

How Summit® Works

Summit® innovatively approaches developing new rating territories by smoothing and clustering an insurer's experience or the output of various catastrophe models (hurricane, severe thunderstorm, or earthquake). Specifically designed for zip code defined data, **Summit®** can also utilize more refined data levels such as census blocks or tracts.

Summit®'s smoothing feature provides the flexibility to allow users to select the smoothing equation and the credibility standard to specify how far to "reach out" to surrounding zip codes and how much the additional information contributes to smoothing of the local data. The clustering process can be performed using contiguous or non-contiguous areas based on dollar or percentage differences. The clustering output provides graphically displayed diagnostics to assist in determining the optimum number of territories from a statistical standpoint.

Summit® has been recently-updated with **NEW** features including:

- Rate change impact analysis that reveals rate swings
- Analytical tools that highlight optimal territory cluster sets
- Output files for use with external mapping software products
- Greater data and user flexibility with more smoothing and clustering options
- Seamless data flow between smoothing and clustering processes

Why Wait?

For more information about **Summit®**, please visit www.pinnacleactuarial.com or contact Chris Carlson by writing ccarlson@pinnacleactuarial.com or calling Pinnacle's Columbus, Ohio location at (614) 734-8366.

About Pinnacle


Pinnacle Actuarial Resources, Inc. is an independent actuarial and management consulting firm owned by its professional staff. Ranking among the top 10 largest property/casualty actuarial firms in the United States, Pinnacle's reputation for uncompromising professionalism, expertise and outstanding service explains why more and more companies and organizations consider Pinnacle to be the firm of choice for actuarial services. Pinnacle is based in Bloomington, Illinois, with regional offices in Chicago, Columbus, Indianapolis, New York and San Francisco.

The Pinnacle Difference

Here's what you can expect from Pinnacle:

- A strong desire to know our customers and consider their unique business goals, geographic and industry mix, risks and culture
- Responsive customer service that is timely, dependable and focused on your unique and evolving needs
- Effective communication of our findings, featuring objective, understandable reports, presentations and expert analyses
- Emphasis on knowledge transfer which results in greater customer satisfaction and better understanding of our results and products
- Multi-disciplinary expertise and experience, combined with marketplace knowledge and state-of-the-art technologies, tailored to each customer's projects

Summit®



A Geographical Experience
Smoothing and Clustering Tool

Enhance
Your Rating Territories

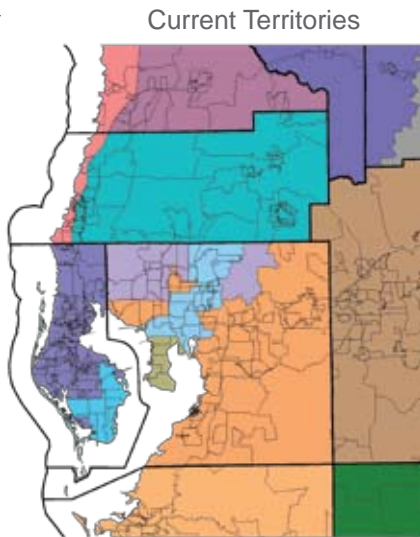
PINNACLE
ACTUARIAL RESOURCES, INC. 
The Firm of Choice

Think you know what's going on geographically in your portfolio?

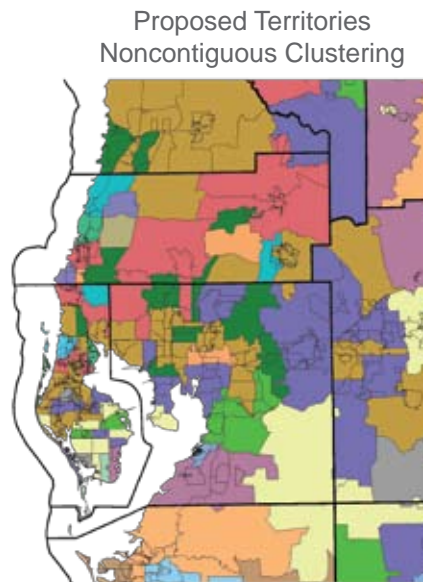
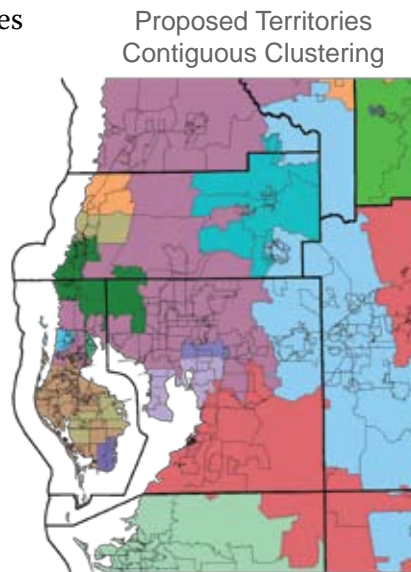
At Pinnacle, we have found most insurers don't. Rather than using finer detailed boundaries based on actual experience, most insurers still use definitions based on county boundaries or outdated city and street definitions. As a result, too many insurers are missing opportunities to more appropriately price their portfolios and gain competitive advantage.

Summit® changes all of that.

By developing geographic boundaries based on underlying experience, insurers of all sizes can easily and efficiently glean information to define new territories. For smaller insurers, Pinnacle can help you supplement your data with industry experience in most states to provide increased predictive value for territorial analysis.



Summit® applies user-selected smoothing techniques to blend information from surrounding geographical areas rather than using statewide information. The software then develops numerous sets of indicated territory boundaries by grouping or clustering areas of similar experience. This dual process of "smoothing" and "clustering" is incorporated into Pinnacle's software application on a Visual Basic platform.



Because Summit® uses an insurer's actual loss experience, the analysis provides a portfolio-based perspective on territorial boundaries. Summit® can group geographic areas into contiguous territories where adjacency is desired or into noncontiguous clusters where it is not. Summit® also creates a variety of territorial scenarios in one run. By including an insurer's current definitions and rate levels, the software provides an easy-to-understand spreadsheet displaying a distribution of rate change impacts statewide as well as specific impacts by zip code.

Summit® is compatible with many external mapping software packages. This allows for easy development of rate impact maps for each indicated scenario and displaying indicated definition boundaries.

There is no doubt about it.

For those who want to review and segment their risk portfolio to make better-informed underwriting and pricing decisions, this is must-have software. There are other benefits as well. Properly-configured territories using ZIP codes and other, smaller building blocks can reduce misclassifications by agents and underwriters and gain competitive advantage in today's increasingly sophisticated marketplace.

Note: Maps were developed using Summit® output with separate mapping software, which is not part of Summit®.