

Flow Name	Flow Description	Flow Type
accident report	Report of commercial vehicle safety accident. The information may be provided as a response to a real-time query or proactively by the source. The query flow is not explicitly shown.	Information
AHS control data	Information required for vehicles to operate on AHS lanes.	Information
AHS control information	Control data to AHS roadway equipment.	Information
AHS status	Status of AHS equipment, lane controls etc.	Information
AHS vehicle data	AHS route and vehicle condition data.	Information
air quality information	Aggregated region-wide measured air quality data and possible pollution incident information.	Information
alerts	Specific alerts and messages related to commercial vehicles (e.g. trucks not advised, trucks over 10 tons not allowed on bridge, route details). This also includes warning indications detected by on-board sensors (cargo, safety).	Information
archive analysis requests	A user request that initiates data mining, analytical processing, aggregation or summarization, report formulation, or other advanced processing and analysis of archived data. The request also includes information that is used to identify and authenticate the user and support electronic payment requirements, if any.	Request
archive analysis results	Processed information products, supporting meta data, and any associated transaction information resulting from data mining, analytical processing, aggregation or summarization, report formulation, or other on-line processing and analysis of archived data.	Information
archive coordination	Catalog data, meta data, published data, and other information exchanged between archives to support data synchronization and satisfy user data requests.	Information
archive management data	Information used to support the management of an ITS archive including database reports on the condition and quality of the archived data, status of the import and collection process, reports that monitor archive usage, and any special requests that require direct action by the administrator (e.g., requests for access to new data sources).	Information
archive management requests	Commands, requests, and queries that support the administration and management of an ITS data archive.	Request
archive request confirmation	Confirmation that an archive request has been received and processed with information on the disposition of the request.	Information
archive requests	A request to a data source for information on available data (i.e. "catalog") or a request that defines the data to be archived. The request can be a general subscription intended to initiate a continuous or regular data stream or a specific request intended to initiate a one-time response from the recipient.	Request
archive status	Notification that data provided to an archive contains erroneous, missing, or suspicious data or verification that the data provided appears valid. If an error has been detected, the offending data and the nature of the potential problem are identified.	Information
archived data product requests	A user-specified request for archived data products (i.e. data, meta data, or data catalogs). The request also includes information that is used to identify and authenticate the user and support electronic payment requirements, if any.	Request
archived data products	Raw or processed data, meta data, data catalogs and other data products provided to a user system upon request. The response may also include any associated transaction information.	Information
arriving train information	Information for a train approaching a highway-rail intersection that may include direction and allow calculation of approximate arrival time and closure duration.	Information
asset archive data	Information describing transportation assets including pavements, bridges, and all other infrastructure included in the transportation network. In addition, information can cover support assets (support equipment and systems, software, etc.). Content may include a catalog of available information, the actual information to be archived, and associated meta data that describes the archived information.	Information
asset inventory	Information on pavement, bridges, signs and other assets. This includes asset location, installation information, materials information, vendor/contractor information, current maintenance status, and a variety of other information (e.g., video logs) that define the transportation infrastructure.	Information
asset restrictions	Restrictions levied on transportation asset usage based on infrastructure design, surveys, tests, or analyses. This includes standard height, width, and weight restrictions by facility as well as special restrictions such as spring weight restrictions and temporary bridge weight restrictions.	Information
asset status update	Changes to status of pavement, bridges, signs and other assets resulting from maintenance or construction activities or infrastructure monitoring. The updates may include changes in installation information, materials information, vendor/contractor information, condition, and current maintenance status. In addition to infrastructure asset updates, the information provided may also include status of the maintenance and construction support assets, including vehicle and equipment utilization and repair records.	Information

## tblFlows

audit data	Information to support a tax audit.	Information
bad tag list	List of invalid transit user tags which may have previously failed a fare payment transaction.	Information
basic vehicle measures	Information provided to on-board ITS equipment from the vehicle platform indicating current vehicle status.	Information
border agency clearance results	Notification regarding the granting of permission for commercial freight shipment to enter the U.S.	Information
border clearance data	Trip specific data regarding the movement of goods across international borders. Includes trip identification number. May also include results from recent border crossing screening events.	Information
border clearance data request	Request for trip specific data regarding the movement of goods across international borders. Includes trip identification number. May also include results from recent border crossing screening events.	Information
border clearance event	Reports clearance event data regarding action taken at border, including acceptance or override of system decision, and date/time stamp	Request
border clearance status	Notification regarding the crossing status of commercial freight shipment scheduled to enter the U.S. Includes portions of border agency and transportation agency clearance results, as they become available. Recipients may include trade regulatory agencies that do not receive status information directly from U.S. Customs (e.g., other transportation agencies with trade related responsibilities, such as NHTSA, MARAD, etc.)	Information
broadcast advisories	General broadcast advisories that are provided over wide-area wireless communications direct to the vehicle radio. These analog advisory messages may provide similar content to ITS broadcast information flows, but include no digital data component. Existing Highway-Advisory Radio (HAR) advisory messages are a prime example of this flow.	Information
broadcast information	General broadcast information that contains link travel times, incidents, advisories, transit services and a myriad of other traveler information.	Information
care facility status	Information regarding facility type and capabilities, facility status, and its ability to admit new patients.	Information
care facility status request	Request for information regarding care facility availability and status.	Request
citation	Report of commercial vehicle citation. The citation includes references to the statute(s) that was (were) violated. It includes information on the violator and the officer issuing the citation. A citation differs from a violation because it is adjudicated by the courts. The information may be provided as a response to a real-time query or proactively by the source. The query flow is not explicitly shown.	Information
commercial vehicle archive data	Information describing commercial vehicle travel and commodity flow characteristics. Content may include a catalog of available information, the actual information to be archived, and associated meta data that describes the archived information.	Information
commercial vehicle data	Information about the commercial vehicles cargo, credentials, and payments.	Information
commercial vehicle data request	Requests from the vehicle for information about the commercial vehicle's cargo, credentials, and payments.	Request
commercial vehicle measures	Commercial vehicle, driver, and cargo safety status measured by on-board ITS equipment.	Information
compliance review report	Report containing results of carrier compliance review, including concomitant out-of-service notifications, carrier warnings/notifications. The information may be provided as a response to a real-time query or proactively by the source. The query flow is not explicitly shown.	Information
credential application	Application for commercial vehicle credentials. Authorization for payment is included.	Information
credential fee coordination	Jurisdiction's rates for various credentials (IRP, IFTA, etc.) that are exchanged between agencies.	Information
credentials information	Response containing full credentials information. "Response" may be provided in reaction to a real-time query or a standing request for updated information. The query flow is not explicitly shown.	Information
credentials status information	Credentials information such as registration, licensing, insurance, check flags, and electronic screening enrollment data. A unique identifier is included. Corresponds to the credentials portion of CVISN "snapshots." The status information may be provided as a response to a real-time query or as a result of a standing request for updated information (subscription). This may also include information about non-U.S. fleets for use by U.S. authorities, and information regarding U.S. fleets made available to Mexican and Canadian authorities. The query flow is not explicitly shown.	Information
crew movements	Field crew location within a work zone that is monitored to enhance work zone safety.	Information
crossing call	Request for pedestrian crossing.	Request
crossing permission	Signal to pedestrians indicating permission to cross roadway.	Information

current asset restrictions	Restrictions levied on transportation asset usage based on infrastructure design, surveys, tests, or analyses. This includes standard facility design height, width, and weight restrictions, special restrictions such as spring weight restrictions, and temporary facility restrictions that are imposed during maintenance and construction.	Information
CVC override mode	Manual override of automated pass/pull-in decisions generated by the Commercial Vehicle Check station.	Information
CVO driver initialization	Commercial vehicle driver and vehicle information and requests to the commercial vehicle managing system.	Information
CVO inspector information	Credential, safety, and preclearance information and instructions to the commercial vehicle inspector.	Information
CVO inspector input	Requests from the commercial vehicle inspector to operate the commercial vehicle inspection station.	Information
CVO pass/pull-in message	Message sent to commercial vehicle driver indicating whether to bypass or requesting pull in to inspection/verification stop along with inspection results (e. g., LED indicator on transponder or variable message sign).	Information
CVO weight and presence	Physical attribute of commercial vehicle that can be measured (for example, weight, number of axels, axel spacing, etc.).	Information
daily site activity data	Record of daily activities at commercial vehicle check stations including summaries of screening events and inspections.	Information
data collection and monitoring control	Information used to configure and control data collection and monitoring systems.	Information
declaration information	Notification containing information regarding pending commercial freight shipment into the U.S.	Information
demand responsive transit plan	Plan regarding overall demand responsive transit schedules and deployment.	Information
demand responsive transit request	Request for paratransit support.	Request
dispatch information	Dispatch information and command to emergency personnel.	Information
domestic transportation information	Real-time or near real-time data regarding trade transportation activity. Potentially categorized by shipper classification, carrier, commodity, etc. Intended for use as a transportation decision tool.	Information
driver information	General advisory and traffic control information provided to the driver while en route.	Information
driver inputs	Driver commands to the vehicle.	Information
driver instructions	Transit service instructions, traffic information, road conditions, and other information for both transit and paratransit drivers.	Information
driver log	A daily log showing hours in service for the current driver.	Information
driver log request	Request for driver log data.	Request
driver to fleet request	Requests from the driver and vehicle for routing, payment, and enrollment information.	Information
driver updates	Information displayed or otherwise conveyed by the vehicle to the driver.	Information
electronic lock data	Notification to roadside (via transponder) of the presence and status of electronic cargo locks.	Information
electronic lock data request	Request from roadside for data regarding presence and status of electronic cargo locks.	Request
electronic screening request	Request for identification data to support electronic screening.	Request
emergency acknowledge	Acknowledge request for emergency assistance and provide additional details regarding actions and verification requirements.	Information
emergency archive data	Logged incident information that characterizes the identified incidents and provides a record of the corresponding incident response. Content may include a catalog of available information, the actual information to be archived, and associated meta data that describes the archived information.	Information
emergency data request	A request for additional information or a control command issued by the emergency response agency in response to an emergency request for assistance from a traveler.	Request
emergency dispatch requests	Emergency vehicle dispatch instructions including incident location and available information concerning the incident.	Information
emergency dispatch response	Request for additional emergency dispatch information (e.g., a suggested route) and provision of en route status.	Information
emergency notification	An emergency request for assistance originated by a traveler using an in-vehicle, public access, or personal device.	Information
emergency operations request	Emergency operator inputs supporting call taking, dispatch, and other operations and communications center operator functions.	Information
emergency operations status	Emergency operations data supporting a range of emergency operating positions including call taker, dispatch, and various other operations and communications center operator positions.	Information
emergency personnel inputs	Current incident status information and requests from emergency personnel in the field for information and/or resources.	Information
emergency request	An emergency assistance request originated by a transit traveler using an in-vehicle, public access, or personal device.	Request

emergency traffic control request	Special request to preempt the current traffic control strategy in effect at one or more signalized intersections or highway segments. For example, this flow can request all signals to red-flash, request a progression of traffic control preemptions along an emergency vehicle route, or request another special traffic control plan.	Request
emergency traffic control response	Status of the special traffic signal control strategy implemented in response to the emergency traffic control request.	Information
emergency vehicle tracking data	The current location and operating status of the emergency vehicle.	Information
emissions archive data	Air quality and vehicle emissions information that is collected by sensors or derived from models. Content may include a catalog of available information, the actual information to be archived, and associated meta data that describes the archived information.	Information
emissions data	Emissions data and associated imagery collected by roadside equipment.	Information
environmental conditions	Current road conditions (e.g., surface temperature, subsurface temperature, moisture, icing, treatment status) and surface weather conditions (e.g., air temperature, wind speed, precipitation, visibility) that are measured by environmental sensors.	Information
environmental conditions data	Current road conditions (e.g., surface temperature, subsurface temperature, moisture, icing, treatment status) and surface weather conditions (e.g., air temperature, wind speed, precipitation, visibility) as measured and reported by environmental sensors.	Information
environmental probe data	Current environmental conditions (e.g., air temperature, wind speed, surface temperature) as measured by vehicle-based environmental sensors. In addition to environmental sensor inputs, this flow may also include vehicle control system information that may indicate adverse road surface conditions (e.g., traction control system activations).	Information
environmental sensors control	Data used to configure and control environmental sensors.	Request
equipment availability	An inventory of the maintenance and construction equipment available at the storage facility. This flow includes the type of equipment, enough descriptive information to indicate its suitability for use, and its current status. This flow may contain information for a specific type of equipment or include all equipment available at the facility.	Information
equipment maintenance status	Current status of field equipment maintenance actions.	Information
event confirmation	Confirmation that special event details have been received and processed.	Information
event information	Special event information for travelers. This would include a broader array of information than the similar "event plans" that conveys only information necessary to support traffic management for the event.	Information
event information request	Request for special event information.	Request
event plans	Plans for major events possibly impacting traffic.	Information
external reports	Traffic and incident information that is collected by the media through a variety of mechanisms (e.g., radio station call-in programs, air surveillance).	Information
fare and payment status	Current fare collection information including the operational status of the fare collection equipment and financial payment transaction data.	Information
fare and price information	Current transit, parking, and toll fee schedule information.	Information
fare management information	Transit fare information and transaction data used to manage transit fare processing on the transit vehicle.	Information
field device status	Reports from field equipment (sensors, signals, signs, controllers, etc.) which indicate current operational status.	Information
field equipment status	Identification of field equipment requiring repair and known information about the associated faults.	Information
fleet manager inquiry	Inquiry from fleet manager requesting data from commercial vehicle management system.	Request
fleet status	Fleet status information including enrollment status, routing information, current vehicle information, and emergency information.	Information
fleet to driver update	Updated instructions to the driver including dispatch, routing, and special instructions.	Information
freeway control data	Control commands and operating parameters for ramp meters, mainline metering/lane controls and other systems associated with freeway operations.	Information
freeway control status	Current operational status and operating parameters for ramp meters, mainline metering/lane controls and other control equipment associated with freeway operations.	Information
government reporting data receipt	The acknowledgement of satisfactory receipt of information used as input to government data systems or a report identifying problems or issues with the data submittal.	Information
government reporting system data	Information provided by an ITS archive, formatted as appropriate, that can be used as input to government data reporting systems.	Information
hazmat information	Information about a particular hazmat load including nature of the load and unloading instructions. May also include hazmat vehicle route and route update information.	Information

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hazmat information request	Request for information about a particular hazmat load.	Request
hazmat spill notification	This data flow is used by the on-board cargo monitoring equipment package to contact emergency response organizations when the cargo sensors detect a release of hazardous material. This information will include the vehicle location discussed above as well as identifying the carrier. The information may be provided as a response to a real-time query or proactively by the source. The query flow is not explicitly shown.	Information
highway control status	Current traffic control equipment status that indicates operational status and right-of-way availability to the non-highway transportation mode at a multimodal crossing.	Information
hov data	Current HOV lane information including both standard traffic flow measures and information regarding vehicle occupancy in HOV lanes.	Information
hri advisories	Notification of Highway-Rail Intersection equipment failure, intersection blockage, or other condition requiring attention, and maintenance activities at or near highway rail intersections.	Information
hri control data	Data required for HRI information transmitted at railroad grade crossings and within railroad operations.	Information
hri operational status	Status of the highway-rail grade crossing equipment including both the current state of mode of operation and the current equipment condition.	Information
hri request	A request for highway-rail intersection status or a specific control request intended to modify HRI operation.	Request
hri status	Status of the highway-rail intersection equipment including both the current state or mode of operation and the current equipment condition.	Information
identification information	Vehicle identification information such as license plate number, US DOT number, ICC number, bar code, etc.	Information
incident command information	Information that supports local management of an incident. It includes resource deployment status, hazardous material information, traffic, road, and weather conditions, evacuation advice, and other information that enables emergency or maintenance personnel in the field to implement an effective, safe incident response.	Information
incident command information presentation	Presentation of information to emergency personnel in the field that supports local tactical decision-making within an incident command system structure.	Information
incident command request	Request for resources, commands for relay to other allied response agencies, and other requests that reflect local command of an evolving incident response.	Request
incident information	Notification of existence of incident and expected severity, location, time and nature of incident.	Information
incident information for media	Report of current desensitized incident information prepared for public dissemination through the media.	Information
incident information request	Request for incident information, clearing time, severity. The request can be a subscription that initiates as-needed information updates as well as a one-time request for information.	Request
incident notification	The notification of an incident including its nature, severity, and location.	Information
incident notification response	Interactive acknowledgement and verification of the incident information received, requests for additional information, and general information on incident response status.	Information
incident report	Report of an identified incident including incident location, type, severity and other information necessary to initiate an appropriate incident response.	Information
incident response coordination	Incident response procedures, resource coordination, and current incident response status that are shared between allied response agencies to support a coordinated response to incidents. This flow also coordinates a positive hand off of responsibility for all or part of an incident response between agencies.	Information
incident response status	Status of the current incident response including traffic management strategies implemented at the site (e.g., closures, diversions, traffic signal control overrides).	Information
incident status	Information gathered at the incident site that more completely characterizes the incident and provides current incident response status.	Information
information on violators	Response from law enforcement agency to request for information on violators. May include information about commercial vehicle violations or other kinds of violations associated with the particular entity.	Information
infrastructure conditions data	Current condition of pavement, bridges, culverts, signs, and other roadway infrastructure as measured by on-board sensors or read from infrastructure-based sensors. The data may include raw data or images (e.g., photo logs) that indicate the current status of the infrastructure.	Information
infrastructure monitoring sensor control	Data used to configure and control infrastructure monitoring sensors.	Request
infrastructure monitoring sensor data	Data read from infrastructure-based sensors that monitor the condition of pavement, bridges, culverts, signs, and other roadway infrastructure.	Information
intermod CVO coord	Cargo movement logs, routing information, and cargo ID's.	Information

intermodal freight archive data	Information describing demand at intermodal freight terminals including loading/unloading activities of trailers and containers. Content may include a catalog of available information, the actual information to be archived, and associated meta data that describes the archived information.	Information
intersection blockage notification	Notification that a highway-rail intersection is obstructed and supporting information.	Information
intersection status	Status of intersection congestion, approaching vehicles, etc.	Information
in-vehicle transaction status	The status of an electronic payment transaction presented to the driver by in-vehicle equipment.	Information
ISP coordination	Coordination and exchange of transportation information between centers. This flow allows a broad range of transportation information collected by one ISP to be redistributed to many other ISPs and their clients.	Information
ISP operating parameter updates	Tuning and performance enhancement parameters to ISP algorithms.	Information
ISP operating parameters	Parameters provided to the ISP Operator by the ISP including broadcast information settings, route selection controls, and travel optimization algorithms.	Information
license request	Request supporting registration data based on license plate read during violation.	Request
local signal preemption request	Direct control signal or message to a signalized intersection that results in preemption of the current control plan and grants right-of-way to the requesting vehicle.	Information
local signal priority request	Request from a vehicle to a signalized intersection for priority at that intersection.	Request
logged special vehicle route	Anticipated route information for special vehicles (e.g., oversize vehicles) or groups of vehicles (e.g., governor's motorcade) that may require changes in traffic control strategy.	Information
maint and constr administrative information	Administrative information that is provided to support maintenance and construction operations. This information includes: equipment and consumables resupply purchase request status, personnel qualifications including training and special certifications, environmental regulations and rules that may impact maintenance activities, and requests and project requirements from contract administration.	Information
maint and constr administrative request	Requests for maintenance and construction administrative information or services. Requests include: requests to purchasing for equipment and consumables resupply and requests to human resources that manage training and special certification for field crews and other personnel.	Request
maint and constr archive data	Information describing road construction and maintenance activities identifying the type of activity, the work performed, and work zone information including work zone configuration and safety (e.g., a record of intrusions and vehicle speeds) information.. For construction activities, this information also includes a description of the completed infrastructure, including as-built plans as applicable. Content may include a catalog of available information, the actual information to be archived, and associated meta data that describes the archived information.	Information
maint and constr center personnel inputs	Maintenance and construction related information (e.g., routing information, scheduling data, dispatch instructions, resource allocations, incident coordination) entered by maintenance and construction center personnel.	Request
maint and constr dispatch information	Information used to dispatch maintenance and construction vehicles, equipment, and crews. This information includes routing information, traffic information, road restrictions, incident information, environmental information, decision support information, maintenance schedule data, dispatch instructions, personnel assignments, and corrective actions.	Information
maint and constr dispatch status	Current maintenance and construction status including work data, operator status, crew status, and equipment status.	Information
maint and constr equipment repair status	Current maintenance and repair status of the maintenance and construction vehicle fleet and other support equipment. This information includes a record of all maintenance and repair activities performed.	Information
maint and constr field personnel information presentation	Information presented to maintenance and construction field personnel including vehicle routing and traffic information, road restrictions, environmental information, decision support information, maintenance schedules, dispatch instructions, maintenance personnel assignments, vehicle maintenance information, work zone status information, and corrective actions.	Information
maint and constr field personnel inputs	Current maintenance and construction status information provided by field personnel including work data, operator status, crew status, vehicle status, and equipment status.	Information
maint and constr fleet information	Information supporting maintenance of the maintenance and construction vehicle fleet and other support equipment. This information includes vehicle status and diagnostic information, vehicle utilization, and coordination of when vehicles will be available for preventative and corrective maintenance.	Information
maint and constr material information	Information on materials stored on the vehicle including quantity and current application rate.	Information

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maint and constr operations information presentation	Presentation of maintenance and construction operations information to center personnel. This information includes maintenance resource status (vehicles, equipment, and personnel), work schedule information, work status, road and weather conditions, traffic information, incident information and associated resource requests, and a range of other information that supports efficient maintenance and construction operations and planning.	Information
maint and constr resource coordination	Request for road maintenance and construction resources that can be used in the diversion of traffic (cones, portable signs), clearance of a road hazard, repair of ancillary damage, or any other incident response.	Information
maint and constr resource request	Request for road maintenance and construction resources that can be used in the diversion of traffic (cones, portable signs), clearance of a road hazard, repair of ancillary damage, or any other incident response.	Request
maint and constr resource response	Current status of maintenance and construction resources including availability and deployment status.	Information
maint and constr vehicle condition presentation	Presentation of vehicle diagnostics and operating status including speed, engine temperature, mileage, tire wear, brake wear, belt wear, maintenance and construction system status, environmental sensor information, and other measures associated with the operation of a maintenance vehicle.	Information
maint and constr vehicle conditions	Vehicle diagnostics information that is collected, filtered, and selectively reported by a maintenance and construction vehicle. The information includes engine temperature, mileage, tire wear, brake wear, belt wear, and any warnings or alarms concerning the operational condition of the vehicle and ancillary equipment.	Information
maint and constr vehicle control	Control data sent from on-board ITS systems to control maintenance and construction vehicle equipment, including control of materials dispersion rate and other control functions that will vary with vehicle type and application.	Information
maint and constr vehicle location data	The current location and related status (e.g., direction and speed) of the maintenance/construction vehicle.	Information
maint and constr vehicle measures	Raw vehicle diagnostics and operating status data reported by the maintenance vehicle platform including engine temperature, mileage, tire wear, brake wear, belt wear, and other operational status measures. In addition to this general vehicle status, this flow also includes the status of maintenance and construction-specific systems on the vehicle.	Information
maint and constr vehicle operational data	Data that describes the maintenance and construction activity performed by the vehicle. Operational data includes materials usage (amount stored and current application rate), operational state of the maintenance equipment (e.g., blade up/down, spreader pattern), vehicle safety status, and other measures associated with the operation of a maintenance, construction, or other special purpose vehicle. Operational data may include basic operational status of the vehicle equipment or a more precise record of the work performed (e.g., application of crack sealant with precise locations and application characteristics).	Information
maint and constr vehicle status coordination	Maintenance and construction vehicle status information that is shared between vehicles. This includes environmental conditions and the operational status of the vehicles.	Information
maint and constr vehicle system control	Configure and control data that supports remote control of on-board maintenance and construction vehicle systems and field equipment that is remotely controlled by the vehicle. For example, the data can be used to adjust material application rates and spread patterns.	Information
maint and constr work performance	Overall project status and work performance information provided to support contract administration.	Information
maint and constr work plans	Future construction and maintenance work schedules and activities including anticipated closures with anticipated impact to the roadway, alternate routes, anticipated delays, closure times, and durations.	Information
maintenance and repair needs	Recommended strategies and schedules for maintenance of the transportation infrastructure.	Information
maintenance materials storage status	The amount and availability of maintenance materials in storage facilities.	Information
maintenance status	Current maintenance status of vehicle.	Information
map update request	Request for a map update which could include a new underlying map or map layer updates.	Request
map updates	Map update which could include a new underlying static or real-time map or map layer(s) update.	Information
media information request	Request from the media for current transportation information.	Request
multimodal archive data	Operational information from alternate passenger transportation modes including air, rail transit, taxis, and ferries. Content may include a catalog of available information, the actual information to be archived, and associated meta data that describes the archived information.	Information
multimodal crossing status	Indication of operational status and pending requests for right-of-way from equipment supporting the non-highway mode at multimodal crossings.	Information

multimodal information	Schedule information for alternate mode transportation providers such as train, ferry, air and bus.	Information
multimodal information request	Information request for alternate mode transportation providers such as train, ferry, air and bus.	Request
multimodal service data	Multimodal transportation schedules and other service information.	Information
on-board safety data	Safety data measured by on-board sensors. Includes information about the vehicle, vehicle components, cargo, and driver.	Information
on-board safety request	Request for on-board vehicle safety data by the roadside equipment.	Request
on-board vehicle data	Information about the commercial vehicle stored on-board (for maintenance purposes, gate access, cargo status, lock status, etc.).	Information
on-board vehicle request	Request for on-board vehicle data.	Request
other data source archive data	Data extracted from other data sources. A wide range of ITS and non-ITS data and associated meta data may be provided.	Information
parking archive data	Data used to analyze and monitor trends in parking demand, pricing, and operational actions. Content may include a catalog of available information, the actual information to be archived, and associated meta data that describes the archived information.	Information
parking availability	Current parking lot occupancy, parking availability, and cost information.	Information
parking coordination	Information that enables parking management activities to be coordinated between different parking operators or systems in a region.	Information
parking demand management request	Request to change the demand for parking facility use through pricing or other mechanisms.	Request
parking demand management response	Response to parking demand management change requests indicating level of compliance with request.	Information
parking information	General parking information and current parking availability.	Information
parking instructions	Information that allows local parking facilities to be managed to support regional traffic management objectives.	Information
parking lot data request	Request for parking lot occupancy, fares, and availability. The request can be a subscription that initiates as-needed information updates as well as a one-time request for information.	Information
parking lot reservation confirmation	Confirmation for parking lot reservation.	Information
parking operator inputs	Local parking operator inputs that query current status and control the operation of the parking management system.	Information
parking reservations request	Reservation request for parking lot.	Request
parking status	Parking lot operational status.	Information
pass/pull-in	Command to commercial vehicle to pull into or bypass inspection station.	Information
patient status	Information that supports assessment of the patient's condition. Information could include general categorization of patient status, patient vital signs, pertinent medical history, and emergency care information.	Information
payment	Payment of some kind (e.g., toll, parking, fare) by traveler which, in most cases, can be related to a credit account.	Information
payment request	Request for payment from financial institution.	Request
payment violation notification	Notification to enforcement agency of a toll, parking, or transit fare payment violation.	Information
personal transit information	General and personalized transit information for a particular fixed route, flexible route, or paratransit system.	Information
physical presence	Detection of an obstacle by a vehicle. Obstacle could include animals, other vehicles, pedestrians, rocks in roadway etc.	Information
pollutant levels	Atmospheric pollutant levels as monitored by air quality sensors.	Information
pollution data	Measured emissions data comprised of various atmospheric pollutants.	Information
pollution data display	Both reference and current pollution status details for a given geographic area.	Information
pollution data parameters	Nominal pollution data compliance (reference) levels for each sector of an urban area.	Information
pollution state data request	Aggregated emissions data information request.	Request
position fix	Information which provides a traveler's or vehicle's geographical position.	Information
probe data	Aggregate data from probe vehicles including location, speed for a given link or collection of links.	Information
provider profile confirm	Confirmation of profile information received by a service provider (e.g. for a hotel or restaurant).	Information
provider profile data	Information supplied by a service provider (e.g., a hotel or restaurant) that identifies the service provider and provides details of the service offering. This flow covers initial registration of a service provider and subsequent submittal of new information and status updates so that data currency is maintained.	Information
railroad advisories	Real-time notification of railway-related incident or advisory.	Information
railroad schedules	Train schedules, maintenance schedules, and other information from the railroad that supports forecast of HRI closures.	Information
registration	Registered owner of vehicle and associated vehicle information.	Information
remote surveillance control	The control commands used to remotely operate another center's sensors or surveillance equipment so that roadside surveillance assets can be shared by more than one agency.	Information

## tblFlows

request fare and price information	Requests for current fare and price information from a service provider that can be used to augment the traffic manager's overall view of current transportation network status.	Request
request for bad tag list	Request for list of bad vehicle tag IDs.	Request
request for enforcement	Request for traffic enforcement to address safety issues in a work zone or other special situations.	Information
request for payment	Request to deduct cost of service from user's payment account.	Request
request for performance data	Request issued by a service provider for current parking service performance data.	Request
request for right-of-way	Forwarded request from signal prioritization, signal preemption, pedestrian call, multi-modal crossing activation, or other source for right-of-way.	Request
request for road network conditions	Request for traffic information, road conditions, surface weather conditions, incident information, and other road network status. The request specifies the region/route of interest, the desired effective time period, and other parameters that allow preparation of a tailored response. The request can be a subscription that initiates as-needed information updates as well as a one-time request for information.	Request
request for service	A traveler service request initiated by a driver or traveler. The request may result in a financial transaction, summon an emergency response, or initiate another service at the behest of the driver.	Request
request for vehicle measures	Request for vehicle performance and maintenance data collected by onboard sensors.	Request
request tag data	Request for tag information including credit identity, stored value card cash, etc.	Information
request transit information	Request for transit service information and current transit status.	Request
resource deployment status	Status of traffic management center resource deployment identifying the resources available and their current deployment status.	Information
resource request	A request for traffic management resources to implement special traffic control measures, assist in clean up, verify an incident, etc.	Request
reversible lane status	Current reversible lane status including traffic sensor and surveillance data and the operational status and mode of the reversible lane control equipment.	Information
road data	Basic road facility and treatment information that supports road conditions forecasts.	Information
road network conditions	Current and forecasted traffic information, road and weather conditions, incident information, and other road network status. Either raw data, processed data, or some combination of both may be provided by this architecture flow.	Information
road network probe information	Aggregated route usage, travel times, environmental conditions, and other aggregated data collected from probe vehicles.	Information
road weather information	Road conditions and weather information that are made available by road maintenance operations to other transportation system operators.	Information
roadside archive data	A broad set of data derived from roadside sensors that includes current traffic conditions, environmental conditions, and any other data that can be directly collected by roadside sensors. This data also indicates the status of the sensors and reports of any identified sensor faults.	Information
roadside transaction status	The status of an electronic payment transaction provided directly to the driver via sign or other roadside infrastructure.	Information
roadway characteristics	Detectable or measurable road characteristics such as friction coefficient and general surface conditions, road geometry and markings, etc. These characteristics are monitored or measured by ITS sensors and used to support advanced vehicle safety and control and road maintenance capabilities.	Information
roadway equipment coordination	The direct flow of information between field equipment. This includes transfer of information between sensors and driver information systems or control devices (traffic signals, ramp meters, etc.), direct coordination between adjacent control devices, interfaces between detection and warning or alarm systems, and any other direct communications between field equipment. Both peer-to-peer and master-slave communications between field devices are covered by this flow.	Information
roadway information system data	Information used to initialize, configure, and control roadside systems that provide driver information (e.g., dynamic message signs, highway advisory radio, beacon systems). This flow can provide message content and delivery attributes, local message store maintenance requests, control mode commands, status queries, and all other commands and associated parameters that support remote management of these systems.	Information
roadway information system status	Current operating status of dynamic message signs, highway advisory radios, beacon systems, or other configurable field equipment that provides dynamic information to the driver.	Information
roadway maintenance status	Summary of maintenance fleet operations affecting the road network. This includes the status of winter maintenance (snow plow schedule and current status).	Information

roadway treatment system control	Control data for remotely located, automated devices, that affect the roadway surface (e.g. de-icing applications).	Information
roadway treatment system status	Current operational status of automated roadway treatment devices (e.g., anti-icing systems).	Information
route assignment	Route assignment information for transit driver.	Information
route plan	Tailored route provided by ISP in response to a specific request.	Information
route request	Request for a tailored route based on given constraints.	Request
safety inspection record	Record containing results of commercial vehicle safety inspection.	Information
safety inspection report	Report containing results of commercial vehicle safety inspection. The information may be provided as a response to a real-time query or proactively by the source. The query flow is not explicitly shown.	Information
safety inspection request	Request for safety inspection record.	Request
safety status information	Safety information such as safety ratings, inspection summaries, and violation summaries. A unique identifier is included. Corresponds to the safety portion of CVISN "snapshots." The status information may be provided as a response to a real-time query or as a result of a standing request for updated information (subscription). This may also include information about non-U.S. fleets for use by U.S. authorities, and information regarding U.S. fleets made available to Mexican and Canadian authorities. The query flow is not explicitly shown.	Information
safety system status	Current vehicle safety system status indicating the operating condition of these systems and the safety status of the vehicle and driver.	Information
screening event record	Results of CVO electronic screening activity.	Information
secure area characteristics	Characteristics (visual, audible, other) that are monitored by surveillance security systems via sensors.	Information
secure area monitoring support	Commands that control surveillance equipment and security sensors that monitor secure public transportation areas. Also includes information for general advisories and alerts intended for general dissemination in these same public areas.	Information
secure area surveillance data	Data collected from surveillance systems used to monitor secure areas. Includes video, audio, and other security sensor outputs.	Information
selected routes	Routes selected based on route request criteria.	Information
signal control data	Information used to configure and control traffic signal systems.	Information
signal control status	Status of surface street signal controls.	Information
speed monitoring control	Information used to configure and control automated speed monitoring, speed warning, and speed enforcement systems.	Information
speed monitoring information	System status including current operational state and logged information including measured speeds, warning messages displayed, and violation records.	Information
storage facility request	Request for information about the equipment and/or materials available at a maintenance storage facility.	Request
suggested route	Suggested route for a dispatched emergency or maintenance vehicle that may reflect current network conditions and the additional routing options available to en route emergency or maintenance vehicles that are not available to the general public.	Information
tag data	Unique tag ID and related vehicle information.	Information
tag update	Update data held in tag which can be read by another roadside device (Commercial Vehicle Check Subsystem, Toll Collection Subsystem, etc.).	Information
tax filing	Commercial vehicle tax filing data. Authorization for payment is included.	Information
toll administration requests	Instructions indicating toll fees which should be charged.	Information
toll archive data	Data indicating toll facility usage and pricing schedules. Content may include a catalog of available information, the actual information to be archived, and associated meta data that describes the archived information.	Information
toll coordination	This flow supports reciprocity between toll agencies/service centers by exchanging information that supports reconciliation of toll charges by customers that are enrolled with other toll service centers. In addition to toll charge reconciliation, exchanged information may include toll schedule information, customer information and other toll service information that is coordinated between toll agencies or centers.	Information
toll data	Current toll schedules for different types of vehicles as well as advanced toll payment information.	Information
toll data request	Request made to obtain toll schedule information or pay a toll in advance. The request can be a subscription that initiates as-needed information updates as well as a one-time request for information.	Request
toll demand management request	Request to change the demand for toll road facility use through pricing or other mechanisms.	Request
toll demand management response	Response to toll demand management change requests indicating level of compliance with request.	Information
toll instructions	Demand management toll pricing information based on current congestion.	Information
toll operator requests	Request for information from toll operator at toll collection site.	Request
toll revenues and summary reports	Summary of toll revenues and toll-related reports to toll service provider.	Information

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toll transaction reports	Summary report sent to toll collection point operator containing previous toll transactions.	Information
toll transactions	Detailed list of transactions from a toll station.	Information
track status	Current status of the wayside equipment and notification of an arriving train.	Information
traffic archive data	Information describing the use and vehicle composition on transportation facilities and the traffic control strategies employed. Content may include a catalog of available information, the actual information to be archived, and associated meta data that describes the archived information.	Information
traffic characteristics	Physical traffic characteristics which are monitored and translated into macroscopic measures like occupancy, volume, density, and average speed. Point measures support presence detection and individual vehicle measures like speed.	Information
traffic control coordination	Information transfers that enable remote monitoring and control of traffic management devices. This flow is intended to allow cooperative access to, and control of, field equipment during incidents and special events and during day-to-day operations. This flow also allows 24-hour centers to monitor and control assets of other centers during off-hours, allows system redundancies and fail-over capabilities to be established, and otherwise enables integrated traffic control strategies in a region.	Information
traffic control priority request	Request for signal priority at one or more intersections along a particular route.	Request
traffic control priority status	Status of signal priority request functions at the roadside (e.g. enabled or disabled).	Information
traffic flow	Raw and/or processed traffic detector data which allows derivation of traffic flow variables (e.g., speed, volume, and density measures) and associated information (e.g., congestion, potential incidents).	Information
traffic images	High fidelity, real-time traffic images suitable for surveillance monitoring by the operator or for use in machine vision applications. This flow includes the images and the operational status of the surveillance system.	Information
traffic information coordination	Traffic information exchanged between TMC's. Normally would include incidents, congestion data, traffic data, signal timing plans, and real-time signal control information.	Information
traffic operator data	Presentation of traffic operations data to the operator including traffic conditions, current operating status of traffic control equipment, maintenance activity status, incident status, and other information. This data keeps the operator apprised of current road network status, provides feedback to the operator as traffic control actions are implemented, and supports review of historical data and preparation for future traffic operations activities.	Information
traffic operator inputs	Traffic operations requests for information, configuration changes, commands to adjust current traffic control strategies (e.g., adjust signal timing plans, change DMS messages), and other traffic operations data entry.	Request
traffic sensor control	Information used to configure and control traffic sensor systems.	Information
traffic violation notification	Notification to enforcement agency of a detected traffic violation including speed violations, HOV passenger occupancy violations, and vehicle emissions violations.	Information
transaction status	Response to transaction request. Normally dealing with a request for payment.	Information
transit and fare schedules	Specific transit and fare schedule information including schedule adherence.	Information
transit archive data	Data used to describe and monitor transit demand, fares, operations, and system performance. Content may include a catalog of available information, the actual information to be archived, and associated meta data that describes the archived information.	Information
transit demand management request	Request to change the demand for transit facility use through pricing or other mechanisms.	Information
transit demand management response	Response to transit demand management change requests indicating level of compliance with request.	Information
transit driver availability	Transit driver availability data that can be used to develop driver assignments and detailed operations schedules.	Information
transit driver display	Display (either video or audio) to transit driver containing status of various ITS services.	Information
transit driver inputs	Transit driver emergency request as well as fare transaction data.	Information
transit emergency coordination data	Data exchanged between centers dealing with a transit-related incident.	Information
transit emergency data	Initial notification of transit emergency at a transit stop or on transit vehicles and further coordination as additional details become available and the response is coordinated.	Information
transit fare payment requests	Information provided from the transit user location that supports fare payments and associated record-keeping.	Information
transit fare payment responses	Information provided by transit management that supports a fare payment transaction.	Information

transit fleet manager inputs	Instructions governing service availability, schedules, emergency response plans, transit personnel assignments, transit maintenance requirements, and other inputs that establish general system operating requirements and procedures.	Information
transit incident information	Information on transit incidents that impact transit services for public dissemination.	Information
transit incidents for media	Report of an incident impacting transit operations for public dissemination through the media.	Information
transit information for media	Report of transit schedule deviations for public dissemination through the media.	Information
transit information request	Request for transit operations information including schedule and fare information. The request can be a subscription that initiates as-needed information updates as well as a one-time request for information.	Request
transit information user request	Request for special transit routing, real-time schedule information, and availability information.	Request
transit multimodal information	Transit schedule information for coordination at modal interchange points.	Information
transit operations planning data	Accumulated schedule and fare information, emergency response plans, transit personnel information, maintenance records, and other information intended to support overall planning and management of a transit property.	Information
transit operator display	Display for transit operations personnel regarding performance of the transit fleet, current ridership and on-time performance.	Information
transit operator management data	Information and control provided by transit system operators involving many aspects of managing transit operations.	Information
transit parking coordination	Request for coordinated fare payment and parking lot price data.	Information
transit parking lot response	Response to transit occupancy inquiries and coordination with parking lots.	Information
transit request confirmation	Confirmation of a request for transit information or service.	Information
transit schedule information	Current and projected transit schedule adherence.	Information
transit system data	Current transit system operations information indicating current transit routes, the level of service on each route, and the progress of individual vehicles along their routes for use in forecasting demand and estimating current transportation network performance.	Information
transit traveler information	Transit information prepared to support transit users and other travelers. It contains transit schedules, real-time arrival information, fare schedules, and general transit service information.	Information
transit traveler request	Request by a Transit traveler to summon assistance, request transit information, or request any other transit services.	Request
transit user fare status	Status of fare transaction for transit user.	Information
transit user inputs	Requests from transit user through either an on-board or fixed location traveler information station.	Request
transit user outputs	Information for traveler from either an on-board or fixed location traveler information station.	Information
transit vehicle conditions	Operating conditions of transit vehicle (e.g., mileage).	Information
transit vehicle location data	Current transit vehicle location and related operational conditions data provided by a transit vehicle.	Information
transit vehicle measures	Transit vehicle status measured by on-board ITS equipment.	Information
transit vehicle passenger and use data	Data collected on board the transit vehicle pertaining to availability and/or passenger count.	Information
transit vehicle schedule performance	Estimated times of arrival and anticipated schedule deviations reported by a transit vehicle.	Information
transit work schedule	Orders for maintenance of transit vehicle or other transit system equipment.	Information
transportation border clearance assessment	Notification regarding the granting of permission for commercial freight shipment to enter the U.S. Includes directions for commercial driver to proceed to nearest vehicle weigh and inspection station for further review if required.	Information
transportation weather information	Current and forecast road conditions and weather information (e.g., surface condition, flooding, wind advisories, visibility, etc.) associated with the transportation network. This information is of a resolution, timeliness, and accuracy to be useful in transportation decision making.	Information
transportation weather information request	A request for transportation weather information that may specify the area of interest (a geographic region, particular routes within a region, specific road segments), the type of information that is required, the desired spatial resolution of the information, and time horizon.	Request
travel service info	Reservation information or yellow pages data.	Information
travel service request	Request for reservation or other service (e.g., yellow pages).	Request
traveler advisory request	In vehicle communication between transit and vehicle systems includes advisories and advance payment deductions.	Information
traveler archive data	Data associated with traveler information services including service requests, facility usage, rideshare, routing, and traveler payment transaction data. Content may include a catalog of available information, the actual information to be archived, and associated meta data that describes the archived information.	Information

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traveler card information	The traveler personal information such as name, address, license number, and trip records and profile data.	Information
traveler card update	Information updated concerning traveler's personal data including items such as address, trip records, and profile data.	Information
traveler information	Traveler information comprised of traffic status, advisories, incidents, payment information and many other travel-related data updates and confirmations.	Information
traveler information for media	General traveler information regarding incidents, unusual traffic conditions, transit issues, or other advisory information that has been desensitized and provided to the media.	Information
traveler inputs	Request by a traveler to summon assistance, request travel information, make a reservation, or request any other traveler service.	Information
traveler interface updates	Visual or audio information (e.g., routes, messages, guidance) to the traveler.	Information
traveler profile	Information about a traveler including equipment capabilities, personal preferences and recurring trip characteristics.	Information
traveler request	Request by a traveler to summon assistance, request information, make a reservation, or initiate any other traveler service.	Request
trip confirmation	Acknowledgement by the driver/traveler of acceptance of a route.	Information
trip declaration identifiers	Specific identifiers extracted from notification containing information regarding pending commercial freight shipment into the U.S. Includes carrier, vehicle, and driver identification data.	Information
trip identification number	The unique trip load number for a specific cross-border shipment.	Information
trip log	Driver's daily log, vehicle location, mileage, and trip activity (includes screening, inspection and border clearance event data as well as fare payments).	Information
trip log information	Information entered into the trip log, or request for update.	Information
trip log request	Request for trip log.	Request
trip plan	A sequence of links and special instructions comprising of a trip plan indicating efficient routes for navigating the links. Normally coordinated with traffic conditions, other incidents, preemption and prioritization plans.	Information
trip request	Request by a driver/traveler for special routing.	Request
TRMS coord	Coordination information between local/regional transit organizations including schedule, on-time information, incident information, and ridership.	Information
vehicle characteristics	The physical or visible characteristics of an individual vehicle that can be measured to classify a vehicle and imaged to uniquely identify a vehicle.	Information
vehicle control	Vehicular control commands	Information
vehicle location	Location of vehicle and other vehicle characteristics which are exchanged between vehicle subsystems.	Information
vehicle pollution criteria	Vehicular pollution acceptance criteria.	Information
vehicle probe data	Vehicle probe data indicating identity, route segment identity, link time and location.	Information
vehicle signage data	In-vehicle signage data generated by the roadway infrastructure indicating either road conditions, street names, or special information.	Information
vehicle to vehicle coordination	Any type of advanced vehicle to vehicle communication.	Information
video surveillance control	Information used to configure and control video surveillance systems.	Information
violation notification	Notification to enforcement agency of a violation. The violation notification flow describes the statute or regulation that was violated and how it was violated (e. g., overweight on specific axle by xxx pounds or which brake was out of adjustment and how far out of adjustment it was). A violation differs from a citation because it is not adjudicated by the courts.	Information
weather information	Accumulated forecasted and current weather data (e.g., temperature, pressure, wind speed, wind direction, humidity, precipitation, visibility, light conditions, etc.).	Information
widearea statistical pollution information	Aggregated region-wide measured emissions data and possible pollution incident information.	Information
work plan coordination	Coordination of work plan schedules and activities between maintenance and construction organizations or systems. This information includes the work plan schedules and comments and suggested changes that are exchanged as work plans are coordinated and finalized.	Information
work plan feedback	Comments and suggested changes to proposed construction and maintenance work schedules and activities. This information influences work plan schedules so that they minimize impact to other system operations and the overall transportation system.	Information
work zone information	Summary of maintenance and construction work zone activities affecting the road network including the nature of the maintenance or construction activity, location, impact to the roadway, expected time(s) and duration of impact, anticipated delays, alternate routes, and suggested speed limits. This information may be augmented with images that provide a visual indication of current work zone status and traffic impacts.	Information

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work zone status	Current work zone status including current location (and future locations for moving work zones), impact to the roadway, required lane shifts, expected time(s) and duration of impact, anticipated delays, alternate routes, and suggested speed limits.	Information
work zone warning	Warning of a work zone emergency or safety issue such as the intrusion of a vehicle into the work zone area or movement of field crew into the travel lanes.	Information
work zone warning device control	Data used to configure and control work zone safety monitoring and warning devices.	Information
work zone warning notification	Notification of a work zone emergency or safety issue. This flow identifies that a work zone emergency or safety issue has occurred so that warnings may be generated by more than one system in the work zone.	Information
work zone warning status	Status of a work zone safety monitoring and warning devices. This flow documents system activations and includes additional supporting information (e.g., an image) that allows verification of the alarm.	Information
yellow pages information	Travel service information covering tourist attractions, lodging, restaurants, service stations, emergency services, and other services and businesses of interest to the traveler.	Information
yellow pages request	Request for information through a yellow pages type service.	Request