Case Study: A large U.S. insurer automates complex determinations of vehicles' territorial ratings

Overview

A large U.S. company provides property and casualty insurance and group benefits to customers around the world. One place where policy pricing is challenging is the Connecticut auto insurance market. That state's Insurance Department Regulation 38a-686-2 places stringent restrictions on how insurers assign vehicles to the geographic territories they use in calculating ratings. The insurer enlisted assistance from Precisely to ensure compliance with the regulation, without dedicating exorbitant amounts of staff time to geospatial analysis.

Now, the insurer's systems incorporate a quarterly data feed from Address Fabric, a file of all U.S. addresses and addressrelated characteristics. Because the geocoded location data integrates automatically into the insurer's internal pricing solution, it streamlines compliance. It also creates a convenient audit trail should the Connecticut Insurance Department ever need to see documentation in support of the company's pricing decisions.

Business challenge

Auto insurance companies predict the risk of a particular policy based, in part, on where the vehicle is garaged. In many cases, U.S. insurers can use zip codes to determine these territorial ratings. However, the Connecticut Insurance Department prohibits this simplistic approach in pricing policies for non-fleet private passenger vehicles.

The state specifies that towns cannot be divided into multiple territories, by zip code or any other designation. Moreover, the regulation requires that when two towns are separated by a roadway, "an insurer ... shall rate the particular risk using the lower rate of the two territories." The Insurance Department may ask an insurer at any time to explain why it has assigned an address to a particular territory.

For this large insurance and financial services provider, compliance with the regulation's very detailed rules around territorial definitions required development of a deep understanding of addresses throughout the state. Manually determining each vehicle's territorial ratings with the right degree of specificity would consume a great deal of staff time. The company needed a process that could automate the complex geospatial analysis that the regulation requires, while incorporating high-quality data that business leaders could have confidence in.

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Client profile

• Major provider of property and casualty insurance, as well as other financial services

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• Based in the northeastern United States; serves markets around the world

The Precisely solution gives the insurer's management team confidence that each customer is assigned to the correct rating territory. In addition, its automation enables agents and brokers to price policies much more quickly.

Solution

The insurer already used Spectrum Global Geocoding to better understand its risk exposures across all the states where it does business. For Connecticut, the insurer decided to add the Address Fabric dataset to provide even more information about addresses across the state.

Address Fabric is an inventory of all known addresses nationwide. Precisely assigns each geographic data point a unique, persistent identifier called a PreciselyID, then geocodes it, standardizing and cleansing the data through an extensive address-hygiene process. The insurer selected Address Fabric because of its data quality and its ability to correlate the primary address for a given location with other addresses that might refer to the same home or business.

The insurer now receives from Precisely both postal and non-postal addresses for more than 1.8 million unique physical locations across Connecticut, in a flat file format. An internal system compares this data with customer information to assign the appropriate PreciselyID to each garaged vehicle that the company insures. Then the system maps each address to one of the company's designated "tax towns" for rate-setting purposes. When an address is adjacent to a road that separates two territories, the system calculates the vehicle's rate in each territory and assigns the vehicle to the one with the lower price, as the regulation requires.

Benefits

The Precisely solution gives the insurer's management team confidence that each customer is assigned to the correct rating territory — in other words, that the company is complying with the regulation. In addition, its automation enables agents and brokers to price policies much more quickly than they could if they had to determine a vehicle's rating territory on the fly.

Because the company receives quarterly Address Fabric updates, the territory mapping process remains accurate even if addresses change over time. And because the solution retains a full mapping of PreciselyIDs to their associated "tax town" designations, along with a historical record of changes to addressing information, the insurer can quickly answer any Insurance Department questions about territorial ratings.

Technology used

- Spectrum Global Geocoding
- Address Fabric

Because the solution retains a full mapping of PreciselyIDs to their associated "tax town" designations, the insurer can quickly answer any Insurance Department questions about territorial ratings.