



## Intelligent Transportation Systems Standards Fact Sheet

### SAE J2354

July 2001

## Advanced Traveler Information Systems (ATIS) Message Sets

### Overview

Clearly defined message sets are essential components in the design and operation of modern, computer-based ITS systems. Specifically, a message set provides a series, or set, of individual messages, established in a strict format, for exchanging information on a given topic. An agreed-upon message set with unambiguous definitions is one of the essential standards required to exchange messages between ITS systems.

Message sets work in conjunction with at least two other sets of standards to provide an effective data exchange. The first required set of standards include data dictionaries that provide the definition and syntax of individual data elements (DEs) that make up the specific message content of a message. In a simple analogy, message sets are the sentences where DEs are the individual words. The second set of standards needed for data exchange provides the actual communications protocols, and describes how the messages are encoded for transmission, transmitted and then decoded by the receiver.

This standard, **SAE J2354, Advanced Traveler Information Systems (ATIS) Message Sets**, provides the messages that are exchanged among information providers, traffic management centers, and other ITS centers.

### What is this standard for?

This standard defines message sets for advanced traveler information systems (ATIS) for general use independent of medium of transmission or bandwidth. The message sets themselves are made up of the data elements (DEs) defined in companion standard SAE J2353. This standard, **SAE J2354, Advanced Traveler Information Systems (ATIS) Message Sets**, provides a variety of ATIS messages, both one-way and two-way in nature, as well as various profiles for requesting such messages. In addition, it contains a diverse array of supporting messages including traffic flow, navigation, transit, weather, parking, and other commercial uses of ATIS. This standard provides a catalog of ATIS messages that can be used for many ATIS applications.

### Who uses it?

This standard is intended for use by ATIS message creators and application developers, both public- and private-sector. Anyone desiring to create ATIS messages that can be used by end-user ITS applications would follow the formats outlined in this standard to ensure interoperability.

### How is it used?

This standard is used to specify the precise format, element order, and transactional order of traveler information messages passing between information service providers (ISPs) and end-user applications. Used in conjunction with SAE J2353, which defines the DEs themselves, it provides a complete specification at the bit level for traveler information messages. The format of these messages (often reconstructed after some form of transmission) is similar to that used by end users in creating consumer applications.

### Scope

This standard is intended to provide a reference for ATIS messages used without any media or bandwidth restrictions. Such restrictions are defined in other SAE standards.

To obtain a copy of this standard, please contact:

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## Related documents

[SAE J2353 – Advanced Traveler Information Systems \(ATIS\) Data Dictionary](#)

[SAE J2369 – Standards for ATIS Message Sets Delivered over Reduced Bandwidth Media.](#)