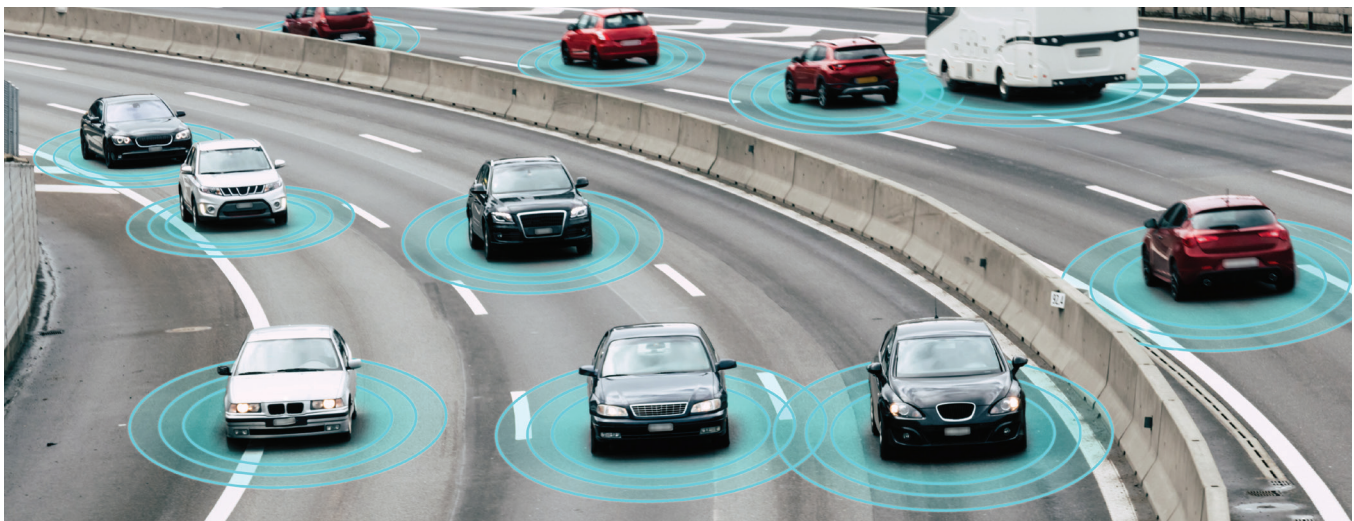# Overcoming the Hidden Costs of Incorrect VINs

A case study highlighting one insurer's experience validating VINs and identifying potential sources of premium leakage using Verisk data

Impact of invalid VINs on an insurer's book of business

On average, approximately 5 percent of all vehicle identification numbers (VINs) are either missing or invalid, potentially leaving multiple areas of exposure to mispriced risk.

A large national preferred auto insurer wanted to identify misstated VINs to improve the overall data accuracy of its personal auto book. Identifying those misstated VINs would allow the insurer to refine its symbol-based rating and adjust pricing accordingly. In addition, the insurer sought to confront premium leakage related to invalid vehicle registration.

Uncovering and correcting errors

While conducting a pilot of ISO Risk Analyzer, the insurer uncovered a number of invalid VINs in its book. The insurer used Verisk's Vehicle Registration Reports solution to correct its vehicle data by leveraging already available information, including vehicle owners, license plates, and partial VINs.

Many of the insurer's invalid VINs were due to older internal models and symbols that didn't account for a 17-digit VIN. Others stemmed from independent agents and human error, such as typing incorrect numbers or making the wrong selection from a drop-down menu. And some were the result of transfers from legacy systems that didn't require VINs or forewent the full 17-digit identifier.

Thousands of VINs, vehicles, policies, and households were analyzed in an initial batch of standard policies. After a successful round of VIN corrections, further vehicle and data clarifications were pursued in a second round of VIN cleansing.

[1] The Challenge of Auto Insurance Premium Leakage, Verisk, February 2017

Cleansing VINs and identifying potential hidden costs

The carrier was able to correct 78% of the invalid VINs in its book and adjust pricing to align with the more granular vehicle information acquired from a full 17-digit VIN. But there was more: VIN cleansing also used the full information set to help develop a more accurate view of the customers and vehicles in question, identifying potential hidden sources of premium leakage through the analysis.
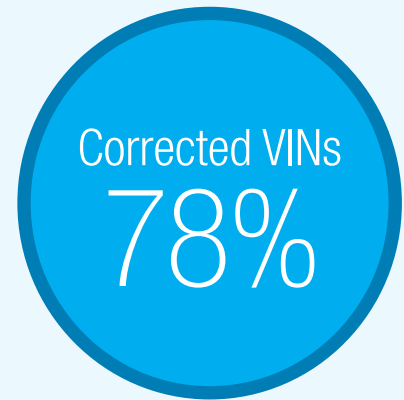
Corrected VINs
78%

Household hit rate	Branded title information	Misstated commercial use	Average number of "hidden" vehicles
91%	3.4%	1.4%	3.2

Among VIN-corrected vehicles, potential premium leakage was identified from several sources. Branded titles were found in 3.4 percent of the total vehicles run, and 1.4 percent of the vehicles showed misstated commercial use, 0.4 percent higher than the national average.

Another source of missing potential premium recovery was the identification of an average of 3.2 hidden vehicles, which could indicate misstated ownership interest, uninsured risk, or even opportunities to upsell. The bottom line: an improved understanding of the insurer's book of business and customer base with the potential to guide retention and pricing strategies.

Additional use cases for VIN cleansing include identifying garaging-related premium leakage, as well as uncovering a VIN's full 17 digits to recognize advanced driver-assistance systems. In addition, Vehicle Registration Reports information can be used to identify and correct policies rated in the wrong state, which can help improve compliance with state liability reporting requirements and mitigate penalties from regulators.

To learn how to get a book analysis, contact Verisk at:

🌐 verisk.com/VRR   📱 1-800-888-4476   ✉ info@verisk.com

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