	1%	1%	1%	1%
<b>Associated Taxes</b>	2%	2%	2%	2%	2%
<b>Total Loss Exposure</b>	100%	100%	100%	100%	100%

Note: Shown for all loans with original LTV greater than 80 percent with an MI policy at origination, independent of whether the MI was in place at time of default. We exclude loans that were disposed through a note sale, as CRT investors would not receive MI proceeds. Loans resolved via short sale are included here even if there was no foreclosure; the foreclosure date field is populated with the sale date.



## Calculating Expected MI proceeds Depending on the Type of Claim Outcome

Investors can use the MI Claim Amount estimated in the manner described in Exhibit 2 above to calculate the expected MI proceeds, also known as the MI benefit. An MI provider may settle a claim in a number of ways, and the expected MI proceeds depend on the method used to settle the claim. In the historical dataset, the payments received from MI policy claims are recognized in the *Credit Enhancement (CE) Proceeds* field. The primary claim outcomes are listed below, along with a summary of the implications for investors and the relevant historical data fields to support the estimated MI proceeds calculation. Our taxonomy is not perfect but some parties may find it helpful for analyzing the publicly available data:

1. **The Percentage Option:** Historically, this has been the most prevalent option used by MI providers to settle a claim. Under this option, the MI provider elects to pay an amount equal to the MI Claim Amount multiplied by the applicable coverage percentage. MI policies cover a percentage of the Claim Amount based on the LTV ratio and product type of the loan, as prescribed by Fannie Mae's *Selling Guide*. All loans with MI are covered at a specific coverage level. Generally, loans with higher LTV ratios at origination require higher levels of MI coverage (**Exhibit 5**). Subject to Fannie Mae requirements, the MI coverage percentage may vary at the loan level for a variety of reasons; therefore, it is important to reference the actual coverage percentage for a given loan, as reported in the historical dataset.

### Exhibit 5: MI Coverage Levels by LTV Ratio and Program

LTV Range	Charter Min Coverage	Standard MI Coverage	HomeReady MI Coverage
95.01 – 97.00%	18.0%	35.0%	25.0%
90.01 – 95.00%	16.0%	30.0%	25.0%
85.01 – 90.00%	12.0%	25.0%	25.0%
80.01 – 85.00%	6.0%	12.0%	12.0%

Note: Coverage levels shown for fixed-rate loans with original term > 20 years. Fixed-rate loans with original term ≤ 20 years have lower requirements.

Claim Outcome	Implications for Investors	Estimated MI Proceeds Calculation/ Relevant Historical Data Fields
<b>Percentage Option</b>	CRT investors sustain any net loss after taking into account the MI proceeds and the portion of any losses borne by Fannie Mae in applicable CRT deals.	<i>MI coverage percentage</i> x Estimated Claim Amount (as calculated in <b>Exhibit 2</b> ).

2. **Property Sale:** Fannie Mae may receive an offer on a defaulted property prior to the submission and/or settlement of an MI claim; for instance, at the foreclosure auction. If Fannie Mae approves the sale, the MI provider's obligation under this option is the actual loss incurred, subject to eligibility and not to exceed the amount that would be due under the Percentage Option. This option is generally exercised if a purchase offer is accepted prior to the settlement due date.

Claim Outcome	Implications for Investors	Estimated MI Proceeds Calculation/ Relevant Historical Data Fields
<b>Property Sale</b>	Historically, loans that have been settled using the Property Sale Option have experienced de minimis losses in the amount of costs ineligible for MI coverage.	Estimated Claim Amount (as calculated in <b>Exhibit 2</b> ) – <i>Net Sales Proceeds</i> – <i>Repurchase/Make Whole Proceeds</i> – <i>Other Proceeds</i> .



3. **Conveyance:** An MI provider may opt to acquire the property from Fannie Mae by paying the Claim Amount subject to limits on expenses. An MI provider may find this option most attractive when it believes that it will be able to mitigate losses and/or liquidate a property more efficiently than Fannie Mae. This option must be exercised within a limited time window from the filing of an MI claim and rarely occurs in the historical dataset.

Claim Outcome	Implications for Investors	Estimated MI Proceeds Calculation/ Relevant Historical Data Fields
<b>Conveyance</b>	Historically, loans that have been conveyed to the MI provider have experienced zero or de minimis losses in the amount of costs ineligible for MI coverage.	<i>Net Sales Proceeds</i> field displays zero.  <i>Credit Enhancement Proceeds</i> are non-zero and generally represent a large/majority proportion of the estimated Claim Amount.

**Exhibit 6** illustrates the loss severity by inferred claim outcome and origination year for those claims that result in a payment by the MI Provider.

**Exhibit 6: Loss Severity by Claim Outcome and Origination Year**

	1999-2016 Origination Vintages			2013-2016 Origination Vintages		
	Percentage Option	Property Sale	Conveyance	Percentage Option	Property Sale	Conveyance
<b>Default UPB (\$MM)</b>	20,502	6,456	141	114	146	10
<b>Number of Loans</b>	131,919	41,590	922	778	735	37
<b>Proceeds (% of Default UPB)</b>						
<b>Net Sales Proceeds</b>	59%	78%	0%	79%	86%	0%
<b>Credit Enhancement</b>	26%	21%	113%	27%	22%	112%
<b>Repurchase/Make Whole</b>	3%	13%	0%	0%	1%	0%
<b>Other Proceeds</b>	2%	3%	0%	2%	2%	0%
<b>Net Severity (% of Default UPB)</b>	33%	2%	2%	11%	2%	5%
<b>LPI Date to Disposition Date</b>	25	18	16	18	14	20
<b>Forecl Date to Disposition Date</b>	6	4	5	5	3	6

*Note: Shown for all loans with original LTV greater than 80 percent with an MI policy at origination, independent of whether the MI was in place at time of default. We exclude loans that were disposed through a note sale, as CRT investors would not receive MI proceeds. Loans resolved via short sale are included here even if there was no foreclosure; the foreclosure date field is populated with the sale date. Disposition timelines shown are in weighted average months.*

**Simplifying the Percentage Option**

Fannie Mae recently introduced a program designed to streamline the MI claims process, known as “MI Factor,” to reduce the settlement timelines, operational burden, and cost associated with the MI Percentage Option. Accurately calculating the eligible foreclosure/property preservation cost component of the Claim Amount (defined in **Exhibits 1 and 2**) has been a significant pain point for servicers and MI providers. The negotiation of these MI expense claims leads to payment uncertainty, extended settlement timelines, and increased processing overhead, impacting Fannie Mae and CRT investors. Under this new program, the amount of foreclosure/property preservation costs eligible for MI coverage is calculated by applying a numerical factor to the property value or defaulted UPB of the loan, depending on the disposition type. The factor approach only applies to the calculation of foreclosure/property preservation costs, which generally represent approximately 5 percent of the Claim Amount but produce the most work for all parties involved. Fannie Mae uses historical data on foreclosure/property preservation costs to develop the factors, which take into account loan characteristics, such as disposition type, geography, and property value. The same set of factors are used for all participating MI providers and will generally apply to all of the loans for which they provide



coverage, including those that were insured prior to the introduction of this program. Fannie Mae does not anticipate any material effect on the overall levels of MI proceeds; however, the factor approach may result in shorter claims payment timelines and greater certainty in loss coverage.

## Other MI Outcomes

Apart from traditional claim outcomes that result in a benefit payment, there are two additional outcomes that do not result in a benefit payment: cancellations and rescissions/denials. In this section, we describe these two outcomes and provide guidance for distinguishing between them in the historical dataset. Although both of these outcomes would have zero *Credit Enhancement Proceeds*, a non-zero value in the *Repurchase/Make Whole Proceeds* field may signal the latter outcome. However, investors should be cautious about overestimating the prevalence of these outcomes for recent dispositions as there may be a delay in populating the Credit Enhancement Proceeds field in the historical dataset.<sup>5</sup>

1. **Cancellation:** MI cancellation can occur automatically when the principal balance of a loan is scheduled to reach 78 percent of the original value of the property. Alternatively, the borrower may request cancellation when the principal balance actually reaches 80 percent of the original or 70-80 percent of the current value of the property, depending upon eligibility criteria. In order to qualify for a borrower-initiated termination, a loan must meet certain property value, payment history, seasoning, and LTV ratio thresholds.<sup>6</sup> Only borrower-paid MI (BPMI) policies are eligible for cancellation. Borrowers have an incentive to cancel their policies if they meet eligibility criteria to eliminate premium payments. Approximately 85 percent of MI policies from recent vintages have been borrower-paid, while the balance of policies have been lender-paid.<sup>7</sup>

Claim Outcome	Implications for Investors	Estimated MI Proceeds Calculation/ Relevant Historical Data Fields
<b>Cancellation</b>	Historically, MI cancellations have trended higher with home price appreciation; as a result, investors may consider modeling projected MI cancellation rates using expectations of home values. If a loan on which the MI policy has been cancelled defaults, the investor is not eligible for any MI proceeds. However, high rates of borrower-initiated MI cancellations are only likely to occur in strong economic scenarios.	<i>Credit Enhancement Proceeds</i> displays zero. The monthly remittance files for CRT deals have an <i>MI Cancellation Indicator</i> flag, so investors will be able to identify which loans in the reference pool no longer have an active MI policy. This field is unavailable in the historical dataset.

2. **Rescission/Denial:** An MI policy may be voided if it is found that the mortgage originator did not conform to the MI provider’s underwriting guidelines (rescission) or that the servicer did not conform to the MI provider’s servicing guide (denial). Rescissions/denials have trended downward as underwriting and servicing practices have improved. In addition, MI providers have updated their master policies post-crisis to offer rescission relief in certain circumstances.<sup>8</sup> As discussed in Fannie Mae’s MI primer, an MI claim may also be denied in full if the principal cause of default is determined to be physical damage, such as that resulting from a natural disaster. MI is designed to compensate policyholders for losses due to a credit default, not for those resulting from physical damage, which may instead be covered by property and/or flood insurance.

<sup>5</sup> Investors can generally assume that Credit Enhancement Proceeds that are populated for dispositions that occurred at least one year prior to the publication of the dataset is not delayed.

<sup>6</sup> The eligibility criteria for termination of an MI policy are detailed in Fannie Mae’s [Servicing Guide Section B-8.1-04](#). Fannie Mae recently [announced](#) that beginning in 2019, the LTV threshold for borrower-initiated termination will be changed to 80 percent based on current value with property improvements.

<sup>7</sup> Fannie Mae recently introduced another option for obtaining mortgage insurance called enterprise-paid mortgage insurance (EPMI), which is detailed [here](#). EPMI coverage has a fixed 10-year term that continues for loans that are delinquent on the sunset month.

<sup>8</sup> Just as Fannie Mae has offered lenders relief from representations and warranties under certain circumstances, we have provided guidance to MI providers for integrating rescission relief into their master policies, which is posted [here](#). Examples of conditions in which rescission relief is offered under the current master policies include instances where the borrower has made 36 payments with no more than two 30-day delinquencies and no 60-day delinquencies in the first 36 months.



Claim Outcome	Implications for Investors	Estimated MI Proceeds Calculation/ Relevant Historical Data Fields
<b>Rescission/Denial</b>	In the case of MI rescission or denial, MI proceeds are likely to be zero. Fannie Mae will seek make-whole recoveries from the seller/servicer for the amount equivalent to MI proceeds that are otherwise contractually due. If Fannie Mae also identifies a breach of representations and warranties, the seller/servicer may be responsible for the entire loss.	<i>Credit Enhancement Proceeds</i> displays zero. Proceeds collected from the lender are recognized in the <i>Repurchase Make Whole Proceeds</i> field and proceeds collected from the servicer are recognized in the <i>Other Foreclosure Proceeds</i> field, rather than in the <i>Credit Enhancement Proceeds</i> field.

**Exhibit 7** illustrates when it is likely that a particular MI settlement outcome may occur relative to the lifecycle of the claims process.

**Exhibit 7: MI Settlement Outcomes Timeline**



<b>Loan eligible for cancellation?</b>	Cancellation				
<b>Violation of eligibility/ Servicing criteria?</b>	Rescission/ Denial	Rescission/ Denial	Rescission/ Denial	Rescission/ Denial	Rescission/ Denial
<b>MI provider chooses to acquire property?</b>		Conveyance	Conveyance	Conveyance	
<b>Approved sale prior to claim settlement?</b>		Property Sale	Property Sale	Property Sale	Property Sale
<b>Most attractive option is Percentage Option?</b>				Percentage Option	Percentage Option

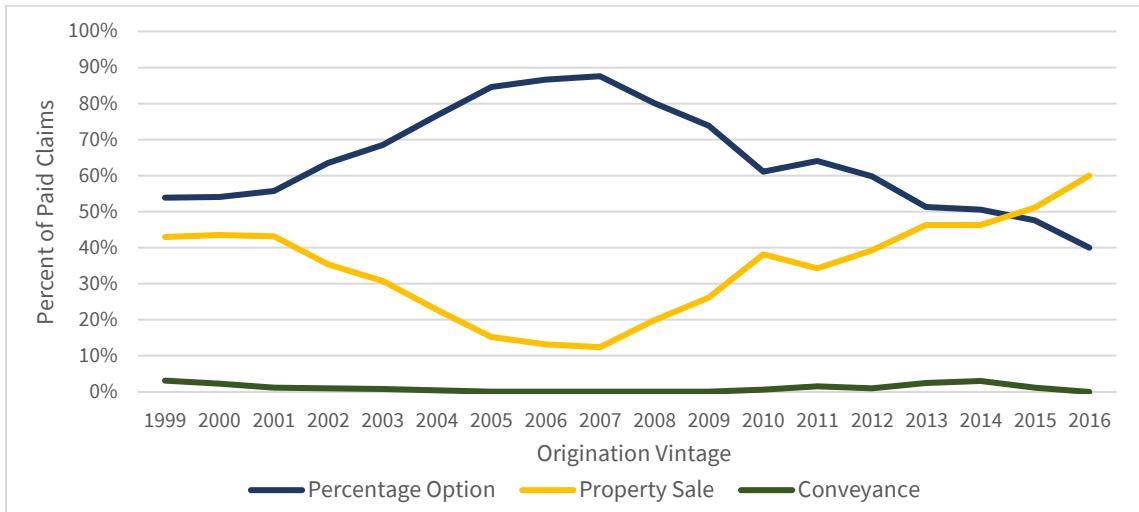




## MI Claim Settlement Trends

Interesting trends emerge when we categorize the historical dataset according to claim outcomes. Historically, the most common claim outcome has been the Percentage Option; however, the Property Sale Option is more prevalent among resolutions in recent origination vintages, as illustrated in **Exhibit 8**. We can generally distinguish between these two outcomes in the historical dataset by comparing the actual MI proceeds received, which are reported in the *Credit Enhancement Proceeds* field, to the proceeds we would have expected to receive under each option as defined in the previous section.

**Exhibit 8: Claim Outcomes by Origination Year (Percent of Loans)**



*Note: Shown for all loans with original LTV greater than 80 percent with an MI policy at origination, independent of whether the MI was in place at time of default. We exclude loans that were disposed through a note sale, as CRT investors would not receive MI proceeds.*

Part of the reason for this emerging trend may be reverse survivorship bias, as this analysis only covers claims that have already been settled. Defaulted loans still in the foreclosure process or in the claim settlement period, as well as current loans that may default in the future, are not included in this analysis. If these loans experience longer resolution timelines, the corresponding claims may be paid using the Percentage Option. However, in recent years, Fannie Mae has enhanced its credit loss management tools and strategies, leveraging market-leading valuation data and in-house experts to maximize recoveries. In addition, the strength of the housing market has resulted in shorter property disposition timelines and higher recoveries on property sales. In a strong housing market, the net loss to an MI provider under the Property Sale Option may be lower than the net loss under the Percentage Option.

In general, we would expect that an MI provider will settle a claim in the manner that requires it to make the lowest net payment, and in most cases we find that the actual Credit Enhancement Proceeds received are closer to the lesser of either the Percentage Option or the Property Sale Option. This would indicate that the MI provider was able to exercise its option efficiently. However, the MI provider does not always have the ability to exercise the Property Sale Option; the settlement due date may pass before the REO property is sold. The MI provider must generally settle the MI claim within 60 days after the claim is perfected (i.e., when the servicer has provided all the relevant documents to the MI provider) or otherwise incur a penalty for paying the claim late. If the REO property has not been sold by the deadline, the MI provider would generally settle the claim by paying the Percentage Option amount. Although the Net Sales Proceeds field may be populated in the historical dataset and may suggest that the Property Sale Option would have been cheaper for the MI provider, the MI provider may have settled the claim before the Property Sale Option was available.

For a small subset of claims from legacy vintages, the MI proceeds actually collected are lower than expected because the mortgage insurer became subject to a deferred payment plan, as ordered by its regulator when it was under a special supervisory status. The affected entities have not written new business since these plans were imposed, and, consequently, no loans referenced in CRT transactions are covered by policies written by these entities. CRT investors do not take exposure to MI counterparty risk. In the event that a claim is reduced in the future due to the financial weakness of an MI provider, Fannie Mae will absorb any portion of losses that would have been paid by the MI but for its inability to pay.



## Summary

Historically, primary mortgage insurance has played a significant role in reducing investor exposure to credit losses due to borrower defaults. Investors can leverage the Fannie Mae Single-Family Historical Loan Performance dataset to analyze trends in MI proceeds and to help model the contribution of MI proceeds in offsetting credit losses.

We aim to continue to provide transparency and insight into Fannie Mae's fixed-income products and programs. We value your feedback, and we invite you to reach out to the Fannie Mae Investor Help Line at 1-800-232-6643 or by [e-mail](#) with any questions.

## Additional Resources

- [Fannie Mae's Credit Risk Transfer programs](#)
- [Fannie Mae Mortgage Insurance Primer](#)
- [Single-Family Loan Performance Dataset](#)

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## Commentary Glossary

**Benefit:** Also referred to as MI or Credit Enhancement Proceeds. The portion of the loss incurred due to a default that is actually paid by the MI provider to settle a claim.

**Claim:** A claim is a request for payment of an insurance benefit to cover losses associated with a default. A claim is considered to be perfected when the servicer has provided the MI provider all of the information, documentation, and access to the property that is required pursuant to the MI policy. The servicer must generally file a claim with the MI provider within 60 days of foreclosure completion.

**Claim Amount:** The eligible portion of the calculated loss incurred by the servicer and/or Fannie Mae in connection with a default that the servicer submits to the MI provider. This amount includes the defaulted balance, as well as accrued interest and liquidation expenses. The claim amount should be limited to eligible expenses, as defined by the MI provider's master policy in conjunction with the MI provider's servicing guidelines.

**Curtailment:** A reduction in MI benefits paid as a result of breaches of the MI provider's servicing guidelines. For example, an MI provider may curtail an MI benefit when the servicer takes longer to foreclose than permitted by MI provider timelines. The servicing guidelines of an MI provider may change over the life of the MI policy.

**Denial:** An MI provider denies, or pays no benefit, because (a) the servicer fails to provide required documentation as part of the claims filing process, or (b) there is a significant breach of the MI provider's servicing guidelines and the damage to the MI provider cannot be reasonably quantified.

**Disallowance:** A reduction of MI benefits paid as a result of costs that are explicitly excluded under the MI provider's master policy that were erroneously included in the MI claim amount. For example, a disallowance may occur if a servicer erroneously includes in the MI claim legal expenses that are in excess of the limit defined in the master policy.

**Master Policy:** The contractual policy governing the terms of coverage for all loans with MI.

**Perfected (claim):** A claim is considered to be perfected when the servicer has provided the MI provider all of the information, documentation, and access to the property that it is entitled to pursuant to the policy. A claim must be perfected by the servicer before the MI provider can settle it.

**Proceeds:** Also referred to as the Insurance Benefit. The portion of the loss incurred due to a default that is actually paid by the MI provider to settle a claim.

**Rescission:** An MI provider may rescind coverage and pay no benefit on an MI claim if it finds a material origination defect such that the lender violated certain coverage eligibility criteria in the master policy. Rescission is similar to a violation of Fannie Mae's representations and warranties.

**Total Loss Exposure:** From the perspective of a CRT investor, the sum of all credit losses associated with a defaulted loan. It is comprised of the defaulted UPB, including delinquent interest from the time of borrower default through property sale, all liquidation expenses through property sale, and any principal forgiveness.