



Job Description

Catastrophe Modeling and Exposure Management Analyst

Position Summary:

This position is responsible for catastrophe modeling services and exposure management for all of FedNat Holding Company's insurance carriers. These services will include, but are not limited to, portfolio optimization, exposure management and modeling expertise. The ideal candidate will be able to understand property and casualty insurance industry terminology and have prior experience working with AIR, RMS and KCC catastrophe models.

Responsibilities:

- Collecting catastrophe exposure data, assessing the data quality and ensuring the necessary assumptions are made for modeling the risks
- Preparing and analyzing data and modeling results for portfolio management and reinsurance renewals projects
- Analyzing changes in exposures and the associated impact on catastrophe model results; and communicating the findings to internal stakeholders
- Modeling the probability distributions of gross, ceded and net results using AIR, RMS and KCC vendor catastrophe model software
- Analyzing how the distribution of results and relevant risk measures change as a result of the application of various reinsurance program alternatives
- Assist with rate filing statistics
- Contributing to the development and refinement of proprietary catastrophe modeling and mapping tools
- Leading internal catastrophe modeling projects and initiatives
- Maximize premium writings while maintaining levels of modeled catastrophe risk according to plan
- Work with outside vendors and inside personnel to manage exposure strategy and ongoing portfolio optimization analysis
- Engage outside vendors to create new products to analyze and manage exposure strategy and ongoing portfolio optimization analysis
- Review monthly reports from outside vendors to analyze and manage exposure strategy and ongoing portfolio optimization analysis
- Interact with actuarial (inside and outside) incorporating modeling results for rate filings
- Assist with discussions with rating agencies such as Demotech and the Florida OIR
- Assist with the review and introduction of new lines of business and new products
- Assist with the assembly of investor/board presentations and analyses as required
- Assist with the review and introduction of new State expansion



Knowledge and Skills:

- Excellent interpersonal and communication skills
- Use logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems
- Identify complex problems and review related information to develop and evaluate options and implement solutions
- Strong Microsoft Excel, Access and SQL skills
- Superior analytical and problem-solving skills
- A collaborative, team-oriented individual
- Proactive; a desire and ability to lead internal initiatives and research projects to completion
- Strong attention to detail

Experience and Education:

- 3-5 years CAT modeling experience, with in depth knowledge of the underlying model methodologies and assumptions
- An understanding of the insurance industry and product lines
- Technical expertise working with AIR, RMS and KCC catastrophe models
- Superior data management skills. This individual must have the ability to manipulate, interpret, and extrapolate complex data
- Strong communication and presentation skills. An ability to translate complex technical analysis and concepts into easily understandable terms
- Strong project management skills with an ability to lead independently and prioritize one's workload
- Bachelors Degree or higher in a business related or quantitative field, preferably Statistics, Mathematics, Actuarial Science or similar field
- Depending on area of support, specific certification/s are preferred and may include one or more of the following:
 - Risk Management Solutions designation - Certified Catastrophe Risk Analyst (CCRA)
 - AIR Institute Certified Catastrophe Modeler (CCM)

Physical requirements:

- **Sedentary Work.** Exerting up to 10 pounds of force occasionally and/or negligible amount of force frequently or constantly to lift, carry, push, pull or otherwise move objects, including the human body. Sedentary work involves sitting most of the time. Jobs are sedentary if walking and standing are required only occasionally and all other sedentary criteria are met.
- **Visual Acuity.** Required to have close visual acuity to perform activities such as: preparing and analyzing data and figures, viewing computer terminal, extensive reading.
- **Reaching.** Extending hand(s) and arm(s) in any direction
- **Fingering.** Picking, pinching typing or otherwise working primarily with fingers rather than with whole hands
- **Repetitive Motion.** Substantial movements (motions) of the wrist, hands and/or fingers.



- **Talking.** Expressing or exchanging ideas by means of the spoken work. Those activities in which they must convey detailed or important spoken instructions to other workers accurately, loudly, or quickly.

Department: Century Risk Insurance Services

Reports to: President

FLSA Status: Exempt

Position Level: Employee