

ELABORACIÓN DE LA ARQUITECTURA NACIONAL DE ITS [V.2] Y ANTEPROYECTO PARA ARQUITECTURAS REGIONALES DE ITS

ANEXO 1:

NORMATIVA DE APLICACIÓN EN LA ARQUITECTURA ITS



21 DE FEBRERO DE 2014

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1 INTRODUCCIÓN Y OBJETIVOS DEL DOCUMENTO

La Arquitectura Nacional ITS v.2 para México define el marco de trabajo para la definición, planificación, despliegue e integración de los ITS en los entornos urbanos, interurbanos y rurales de todo el país.

La Arquitectura ITS se ha definido desde un punto de vista funcional, es decir, sin atender a tecnologías específicas, si bien es un objetivo primordial en el despliegue de la misma conseguir la integración plena y efectiva de todos los equipos y sistemas considerados. Para conseguir este objetivo, es fundamental que los flujos e intercambios de información entre los diferentes equipos y sistemas tengan lugar bajo unos estándares comunes y la misma normativa de referencia.

El presente documento constituye un anexo de la Arquitectura Nacional ITS v.2 para México, en el cual se expone la normativa de referencia que han de seguir los flujos de información intercambiados por los diferentes subsistemas con el fin de asegurar la integración e interoperabilidad de los equipos y sistemas involucrados en el despliegue e implantación de la arquitectura ITS a todos sus niveles, federal, estatal y local.

El presente documento se ha organizado en dos apartados:

- Marco general: se detalla la normativa de referencia en vigor en México, tanto de manera general como la que se aplica específicamente al transporte.
- Estándares de comunicación. Se incluyen los estándares existentes en México identificados, así como otra normativa internacional que podría ser aplicada en el país, en ausencia de estándares oficialmente aprobados en México. Con este fin se han tomado como referencia los estándares utilizados por la Arquitectura ITS de los Estados Unidos, dados los estrechos vínculos comerciales y culturales de ambos países.

2 MARCO GENERAL

Si bien el propósito de este anexo es principalmente recoger la normatividad relativa a los protocolos de comunicación para los flujos de información entre dispositivos ITS, que garantice la interoperabilidad, se debe atender igualmente a las leyes, reglamentos y normas de ámbito superior que son de aplicación.

Se incluye a continuación un listado no exhaustivo de normativa de referencia en vigor en México.

2.1 Normativa y leyes genéricas de aplicación:

- Constitución Política de los Estados Unidos Mexicanos.
- Ley General del Sistema Nacional de Seguridad Pública. (Última reforma publicada DOF el 29 de octubre de 2013).
- Ley de la Policía Federal (Última reforma publicada en el DOF 24-06-2011). y su Reglamento en su última versión.
- Ley del Registro Público Vehicular. (Última reforma publicada DOF 05-06-2012).
- Ley de Metrología y Normalización (Última reforma publicada DOF 9-04-2012), y su Reglamento en su última versión.
- Ley de Obras Públicas y Servicios Relacionados con las Mismas (Última reforma publicada DOF 9-04-2012)
- Ley del Servicio de Administración Tributaria (Última reforma publicada DOF 09-04-2012)
- Ley General de Protección Civil, (Publicada DOF 06-06-2012).
- Ley Federal de Protección de Datos Personales en Posesión de los Particulares (Última reforma publicada DOF 05-07-2010)
- Ley Federal de Telecomunicaciones. (Última reforma publicada DOF 16-01-2013).
- Ley de Vías Generales de Comunicación (Última reforma publicada DOF 09-04-2012).

2.2 Normativa de aplicación al transporte

- Leyes federales:
 - Ley de Caminos, Puentes y Autotransporte Federal (Última reforma publicada DOF 16-12-2013).
 - Ley de Aeropuertos (Última reforma publicada DOF 21-01-2009).

- Ley de Aviación Civil (Última reforma publicada DOF 21-05-2013).
- Ley de Puertos (Última reforma publicada DOF 23-01-2014).
- Ley de Navegación y Comercio Marítimos (Última reforma publicada DOF 23-01-2014).
- Ley Aduanera (Última reforma publicada DOF 09-12-2013).
- Reglamentos federales:
 - Reglamento sobre el Peso, Dimensiones y Capacidad de los Vehículos de Autotransporte que transitan en los Caminos y Puentes de Jurisdicción Federal. 15-11-2006.
 - Reglamento de Autotransporte Federal y Servicios Auxiliares. 28-11-2000.
 - Reglamento de Tránsito en Carreteras y Puentes de Jurisdicción Federal. 22-11-2012.
 - Reglamento para el Transporte Terrestre de Materiales y Residuos Peligrosos. 20-11-2012.
 - Reglamento de la Ley de Aeropuertos. 09-09-2003
 - Reglamento de la Ley de Aviación Civil. 24-06-2004
 - Reglamento de la Ley de Puertos. 08-08-2000
 - Reglamento de la Ley de Navegación. 19-04-2005
- Tratados y acuerdos internacionales:
 - Tratado de Libre Comercio de América del Norte (TLCAN), en vigor desde 01-01-1994.
 - Acuerdo por el que se crea la modalidad temporal del servicio de autotransporte transfronterizo de carga internacional entre los Estados Unidos Mexicanos y los Estados Unidos de América. (07-07-2011).
- Normas Oficiales Mexicanas:
 - **NOM-012-SCT-2-2008**, Sobre el peso y dimensiones máximas con los que pueden circular los vehículos de autotransporte que transitan en los caminos y puentes de jurisdicción federal. 01-04-2008.
 - ACUERDO que modifica el transitorio segundo de la Norma Oficial Mexicana NOM-012-SCT-2-2008, Sobre el peso y dimensiones máximas con los que pueden circular los vehículos de autotransporte que transitan en las vías generales de comunicación de jurisdicción federal. 30-04-2012.
 - AVISO por medio del cual se prorroga, por un plazo de seis meses, la vigencia del Acuerdo que modifica el transitorio segundo de la Norma Oficial Mexicana NOM-012-SCT-2-2008. 30-10-2012.

- **NOM-068-SCT-2-2000**, Transporte terrestre-Servicio de autotransporte federal de pasaje, turismo, carga y transporte privado-Condiciones físico-mecánica y de seguridad para la operación en caminos y puentes de jurisdicción federal. 24-07-2000.
- **NOM-035-SCT-2-2010**, Remolques y semirremolques- Especificaciones de seguridad y métodos de prueba. 30-09-2010.
- **NOM-040-SCT-2-2012**, Para el transporte de objetos indivisibles de gran peso y/o volumen, peso y dimensiones de las combinaciones vehiculares y de las grúas industriales y su tránsito por caminos y puentes de jurisdicción federal. 20-03-2013
- **NOM-001-SCT-2-2000**, Placas metálicas, calcomanías de identificación y tarjetas de circulación empleadas en automóviles, autobuses, camiones, minibuses, Motocicletas y remolques matriculados en la república mexicana, licencia federal de conductor y calcomanía de verificación físico – mecánica - especificaciones y métodos de prueba. 3-03-2003.
- Normas de Transporte de Residuos y Materiales Peligrosos, entre ellas:
 - **NOM-002-SCT-2011**. Listado de las sustancias y materiales peligrosos más usualmente transportados. 27-01-2012.
 - **NOM-003-SCT/2008**, Características de las etiquetas de envases y embalajes, destinadas al transporte de sustancias, materiales y residuos peligrosos. 15-08-2008.
 - **NOM-004-SCT/2008**, Sistemas de identificación de unidades destinadas al transporte de sustancias, materiales y residuos peligrosos. 18-08-2008.
 - **NOM-005-SCT/2008**, Información de emergencia para el transporte de sustancias, materiales y residuos peligrosos. 14-08-2008.
 - **NOM-006-SCT2/2011**, Aspectos básicos para la revisión ocular diaria de la unidad destinada al autotransporte de materiales y residuos peligrosos. 22-08-2011.
 - **NOM-007-SCT-2-2010**, Marcado de envases y embalajes destinados al transporte de sustancias y residuos peligrosos. 06-09-2010.
 - **NOM-011-SCT2/2012**, Condiciones para el transporte de las sustancias y materiales peligrosos envasadas y/o embaladas en cantidades limitadas. 5-07-2012
 - **NOM-023-SCT2/2011**, Información que debe contener la Placa Técnica que deben portar los autotanques, cisternas portátiles y Recipientes Metálicos Intermedios a Granel (RIG) que transportan sustancias, materiales y residuos peligrosos. 14-09-2011.
 - **NOM-028-SCT2/2010**, Disposiciones especiales y generales para el transporte de las sustancias, materiales y residuos peligrosos de la clase 3 líquidos inflamables. 22-04-2010.

3 ESTÁNDARES DE COMUNICACIÓN

En este apartado se hace referencia a los estándares identificados para los flujos de información definidos en la *Arquitectura Funcional* y desarrollados en la *Arquitectura de Comunicaciones*.

En primer lugar se incluyen aquellos que se han identificado en la normativa mexicana, y posteriormente se incluyen estándares internacionales, que pueden ser tomados como referencia en caso de ausencia de los mismos.

3.1 Compendio de estándares existentes en México

Se encuentran definidos por las siguientes normas:

- N-EIP-2-01-001/13 Protocolos de Comunicación para Tableros de Señalamiento Variable con LED's.
- N-EIP-2-01-002/13 Protocolos de Comunicación para Tableros de Señalamiento Cambiable con LED's.
- N-EIP-2-01-003/13 Protocolos de Comunicación para Tableros de Señalamiento de Encendido-Apagado con LED's.
- N-EIP-2-01-004/13 Protocolos de Comunicación para Tableros de Señalamiento de Velocidad Variable con LED's.
- N-EIP-2-01-005/13 Protocolos de Comunicación para Tableros de Señalamiento de Velocidad Real con LED's.
- N-EIP-2-01-006/13 Protocolos de Comunicación para Tableros de Señalamiento de Tiempo Estimado de Viaje con LED's.
- N-EIP-2-01-007/13 Protocolos de Comunicación para Antenas de Telepeaje.
- N-EIP-2-01-008/13 Protocolos de Comunicación para Transpondedores de Telepeaje.

3.2 Compendio de estándares internacionales de referencia

A continuación, para cada flujo de información identificado y definido en el documento Arquitectura de Comunicaciones se exponen los estándares de referencia utilizados en la arquitectura ITS de EU, que podrían ser aplicados en la Arquitectura Nacional ITS v.2 para México, en ausencia de otras normas en vigor en la república mexicana.

En cada flujo identificado se indica:

- La normativa de referencia internacional, cuando exista.
- En caso de no existir normativa de referencia, se especifica si el flujo de información es candidato a ser estandarizado, o si por el contrario no hay planes de estandarización del mismo.

Para facilitar la búsqueda de cada flujo de información, se muestran ordenados alfabéticamente a continuación.

3.2.1 A

Tabla 1: Normativa de referencia para flujos de información (letra A)

FLUJOS	NORMATIVA
Actualización de estado de recurso/activo	Flujo candidato a ser normalizado
Actualización de interfaz para el viajero	Flujo sin normativa de referencia
Actualización de mapa	Flujo candidato a ser normalizado
Actualización de tarjeta o dispositivo	Flujo candidato a ser normalizado
Actualizaciones para conductor	Flujo candidato a ser normalizado
Alarmas	Flujo candidato a ser normalizado
Alerta de desviación de ruta	Flujo candidato a ser normalizado
Alertas	Flujo sin normativa de referencia
Alertas asociadas a la flota y la carga	Flujo sin normativa de referencia
Alertas y avisos	Flujo candidato a ser normalizado
Asignación de ruta	Flujo sin normativa de referencia
Autorización de acceso	Flujo candidato a ser normalizado
Aviso de emergencia	SAE J2266 Location Referencing Message Specification (LRMS) SAE J2313 On-Board Land Vehicle Mayday Reporting Interface SAE J2354 Message Set for Advanced Traveler Information System (ATIS) SAE J2540 Messages for Handling Strings and Look-Up Tables in ATIS Standards SAE J2540/1 RDS (Radio Data System) Phrase Lists SAE J2540/2 ITIS (International Traveler Information Systems) Phrase Lists SAE J2540/3 National Names Phrase List
Aviso en la zona de trabajo	Flujo sin normativa de referencia
Avisos en un cruce carretera-ferrocarril (paso a nivel)	Flujo candidato a ser normalizado
Avisos para difusión	Flujo candidato a ser normalizado

3.2.2 B

Tabla 2: Normativa de referencia para flujos de información (letra B)

FLUJOS	NORMATIVA
Bloqueo de vehículo de carga	Flujo candidato a ser normalizado
Bloqueo de vehículo de transporte público	Flujo candidato a ser normalizado

3.2.3 C

Tabla 3: Normativa de referencia para flujos de información (letra C)

FLUJOS	NORMATIVA
Características de identidad esperadas del conductor	Flujo candidato a ser normalizado
Características de la carretera	Flujo sin normativa de referencia
Características del área segura	Flujo sin normativa de referencia
Características del tránsito	Flujo sin normativa de referencia
Características del vehículo	Flujo sin normativa de referencia
Cargos de peajes basados en distancia recorrida por enlace	Flujo candidato a ser normalizado
Comandos de control semafórico	NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1103 Transportation Management Protocols (TMP) NTCIP 1201 Global Object Definitions NTCIP 1202 Object Definitions for Actuated Traffic Signal Controller (ASC) Units NTCIP 1210 Field Management Stations (FMS) - Part 1: Object Definitions for Signal System Masters NTCIP 1211 Object Definitions for Signal Control and Prioritization (SCP) NTCIP 1214 Object Definitions for Conflict Monitor Units (CMU) NTCIP 2101 Point to Multi-Point Protocol Using RS-232 Subnetwork Profile NTCIP 2102 Point to Multi-Point Protocol Using FSK Modem Subnetwork Profile NTCIP 2103 Point-to-Point Protocol Over RS-232 Subnetwork Profile NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2201 Transportation Transport Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2301 Simple Transportation Management Framework (STMF) Application Profile NTCIP 2302 Trivial File Transfer Protocol (TFTP) Application Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile
Condiciones del vehículo de transporte público	APTA TCIP-S-001 3.0.4 Standard for Transit Communications Interface Profiles
Condiciones meteorológicas	Flujo sin normativa de referencia
Confirmación de emergencia	SAE J2266 Location Referencing Message Specification (LRMS) SAE J2313 On-Board Land Vehicle Mayday Reporting Interface SAE J2354 Message Set for Advanced Traveler Information System (ATIS) SAE J2540 Messages for Handling Strings and Look-Up Tables in ATIS Standards SAE J2540/1 RDS (Radio Data System) Phrase Lists SAE J2540/2 ITIS (International Traveler Information Systems) Phrase Lists SAE J2540/3 National Names Phrase List
Confirmación de entrega del contenedor	Flujo sin normativa de referencia
Confirmación de recogida de contenedor	Flujo sin normativa de referencia
Confirmación de solicitud de archivo	Flujo candidato a ser normalizado
Confirmación de tránsito de carga intermodal	Flujo candidato a ser normalizado
Confirmación de viaje	APTA TCIP-S-001 3.0.4 Standard for Transit Communications Interface Profiles SAE J2266 Location Referencing Message Specification (LRMS) SAE J2354 Message Set for Advanced Traveler Information System (ATIS) SAE J2540 Messages for Handling Strings and Look-Up Tables in ATIS Standards SAE J2540/1 RDS (Radio Data System) Phrase Lists SAE J2540/2 ITIS (International Traveler Information Systems) Phrase Lists SAE J2540/3 National Names Phrase List
Consulta del gerente de flota	Flujo sin normativa de referencia
Consulta del sello o precinto del contenedor	Flujo sin normativa de referencia
Control de carril reversible	Flujo candidato a ser normalizado
Control de dispositivo de protección a usuario en carretera	Flujo candidato a ser normalizado
Control de dispositivos de advertencia en zona de trabajo	Flujo candidato a ser normalizado
Control de gestión de carril	Flujo candidato a ser normalizado
Control de sensor de área segura	Flujo candidato a ser normalizado

FLUJOS	NORMATIVA
Control de sensor de contaminación	NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1103 Transportation Management Protocols (TMP) NTCIP 1201 Global Object Definitions NTCIP 1204 Object Definitions for Environmental Sensor Stations (ESS) NTCIP 2101 Point to Multi-Point Protocol Using RS-232 Subnetwork Profile NTCIP 2102 Point to Multi-Point Protocol Using FSK Modem Subnetwork Profile NTCIP 2103 Point-to-Point Protocol Over RS-232 Subnetwork Profile NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2201 Transportation Transport Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2301 Simple Transportation Management Framework (STMF) Application Profile NTCIP 2302 Trivial File Transfer Protocol (TFTP) Application Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile
Control de sensor de emisiones	Flujo candidato a ser normalizado
Control de sensores de tránsito	NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1103 Transportation Management Protocols (TMP) NTCIP 1201 Global Object Definitions NTCIP 1209 Data Element Definitions for Transportation Sensor Systems (TSS) NTCIP 2101 Point to Multi-Point Protocol Using RS-232 Subnetwork Profile NTCIP 2102 Point to Multi-Point Protocol Using FSK Modem Subnetwork Profile NTCIP 2103 Point-to-Point Protocol Over RS-232 Subnetwork Profile NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2201 Transportation Transport Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2301 Simple Transportation Management Framework (STMF) Application Profile NTCIP 2302 Trivial File Transfer Protocol (TFTP) Application Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile
Control de sensores medioambientales	Flujo candidato a ser normalizado NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1103 Transportation Management Protocols (TMP) NTCIP 1201 Global Object Definitions NTCIP 1204 Object Definitions for Environmental Sensor Stations (ESS) NTCIP 2101 Point to Multi-Point Protocol Using RS-232 Subnetwork Profile NTCIP 2102 Point to Multi-Point Protocol Using FSK Modem Subnetwork Profile NTCIP 2103 Point-to-Point Protocol Over RS-232 Subnetwork Profile NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2201 Transportation Transport Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2301 Simple Transportation Management Framework (STMF) Application Profile NTCIP 2302 Trivial File Transfer Protocol (TFTP) Application Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile
Control de sensores para el monitoreo de la infraestructura	Flujo candidato a ser normalizado
Control de sistemas de control de accesos	NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1103 Transportation Management Protocols (TMP) NTCIP 1201 Global Object Definitions NTCIP 1207 Object Definitions for Ramp Meter Control (RMC) Units NTCIP 2101 Point to Multi-Point Protocol Using RS-232 Subnetwork Profile NTCIP 2102 Point to Multi-Point Protocol Using FSK Modem Subnetwork Profile NTCIP 2103 Point-to-Point Protocol Over RS-232 Subnetwork Profile NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2201 Transportation Transport Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2301 Simple Transportation Management Framework (STMF) Application Profile NTCIP 2302 Trivial File Transfer Protocol (TFTP) Application Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile
Control de vehículo	Flujo candidato a ser normalizado

FLUJOS	NORMATIVA
Control de video-vigilancia	NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1103 Transportation Management Protocols (TMP) NTCIP 1201 Global Object Definitions NTCIP 1205 Object Definitions for Closed Circuit Television (CCTV) Camera Control NTCIP 1208 Object Definitions for Closed Circuit Television (CCTV) Switching NTCIP 2101 Point to Multi-Point Protocol Using RS-232 Subnetwork Profile NTCIP 2102 Point to Multi-Point Protocol Using FSK Modem Subnetwork Profile NTCIP 2103 Point-to-Point Protocol Over RS-232 Subnetwork Profile NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2201 Transportation Transport Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2301 Simple Transportation Management Framework (STMF) Application Profile NTCIP 2302 Trivial File Transfer Protocol (TFTP) Application Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile
Control de video-vigilancia de área segura	NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1103 Transportation Management Protocols (TMP) NTCIP 1201 Global Object Definitions NTCIP 1205 Object Definitions for Closed Circuit Television (CCTV) Camera Control NTCIP 1208 Object Definitions for Closed Circuit Television (CCTV) Switching NTCIP 2101 Point to Multi-Point Protocol Using RS-232 Subnetwork Profile NTCIP 2102 Point to Multi-Point Protocol Using FSK Modem Subnetwork Profile NTCIP 2103 Point-to-Point Protocol Over RS-232 Subnetwork Profile NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2201 Transportation Transport Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2301 Simple Transportation Management Framework (STMF) Application Profile NTCIP 2302 Trivial File Transfer Protocol (TFTP) Application Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile
Control del sistema de avisos de la carretera	NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1103 Transportation Management Protocols (TMP) NTCIP 1201 Global Object Definitions NTCIP 1209 Data Element Definitions for Transportation Sensor Systems (TSS) NTCIP 2101 Point to Multi-Point Protocol Using RS-232 Subnetwork Profile NTCIP 2102 Point to Multi-Point Protocol Using FSK Modem Subnetwork Profile NTCIP 2103 Point-to-Point Protocol Over RS-232 Subnetwork Profile NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2201 Transportation Transport Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2301 Simple Transportation Management Framework (STMF) Application Profile NTCIP 2302 Trivial File Transfer Protocol (TFTP) Application Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile
Control del sistema de barrera	Flujo candidato a ser normalizado
Control del sistema de salvaguarda	Flujo candidato a ser normalizado
Control del sistema de tratamiento de la carretera	NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1103 Transportation Management Protocols (TMP) NTCIP 1201 Global Object Definitions NTCIP 1204 Object Definitions for Environmental Sensor Stations (ESS) NTCIP 2101 Point to Multi-Point Protocol Using RS-232 Subnetwork Profile NTCIP 2102 Point to Multi-Point Protocol Using FSK Modem Subnetwork Profile NTCIP 2103 Point-to-Point Protocol Over RS-232 Subnetwork Profile NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2201 Transportation Transport Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2301 Simple Transportation Management Framework (STMF) Application Profile NTCIP 2302 Trivial File Transfer Protocol (TFTP) Application Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile

FLUJOS	NORMATIVA
Control del sistema de vehículo de mantenimiento y construcción	Flujo candidato a ser normalizado
Control remoto de video-vigilancia	Flujo candidato a ser normalizado ITE TMDD Traffic Management Data Dictionary (TMDD) and Message Sets for External Traffic Management Center Communications (MS/ETMCC) NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML)
Coordinación de archivos	Flujo candidato a ser normalizado
Coordinación de control de vehículos	Flujo candidato a ser normalizado
Coordinación de información de amenazas	Flujo candidato a ser normalizado
Coordinación de la información para la gestión de incidentes	IEEE 1512 -2006 Standard for Common Incident Management Message Sets for use by Emergency Management Centers IEEE 1512.1-2006 Standard for Traffic Incident Management Message Sets for Use by Emergency Management Centers IEEE 1512.2-2004 Standard for Public Safety Traffic Incident Management Message Sets for Use by Emergency Management Centers IEEE 1512.3-2006 Standard for Hazardous Material Incident Management Message Sets for Use by Emergency Management Centers IEEE P1512.4 Standard for Common Traffic Incident Management Message Sets for Use in Entities External to Centers NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML)
Coordinación de recursos	IEEE 1512 -2006 Standard for Common Incident Management Message Sets for use by Emergency Management Centers IEEE 1512.1-2006 Standard for Traffic Incident Management Message Sets for Use by Emergency Management Centers IEEE 1512.2-2004 Standard for Public Safety Traffic Incident Management Message Sets for Use by Emergency Management Centers IEEE 1512.3-2006 Standard for Hazardous Material Incident Management Message Sets for Use by Emergency Management Centers IEEE P1512.4 Standard for Common Traffic Incident Management Message Sets for Use in Entities External to Centers NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML)
Coordinación de recursos de mantenimiento y construcción	Flujo candidato a ser normalizado
Coordinación de respuesta al incidente	IEEE 1512 -2006 Standard for Common Incident Management Message Sets for use by Emergency Management Centers IEEE 1512.1-2006 Standard for Traffic Incident Management Message Sets for Use by Emergency Management Centers IEEE 1512.2-2004 Standard for Public Safety Traffic Incident Management Message Sets for Use by Emergency Management Centers IEEE 1512.3-2006 Standard for Hazardous Material Incident Management Message Sets for Use by Emergency Management Centers IEEE P1512.4 Standard for Common Traffic Incident Management Message Sets for Use in Entities External to Centers NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML)

FLUJOS	NORMATIVA
Coordinación de tránsito de emergencia	ITE TMDD Traffic Management Data Dictionary (TMDD) and Message Sets for External Traffic Management Center Communications (MS/ETMCC) NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML)
Coordinación del equipamiento de carretera	NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 1202 Object Definitions for Actuated Traffic Signal Controller (ASC) Units NTCIP 1210 Field Management Stations (FMS) - Part 1: Object Definitions for Signal System Masters NTCIP 1214 Object Definitions for Conflict Monitor Units (CMU) NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML)
Coordinación del plan de emergencia	Flujo candidato a ser normalizado
Coordinación tarifaria de transporte público	APTA TCIP-S-001 3.0.4 Standard for Transit Communications Interface Profiles NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML)

3.2.4 D

Tabla 4: Normativa de referencia para flujos de información (letra D)

FLUJOS	NORMATIVA
Datos de actividad diaria	Flujo candidato a ser normalizado
Datos de amenazas para análisis	Flujo candidato a ser normalizado
Datos de archivo de equipamiento a un lado del camino	NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1103 Transportation Management Protocols (TMP) NTCIP 1201 Global Object Definitions NTCIP 1204 Object Definitions for Environmental Sensor Stations (ESS) NTCIP 1206 Object Definitions for Data Collection and Monitoring (DCM) Devices NTCIP 1209 Data Element Definitions for Transportation Sensor Systems (TSS) NTCIP 2101 Point to Multi-Point Protocol Using RS-232 Subnetwork Profile NTCIP 2102 Point to Multi-Point Protocol Using FSK Modem Subnetwork Profile NTCIP 2103 Point-to-Point Protocol Over RS-232 Subnetwork Profile NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2201 Transportation Transport Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2301 Simple Transportation Management Framework (STMF) Application Profile NTCIP 2302 Trivial File Transfer Protocol (TFTP) Application Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile
Datos de archivos de tránsito	ASTM E2468-05 Standard Practice for Metadata to Support Archived Data Management Systems ASTM E2665-08 Standard Specifications for Archiving ITS-Generated Traffic Monitoring Data ITE TMDD Traffic Management Data Dictionary (TMDD) and Message Sets for External Traffic Management Center Communications (MS/ETMCC) NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML)
Datos de archivos de transporte público	Flujo candidato a ser normalizado
Datos de condiciones de la infraestructura	Flujo candidato a ser normalizado
Datos de contaminación de un área	NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1103 Transportation Management Protocols (TMP) NTCIP 1201 Global Object Definitions NTCIP 1204 Object Definitions for Environmental Sensor Stations (ESS) NTCIP 2101 Point to Multi-Point Protocol Using RS-232 Subnetwork Profile NTCIP 2102 Point to Multi-Point Protocol Using FSK Modem Subnetwork Profile NTCIP 2103 Point-to-Point Protocol Over RS-232 Subnetwork Profile NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2201 Transportation Transport Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2301 Simple Transportation Management Framework (STMF) Application Profile NTCIP 2302 Trivial File Transfer Protocol (TFTP) Application Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile
Datos de control de la carretera automatizada	Flujo candidato a ser normalizado
Datos de control de un cruce carretera-ferrocarril (paso a nivel)	Flujo candidato a ser normalizado

FLUJOS	NORMATIVA
Datos de control de vehículos automatizados	Flujo candidato a ser normalizado
Datos de demanda	Flujo candidato a ser normalizado
Datos de emergencia de transporte público	IEEE 1512 -2006 Standard for Common Incident Management Message Sets for use by Emergency Management Centers IEEE 1512.1-2006 Standard for Traffic Incident Management Message Sets for Use by Emergency Management Centers IEEE 1512.2-2004 Standard for Public Safety Traffic Incident Management Message Sets for Use by Emergency Management Centers IEEE 1512.3-2006 Standard for Hazardous Material Incident Management Message Sets for Use by Emergency Management Centers IEEE P1512.4 Standard for Common Traffic Incident Management Message Sets for Use in Entities External to Centers NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML)
Datos de emisiones de vehículos	Flujo candidato a ser normalizado
Datos de fallo en control semafórico	NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1103 Transportation Management Protocols (TMP) NTCIP 1201 Global Object Definitions NTCIP 1202 Object Definitions for Actuated Traffic Signal Controller (ASC) Units NTCIP 1210 Field Management Stations (FMS) - Part 1: Object Definitions for Signal System Masters NTCIP 1214 Object Definitions for Conflict Monitor Units (CMU) NTCIP 2101 Point to Multi-Point Protocol Using RS-232 Subnetwork Profile NTCIP 2102 Point to Multi-Point Protocol Using FSK Modem Subnetwork Profile NTCIP 2103 Point-to-Point Protocol Over RS-232 Subnetwork Profile NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2201 Transportation Transport Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2301 Simple Transportation Management Framework (STMF) Application Profile NTCIP 2302 Trivial File Transfer Protocol (TFTP) Application Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile
Datos de gestión de archivos	Flujo sin normativa de referencia
Datos de liquidación/tramitación en aduana	ASTM E2158-01 Standard Specification for Dedicated Short Range Communication (DSRC) Physical Layer using Microwave in the 902-928 MHz Band IEEE 1455-1999 Standard for Message Sets for Vehicle/Roadside Communications
Datos de localización de vehículos de carga	APTA TCIP-S-001 3.0.4 Standard for Transit Communications Interface Profiles
Datos de localización de vehículos de transporte público	APTA TCIP-S-001 3.0.4 Standard for Transit Communications Interface Profiles
Datos de localización del vehículo	Flujo candidato a ser normalizado
Datos de localización del vehículo de mantenimiento y construcción	Flujo candidato a ser normalizado
Datos de peaje	Flujo candidato a ser normalizado
Datos de protección de usuario en carretera	Flujo candidato a ser normalizado
Datos de seguimiento del vehículo de emergencia	Flujo candidato a ser normalizado
Datos de seguridad a bordo	ASTM E2158-01 Standard Specification for Dedicated Short Range Communication (DSRC) Physical Layer using Microwave in the 902-928 MHz Band Flujo candidato a ser normalizado IEEE 1455-1999 Standard for Message Sets for Vehicle/Roadside Communications

FLUJOS	NORMATIVA
Datos de seguridad del vehículo	ASTM E2213-03 Standard Specification for Telecommunications and Information Exchange Between Roadside and Vehicle Systems - 5 GHz Band Dedicated Short Range Communications (DSRC) Medium Access Control (MAC) and Physical Layer (PHY) Specifications IEEE 1609.1-2006 Standard for Wireless Access in Vehicular Environments (WAVE) - Resource Manager IEEE 1609.2-2006 Standard for Wireless Access in Vehicular Environments (WAVE) - Security Services for Applications and Management Messages IEEE 1609.3 Standard for Wireless Access in Vehicular Environments (WAVE) - Networking Services IEEE 1609.4-2006 Standard for Wireless Access in Vehicular Environments (WAVE) - Multi-Channel Operation IEEE 802.11p Standard for Information Technology - Telecommunications and Information Exchange Between Systems - Local and Metropolitan Area Networks - Specific Requirements - Part II: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specification IEEE P1609.0 Standard for Wireless Access in Vehicular Environments (WAVE) - Architecture SAE J2735 Dedicated Short Range Communications (DSRC) Message Set Dictionary
Datos de seguridad del vehículo en una intersección	ASTM E2213-03 Standard Specification for Telecommunications and Information Exchange Between Roadside and Vehicle Systems - 5 GHz Band Dedicated Short Range Communications (DSRC) Medium Access Control (MAC) and Physical Layer (PHY) Specifications IEEE 1609.1-2006 Standard for Wireless Access in Vehicular Environments (WAVE) - Resource Manager IEEE 1609.2-2006 Standard for Wireless Access in Vehicular Environments (WAVE) - Security Services for Applications and Management Messages IEEE 1609.3 Standard for Wireless Access in Vehicular Environments (WAVE) - Networking Services IEEE 1609.4-2006 Standard for Wireless Access in Vehicular Environments (WAVE) - Multi-Channel Operation IEEE 802.11p Standard for Information Technology - Telecommunications and Information Exchange Between Systems - Local and Metropolitan Area Networks - Specific Requirements - Part II: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specification IEEE P1609.0 Standard for Wireless Access in Vehicular Environments (WAVE) - Architecture SAE J2735 Dedicated Short Range Communications (DSRC) Message Set Dictionary
Datos de sensor de área segura	Flujo candidato a ser normalizado
Datos de sensor medioambiental	Flujo candidato a ser normalizado NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1103 Transportation Management Protocols (TMP) NTCIP 1201 Global Object Definitions NTCIP 1204 Object Definitions for Environmental Sensor Stations (ESS) NTCIP 2101 Point to Multi-Point Protocol Using RS-232 Subnetwork Profile NTCIP 2102 Point to Multi-Point Protocol Using FSK Modem Subnetwork Profile NTCIP 2103 Point-to-Point Protocol Over RS-232 Subnetwork Profile NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2201 Transportation Transport Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2301 Simple Transportation Management Framework (STMF) Application Profile NTCIP 2302 Trivial File Transfer Protocol (TFTP) Application Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile
Datos de sensores para el monitoreo de la infraestructura	Flujo candidato a ser normalizado

FLUJOS	NORMATIVA
Datos de señalización en el vehículo	ASTM E2158-01 Standard Specification for Dedicated Short Range Communication (DSRC) Physical Layer using Microwave in the 902-928 MHz Band ASTM E2213-03 Standard Specification for Telecommunications and Information Exchange Between Roadside and Vehicle Systems - 5 GHz Band Dedicated Short Range Communications (DSRC) Medium Access Control (MAC) and Physical Layer (PHY) Specifications Flujo candidato a ser normalizado IEEE 1455-1999 Standard for Message Sets for Vehicle/Roadside Communications IEEE 1609.1-2006 Standard for Wireless Access in Vehicular Environments (WAVE) - Resource Manager IEEE 1609.2-2006 Standard for Wireless Access in Vehicular Environments (WAVE) - Security Services for Applications and Management Messages IEEE 1609.3 Standard for Wireless Access in Vehicular Environments (WAVE) - Networking Services IEEE 1609.4-2006 Standard for Wireless Access in Vehicular Environments (WAVE) - Multi-Channel Operation IEEE 802.11p Standard for Information Technology - Telecommunications and Information Exchange Between Systems - Local and Metropolitan Area Networks - Specific Requirements - Part II: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specification IEEE P1609.0 Standard for Wireless Access in Vehicular Environments (WAVE) - Architecture SAE J2735 Dedicated Short Range Communications (DSRC) Message Set Dictionary
Datos de sistema de emisión de reportes gubernamentales	Flujo candidato a ser normalizado
Datos de sistema de información de la carretera	Flujo candidato a ser normalizado NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1103 Transportation Management Protocols (TMP) NTCIP 1201 Global Object Definitions NTCIP 1203 Object Definitions for Dynamic Message Signs (DMS) NTCIP 2101 Point to Multi-Point Protocol Using RS-232 Subnetwork Profile NTCIP 2102 Point to Multi-Point Protocol Using FSK Modem Subnetwork Profile NTCIP 2103 Point-to-Point Protocol Over RS-232 Subnetwork Profile NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2201 Transportation Transport Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2301 Simple Transportation Management Framework (STMF) Application Profile NTCIP 2302 Trivial File Transfer Protocol (TFTP) Application Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile
Datos de sondas medioambientales	ASTM E2213-03 Standard Specification for Telecommunications and Information Exchange Between Roadside and Vehicle Systems - 5 GHz Band Dedicated Short Range Communications (DSRC) Medium Access Control (MAC) and Physical Layer (PHY) Specifications Flujo candidato a ser normalizado IEEE 1609.1-2006 Standard for Wireless Access in Vehicular Environments (WAVE) - Resource Manager IEEE 1609.2-2006 Standard for Wireless Access in Vehicular Environments (WAVE) - Security Services for Applications and Management Messages IEEE 1609.3 Standard for Wireless Access in Vehicular Environments (WAVE) - Networking Services IEEE 1609.4-2006 Standard for Wireless Access in Vehicular Environments (WAVE) - Multi-Channel Operation IEEE 802.11p Standard for Information Technology - Telecommunications and Information Exchange Between Systems - Local and Metropolitan Area Networks - Specific Requirements - Part II: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specification IEEE P1609.0 Standard for Wireless Access in Vehicular Environments (WAVE) - Architecture SAE J2735 Dedicated Short Range Communications (DSRC) Message Set Dictionary
Datos de sondas medioambientales en red vial	Flujo candidato a ser normalizado
Datos de soporte en caso de amenaza	Flujo candidato a ser normalizado

FLUJOS	NORMATIVA
Datos de vehículos de alta ocupación	NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1103 Transportation Management Protocols (TMP) NTCIP 1201 Global Object Definitions NTCIP 1209 Data Element Definitions for Transportation Sensor Systems (TSS) NTCIP 2101 Point to Multi-Point Protocol Using RS-232 Subnetwork Profile NTCIP 2102 Point to Multi-Point Protocol Using FSK Modem Subnetwork Profile NTCIP 2103 Point-to-Point Protocol Over RS-232 Subnetwork Profile NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2201 Transportation Transport Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2301 Simple Transportation Management Framework (STMF) Application Profile NTCIP 2302 Trivial File Transfer Protocol (TFTP) Application Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile
Datos de vehículos sonda en peaje	Flujo candidato a ser normalizado ITE TMDD Traffic Management Data Dictionary (TMDD) and Message Sets for External Traffic Management Center Communications (MS/ETMCC) NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML)
Datos de vehículos sonda para estimar las condiciones del tránsito	ASTM E2158-01 Standard Specification for Dedicated Short Range Communication (DSRC) Physical Layer using Microwave in the 902-928 MHz Band ASTM E2213-03 Standard Specification for Telecommunications and Information Exchange Between Roadside and Vehicle Systems - 5 GHz Band Dedicated Short Range Communications (DSRC) Medium Access Control (MAC) and Physical Layer (PHY) Specifications Flujo candidato a ser normalizado IEEE 1455-1999 Standard for Message Sets for Vehicle/Roadside Communications IEEE 1609.1-2006 Standard for Wireless Access in Vehicular Environments (WAVE) - Resource Manager IEEE 1609.2-2006 Standard for Wireless Access in Vehicular Environments (WAVE) - Security Services for Applications and Management Messages IEEE 1609.3 Standard for Wireless Access in Vehicular Environments (WAVE) - Networking Services IEEE 1609.4-2006 Standard for Wireless Access in Vehicular Environments (WAVE) - Multi-Channel Operation IEEE 802.11p Standard for Information Technology - Telecommunications and Information Exchange Between Systems - Local and Metropolitan Area Networks - Specific Requirements - Part II: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specification IEEE P1609.0 Standard for Wireless Access in Vehicular Environments (WAVE) - Architecture NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1103 Transportation Management Protocols (TMP) NTCIP 1201 Global Object Definitions NTCIP 1206 Object Definitions for Data Collection and Monitoring (DCM) Devices NTCIP 2101 Point to Multi-Point Protocol Using RS-232 Subnetwork Profile NTCIP 2102 Point to Multi-Point Protocol Using FSK Modem Subnetwork Profile NTCIP 2103 Point-to-Point Protocol Over RS-232 Subnetwork Profile NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2201 Transportation Transport Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2301 Simple Transportation Management Framework (STMF) Application Profile NTCIP 2302 Trivial File Transfer Protocol (TFTP) Application Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile SAE J2735 Dedicated Short Range Communications (DSRC) Message Set Dictionary

FLUJOS	NORMATIVA
Datos de video-vigilancia de área segura	APTA TCIP-S-001 3.0.4 Standard for Transit Communications Interface Profiles NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1103 Transportation Management Protocols (TMP) NTCIP 1201 Global Object Definitions NTCIP 1205 Object Definitions for Closed Circuit Television (CCTV) Camera Control NTCIP 1208 Object Definitions for Closed Circuit Television (CCTV) Switching NTCIP 2101 Point to Multi-Point Protocol Using RS-232 Subnetwork Profile NTCIP 2102 Point to Multi-Point Protocol Using FSK Modem Subnetwork Profile NTCIP 2103 Point-to-Point Protocol Over RS-232 Subnetwork Profile NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2201 Transportation Transport Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2301 Simple Transportation Management Framework (STMF) Application Profile NTCIP 2302 Trivial File Transfer Protocol (TFTP) Application Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile
Datos del manifiesto de carga	Flujo candidato a ser normalizado
Datos del operador de la terminal intermodal	Flujo sin normativa de referencia
Datos del vehículo a bordo	Flujo candidato a ser normalizado
Datos del vehículo de carga	Flujo candidato a ser normalizado
Datos para auditoría de pagos de tasas e impuestos	Flujo candidato a ser normalizado
Datos para el operador de tránsito	Flujo sin normativa de referencia
Declaración de impuestos	ANSI TS813 Electronic Filing of Tax Return Data
Desempeño del itinerario de vehículos de carga.	APTA TCIP-S-001 3.0.4 Standard for Transit Communications Interface Profiles NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML)
Desempeño del itinerario de vehículos de transporte público.	APTA TCIP-S-001 3.0.4 Standard for Transit Communications Interface Profiles NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML)
Despacho	Flujo candidato a ser normalizado
Determinación de la autorización de transporte fronterizo	Flujo candidato a ser normalizado
Determinación de la localización	Flujo sin normativa de referencia
Difusión de información a los medios	Flujo candidato a ser normalizado

FLUJOS	NORMATIVA
Difusión de información al viajero	ASTM E2213-03 Standard Specification for Telecommunications and Information Exchange Between Roadside and Vehicle Systems - 5 GHz Band Dedicated Short Range Communications (DSRC) Medium Access Control (MAC) and Physical Layer (PHY) Specifications IEEE 1609.1-2006 Standard for Wireless Access in Vehicular Environments (WAVE) - Resource Manager IEEE 1609.2-2006 Standard for Wireless Access in Vehicular Environments (WAVE) - Security Services for Applications and Management Messages IEEE 1609.3 Standard for Wireless Access in Vehicular Environments (WAVE) - Networking Services IEEE 1609.4-2006 Standard for Wireless Access in Vehicular Environments (WAVE) - Multi-Channel Operation IEEE 802.11p Standard for Information Technology - Telecommunications and Information Exchange Between Systems - Local and Metropolitan Area Networks - Specific Requirements - Part II: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specification IEEE P1609.0 Standard for Wireless Access in Vehicular Environments (WAVE) - Architecture SAE J2266 Location Referencing Message Specification (LRMS) SAE J2354 Message Set for Advanced Traveler Information System (ATIS) SAE J2369 Standard for ATIS Message Sets Delivered Over Reduced Bandwidth Media SAE J2540 Messages for Handling Strings and Look-Up Tables in ATIS Standards SAE J2540/1 RDS (Radio Data System) Phrase Lists SAE J2540/2 ITIS (International Traveler Information Systems) Phrase Lists SAE J2540/3 National Names Phrase List
Disponibilidad de operador de transporte público	Flujo sin normativa de referencia

3.2.5 E

Tabla 5: Normativa de referencia para flujos de información (letra E)

FLUJOS	NORMATIVA
Entrada de inspector de operador de vehículo de carga	Flujo sin normativa de referencia
Entradas de mando del incidente	Flujo sin normativa de referencia
Entradas de operaciones de emergencias	Flujo sin normativa de referencia
Entradas de viajeros	Flujo sin normativa de referencia
Entradas del conductor	Flujo candidato a ser normalizado
Entradas del conductor del vehículo de transporte público	Flujo sin normativa de referencia
Entradas del operador de la terminal intermodal	Flujo sin normativa de referencia
Entradas del operador de tránsito	Flujo sin normativa de referencia
Entradas del operador del estacionamiento	Flujo sin normativa de referencia
Entradas del personal de campo de mantenimiento y construcción	Flujo sin normativa de referencia
Entradas del personal de emergencias	Flujo sin normativa de referencia
Entradas del personal de operaciones de transporte público	Flujo sin normativa de referencia
Estado de archivo	Flujo candidato a ser normalizado
Estado de avisos en zona de trabajo	Flujo candidato a ser normalizado
Estado de carril reversible	NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1103 Transportation Management Protocols (TMP) NTCIP 1201 Global Object Definitions NTCIP 1209 Data Element Definitions for Transportation Sensor Systems (TSS) NTCIP 2101 Point to Multi-Point Protocol Using RS-232 Subnetwork Profile NTCIP 2102 Point to Multi-Point Protocol Using FSK Modem Subnetwork Profile NTCIP 2103 Point-to-Point Protocol Over RS-232 Subnetwork Profile NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2201 Transportation Transport Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2301 Simple Transportation Management Framework (STMF) Application Profile NTCIP 2302 Trivial File Transfer Protocol (TFTP) Application Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile
Estado de control de accesos al tránsito	NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1103 Transportation Management Protocols (TMP) NTCIP 1201 Global Object Definitions NTCIP 1207 Object Definitions for Ramp Meter Control (RMC) Units NTCIP 2101 Point to Multi-Point Protocol Using RS-232 Subnetwork Profile NTCIP 2102 Point to Multi-Point Protocol Using FSK Modem Subnetwork Profile NTCIP 2103 Point-to-Point Protocol Over RS-232 Subnetwork Profile NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2201 Transportation Transport Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2301 Simple Transportation Management Framework (STMF) Application Profile NTCIP 2302 Trivial File Transfer Protocol (TFTP) Application Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile

FLUJOS	NORMATIVA
Estado de control semafórico	NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1103 Transportation Management Protocols (TMP) NTCIP 1201 Global Object Definitions NTCIP 1202 Object Definitions for Actuated Traffic Signal Controller (ASC) Units NTCIP 1210 Field Management Stations (FMS) - Part 1: Object Definitions for Signal System Masters NTCIP 1214 Object Definitions for Conflict Monitor Units (CMU) NTCIP 2101 Point to Multi-Point Protocol Using RS-232 Subnetwork Profile NTCIP 2102 Point to Multi-Point Protocol Using FSK Modem Subnetwork Profile NTCIP 2103 Point-to-Point Protocol Over RS-232 Subnetwork Profile NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2201 Transportation Transport Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2301 Simple Transportation Management Framework (STMF) Application Profile NTCIP 2302 Trivial File Transfer Protocol (TFTP) Application Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile
Estado de la carretera automatizada	Flujo candidato a ser normalizado
Estado de la flota	Flujo sin normativa de referencia
Estado de la intersección	AS 1M E2213-03 Standard Specification for Telecommunications and Information Exchange Between Roadside and Vehicle Systems - 5 GHz Band Dedicated Short Range Communications (DSRC) Medium Access Control (MAC) and Physical Layer (PHY) Specifications IEEE 1609.1-2006 Standard for Wireless Access in Vehicular Environments (WAVE) - Resource Manager IEEE 1609.2-2006 Standard for Wireless Access in Vehicular Environments (WAVE) - Security Services for Applications and Management Messages IEEE 1609.3 Standard for Wireless Access in Vehicular Environments (WAVE) - Networking Services IEEE 1609.4-2006 Standard for Wireless Access in Vehicular Environments (WAVE) - Multi-Channel Operation IEEE 802.11p Standard for Information Technology - Telecommunications and Information Exchange Between Systems - Local and Metropolitan Area Networks - Specific Requirements - Part II: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specification IEEE P1609.0 Standard for Wireless Access in Vehicular Environments (WAVE) - Architecture SAE J2735 Dedicated Short Range Communications (DSRC) Message Set Dictionary
Estado de la red de carreteras	ITE TMDD Traffic Management Data Dictionary (TMDD) and Message Sets for External Traffic Management Center Communications (MS/ETMCC) NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML) SAE J2266 Location Referencing Message Specification (LRMS) SAE J2354 Message Set for Advanced Traveler Information System (ATIS) SAE J2540 Messages for Handling Strings and Look-Up Tables in ATIS Standards SAE J2540/1 RDS (Radio Data System) Phrase Lists SAE J2540/2 ITIS (International Traveler Information Systems) Phrase Lists SAE J2540/3 National Names Phrase List
Estado de la reserva	Flujo candidato a ser normalizado
Estado de la respuesta la incidente ferroviario	Flujo candidato a ser normalizado
Estado de la tramitación/liquidación en frontera	Flujo candidato a ser normalizado
Estado de la transacción	Flujo candidato a ser normalizado
Estado de la transacción a pie de camino	Flujo sin normativa de referencia
Estado de la transacción en el vehículo	Flujo candidato a ser normalizado
Estado de la zona de trabajo	Flujo candidato a ser normalizado

FLUJOS	NORMATIVA
Estado de las comunicaciones de corto alcance	Flujo candidato a ser normalizado
Estado de las operaciones del sistema de transporte público	Flujo sin normativa de referencia
Estado de las operaciones en la gestión de una emergencia	Flujo sin normativa de referencia
Estado de mantenimiento de la carretera	Flujo candidato a ser normalizado
Estado de mantenimiento de los equipos de seguridad	Flujo candidato a ser normalizado
Estado de operación de un cruce carretera-ferrocarril	IEEE 1570-2002 Standard for the Interface Between the Rail Subsystem and the Highway Subsystem at a Highway Rail Intersection
Estado de respuesta al incidente	IEEE 1512 -2006 Standard for Common Incident Management Message Sets for use by Emergency Management Centers IEEE 1512.1-2006 Standard for Traffic Incident Management Message Sets for Use by Emergency Management Centers IEEE 1512.2-2004 Standard for Public Safety Traffic Incident Management Message Sets for Use by Emergency Management Centers IEEE 1512.3-2006 Standard for Hazardous Material Incident Management Message Sets for Use by Emergency Management Centers IEEE P1512.4 Standard for Common Traffic Incident Management Message Sets for Use in Entities External to Centers ITE TMDD Traffic Management Data Dictionary (TMDD) and Message Sets for External Traffic Management Center Communications (MS/ETMCC) NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML)
Estado de una intersección carretera-ferrocarril	Flujo candidato a ser normalizado
Estado del despliegue de recursos	IEEE 1512 -2006 Standard for Common Incident Management Message Sets for use by Emergency Management Centers IEEE 1512.1-2006 Standard for Traffic Incident Management Message Sets for Use by Emergency Management Centers IEEE 1512.2-2004 Standard for Public Safety Traffic Incident Management Message Sets for Use by Emergency Management Centers IEEE 1512.3-2006 Standard for Hazardous Material Incident Management Message Sets for Use by Emergency Management Centers IEEE P1512.4 Standard for Common Traffic Incident Management Message Sets for Use in Entities External to Centers NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML)
Estado del dispositivo de campo	NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1103 Transportation Management Protocols (TMP) NTCIP 1201 Global Object Definitions NTCIP 2101 Point to Multi-Point Protocol Using RS-232 Subnetwork Profile NTCIP 2102 Point to Multi-Point Protocol Using FSK Modem Subnetwork Profile NTCIP 2103 Point-to-Point Protocol Over RS-232 Subnetwork Profile NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2201 Transportation Transport Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2301 Simple Transportation Management Framework (STMF) Application Profile NTCIP 2302 Trivial File Transfer Protocol (TFTP) Application Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile
Estado del equipamiento de campo de seguridad	Flujo candidato a ser normalizado
Estado del estacionamiento	Flujo sin normativa de referencia
Estado del incidente	Flujo candidato a ser normalizado

FLUJOS	NORMATIVA
Estado del pasajero y tarifas de transporte público	APTA TCIP-S-001 3.0.4 Standard for Transit Communications Interface Profiles SAE J2266 Location Referencing Message Specification (LRMS) SAE J2354 Message Set for Advanced Traveler Information System (ATIS) SAE J2540 Messages for Handling Strings and Look-Up Tables in ATIS Standards SAE J2540/1 RDS (Radio Data System) Phrase Lists SAE J2540/2 ITIS (International Traveler Information Systems) Phrase Lists SAE J2540/3 National Names Phrase List
Estado del sello del contenedor	Flujo sin normativa de referencia
Estado del sistema de barrera	Flujo candidato a ser normalizado
Estado del sistema de información de la carretera	Flujo candidato a ser normalizado NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1103 Transportation Management Protocols (TMP) NTCIP 1201 Global Object Definitions NTCIP 1203 Object Definitions for Dynamic Message Signs (DMS) NTCIP 2101 Point to Multi-Point Protocol Using RS-232 Subnetwork Profile NTCIP 2102 Point to Multi-Point Protocol Using FSK Modem Subnetwork Profile NTCIP 2103 Point-to-Point Protocol Over RS-232 Subnetwork Profile NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2201 Transportation Transport Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2301 Simple Transportation Management Framework (STMF) Application Profile NTCIP 2302 Trivial File Transfer Protocol (TFTP) Application Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile
Estado del sistema de salvaguarda	Flujo candidato a ser normalizado
Estado del sistema de transporte	Flujo candidato a ser normalizado
Estado del sistema de tratamiento de la carretera	NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1103 Transportation Management Protocols (TMP) NTCIP 1201 Global Object Definitions NTCIP 1204 Object Definitions for Environmental Sensor Stations (ESS) NTCIP 2101 Point to Multi-Point Protocol Using RS-232 Subnetwork Profile NTCIP 2102 Point to Multi-Point Protocol Using FSK Modem Subnetwork Profile NTCIP 2103 Point-to-Point Protocol Over RS-232 Subnetwork Profile NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2201 Transportation Transport Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2301 Simple Transportation Management Framework (STMF) Application Profile NTCIP 2302 Trivial File Transfer Protocol (TFTP) Application Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile
Estado del transporte de carga	Flujo candidato a ser normalizado
Estado del vehículo automatizado	Flujo candidato a ser normalizado
Estado del vehículo de carga	Flujo candidato a ser normalizado
Estatus de tarifas y de pago	APTA TCIP-S-001 3.0.4 Standard for Transit Communications Interface Profiles
Evaluación del estado de la red vial	Flujo candidato a ser normalizado
Evento de autorización aduanal	ASTM E2158-01 Standard Specification for Dedicated Short Range Communication (DSRC) Physical Layer using Microwave in the 902-928 MHz Band Flujo candidato a ser normalizado IEEE 1455-1999 Standard for Message Sets for Vehicle/Roadside Communications

3.2.6 F

Tabla 6: Normativa de referencia para flujos de información (letra F)

FLUJOS	NORMATIVA
Flujo de tránsito	NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1103 Transportation Management Protocols (TMP) NTCIP 1201 Global Object Definitions NTCIP 1209 Data Element Definitions for Transportation Sensor Systems (TSS) NTCIP 2101 Point to Multi-Point Protocol Using RS-232 Subnetwork Profile NTCIP 2102 Point to Multi-Point Protocol Using FSK Modem Subnetwork Profile NTCIP 2103 Point-to-Point Protocol Over RS-232 Subnetwork Profile NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2201 Transportation Transport Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2301 Simple Transportation Management Framework (STMF) Application Profile NTCIP 2302 Trivial File Transfer Protocol (TFTP) Application Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile

3.2.7 G

Tabla 7: Normativa de referencia para flujos de información (letra G)

FLUJOS	NORMATIVA
Grado de cumplimiento del horario del vehículo de transporte público	APTA TCIP-S-001 3.0.4 Standard for Transit Communications Interface Profiles

3.2.8 H

No hay flujos de datos que comiencen por la letra H.

3.2.9 I

Tabla 8: Normativa de referencia para flujos de información (letra I)

FLUJOS	NORMATIVA
Identificación	Flujo candidato a ser normalizado
Identificación de contenedores	ISO 17262:2012 Automatic vehicle and equipment identification -- Intermodal goods transport -- Numbering and data structures
Identificador único de tag e información asociada del vehículo	Flujo candidato a ser normalizado
Identificadores de declaración de viaje	Flujo candidato a ser normalizado
Imágenes de tránsito	Flujo candidato a ser normalizado NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1103 Transportation Management Protocols (TMP) NTCIP 1201 Global Object Definitions NTCIP 1205 Object Definitions for Closed Circuit Television (CCTV) Camera Control NTCIP 1208 Object Definitions for Closed Circuit Television (CCTV) Switching NTCIP 2101 Point to Multi-Point Protocol Using RS-232 Subnetwork Profile NTCIP 2102 Point to Multi-Point Protocol Using FSK Modem Subnetwork Profile NTCIP 2103 Point-to-Point Protocol Over RS-232 Subnetwork Profile NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2201 Transportation Transport Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2301 Simple Transportation Management Framework (STMF) Application Profile NTCIP 2302 Trivial File Transfer Protocol (TFTP) Application Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile
Indicación de manipulación o violación de la seguridad del vehículo y/o de la carga	Flujo candidato a ser normalizado
Información al operador de transporte público	APTA TCIP-S-001 3.0.4 Standard for Transit Communications Interface Profiles
Información al viajero basada en voz	Flujo candidato a ser normalizado
Información al viajero interactiva	SAE J2266 Location Referencing Message Specification (LRMS) SAE J2354 Message Set for Advanced Traveler Information System (ATIS) SAE J2540 Messages for Handling Strings and Look-Up Tables in ATIS Standards SAE J2540/1 RDS (Radio Data System) Phrase Lists SAE J2540/2 ITIS (International Traveler Information Systems) Phrase Lists SAE J2540/3 National Names Phrase List
Información al viajero para los medios de comunicación	NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML) SAE J2266 Location Referencing Message Specification (LRMS) SAE J2354 Message Set for Advanced Traveler Information System (ATIS) SAE J2540 Messages for Handling Strings and Look-Up Tables in ATIS Standards SAE J2540/1 RDS (Radio Data System) Phrase Lists SAE J2540/2 ITIS (International Traveler Information Systems) Phrase Lists SAE J2540/3 National Names Phrase List
Información de amenaza	Flujo candidato a ser normalizado
Información de amenazas en la flota	Flujo candidato a ser normalizado
Información de apoyo a la decisión	Flujo candidato a ser normalizado
Información de autenticación del operador	APTA TCIP-S-001 3.0.4 Standard for Transit Communications Interface Profiles
Información de consignación y entrega	Flujo sin normativa de referencia

FLUJOS	NORMATIVA
Información de control de tránsito en una emergencia	IEEE 1512 -2006 Standard for Common Incident Management Message Sets for use by Emergency Management Centers IEEE 1512.1-2006 Standard for Traffic Incident Management Message Sets for Use by Emergency Management Centers IEEE 1512.2-2004 Standard for Public Safety Traffic Incident Management Message Sets for Use by Emergency Management Centers IEEE 1512.3-2006 Standard for Hazardous Material Incident Management Message Sets for Use by Emergency Management Centers IEEE P1512.4 Standard for Common Traffic Incident Management Message Sets for Use in Entities External to Centers NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 1201 Global Object Definitions NTCIP 1211 Object Definitions for Signal Control and Prioritization (SCP) NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML)
Información de credenciales	Flujo candidato a ser normalizado
Información de emergencia al viajero	Flujo candidato a ser normalizado NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML) SAE J2266 Location Referencing Message Specification (LRMS) SAE J2354 Message Set for Advanced Traveler Information System (ATIS) SAE J2540 Messages for Handling Strings and Look-Up Tables in ATIS Standards SAE J2540/1 RDS (Radio Data System) Phrase Lists SAE J2540/2 ITIS (International Traveler Information Systems) Phrase Lists SAE J2540/3 National Names Phrase List
Información de estacionamiento	APTA TCIP-S-001 3.0.4 Standard for Transit Communications Interface Profiles NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML) SAE J2266 Location Referencing Message Specification (LRMS) SAE J2354 Message Set for Advanced Traveler Information System (ATIS) SAE J2540 Messages for Handling Strings and Look-Up Tables in ATIS Standards SAE J2540/1 RDS (Radio Data System) Phrase Lists SAE J2540/2 ITIS (International Traveler Information Systems) Phrase Lists SAE J2540/3 National Names Phrase List

FLUJOS	NORMATIVA
Información de estacionamiento en vehículo	ASTM E2158-01 Standard Specification for Dedicated Short Range Communication (DSRC) Physical Layer using Microwave in the 902-928 MHz Band ASTM E2213-03 Standard Specification for Telecommunications and Information Exchange Between Roadside and Vehicle Systems - 5 GHz Band Dedicated Short Range Communications (DSRC) Medium Access Control (MAC) and Physical Layer (PHY) Specifications IEEE 1455-1999 Standard for Message Sets for Vehicle/Roadside Communications IEEE 1609.1-2006 Standard for Wireless Access in Vehicular Environments (WAVE) - Resource Manager IEEE 1609.2-2006 Standard for Wireless Access in Vehicular Environments (WAVE) - Security Services for Applications and Management Messages IEEE 1609.3 Standard for Wireless Access in Vehicular Environments (WAVE) - Networking Services IEEE 1609.4-2006 Standard for Wireless Access in Vehicular Environments (WAVE) - Multi-Channel Operation IEEE 802.11p Standard for Information Technology - Telecommunications and Information Exchange Between Systems - Local and Metropolitan Area Networks - Specific Requirements - Part II: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specification IEEE P1609.0 Standard for Wireless Access in Vehicular Environments (WAVE) - Architecture
Información de estacionamiento para el conductor	Flujo sin normativa de referencia
Información de estado de la seguridad	Flujo candidato a ser normalizado
Información de gestión de carril	NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1103 Transportation Management Protocols (TMP) NTCIP 1201 Global Object Definitions NTCIP 1209 Data Element Definitions for Transportation Sensor Systems (TSS) NTCIP 2101 Point to Multi-Point Protocol Using RS-232 Subnetwork Profile NTCIP 2102 Point to Multi-Point Protocol Using FSK Modem Subnetwork Profile NTCIP 2103 Point-to-Point Protocol Over RS-232 Subnetwork Profile NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2201 Transportation Transport Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2301 Simple Transportation Management Framework (STMF) Application Profile NTCIP 2302 Trivial File Transfer Protocol (TFTP) Application Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile
Información de identificación	Flujo sin normativa de referencia
Información de incidente	IEEE 1512 -2006 Standard for Common Incident Management Message Sets for use by Emergency Management Centers IEEE 1512.1-2006 Standard for Traffic Incident Management Message Sets for Use by Emergency Management Centers IEEE 1512.2-2004 Standard for Public Safety Traffic Incident Management Message Sets for Use by Emergency Management Centers IEEE 1512.3-2006 Standard for Hazardous Material Incident Management Message Sets for Use by Emergency Management Centers IEEE P1512.4 Standard for Common Traffic Incident Management Message Sets for Use in Entities External to Centers ITE TMDD Traffic Management Data Dictionary (TMDD) and Message Sets for External Traffic Management Center Communications (MS/ETMCC) NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML) SAE J2266 Location Referencing Message Specification (LRMS) SAE J2354 Message Set for Advanced Traveler Information System (ATIS) SAE J2540 Messages for Handling Strings and Look-Up Tables in ATIS Standards SAE J2540/1 RDS (Radio Data System) Phrase Lists SAE J2540/2 ITIS (International Traveler Information Systems) Phrase Lists SAE J2540/3 National Names Phrase List

FLUJOS	NORMATIVA
Información de incidente de transporte público	Flujo candidato a ser normalizado
Información de inspectores de vehículos de carga	Flujo sin normativa de referencia
Información de itinerarios de transporte público	APTA TCIP-S-001 3.0.4 Standard for Transit Communications Interface Profiles
Información de itinerarios de transporte público en una emergencia	Flujo candidato a ser normalizado
Información de la calidad del aire	Flujo candidato a ser normalizado
Información de la zona de trabajo	Flujo candidato a ser normalizado
Información de materiales peligrosos	IEEE 1512 -2006 Standard for Common Incident Management Message Sets for use by Emergency Management Centers IEEE 1512.1-2006 Standard for Traffic Incident Management Message Sets for Use by Emergency Management Centers IEEE 1512.2-2004 Standard for Public Safety Traffic Incident Management Message Sets for Use by Emergency Management Centers IEEE 1512.3-2006 Standard for Hazardous Material Incident Management Message Sets for Use by Emergency Management Centers IEEE P1512.4 Standard for Common Traffic Incident Management Message Sets for Use in Entities External to Centers NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML)
Información de pago del vehículo	ASTM E2158-01 Standard Specification for Dedicated Short Range Communication (DSRC) Physical Layer using Microwave in the 902-928 MHz Band ASTM E2213-03 Standard Specification for Telecommunications and Information Exchange Between Roadside and Vehicle Systems - 5 GHz Band Dedicated Short Range Communications (DSRC) Medium Access Control (MAC) and Physical Layer (PHY) Specifications Flujo candidato a ser normalizado IEEE 1455-1999 Standard for Message Sets for Vehicle/Roadside Communications IEEE 1609.1-2006 Standard for Wireless Access in Vehicular Environments (WAVE) - Resource Manager IEEE 1609.2-2006 Standard for Wireless Access in Vehicular Environments (WAVE) - Security Services for Applications and Management Messages IEEE 1609.3 Standard for Wireless Access in Vehicular Environments (WAVE) - Networking Services IEEE 1609.4-2006 Standard for Wireless Access in Vehicular Environments (WAVE) - Multi-Channel Operation IEEE 802.11p Standard for Information Technology - Telecommunications and Information Exchange Between Systems - Local and Metropolitan Area Networks - Specific Requirements - Part II: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Spec IEEE P1609.0 Standard for Wireless Access in Vehicular Environments (WAVE) - Architecture IEEE P1609.11 Standard for Wireless Access in Vehicular Environments (WAVE) - Over-the-Air Data Exchange Protocol for Intelligent Transportation Systems (ITS)
Información de registro de viaje	Flujo sin normativa de referencia
Información de servicios de viaje	NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML) SAE J2266 Location Referencing Message Specification (LRMS) SAE J2354 Message Set for Advanced Traveler Information System (ATIS) SAE J2540 Messages for Handling Strings and Look-Up Tables in ATIS Standards SAE J2540/1 RDS (Radio Data System) Phrase Lists SAE J2540/2 ITIS (International Traveler Information Systems) Phrase Lists SAE J2540/3 National Names Phrase List

FLUJOS	NORMATIVA
Información de sondeos	Flujo candidato a ser normalizado
Información de tarifas	NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML) SAE J2266 Location Referencing Message Specification (LRMS) SAE J2354 Message Set for Advanced Traveler Information System (ATIS) SAE J2540 Messages for Handling Strings and Look-Up Tables in ATIS Standards SAE J2540/1 RDS (Radio Data System) Phrase Lists SAE J2540/2 ITIS (International Traveler Information Systems) Phrase Lists SAE J2540/3 National Names Phrase List
Información de tránsito para medios de comunicación	ITE TMDD Traffic Management Data Dictionary (TMDD) and Message Sets for External Traffic Management Center Communications (MS/ETMCC) NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML)
Información de transporte público para usuario	Flujo candidato a ser normalizado
Información de verificación de cliente	Flujo candidato a ser normalizado
Información del equipamiento de carga	Flujo candidato a ser normalizado
Información del estado de credenciales	Flujo candidato a ser normalizado
Información del servicio de transporte público	NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML) SAE J2266 Location Referencing Message Specification (LRMS) SAE J2354 Message Set for Advanced Traveler Information System (ATIS) SAE J2540 Messages for Handling Strings and Look-Up Tables in ATIS Standards SAE J2540/1 RDS (Radio Data System) Phrase Lists SAE J2540/2 ITIS (International Traveler Information Systems) Phrase Lists SAE J2540/3 National Names Phrase List
Información estadística de contaminación de un área amplia	Flujo candidato a ser normalizado
Información meteorológica	Flujo candidato a ser normalizado
Información meteorológica para el transporte	Flujo candidato a ser normalizado ITE TMDD Traffic Management Data Dictionary (TMDD) and Message Sets for External Traffic Management Center Communications (MS/ETMCC) NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML)

FLUJOS	NORMATIVA
Información multimodal	NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML) SAE J2266 Location Referencing Message Specification (LRMS) SAE J2354 Message Set for Advanced Traveler Information System (ATIS) SAE J2540 Messages for Handling Strings and Look-Up Tables in ATIS Standards SAE J2540/1 RDS (Radio Data System) Phrase Lists SAE J2540/2 ITIS (International Traveler Information Systems) Phrase Lists SAE J2540/3 National Names Phrase List
Información para el conductor	Flujo sin normativa de referencia
Información para un tren que llega	IEEE 1570-2002 Standard for the Interface Between the Rail Subsystem and the Highway Subsystem at a Highway Rail Intersection
Información sobre infractores proporcionada por la autoridad competente	Flujo candidato a ser normalizado
Información tarifaria de transporte público	APTA TCIP-S-001 3.0.4 Standard for Transit Communications Interface Profiles SAE J2266 Location Referencing Message Specification (LRMS) SAE J2354 Message Set for Advanced Traveler Information System (ATIS) SAE J2540 Messages for Handling Strings and Look-Up Tables in ATIS Standards SAE J2540/1 RDS (Radio Data System) Phrase Lists SAE J2540/2 ITIS (International Traveler Information Systems) Phrase Lists SAE J2540/3 National Names Phrase List
Informe de accidente de un vehículo de carga	Flujo candidato a ser normalizado
Informe de incidente	IEEE 1512 -2006 Standard for Common Incident Management Message Sets for use by Emergency Management Centers IEEE 1512.1-2006 Standard for Traffic Incident Management Message Sets for Use by Emergency Management Centers IEEE 1512.2-2004 Standard for Public Safety Traffic Incident Management Message Sets for Use by Emergency Management Centers IEEE 1512.3-2006 Standard for Hazardous Material Incident Management Message Sets for Use by Emergency Management Centers IEEE P1512.4 Standard for Common Traffic Incident Management Message Sets for Use in Entities External to Centers NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML)
Informe de inspección de seguridad.	Flujo candidato a ser normalizado
Informe de revisión de cumplimiento.	Flujo candidato a ser normalizado
Informes externos	Flujo candidato a ser normalizado ITE TMDD Traffic Management Data Dictionary (TMDD) and Message Sets for External Traffic Management Center Communications (MS/ETMCC) NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML)
Inicialización del conductor-Operador de Vehículo de Carga	Flujo sin normativa de referencia
Instrucciones en peaje	Flujo candidato a ser normalizado
Intercambio de información de cargas especiales	Flujo candidato a ser normalizado
Introducción de número de identificación de viaje	Flujo sin normativa de referencia

3.2.10 J

No hay flujos de datos que comiencen por la letra J.

3.2.11 K

No hay flujos de datos que comiencen por la letra K.

3.2.12 L

Tabla 9: Normativa de referencia para flujos de información (letra L)

FLUJOS	NORMATIVA
Lista de tarjetas inválidas	APTA TCIP-S-001 3.0.4 Standard for Transit Communications Interface Profiles
Localización de contenedores	Flujo sin normativa de referencia

3.2.13 M

Tabla 10: Normativa de referencia para flujos de información (letra M)

FLUJOS	NORMATIVA
Manifiesto del contenedor	Flujo sin normativa de referencia
Mediciones del vehículo básico	Flujo candidato a ser normalizado
Mensaje de autorización/detención de vehículo de carga	Flujo sin normativa de referencia
Modalidad para anular la inspección de vehículos de carga	Flujo sin normativa de referencia
Movimientos de operarios	Flujo sin normativa de referencia

3.2.14 N

Tabla 11: Normativa de referencia para flujos de información (letra N)

FLUJOS	NORMATIVA
Necesidades de reparación y mantenimiento	Flujo candidato a ser normalizado
Niveles de contaminantes	Flujo sin normativa de referencia
Notificación de alarma	APTA TCIP-S-001 3.0.4 Standard for Transit Communications Interface Profiles
Notificación de aviso de la zona de trabajo	Flujo candidato a ser normalizado
Notificación de bloqueo de cruce	Flujo candidato a ser normalizado
	IEEE 1570-2002 Standard for the Interface Between the Rail Subsystem and the Highway Subsystem at a Highway Rail Intersection
Notificación de derrame de mercancías peligrosas	Flujo candidato a ser normalizado
Notificación de infracción a la autoridad competente	Flujo candidato a ser normalizado
Notificación de infracción de emisiones	Flujo candidato a ser normalizado
Notificación de infracción de tránsito	Flujo candidato a ser normalizado
Notificación de infracción en el pago	Flujo candidato a ser normalizado
Notificación de pre-llegada	Flujo candidato a ser normalizado
Notificación de solicitud de derecho de paso	NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1103 Transportation Management Protocols (TMP) NTCIP 1201 Global Object Definitions NTCIP 1202 Object Definitions for Actuated Traffic Signal Controller (ASC) Units NTCIP 1211 Object Definitions for Signal Control and Prioritization (SCP) NTCIP 1214 Object Definitions for Conflict Monitor Units (CMU) NTCIP 2101 Point to Multi-Point Protocol Using RS-232 Subnetwork Profile NTCIP 2102 Point to Multi-Point Protocol Using FSK Modem Subnetwork Profile NTCIP 2103 Point-to-Point Protocol Over RS-232 Subnetwork Profile NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2201 Transportation Transport Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2301 Simple Transportation Management Framework (STMF) Application Profile NTCIP 2302 Trivial File Transfer Protocol (TFTP) Application Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile
Número de identificación de viaje	Flujo candidato a ser normalizado

3.2.15 Ñ

No hay flujos de datos que comiencen por la letra Ñ.

3.2.16 O

No hay flujos de datos que comiencen por la letra O.

3.2.17 P

Tabla 12: Normativa de referencia para flujos de información (letra P)

FLUJOS	NORMATIVA
Pago	Flujo candidato a ser normalizado
Parámetros de datos de contaminación	Flujo sin normativa de referencia
Parámetros de supervisión de carga	Flujo candidato a ser normalizado
Paso/detención	ASTM E2158-01 Standard Specification for Dedicated Short Range Communication (DSRC) Physical Layer using Microwave in the 902-928 MHz Band IEEE 1455-1999 Standard for Message Sets for Vehicle/Roadside Communications
Perfil del viajero	SAE J2266 Location Referencing Message Specification (LRMS) SAE J2354 Message Set for Advanced Traveler Information System (ATIS) SAE J2540 Messages for Handling Strings and Look-Up Tables in ATIS Standards SAE J2540/1 RDS (Radio Data System) Phrase Lists SAE J2540/2 ITIS (International Traveler Information Systems) Phrase Lists SAE J2540/3 National Names Phrase List
Permiso para cruzar	Flujo sin normativa de referencia
Petición de cruce	Flujo sin normativa de referencia
Plan de transporte público a la demanda	Flujo candidato a ser normalizado
Plan de viaje	APTA TCIP-S-001 3.0.4 Standard for Transit Communications Interface Profiles SAE J2266 Location Referencing Message Specification (LRMS) SAE J2354 Message Set for Advanced Traveler Information System (ATIS) SAE J2540 Messages for Handling Strings and Look-Up Tables in ATIS Standards SAE J2540/1 RDS (Radio Data System) Phrase Lists SAE J2540/2 ITIS (International Traveler Information Systems) Phrase Lists SAE J2540/3 National Names Phrase List
Planes de evento	Flujo candidato a ser normalizado IEEE 1512 -2006 Standard for Common Incident Management Message Sets for use by Emergency Management Centers IEEE 1512.1-2006 Standard for Traffic Incident Management Message Sets for Use by Emergency Management Centers IEEE 1512.2-2004 Standard for Public Safety Traffic Incident Management Message Sets for Use by Emergency Management Centers IEEE 1512.3-2006 Standard for Hazardous Material Incident Management Message Sets for Use by Emergency Management Centers IEEE P1512.4 Standard for Common Traffic Incident Management Message Sets for Use in Entities External to Centers ITE TMDD Traffic Management Data Dictionary (TMDD) and Message Sets for External Traffic Management Center Communications (MS/ETMCC) NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML)
Planes de obras de construcción y mantenimiento	Flujo candidato a ser normalizado
Presencia física	Flujo sin normativa de referencia
Presencia no vehicular	Flujo sin normativa de referencia
Presentación de datos de contaminación	Flujo sin normativa de referencia

FLUJOS	NORMATIVA
Presentación de información a la estructura de mando en la gestión de incidentes	Flujo sin normativa de referencia
Presentación de información al personal de campo de mantenimiento y construcción	Flujo sin normativa de referencia
Presentación de información al personal de emergencias	Flujo sin normativa de referencia
Presentación de la información de operaciones de mantenimiento y construcción	Flujo sin normativa de referencia
Productos de datos archivados	ASTM E2468-05 Standard Practice for Metadata to Support Archived Data Management Systems ASTM E2665-08 Standard Specifications for Archiving ITS-Generated Traffic Monitoring Data Flujo candidato a ser normalizado ITE TMDD Traffic Management Data Dictionary (TMDD) and Message Sets for External Traffic Management Center Communications (MS/ETMCC) NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML)

3.2.18 Q

No hay flujos de datos que comiencen por la letra Q.

3.2.19 R

Tabla 13: Normativa de referencia para flujos de información (letra R)

FLUJOS	NORMATIVA
Recepción de datos de reportes gubernamentales	Flujo candidato a ser normalizado
Reconocimiento de alarma	APTA TCIP-S-001 3.0.4 Standard for Transit Communications Interface Profiles Flujo candidato a ser normalizado
Recopilación de datos y control del monitoreo	NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1103 Transportation Management Protocols (TMP) NTCIP 1201 Global Object Definitions NTCIP 1204 Object Definitions for Environmental Sensor Stations (ESS) NTCIP 1206 Object Definitions for Data Collection and Monitoring (DCM) Devices NTCIP 1209 Data Element Definitions for Transportation Sensor Systems (TSS) NTCIP 2101 Point to Multi-Point Protocol Using RS-232 Subnetwork Profile NTCIP 2102 Point to Multi-Point Protocol Using FSK Modem Subnetwork Profile NTCIP 2103 Point-to-Point Protocol Over RS-232 Subnetwork Profile NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2201 Transportation Transport Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2301 Simple Transportation Management Framework (STMF) Application Profile NTCIP 2302 Trivial File Transfer Protocol (TFTP) Application Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile
Registro	Flujo candidato a ser normalizado
Registro de las inspecciones de seguridad	Flujo candidato a ser normalizado
Registro de viaje	Flujo candidato a ser normalizado
Requerimiento	Flujo candidato a ser normalizado
Reserva del transporte de carga	Flujo candidato a ser normalizado
Respuesta a alerta	Flujo sin normativa de referencia
Respuesta a cambios en el servicio de peaje	Flujo candidato a ser normalizado
Respuesta a violación de la seguridad	Flujo candidato a ser normalizado
Respuesta al envío de recursos a una emergencia	Flujo candidato a ser normalizado
Respuesta de los recursos de mantenimiento y construcción	Flujo candidato a ser normalizado IEEE 1512 -2006 Standard for Common Incident Management Message Sets for use by Emergency Management Centers IEEE 1512.1-2006 Standard for Traffic Incident Management Message Sets for Use by Emergency Management Centers IEEE 1512.2-2004 Standard for Public Safety Traffic Incident Management Message Sets for Use by Emergency Management Centers IEEE 1512.3-2006 Standard for Hazardous Material Incident Management Message Sets for Use by Emergency Management Centers IEEE P1512.4 Standard for Common Traffic Incident Management Message Sets for Use in Entities External to Centers NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML)
Respuesta del conductor a alerta	Flujo candidato a ser normalizado
Restricciones de capacidad	Flujo candidato a ser normalizado
Restricciones de ruta	Flujo candidato a ser normalizado
Resultados de inspección	Flujo candidato a ser normalizado
Resultados del análisis de archivos	Flujo candidato a ser normalizado
Resultados del proceso de autenticación o actualización de la base de datos de autenticación de a bordo	APTA TCIP-S-001 3.0.4 Standard for Transit Communications Interface Profiles

FLUJOS	NORMATIVA
Ruta sugerida	Flujo candidato a ser normalizado
Rutas de emergencia	Flujo candidato a ser normalizado
Rutas programadas	NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML) SAE J2266 Location Referencing Message Specification (LRMS) SAE J2354 Message Set for Advanced Traveler Information System (ATIS) SAE J2540 Messages for Handling Strings and Look-Up Tables in ATIS Standards SAE J2540/1 RDS (Radio Data System) Phrase Lists SAE J2540/2 ITIS (International Traveler Information Systems) Phrase Lists SAE J2540/3 National Names Phrase List
Rutas seleccionadas en base a criterios de selección de ruta	NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML) SAE J2266 Location Referencing Message Specification (LRMS) SAE J2354 Message Set for Advanced Traveler Information System (ATIS) SAE J2540 Messages for Handling Strings and Look-Up Tables in ATIS Standards SAE J2540/1 RDS (Radio Data System) Phrase Lists SAE J2540/2 ITIS (International Traveler Information Systems) Phrase Lists SAE J2540/3 National Names Phrase List

3.2.20 S

Tabla 14: Normativa de referencia para flujos de información (letra S)

FLUJOS	NORMATIVA
Seguimiento de estado	IEEE 1570-2002 Standard for the Interface Between the Rail Subsystem and the Highway Subsystem at a Highway Rail Intersection
Solicitud de información sobre una carga de mercancías peligrosas en particular	IEEE 1512 -2006 Standard for Common Incident Management Message Sets for use by Emergency Management Centers IEEE 1512.1-2006 Standard for Traffic Incident Management Message Sets for Use by Emergency Management Centers IEEE 1512.2-2004 Standard for Public Safety Traffic Incident Management Message Sets for Use by Emergency Management Centers IEEE 1512.3-2006 Standard for Hazardous Material Incident Management Message Sets for Use by Emergency Management Centers IEEE P1512.4 Standard for Common Traffic Incident Management Message Sets for Use in Entities External to Centers NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML)
Solicitud de acceso	Flujo candidato a ser normalizado
Solicitud de actualización de mapa	Flujo candidato a ser normalizado
Solicitud de análisis de archivos	Flujo candidato a ser normalizado
Solicitud de ayuda	APTA TCIP-S-001 3.0.4 Standard for Transit Communications Interface Profiles
Solicitud de bloqueo de vehículo de carga	Flujo candidato a ser normalizado
Solicitud de bloqueo de vehículo de transporte público	Flujo candidato a ser normalizado
Solicitud de cambio en el servicio del peaje	Flujo candidato a ser normalizado
Solicitud de cobros de cuotas y fijación de peajes	Flujo sin normativa de referencia
Solicitud de consignación	Flujo sin normativa de referencia
Solicitud de control de tránsito en una emergencia	IEEE 1512 -2006 Standard for Common Incident Management Message Sets for use by Emergency Management Centers IEEE 1512.1-2006 Standard for Traffic Incident Management Message Sets for Use by Emergency Management Centers IEEE 1512.2-2004 Standard for Public Safety Traffic Incident Management Message Sets for Use by Emergency Management Centers IEEE 1512.3-2006 Standard for Hazardous Material Incident Management Message Sets for Use by Emergency Management Centers IEEE P1512.4 Standard for Common Traffic Incident Management Message Sets for Use in Entities External to Centers NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 1201 Global Object Definitions NTCIP 1211 Object Definitions for Signal Control and Prioritization (SCP) NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML)
Solicitud de credenciales para un vehículo de carga (incluida autorización de pago)	Flujo candidato a ser normalizado
Solicitud de datos de cobro de cuotas	Flujo candidato a ser normalizado
Solicitud de datos de desempeño	Flujo sin normativa de referencia
Solicitud de datos de emergencia	SAE J2266 Location Referencing Message Specification (LRMS) SAE J2313 On-Board Land Vehicle Mayday Reporting Interface SAE J2354 Message Set for Advanced Traveler Information System (ATIS) SAE J2540 Messages for Handling Strings and Look-Up Tables in ATIS Standards SAE J2540/1 RDS (Radio Data System) Phrase Lists SAE J2540/2 ITIS (International Traveler Information Systems) Phrase Lists SAE J2540/3 National Names Phrase List

FLUJOS	NORMATIVA
Solicitud de datos de identificación para dar soporte a la revisión electrónica	ASTM E2158-01 Standard Specification for Dedicated Short Range Communication (DSRC) Physical Layer using Microwave in the 902-928 MHz Band IEEE 1455-1999 Standard for Message Sets for Vehicle/Roadside Communications
Solicitud de datos de liquidación/tramitación en la frontera	ASTM E2158-01 Standard Specification for Dedicated Short Range Communication (DSRC) Physical Layer using Microwave in the 902-928 MHz Band IEEE 1455-1999 Standard for Message Sets for Vehicle/Roadside Communications
Solicitud de datos de operación y mantenimiento recopilados mediante sensores embarcados	APTA TCIP-S-001 3.0.4 Standard for Transit Communications Interface Profiles
Solicitud de datos de plazas de estacionamiento	APTA TCIP-S-001 3.0.4 Standard for Transit Communications Interface Profiles NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML) SAE J2266 Location Referencing Message Specification (LRMS) SAE J2354 Message Set for Advanced Traveler Information System (ATIS) SAE J2540 Messages for Handling Strings and Look-Up Tables in ATIS Standards SAE J2540/1 RDS (Radio Data System) Phrase Lists SAE J2540/2 ITIS (International Traveler Information Systems) Phrase Lists SAE J2540/3 National Names Phrase List
Solicitud de datos de vehículo de carga	Flujo candidato a ser normalizado
Solicitud de datos del sello electrónico	ASTM E2158-01 Standard Specification for Dedicated Short Range Communication (DSRC) Physical Layer using Microwave in the 902-928 MHz Band IEEE 1455-1999 Standard for Message Sets for Vehicle/Roadside Communications
Solicitud de despacho	Flujo candidato a ser normalizado
Solicitud de entrega de contenedor	Flujo sin normativa de referencia
Solicitud de envío a emergencia	Flujo candidato a ser normalizado
Solicitud de información de datos agregados de contaminación	Flujo candidato a ser normalizado
Solicitud de información de emergencia al viajero	Flujo candidato a ser normalizado
Solicitud de información de los medios de comunicación	Flujo sin normativa de referencia
Solicitud de información de tag.	Flujo candidato a ser normalizado
Solicitud de información de transporte público	NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML) SAE J2266 Location Referencing Message Specification (LRMS) SAE J2354 Message Set for Advanced Traveler Information System (ATIS) SAE J2540 Messages for Handling Strings and Look-Up Tables in ATIS Standards SAE J2540/1 RDS (Radio Data System) Phrase Lists SAE J2540/2 ITIS (International Traveler Information Systems) Phrase Lists SAE J2540/3 National Names Phrase List
Solicitud de información de viajero	SAE J2266 Location Referencing Message Specification (LRMS) SAE J2354 Message Set for Advanced Traveler Information System (ATIS) SAE J2540 Messages for Handling Strings and Look-Up Tables in ATIS Standards SAE J2540/1 RDS (Radio Data System) Phrase Lists SAE J2540/2 ITIS (International Traveler Information Systems) Phrase Lists SAE J2540/3 National Names Phrase List

FLUJOS	NORMATIVA
Solicitud de información del servicio de viajes	NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML) SAE J2266 Location Referencing Message Specification (LRMS) SAE J2354 Message Set for Advanced Traveler Information System (ATIS) SAE J2540 Messages for Handling Strings and Look-Up Tables in ATIS Standards SAE J2540/1 RDS (Radio Data System) Phrase Lists SAE J2540/2 ITIS (International Traveler Information Systems) Phrase Lists SAE J2540/3 National Names Phrase List
Solicitud de información meteorológica	Flujo candidato a ser normalizado ITE TMDD Traffic Management Data Dictionary (TMDD) and Message Sets for External Traffic Management Center Communications (MS/ETMCC) NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML)
Solicitud de información multimodal	NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML) SAE J2266 Location Referencing Message Specification (LRMS) SAE J2354 Message Set for Advanced Traveler Information System (ATIS) SAE J2540 Messages for Handling Strings and Look-Up Tables in ATIS Standards SAE J2540/1 RDS (Radio Data System) Phrase Lists SAE J2540/2 ITIS (International Traveler Information Systems) Phrase Lists SAE J2540/3 National Names Phrase List
Solicitud de información para dar soporte a los pagos en estacionamientos y peaje	ASTM E2158-01 Standard Specification for Dedicated Short Range Communication (DSRC) Physical Layer using Microwave in the 902-928 MHz Band ASTM E2213-03 Standard Specification for Telecommunications and Information Exchange Between Roadside and Vehicle Systems - 5 GHz Band Dedicated Short Range Communications (DSRC) Medium Access Control (MAC) and Physical Layer (PHY) Specifications Flujo candidato a ser normalizado IEEE 1455-1999 Standard for Message Sets for Vehicle/Roadside Communications IEEE 1609.1-2006 Standard for Wireless Access in Vehicular Environments (WAVE) - Resource Manager IEEE 1609.2-2006 Standard for Wireless Access in Vehicular Environments (WAVE) - Security Services for Applications and Management Messages IEEE 1609.3 Standard for Wireless Access in Vehicular Environments (WAVE) - Networking Services IEEE 1609.4-2006 Standard for Wireless Access in Vehicular Environments (WAVE) - Multi-Channel Operation IEEE 802.11p Standard for Information Technology - Telecommunications and Information Exchange Between Systems - Local and Metropolitan Area Networks - Specific Requirements - Part II: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specification IEEE P1609.0 Standard for Wireless Access in Vehicular Environments (WAVE) - Architecture IEEE P1609.11 Standard for Wireless Access in Vehicular Environments (WAVE) - Over-the-Air Data Exchange Protocol for Intelligent Transportation Systems (ITS)

FLUJOS	NORMATIVA
Solicitud de licencia	Flujo candidato a ser normalizado
Solicitud de lista de tarjetas inválidas	APTA TCIP-S-001 3.0.4 Standard for Transit Communications Interface Profiles
Solicitud de manifiesto	Flujo sin normativa de referencia
Solicitud de pago	Flujo candidato a ser normalizado
Solicitud de pago de una entidad financiera	Flujo candidato a ser normalizado
Solicitud de paso	Flujo candidato a ser normalizado
Solicitud de productos de datos archivados	Flujo candidato a ser normalizado ITE TMDD Traffic Management Data Dictionary (TMDD) and Message Sets for External Traffic Management Center Communications (MS/ETMCC) NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML)
Solicitud de recogida de contenedor	Flujo sin normativa de referencia
Solicitud de recurso	IEEE 1512 -2006 Standard for Common Incident Management Message Sets for use by Emergency Management Centers IEEE 1512.1-2006 Standard for Traffic Incident Management Message Sets for Use by Emergency Management Centers IEEE 1512.2-2004 Standard for Public Safety Traffic Incident Management Message Sets for Use by Emergency Management Centers IEEE 1512.3-2006 Standard for Hazardous Material Incident Management Message Sets for Use by Emergency Management Centers IEEE P1512.4 Standard for Common Traffic Incident Management Message Sets for Use in Entities External to Centers NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML)
Solicitud de recursos de mantenimiento y construcción	Flujo candidato a ser normalizado IEEE 1512 -2006 Standard for Common Incident Management Message Sets for use by Emergency Management Centers IEEE 1512.1-2006 Standard for Traffic Incident Management Message Sets for Use by Emergency Management Centers IEEE 1512.2-2004 Standard for Public Safety Traffic Incident Management Message Sets for Use by Emergency Management Centers IEEE 1512.3-2006 Standard for Hazardous Material Incident Management Message Sets for Use by Emergency Management Centers IEEE P1512.4 Standard for Common Traffic Incident Management Message Sets for Use in Entities External to Centers NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML)
Solicitud de registro de inspección de seguridad	Flujo candidato a ser normalizado
Solicitud de registro de viaje	Flujo candidato a ser normalizado
Solicitud de ruta de emergencia	Flujo candidato a ser normalizado
Solicitud de servicio	Flujo sin normativa de referencia
Solicitud de servicios de viaje	SAE J2266 Location Referencing Message Specification (LRMS) SAE J2354 Message Set for Advanced Traveler Information System (ATIS) SAE J2540 Messages for Handling Strings and Look-Up Tables in ATIS Standards SAE J2540/1 RDS (Radio Data System) Phrase Lists SAE J2540/2 ITIS (International Traveler Information Systems) Phrase Lists SAE J2540/3 National Names Phrase List

FLUJOS	NORMATIVA
Solicitud de transporte público a la demanda	Flujo candidato a ser normalizado
Solicitud de un cruce carretera-ferrocarril (paso a nivel)	Flujo candidato a ser normalizado
Solicitud de verificación de cliente	Flujo candidato a ser normalizado
Solicitud de viaje	SAE J2266 Location Referencing Message Specification (LRMS) SAE J2354 Message Set for Advanced Traveler Information System (ATIS) SAE J2540 Messages for Handling Strings and Look-Up Tables in ATIS Standards SAE J2540/1 RDS (Radio Data System) Phrase Lists SAE J2540/2 ITIS (International Traveler Information Systems) Phrase Lists SAE J2540/3 National Names Phrase List
Solicitud del viajero basada en voz	Flujo candidato a ser normalizado
Solicitud no programada de zona de obras	Flujo sin normativa de referencia
Solicitud para obtener datos de a bordo del vehículo	Flujo candidato a ser normalizado
Solicitudes de archivos	Flujo candidato a ser normalizado ITE TMDD Traffic Management Data Dictionary (TMDD) and Message Sets for External Traffic Management Center Communications (MS/ETMCC) NTCIP 1102 Octet Encoding Rules (OER) Base Protocol NTCIP 1104 Center-to-Center Naming Convention Specification NTCIP 2104 Ethernet Subnetwork Profile NTCIP 2202 Internet (TCP/IP and UDP/IP) Transport Profile NTCIP 2303 File Transfer Protocol (FTP) Application Profile NTCIP 2304 Application Profile for DATEX-ASN (AP-DATEX) NTCIP 2306 Application Profile for XML Message Encoding and Transport in ITS Center-to-Center Communications (C2C XML)
Solicitudes de gestión de archivos	Flujo sin normativa de referencia

3.2.21 T

Tabla 15: Normativa de referencia para flujos de información (letra T)

FLUJOS	NORMATIVA
Tasas relativas a distintas credenciales intercambiadas por diferentes agencias públicas	Flujo candidato a ser normalizado
Transacciones de peaje	Flujo candidato a ser normalizado

3.2.22 U

No hay flujos de datos que comiencen por la letra U.

3.2.23 V

Tabla 16: Normativa de referencia para flujos de información (letra V)

FLUJOS	NORMATIVA
Valoración del estado del sistema de transporte público	Flujo candidato a ser normalizado
Valoración del estado del sistema ferroviario	Flujo candidato a ser normalizado
Violación de seguridad de la carga	Flujo candidato a ser normalizado

3.2.24 W

No hay flujos de datos que comiencen por la letra W.

3.2.25 X

No hay flujos de datos que comiencen por la letra X.

3.2.26 Y

No hay flujos de datos que comiencen por la letra Y.

3.2.27 Z

No hay flujos de datos que comiencen por la letra Z.