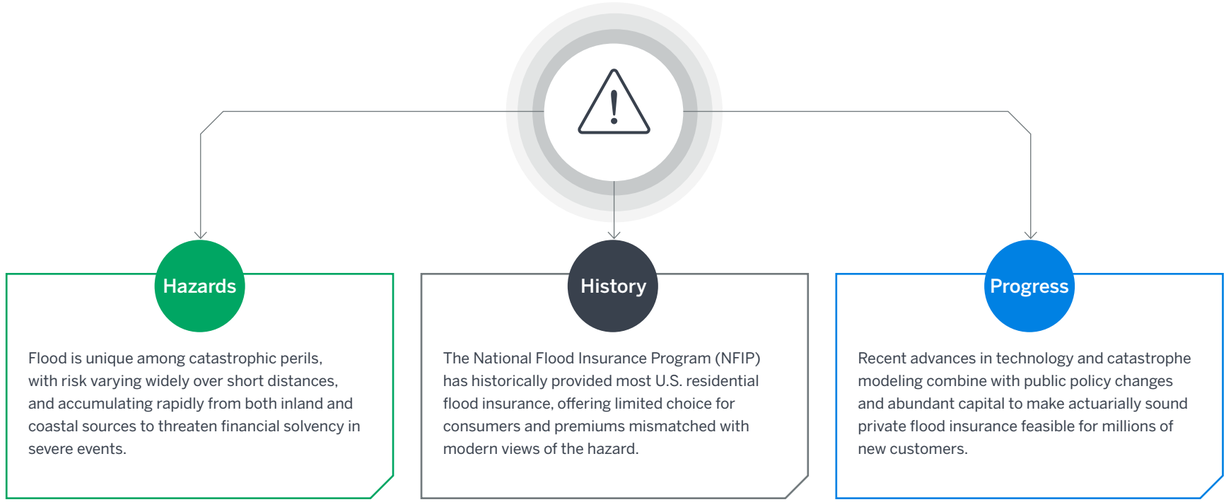
Milliman Flood Analytics

Challenges and opportunities



Hazards

Flood is unique among catastrophic perils, with risk varying widely over short distances, and accumulating rapidly from both inland and coastal sources to threaten financial solvency in severe events.

History

The National Flood Insurance Program (NFIP) has historically provided most U.S. residential flood insurance, offering limited choice for consumers and premiums mismatched with modern views of the hazard.

Progress

Recent advances in technology and catastrophe modeling combine with public policy changes and abundant capital to make actuarially sound private flood insurance feasible for millions of new customers.

How Milliman can help you thrive in the private flood insurance market

We have developed the resources and skills to help insurers succeed in the flood market.

Data
For startups and expanding programs, our Flood Market Baskets provide a comprehensive market view supporting feasibility studies, underwriting rules, and pricing plans.

Analytics
Milliman actuaries are power users of catastrophe models and digital maps, combining big data with insurance savvy to create rating plans that generate profitable growth, satisfy state regulators, and are feasible to implement.

Experience
Milliman has worked with start-up insurers, existing insurers, MGAs, reinsurers, rating bureaus, and the NFIP on science-driven, cutting-edge rating plans and programs.

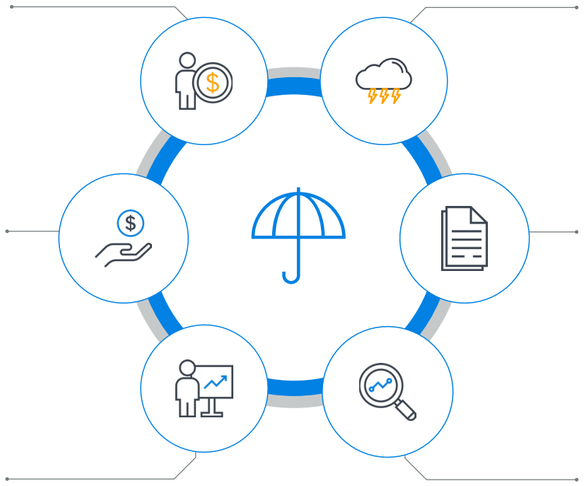
Tools
Milliman has developed its one-of-a-kind Pixel® software, rating engines, and data sets to enable an integrated consulting approach that empowers clients to test their own solutions.

Why offer flood insurance?

Coverage
Flood is not covered under standard homeowners policies, creating confusion and inefficiency that private insurers can remedy

Capital
Re/insurance providers have abundant capacity to deploy to emerging, modelable markets

Technology
Flood risk models are advancing rapidly with better data, geography, science, and computing power



Awareness
Many recent disasters, and emerging climate science, have highlighted the protection gap and left consumers wanting wider coverage

Public policy
Federal and state legislation, along with cooperative state regulators, have explicitly encouraged private market formation

Scale
Private flood insurers can develop business plans that leverage the new tools and capital to attract many new customers in a historically underserved market

Watch Milliman's flood analytics video: Working to provide better coverage

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Our tools

Market Baskets

- Data sets of hypothetical properties at exact locations with realistic risk profiles.
- Usable for catastrophe modeling, insurance pricing, and competitive comparisons against NFIP and private insurers.
- Geographic data elements are included for robust hazard analysis.

Pixel®

- Our web-based, interactive premium and modeled loss comparison platform.
- Helps clients assess price soundness, competitive position, and regional growth opportunities.
- Advanced predictive analytics and data visualizations are embedded and available on the fly.

PinPoint

- Our cloud-based, real-time service delivering geographic underwriting and pricing insight at point-of-quote.
- Based on location data supplied by the client.
- Takes a latitude/longitude, and returns GIS-based variables in real time, in a cost-effective manner relative to competing services.

Why Milliman?

We are **recognized global experts** in property and flood insurance, and specialists in helping re/insurers and their partners assess and price catastrophe-exposed insurance.

We **help take you from concept to launch**, with market feasibility studies, pricing plans that leverage catastrophe models, review of rules and forms, and independent consultation on business plans.

We are **innovators in implementing flood insurance**, having developed an array of underwriting and pricing plans that leverage Geographic Information Systems, for start-up and established re/insurers and partners in the private and public sectors.

We **understand the regulatory landscape**, having surveyed and worked with many U.S. states to understand challenges in entering private flood insurance markets under diverse regulations for admitted insurers.

We offer **scalable, efficient competitive analysis** solutions, with countrywide flood Market Baskets available in the cloud-based Milliman Pixel® software system, along with premiums from the National Flood Insurance Program (NFIP) and private flood competitors.

Working with you

Milliman's goal is to provide the tools, information, and insight you need to deliver profitable growth in emerging and challenging property and flood insurance markets. Our experienced consultants can be at your side as you prove your concept, design rates and rules, launch your program, and manage risk-sharing and risk accumulation.

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Nancy is a Principal who manages Milliman's San Francisco property-casualty practice. She is known as an actuarial thought leader on property insurance issues and has participated in forums with the American Society of Floodplain Managers, Wharton School, National Association of Insurance Commissioners, the American Property Casualty Insurance Association, and Resources for the Future.

Nancy is the primary contact on projects with the NFIP and is providing strategic advice to FEMA. She received an Outstanding Volunteer Award for her work on the American Academy of Actuaries' Flood Insurance Subgroup.

Our global presence

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