



U.S. Department of  
Transportation



## Intelligent Transportation Systems Standards Fact Sheet

### NTCIP 1402

August 2002

## Transit Communications Interface Profiles (TCIP) Incident Management Business Area Standard

### Overview

The Transit Communications Interface Profiles (TCIP) is a family of standards that specifies the rules and terms for the automated exchange of information in transit applications such as operations, maintenance, planning, management, and customer services. TCIP standards define the information and information-transfer requirements among public transportation vehicles (PTVs), transit management centers (TrMCs), other transit facilities, and ITS centers. TCIP standards also identify mechanical and electrical interfaces (physical layer) and methods for ensuring data integrity (data-link layer), specify required message sets, and provide a common set of conformance requirements.

This standard, **NTCIP 1402, TCIP Incident Management Business Area Standard**, defines the incident management data elements (called “objects”) and messages that are supported by the TCIP. The standard also provides for information transfer among transit departments, emergency response service centers and regional traffic management centers.

The NTCIP family of standards is a joint project of the following standards development organizations:

**American Association of State Highway and Transportation Officials (AASHTO)**

**Institute of Transportation Engineers (ITE)**

**National Electrical Manufacturers Association (NEMA)**

(Contact information is shown at the end of this fact sheet)

To obtain a copy of this standard, please contact:  
**Global Engineering Documents**  
Web site: <http://global.ihs.com>

Publication Date: December 2000

### What is this standard for?

The incident management business area standard allows real-time information needed for incident management to be provided to and shared among incident management centers and other information centers and services. The incident management domain includes data and messages related to detecting, verifying, prioritizing, responding to, and clearing unplanned events (i.e., accidents, weather-related events, crimes, etc.) that affect transit operations. These include all data needed to identify the date, time, and location of events, the source of the information about the event, codes for indicating the type and severity of the incident, detour information, and emergency response team dispatching. It also includes data necessary for providing information to the traveling public about the impacts of the incident on the transportation network including the impacts on transit service. Largely, incident management requirements for transit are the same as those for other transportation centers.

### Who uses it?

Normally, the incident management business area for transit agencies falls under the responsibility of its security forces and/or control centers. The transit incident management business area has close ties to other incident management centers outside, such as municipal and/or state police, fire departments, and emergency medical services. For any incident management system, the important interfaces in the context of the National ITS Architecture include the emergency management centers (EM), transportation management centers (TMC), emergency vehicle subsystems (EmVS), transit management centers (TrMC), transit vehicle subsystems (TrVS), transit garage management (TrGM), and planning subsystems (PS). To the extent that the impact of incident management activities affect a passenger's ability to utilize public transportation, incident management systems must be able to provide information to remote traveler support (RTS), information service providers (ISP), and transit customer service information centers.

### How is it used?

This standard provides a list of objects (data elements) and messages necessary for conducting control center or transit management operations. It must be used in conjunction with the TCIP Framework Standard (NTCIP 1400). The TCIP Framework Standard organizes the information and data transfer requirements among public transportation vehicles, transit

management centers, transit facilities, and other ITS centers. The Framework Standard also identifies physical and data link communication requirements, develops required message sets, and establishes a liaison between the Institute of Transportation Engineers (ITE) and other standards development organizations (SDOs).

### **Related documents**

ISO/IEC 8824: 1994 – Abstract Syntax Notation One (ASN.1)

[IEEE Std 1488-2000 – Trial Use Standard for Message Set Template for Intelligent Transportation Systems](#)

[IEEE Std 1489-1999 – Standard for Data Dictionaries for Intelligent Transportation Systems](#)

[NTCIP 1400 -- Transit Communications Interface Profiles \(TCIP\) Framework Standard](#)

[NTCIP 1401 -- Transit Communications Interface Profiles \(TCIP\) Common Public Transportation \(CPT\) Objects](#)

[NTCIP 1404 -- Transit Communications Interface Profiles \(TCIP\) Scheduling \(SCH\) Business Area Standard](#)

[NTCIP 1405 -- Transit Communications Interface Profiles \(TCIP\) Spatial Representation \(SP\) Business Area Standard](#)

[NTCIP 1406 -- Transit Communications Interface Profiles \(TCIP\) On-Board \(OB\) Objects](#)

[NTCIP 1407 -- Transit Communications Interface Profiles \(TCIP\) Control Center \(CC\) Objects](#)

[ITE-AASHTO TM1.03 – Standard for Functional Level Traffic Management Data Dictionary \(TMDD\)](#)

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