

Public Catastrophe Models
Catastrophe Insurance Working Group
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Value Proposition

- ✓ **Public models shift the balance of power back to regulators from private modelers.**

Problems with Private Catastrophe Models

There are several problems with private insurance industry hurricane and earthquake models:

- ✓ **There is no transparency - the documentation and source software code is proprietary (“black box”).**
- ✓ **Loss estimates between private models may differ by 300% or more for the same county.**
- ✓ **They may be manipulated to produce a desired result by changing innumerable input assumptions for such variables as mitigation features or storm set (long term versus near term).**

Problems with Private Catastrophe Models

Additional problems with private insurance industry hurricane and earthquake models:

- ✓ **Private modelers interests are aligned with their insurer and reinsurer clients - not with the interests of consumers and regulators.**
- ✓ **Private modelers keep developing new theories to increase estimated loss costs (near term models, increased inland estimated loss costs based on Hurricane Ike experience, etc.).**
- ✓ **Private hurricane models do not reduce estimated wind losses for storm surge.**

Proposal

It is proposed that the NAIC develop public catastrophe models, which would have the following advantages:

- ✓ All documentation and source software code would be public information.
- ✓ The models would produce a range of reasonable estimated catastrophe losses rather than single point estimates.
- ✓ The models would not be aligned with the interests of the insurance industry.
- ✓ The models could serve as platforms for states to develop their own custom models.

NAIC's Mission

- ✓ Protect the public interest;
- ✓ Promote competitive markets;
- ✓ Facilitate the fair and equitable treatment of insurance consumers;
- ✓ Promote the reliability, solvency and financial solidity of insurance institutions; and
- ✓ Support and improve state regulation of insurance.

Cost and Time Estimates

- ✓ Preliminary cost and time estimates from one provider were on the order of \$700,000 and one year for initial development and \$100,000 per year for maintenance.
- ✓ Project could be funded out of the NAIC's current unallocated net assets and would not require any new assessments or increases in fees.

Benefits of Public Models

- ✓ **Policyholders will be treated fairly and equitably.**
- ✓ **Puts regulators back in control.**
- ✓ **State actuaries need not review or challenge private insurance industry models.**
- ✓ **Can be used to establish rates for insurers of last resort.**
- ✓ **Can also be used to test the reasonableness of private model estimates.**