

To: Industry and Interested Persons

From: NAIC, Structured Securities Group

Re: Macroeconomic Scenarios and Probability Weightings to be used for the Year End 2019 Annual Surveillance of Insurer Owned RMBS and CMBS

Date: 10/25/2019

This document contains the macroeconomic scenarios and probability weightings that the NAIC Structured Securities Group (SSG) will use in the 2019 Annual Surveillance of insurer owned RMBS/CMBS.

BlackRock Solutions will model the securities under four scenarios: Optimistic, Baseline, Conservative, and Most Conservative, with applicable weightings. The final losses will be a probability-weighted average of valuations across all scenarios. The descriptions of these scenarios and weightings are summarized in the tables and charts in **Appendix - A** for RMBS and **Appendix - B** for CMBS.

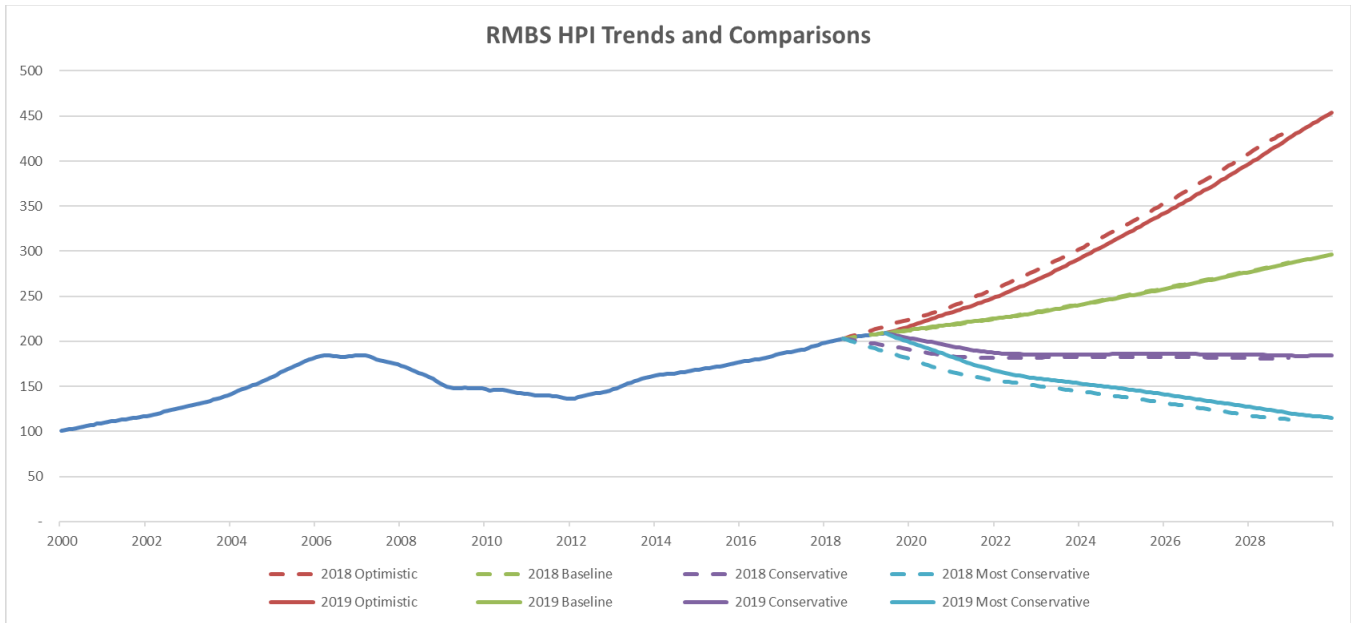
Please visit the SSG's [Structured Securities Reporting webpage](#) for additional information including relevant financial modeling methodologies, timeline for 2019 surveillance, reporting instructions, and RMBS/CMBS security listing. For questions pertaining to analytical methodologies, analytics, and financially modeled RMBS and CMBS list, please direct your inquiries to the Structured Securities Group at 212-386-9000 or SSGinquirydesk@naic.org.

To obtain details for billing and the instructions for the Automated Valuation Service+ ([AVS+](#)) system including when initial invoices will be sent, how to access the Structured Securities portfolios, and how to purchase modeled results, please contact us at 816-783-8300 or securitiessupport@naic.org.

Appendix - A

RMBS: Comparison of Scenarios

RMBS Scenario	Probability	Current to Trough	Time of Trough	3-Year HPI Growth	5-Year HPI Growth
2019 Scenarios and Forecasts					
Optimistic	10%	N/A	N/A	23%	45%
Baseline	50%	N/A	N/A	9%	17%
Conservative	25%	-12%	Q1 2029	-11%	-11%
Most Conservative	15%	-45%	Q1 2030	-22%	-28%
2018 Scenarios and Forecasts					
Optimistic	10%	N/A	N/A	22%	43%
Baseline	50%	N/A	N/A	9%	17%
Conservative	25%	-11%	Q1 2028	-10%	-10%
Most Conservative	15%	-45%	Q1 2029	-20%	-27%



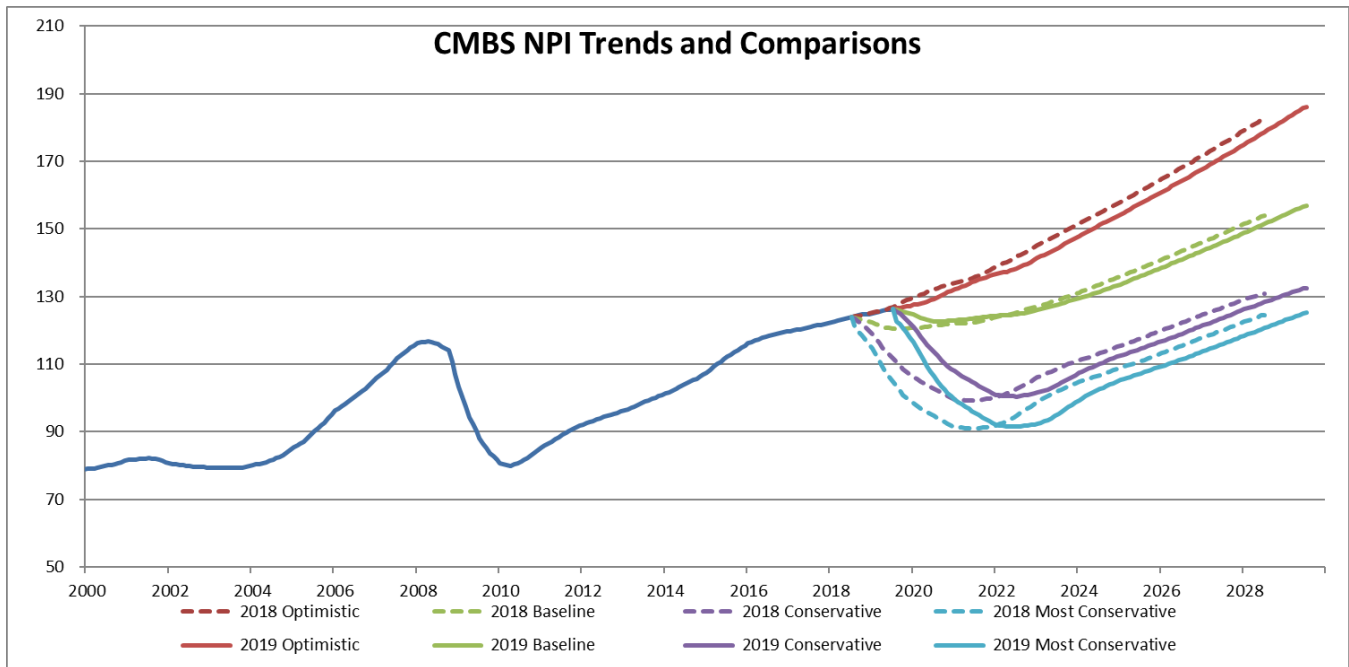
Source: Case-Shiller and BlackRock Solutions

National HPI (Indexed 2000M1 = 100)

Appendix - B

CMBS: Comparison of Scenarios

CMBS Scenario	Probability	Current to Trough	Time of Trough	3-Year NPI Growth	5-Year NPI Growth
2019 Scenarios and Forecasts					
Optimistic	10%	N/A	N/A	10%	20%
Baseline	55%	-3%	Q3 2020	-1%	4%
Conservative	25%	-20%	Q3 2022	-20%	-13%
Most Conservative	10%	-28%	Q3 2022	-28%	-19%
2018 Scenarios and Forecasts					
Optimistic	10%	N/A	N/A	10%	20%
Baseline	55%	-3%	Q3 2019	-1%	4%
Conservative	25%	-20%	Q3 2021	-20%	-12%
Most Conservative	10%	-27%	Q3 2021	-27%	-18%



Source: NCREIF and BlackRock Solutions

NPI (Indexed 1990M1 = 100)