



Stress-Testing

Residential Mortgage Solutions and Services

Bank and bank holding company (BHC) stress tests—mandated by the Federal Reserve’s Comprehensive Capital Analysis and Review (CCAR) program and the Dodd-Frank Act —rigorously assess institutions’ capital adequacy, including the development and maintenance of effective loss-estimation methodologies. CoreLogic HPI Forecasts™ Stress-Testing Scenarios is the latest offering from CoreLogic® to help banks, investors and government entities and other participants effectively satisfy these critical regulatory requirements.

Executing stress tests entirely in-house can be a colossal challenge. Each asset type requires subject matter expertise, highly specialized information, and analytical methods built on demonstrably sound modeling fundamentals. For residential mortgage assets, the stress-test stakes are especially high—they often represent a bank’s greatest risk in dollars outstanding.

We can help you overcome the challenges of residential mortgages.

Our Focus

CoreLogic provides data, solutions, and services that support an effective stress-test loss-estimation methodology for residential mortgages—from our industry-leading data to off-the-shelf CoreLogic solutions to analytics-driven professional services engagements.

CORELOGIC STRESS-TESTING RESOURCES, SOLUTIONS AND EXPERTISE

Off-the-Shelf Analytics Solutions Focused Analysis to Bolster Your Process

Measure home price sensitivity and loss exposure with the same housing analytics used by the Federal Reserve Board of Governors and the Office of the Comptroller of the Currency:

- ▶ CoreLogic HPI™
- ▶ CoreLogic Case-Shiller Indexes™
- ▶ CoreLogic HPI Forecasts™
- ▶ Case-Shiller Home Price Index Forecasts™

Tailor capital adequacy strategies to your lending footprint with our ZIP Code-level and up, CCAR-aligned stress-testing scenarios:

- ▶ CoreLogic HPI Forecasts Stress-Testing Scenarios

Integrate risk modeling and reporting capabilities in a framework that leverages industry-adopted, end-to-end mortgage transition-and-loss models:

- ▶ RiskModel®

Custom Solutions Our Quantitative Experts Can Help

Supplement your in-house stress-testing efforts with analytics-driven services that leverage our quantitative subject-matter expertise:

- ▶ Data Augmentation
- ▶ Stress-Testing Execution
- ▶ Stress-Testing Framework
- ▶ Model Validation
- ▶ MRA and MRIA Remediation Guidance

Data Relevancy Resources Industry-Leading Residential Mortgage Data

Servicing Consortium Data

Expand existing data assets with deep, detailed CoreLogic residential-mortgage market data.

RMBS Data

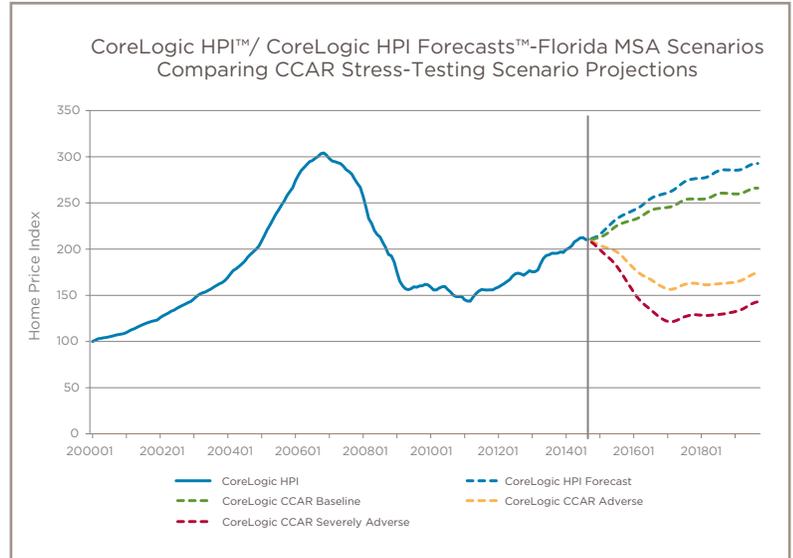
Cover alternative product types (interest-only and other loans hit hard by the housing crash) with data from our non-agency mortgage database.

Bolstering Your Process—CoreLogic Off-the-Shelf Solutions

We offer an array of solutions to bolster or supplement your current mortgage-asset analytics framework. Our unparalleled mortgage performance datasets and authoritative home price indexes can substantially enhance your internal modeling capabilities.

Also, CCAR-aligned CoreLogic HPI Forecasts Stress-Testing Scenarios can project future scenarios at the ZIP Code-level and up—enabling you to tailor your stress-test analytics to your unique geographic concentrations. Few local and regional markets behave like the nation as a whole, so you may find this especially useful.

Our end-to-end RiskModel® solution—currently deployed by several BHCs subject to CCAR—seamlessly incorporates these forecast scenarios, enabling you to develop or further refine your end-to-end stress-testing program.



CoreLogic HPI Forecasts Stress-Testing Scenarios

OFF-THE-SHELF MORTGAGE-ASSET SOLUTIONS

Independently or in combination, these solutions can bolster your process:

- ▶ **Modeling Datasets**
Loan-Level Market Analytics and Non-Agency RMBS Securities inform internal models with the market's most robust loan performance data
- ▶ **Home Price Index Data**
Employed by key government entities and many top banks, our CoreLogic HPI™ and CoreLogic Case-Shiller Indexes™ provide best-in-class home price index data used in developing and enhancing trustworthy economic models
- ▶ **CoreLogic HPI Forecasts™ Stress-Testing Scenarios**
CoreLogic scenarios (CCAR baseline, CCAR adverse, and CCAR severely adverse) are available down to the ZIP Code level—aligned with national CCAR supervisory scenarios to create consistent, reliable forecasts across geographies, tiers, and scenarios
- ▶ **Mortgage Risk Modeling**
Easily configured with supervisory stress-testing scenarios, CoreLogic HPI Forecasts Stress-Testing Scenarios, or macro-economic scenarios you set, RiskModel covers all residential mortgage asset classes—providing comprehensive, defensible default-and-loss forecasts

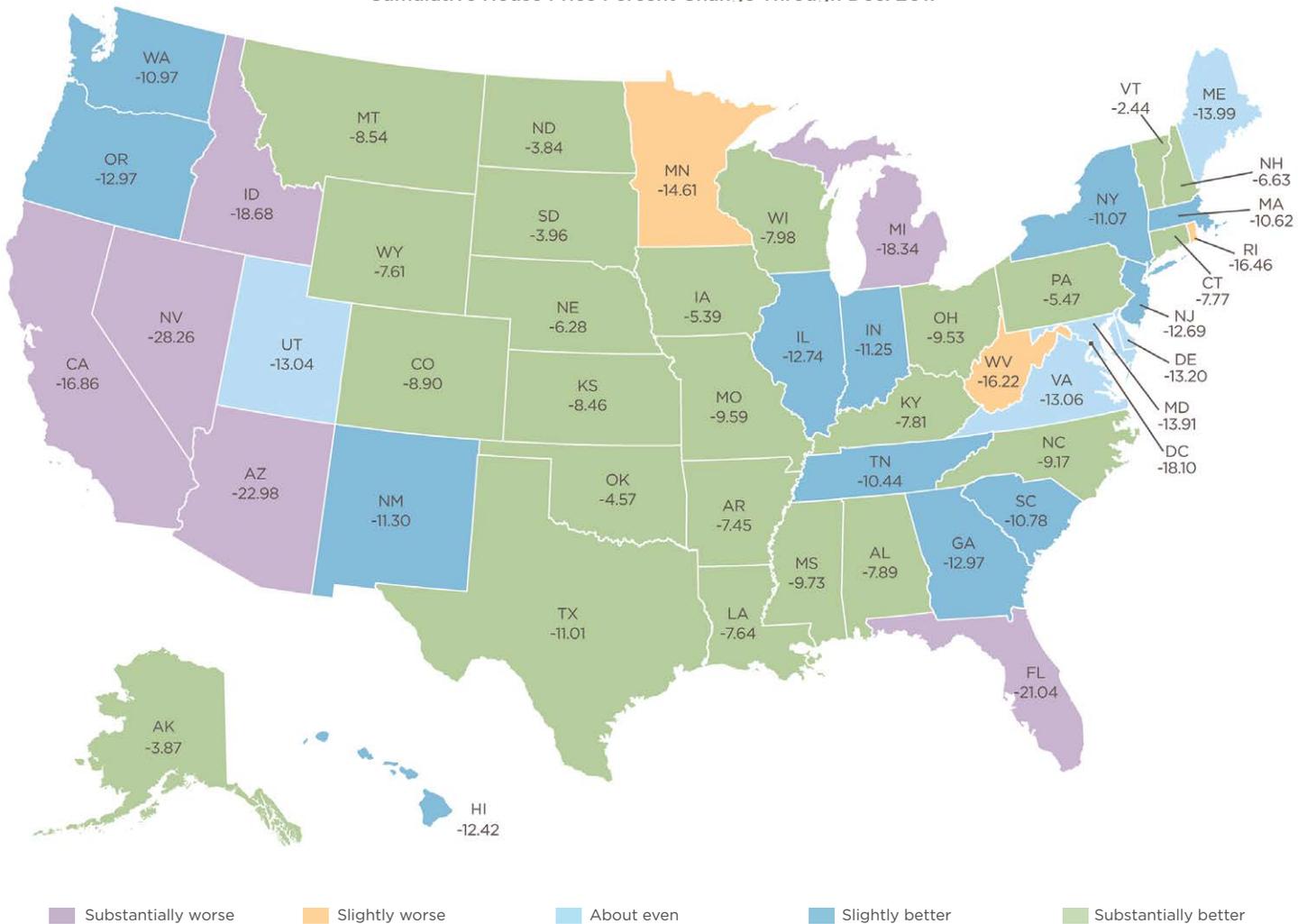
SUPPLEMENTAL MORTGAGE-ASSET SERVICES

Our Advisory Services and DART (Decision Analytics & Research Team) professional services groups offer various levels of stress-testing engagement, from stress-testing execution and custom calibration to model validation. For example, our predictive models can be custom-fit to support internal and external model validations while enhancing the efficacy of your analysis. Advisory Services and DART consultants offer a range of services to help you meet your objectives in schedule, including:

- ▶ **Portfolio Benchmarking and Data Enhancement**
Drawing on our vast repository of mortgage-performance datasets, we can help support management adjustments and expand the breadth of performance observations
- ▶ **Model Validation and Calibration**
Leveraging our quantitative expertise, we can assess your model, provide recommendations to improve it, and develop custom calibrations to support internal model-validation requirements
- ▶ **Stress-Testing Execution**
Once your modeling framework is fully validated, we can work with you to generate forward projections and develop an automated process to support current and future stress-testing submissions

CORELOGIC HPI FORECASTS™ STRESS-TESTING SCENARIOS

Comparing State and National Adverse Scenarios
Cumulative House Price Percent Change Through Dec. 2017



Source: CoreLogic HPI Forecasts Stress-Testing Scenarios

MRAs and MRIs—Specialized Attention

The assignment of MRAs (Matters Requiring Attention) or MRIs (Matters Requiring Immediate Attention)—with accountability at the highest levels of your organization—further intensifies the scrutiny associated with stress-testing activities. Our residential mortgage experts can provide the resources you need to help avoid MRAs and MRIs in the first place, or add outside credibility to your efforts to address them as mandated.

We Can Help Right Now

Call us today to learn more about our proven stress-testing solutions or how to tap our expertise in support of your current efforts to satisfy this critical regulatory requirement.

FOR MORE INFORMATION PLEASE CALL 415-536-3500

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