

## Garrett Bradford

Cartographer/GIS Analyst



### CURRENT RESPONSIBILITY

Garrett is a cartographer and GIS analyst with the property and casualty practice in Milliman's San Francisco office. He joined the firm in 2010.

### EXPERIENCE

Garrett manages and produces Geographic Information Systems (GIS) data for visualization and use in analysis. His expertise includes:

- Cartographic production and graphic design
- ArcGIS for Desktop
- Spatial analysis for catastrophe modeling
- Construction of custom maps using insurance and third-party data

Garrett is expert in data visualization, producing maps that help businesses understand their data. Garrett has produced maps at the state, county, census, zip code, location, and other levels. Some examples of the maps Garrett has created include:

- Loss ratio heat maps
- Retention maps
- Target market potential maps
- Reinsurance cost maps
- Combined ratio maps
- Insurance profile segmentation maps
- Rate level adequacy maps
- Pure premium maps

Garrett designs maps to enable clients to make sound business decisions. Garrett has created multi-dimensional maps that visualize various metrics at once. For example, Garrett's maps can be used to identify the most profitable as well as most competitively priced locations for target marketing.

Garrett has also identified sources for third-party GIS data, such as the United States Geological Survey, the National Oceanic and Atmospheric Administration, the Florida Geological Survey, and the United States Census, and used this data to construct customized GIS layers to meet client needs.

### PRESENTATIONS

Garrett has frequently prepared the data visualization components of actuarial presentations and will be speaking about the use of third-party data at the 2014 Casualty Actuarial Society Ratemaking and Product Management Seminar.

### EDUCATION

- BA, Geography, University of California, Berkeley
- MS, Geographic Information Science, San Francisco State University (*in progress, expected May 2014*)

