



# Case Study Private Passenger Auto Revised Rating Plan

**27% lift added to state's largest domestic property and casualty insurance company**

## Project Objective

The insurer decided to completely revise their rating plan and introduce it as a new program. In designing the new rating plan, all factors were considered:

- New base rates
- Rating factors
- Territory definitions and relativities

## Our Approach

The approach incorporated the strengths of both Talon GLM and Talon Complete Segmentation.

Talon's GLM was used to build an initial model for the bulk of the class plan and to control for certain other fields (e.g. geographic effects). Residuals from this initial GLM were analyzed by Talon's Complete Segmentation to discover the compound variables undetected by the GLM framework.

Given the new compound variables along with the initial GLM, Talon's Complete Segmentation was used again to explore geographic fields to determine new territory definitions.

## Timeframe

This project was extensive, involving territory definitions, base rates, and rating plan factors for five different coverages. The timeline spanned approximately six months using EagleEye's powerful software solution suite.

## Product Advantages

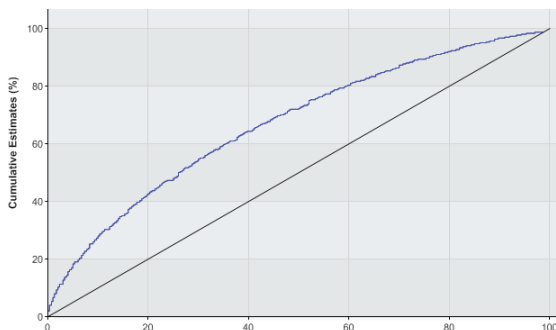
Talon's GLM uniqueness and superior results derive from its integration with Talon's powerful Complete Segmentation capabilities. The combined solution streamlines and accelerates the process of building rating plans while providing greater accuracy than traditional GLMs.

## Results

The Complete Segmentation analysis added 27% lift to the GLM model, with an average correlation of 95.8%, indicating a very high degree of consistency on unseen validation data.

The new rating plan was filed and approved by the state Department of Insurance. With more accurate rates in place, the insurer is positioned for profitable growth.

Lorenz curve from initial GLM model



Segmentation model for territory definitions

