Catastrophe Modeling
Regulation
The Florida Experience
Catastrophe Modeling Regulation

- Florida Commission on Hurricane Loss Projection Methodology
- Florida Office of Insurance Regulation
- Reinsurer and Rating Agency
Florida Commission

• Statutory Charge
  – Provide the most actuarially sophisticated guidelines and standards for projection of hurricane losses possible

• Panel of Experts
  – 3 Actuaries
Florida Commission

• Professional Team
  - Includes a structural engineer
  - Does on site visits to modelers
  - Conducts in-depth audit lasting 2+ days
  - Advises Commission on whether it could verify that Standards were met

• Standards, Disclosures, Audits
  - Two day meetings held in July and Sept. to develop Standards for modelers to meet
  - All modelers must submit Disclosure items as public documents
Florida Commission

- **Effect of Commission Findings**
  - Reimbursement premiums for the FHCF must be based on models found accurate to the extent feasible.
  - Insurers may use models found accurate and these are admissible and relevant in a rate filing only if OIR and the consumer advocate have access to all assumptions and may disclose them in a rate proceeding.
  - Neither acceptance nor rejection by the Commission is binding on FHCF, OIR, or insurers.
Florida Commission

• Appropriateness for Monitoring Modeler Activities
  – Only examines models submitted to it
  – Most sensitive determinations done under Trade Secret protection despite the Sunshine or open meeting law
  – No monitoring or control of versions and variations of models found acceptable
  – Lack of clarity on to whom it is responsible
  – Defines accurate as meeting Standards and reliable as consistently producing statistically similar results without bias
Florida Office of Insurance Regulation

• Regulates rates and solvency of insurers
• Required to hold public hearing on any residential property rate filing based on a computer model if more than +15%
• Actuary’s analysis under Standard of Practice 38
  – Must have basic understanding
  – Must evaluate appropriateness of use
  – Must determine that validation has been done
  – Must understand user inputs
Florida Office of Insurance
Regulation (Continued)

• Actuary’s analysis under Standard of Practice 38 (Continued)
  – Reasonableness of model output considering alternate models
  – Appropriate adjustments and their disclosure
  – Justify material departures from Standard and effect of departure

• Questions asked of filers using models designed to allow OIR to make statutory determination in accordance with Standard
Reinsurers and Rating Agencies

• Require, use, and develop models without regard to any regulatory framework
• Net cost of reinsurance must be considered in determining rate adequacy
• Net investment and business volume greatly affected by rating agency decisions
Catastrophe Modeling Regulation

- Questions
- Additional Information about Commission available at www.sbafla.com/methodology