



September 1999

## SAE J1663

# Truth in Labeling for Navigation Map Databases

### Overview

This standard provides a consistent method for describing the quality and content of navigation-capable map databases, along with consistent definitions of terminology and concepts. It defines the metrics and tests for describing the quality and content of such databases. The standard does not prescribe the quality that a map database must achieve; quality requirements will vary significantly from one application to another. Rather, the use of the standard allows application developers to compare databases from different vendors and select one that corresponds to their requirements.

### What is this standard for?

This standard, **SAE J1663, Truth in Labeling for Navigation Map Databases**, identifies a consistent set of map database content and quality characteristics and metrics. It includes a description of the metrics used for each characteristic and the replicable test procedures for assigning scores for each characteristic. Tests for completeness and accuracy of map properties are also defined. Therefore, this standard is an aid to the evaluation of the content and quality of navigation map databases.

### Who uses it?

This standard is intended primarily for use by developers of passenger vehicle navigation products, automobile manufacturers, and suppliers of automobile equipment. Database vendors may use the standard to construct a descriptive label to attach to their database product. Application developers may use the standard to help them select a database that is most appropriate for the application they are developing.

### How is it used?

This standard facilitates comparisons between different map databases by establishing consistent definitions of map features and attributes. It also identifies important properties of a map database that allows users to determine whether a given map database meets the needs of their application. Different applications need databases with different characteristics. For example, in-vehicle route guidance applications need a high degree of geographic accuracy, street names, house numbers, and detailed driving rule information (e.g., turn restrictions). As an example, systems which simply display maps and areas of traffic congestion do not need a great amount of detail. Advanced cruise control and collision avoidance systems, however, need even greater geographic accuracy than route guidance applications, but do not need house number information. The truth-in-labeling standard helps application developers choose a suitable database for just the characteristics they need, and lets them avoid paying for characteristics (such as very high accuracy) that they do not need.

### Scope

This SAE standard is intended for use with navigation-capable map databases and lists database characteristics, metrics, and scoring tests primarily for coverage in urban areas. It may also be applicable to other ITS traveler applications using digital maps.

### Related documents

ANSI/ASQC Z1.4 1981 – ANSI Standard for Quality Testing

ISO TC204 Working Group 3: ISO-GDF Quality Description and Measuring Methods (Working Group Draft)

121200

To obtain a copy of this standard, please contact:

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Publication Date: November 1995