Quickly assess opportunities in the flood insurance market

Are you trying to decide whether to enter into the private flood insurance market? Then you'd probably like to know:

How many homes can be written profitably at or below National Flood Insurance Program (NFIP) rates

What price and underwriting structure will allow you to compete most effectively given your appetite for risk
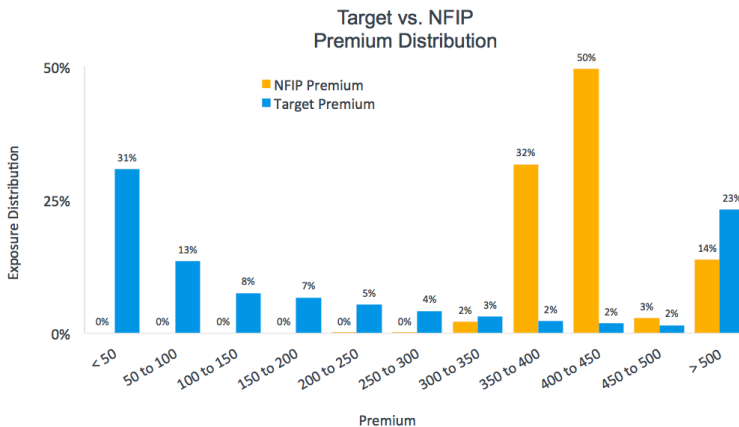
Which types of properties to target with the highest probability of success

Improved catastrophe models and a changing regulatory environment have created a unique business opportunity in the flood insurance market. Companies who want to take advantage of this opportunity need to be able to evaluate potential business risks and decide where and how to offer private flood insurance.

Milliman has teamed up with KatRisk, a catastrophe modeling firm, to create a fast, robust, and cost-effective way to help you do this. Our integrated approach includes the use of Flood Insurance Datasets composed of:

- **Market baskets**—Portfolios of hypothetical risks representing about 10% of the single-family homeowners market, with realistic distributions of the characteristics used for insurance pricing and modeling.

- **Critical risk factors**—Each risk in the market basket includes measures of the critical factors that contribute to flood risk, such as elevation, relative elevation, distance to coast, distance to river, and insurance to value.

- **Expected losses by policy**—Expected inland flood and storm surge losses are provided for each risk in the market baskets based on the KatRisk flood model.

- **NFIP premiums by policy**—We have rated each risk in the market basket through Milliman's NFIP rating engine.
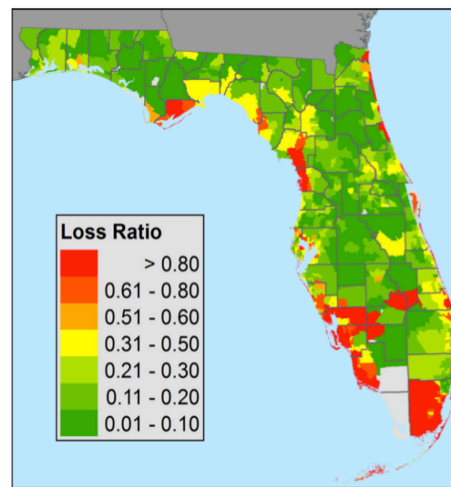
TARGET VS. NFIP PREMIUM DISTRIBUTION

Target vs. NFIP Premium Distribution

MODELED NFIP LOSS RATIOS BY SEGMENT

Segmentation buckets are based on Elevation, Relative Elevation, Distance to Coast, Distance to River and Insurance to Value.
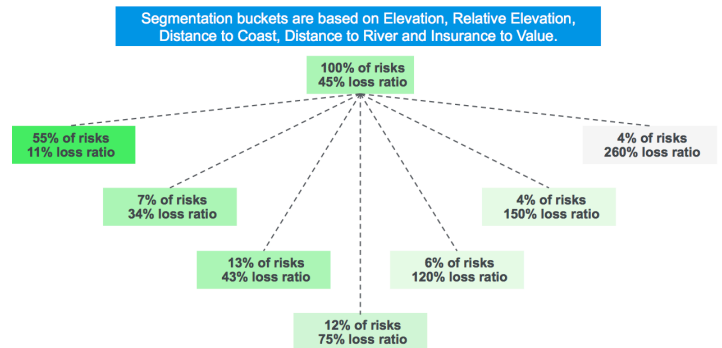
Insurers and reinsurers can license the Flood Insurance Datasets to evaluate the market for flood insurance quickly without a major resource investment. The datasets also provide a critical foundation for the development of sophisticated underwriting and target marketing strategies. Our data enables you to find powerful actionable insights, like the ones we have found in Florida:

- Assuming a target loss ratio of 35%, an insurer can write about 77% of the homes in Florida at rates less than those of the NFIP.

- In each of the NFIP flood zones, a significant number of homes can be written profitably.

- If you were to offer rates based on the NFIP rating plan and segment them based on our critical risk factors, you could target 55% of the risks in the state with an average modeled loss ratio of 11%.
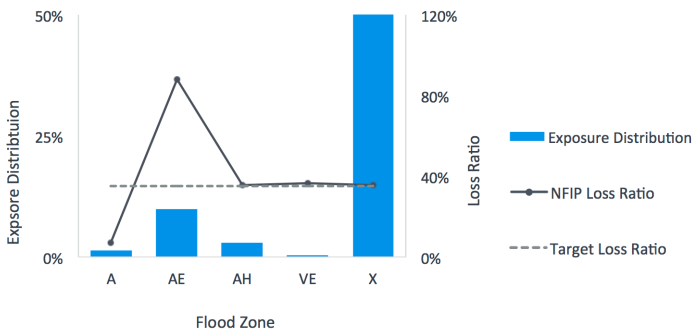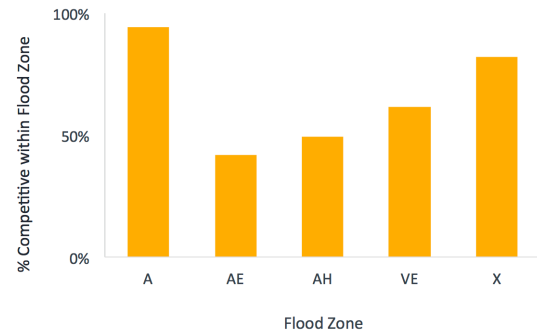
Loss Ratio = Modeled Loss/NFIP Premium

FLOOD ZONE

NFIP Modeled Loss Ratios by Flood Zone

Risks with Target Premium Lower than NFIP by Flood Zone

Milliman's goal is to provide the tools, information, and insight you need to get better results for your company. We are known as innovative business advisors in the property analytics space. We can help you create a profitable market strategy by better understanding the drivers of flood risk, while focusing on your unique business needs.

Milliman's experienced consultants can guide you in creating a new flood insurance program or refining an existing one through the optimal design of flood rates and underwriting rules.

To learn more about your opportunities in the flood insurance market, please contact:

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KatRisk, a catastrophe modeling firm founded in 2012, specializes in global flood and tropical cyclone risk. It is our mission to be a provider of comprehensive and cost effective catastrophe risk models and data, resulting in exceptional value to clients.

KatRisk's catastrophe model can be licensed for internal use in monitoring and managing your flood portfolio.

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