

Architecture Flow Descriptions

| <i>Architecture Flow</i> | <i>Description</i> |
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| alarm | Information about a Commercial Vehicle or Freight Equipment breach, non-permitted security sensitive hazmat detected at the roadside, route deviation, or Commercial Vehicle Driver / Commercial Vehicle / Freight Equipment assignment mismatches which includes the location of the Commercial Vehicle and appropriate identities. |
| alert notification | Notification of a major emergency such as a natural or man-made disaster, civil emergency, or child abduction for distribution to the public. The flow identifies the alert originator, the nature of the emergency, the geographic area affected by the emergency, the effective time period, and information and instructions necessary for the public to respond to the alert. This flow may also identify specific information that should not be released to the public. |
| alert notification coordination | Coordination of emergency alerts to be distributed to the public. This includes notification of a major emergency such as a natural or man-made disaster, civil emergency, or child abduction for distribution to the public and status of the public notification. |
| alert status | Information indicating the current status of the emergency alert including identification of the traveler and driver information systems that are being used to provide the alert. |
| archive coordination | Catalog data, meta data, published data, and other information exchanged between archives to support data synchronization and satisfy user data requests. |
| 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. |
| 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. |
| 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. |
| 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. |
| audit data | Information to support a tax audit. |
| bad tag list | List of invalid transit user tags which may have previously failed a fare payment transaction. |
| broadcast information | General broadcast information that contains link travel times, incidents, advisories, transit services and a myriad of other traveler information. |
| 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. |
| 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. |
| commercial vehicle disable | This flow safely disables a specific commercial vehicle. |
| 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. |
| credential application | Application for commercial vehicle credentials. Authorization for payment is included. |
| 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. |

Architecture Flow**Description**

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| 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. |
| 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. |
| current asset restrictions_ud | |
| daily site activity data | Record of daily activities at commercial vehicle check stations including summaries of screening events and inspections. |
| demand advisory_ud | Broadcast requests for updated transit information |
| demand responsive transit plan | Plan regarding overall demand responsive transit schedules and deployment. |
| demand responsive transit plan_ud | Plan regarding overall demand responsive transit schedules and deployment. |
| demand responsive transit request | Request for paratransit support. |
| demand responsive transit request_ud | Request for paratransit support. |
| disable commercial vehicle | A request that a specific commercial vehicle should be safely disabled. |
| dispute credentials status records_ud | Request for Commercial Vehicle and Fleet operators to dispute credential records held by government systems. |
| dispute safety status records_ud | Request for Commercial Vehicle and Fleet operators to dispute safety records held by government systems. |
| driver to fleet request | Requests from the driver and vehicle for routing, payment, and enrollment information. |
| electronic renewal_ud | Renewals for commercial vehicle permits. |
| electronic screening request | Request for identification data to support electronic screening. |
| emergency acknowledge | Acknowledge request for emergency assistance and provide additional details regarding actions and verification requirements. |
| emergency acknowledge_ud | Acknowledge request for emergency assistance and provide additional details regarding actions and verification requirements. |
| emergency archive data | Logged emergency information including information that characterizes identified incidents (routine highway incidents through disasters), corresponding incident response information, evacuation information, surveillance data, threat data, and resource information. Content may include a catalog of available information, the actual information to be archived, and associated meta data that describes the archived information. |
| emergency data request_ud | A request for additional information or a control command issued by the fleet and freight management system in response to an emergency request for assistance from a vehicle. |
| emergency dispatch requests | Emergency vehicle dispatch instructions including incident location and available information concerning the incident. |
| emergency dispatch response | Request for additional emergency dispatch information (e.g., a suggested route) and provision of en route status. |
| emergency notification | An emergency request for assistance originated by a traveler using an in-vehicle, public access, or personal device or originated by a transit vehicle operator using an on-board device. |
| emergency notification_ud | An emergency request for assistance originated by a traveler using an in-vehicle, public access, or personal device or originated by a transit vehicle operator using an on-board device. |
| emergency plan coordination | Information that supports coordination of emergency management plans, continuity of operations plans, emergency response and recovery plans, evacuation plans, and other emergency plans between agencies. This includes general plans that are coordinated prior to an incident and shorter duration tactical plans that are prepared during an incident. |

| Architecture Flow | Description |
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| emergency traffic control information | Status of a special traffic control strategy or system activation implemented in response to an emergency traffic control request, a request for emergency access routes, a request for evacuation, a request to activate closure systems, a request to employ driver information systems to support public safety objectives, or other special requests. Identifies the selected traffic control strategy and system control status. |
| emergency traffic control request | Special request to preempt the current traffic control strategy in effect at one or more signalized intersections or highway segments, activate traffic control and closure systems such as gates and barriers, activate safeguard systems, or use driver information systems. For example, this flow can request all signals to red-flash, request a progression of traffic control preemptions along an emergency vehicle route, request a specific evacuation traffic control plan, request activation of a road closure barrier system, or place a public safety or emergency-related message on a dynamic message sign. |
| emergency transit schedule information | Information on transit schedule and service changes that adapt the service to better meet needs of responders and the general public in an emergency situation, including special service schedules supporting evacuation. |
| emergency transit service request | Request to modify transit service and fare schedules to address emergencies, including requests for transit services to evacuate people from and/or deploy response agency personnel to an emergency scene. The request may poll for resource availability or request pre-staging, staging, or immediate dispatch of transit resources. |
| emergency transit service response | Response indicating changes to transit service, fares, and/or restrictions that will be made and status of transit resources to be deployed to support emergency response and/or evacuation. |
| emergency traveler information | Public notification of an emergency such as a natural or man-made disaster, civil emergency, or child abduction. This flow also includes evacuation information including evacuation instructions, evacuation zones, recommended evacuation times, tailored evacuation routes and destinations, traffic and road conditions along the evacuation routes, traveler services and shelter information, and reentry times and instructions. |
| emergency vehicle tracking data | The current location and operating status of the emergency vehicle. |
| 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. |
| 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). |
| environmental sensors control equipment availability | Data used to configure and control environmental sensors. |
| equipment maintenance status | 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. |
| evacuation coordination | Current status of field equipment maintenance actions. |
| evacuation information | Coordination of information regarding a pending or in-process evacuation. Includes evacuation zones, evacuation times, evacuation routes, forecast network conditions, and reentry times. |
| event plans | Evacuation instructions and information including evacuation zones, evacuation times, and reentry times. |
| event records_ud | Plans for major events possibly impacting traffic. |
| expected driver identity characteristics | Log files containing events, including type of event, day, and time. |
| fare and payment status | Driver identification information e.g. encrypted PIN codes issued to drivers, encrypted driver biometric parameters. |
| fare management information | Current fare collection information including the operational status of the fare collection equipment and financial payment transaction data. |
| | Transit fare information and transaction data used to manage transit fare processing on the transit vehicle. |

| Architecture Flow | Description |
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| field equipment status | Identification of field equipment requiring repair and known information about the associated faults. |
| fleet tag assignments_ud | Fleet owner toll tag to license plate / vehicle assignments. |
| fleet to driver update | Updated instructions to the driver including dispatch, routing, and special instructions. |
| freeway control data | Control commands and operating parameters for ramp meters, mainline metering/lane controls and other systems associated with freeway operations. |
| freeway control status | Current operational status and operating parameters for ramp meters, mainline metering/lane controls and other control equipment associated with freeway operations. |
| 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. |
| government reporting system data | Information provided by an ITS archive, formatted as appropriate, that can be used as input to government data reporting systems. |
| hazmat information request_ud | Request for information about a particular hazmat load. |
| hazmat information_ud | Information about a particular hazmat load including nature of the load and unloading instructions. May also include hazmat vehicle route and route update information. |
| hazmat registration data_ud | HAZMAT permit and registration information, including payload and route information. |
| hazmat spill notification_ud | 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. |
| 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. |
| hov data | Current HOV lane information including both standard traffic flow measures and information regarding vehicle occupancy in HOV lanes. |
| 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. |
| hri advisories_ud | Notification of Highway-Rail Intersection equipment failure, intersection blockage, or other condition requiring attention, and maintenance activities at or near highway rail intersections. |
| identities | Identification information for the Commercial Vehicle (e.g., license plate number or USDOT number), Freight Equipment (e.g., container, chassis, or trailer identification), and Driver. |
| incident command information coordination | 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. |
| incident information | Notification of existence of incident and expected severity, location, time and nature of incident. As additional information is gathered and the incident evolves, updated incident information is provided. Incidents include any event that impacts transportation system operation ranging from routine incidents (e.g., disabled vehicle at the side of the road) through large-scale natural or human-caused disasters that involve loss of life, injuries, extensive property damage, and multi-jurisdictional response. |
| incident report | Report of an identified incident including incident location, type, severity and other information necessary to initiate an appropriate incident response. |
| incident response coordination | Incident response procedures and current incident response status that are shared between allied response agencies to support a coordinated response to incidents. This flow provides current situation information, including a summary of incident status and its impact on the transportation system and other infrastructure, and current and planned response activities. This flow also coordinates a positive hand off of responsibility for all or part of an incident response between agencies. |

| Architecture Flow | Description |
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| incident response status | Status of the current incident response including a summary of incident status and its impact on the transportation system, traffic management strategies implemented at the site (e.g., closures, diversions, traffic signal control overrides), and current and planned response activities. |
| incident status | Information gathered at the incident site that more completely characterizes the incident and provides current incident response status. |
| information on violators | Information on violators provided by a law enforcement agency. May include information about commercial vehicle violations or other kinds of violations associated with the particular entity. 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. |
| infrastructure monitoring sensor control | Data used to configure and control infrastructure monitoring sensors. |
| infrastructure monitoring sensor control_ud | Data used to configure and control infrastructure monitoring sensors. |
| infrastructure monitoring sensor data | Data read from infrastructure-based sensors that monitor the condition or integrity of transportation infrastructure including bridges, tunnels, interchanges, pavement, culverts, signs, transit rail or guideway, and other roadway infrastructure. Includes sensor data and the operational status of the sensors. |
| infrastructure monitoring sensor data_ud | Data read from infrastructure-based sensors that monitor the condition or integrity of transportation infrastructure including bridges, tunnels, interchanges, pavement, culverts, signs, transit rail or guideway, and other roadway infrastructure. Includes sensor data and the operational status of the sensors. Information may include video, automatic detection (dropped bag), movement, or intrusion detection. |
| license request | Request supporting registration data based on license plate read during violation. |
| maint and constr dispatch information | Information used to dispatch maintenance and construction vehicles, equipment, and crews and information used to keep work zone crews informed. This information includes routing information, traffic information, road restrictions, incident information, environmental information, decision support information, maintenance schedule data, dispatch instructions, personnel assignments, alert notifications, and corrective actions. |
| maint and constr dispatch status | Current maintenance and construction status including work data, operator status, crew status, and equipment status. |
| 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. |
| 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. |
| 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. |
| 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. The request may poll for resource availability or request pre-staging, staging, or immediate dispatch of resources. |
| maint and constr resource response | Current status of maintenance and construction resources including availability and deployment status. General resource inventory information covering vehicles, equipment, materials, and people and specific resource deployment status may be included. |
| 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. |
| maint and constr vehicle location data | The current location and related status (e.g., direction and speed) of the maintenance/construction vehicle. |

Architecture Flow**Description**

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| 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). |
| 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. |
| 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. |
| maintenance materials storage status | The amount and availability of maintenance materials in storage facilities. |
| multimodal crossing status | Indication of operational status and pending requests for right-of-way from equipment supporting the non-highway mode at multimodal crossings. |
| on-board vehicle data | Information about the commercial vehicle stored on-board (for maintenance purposes, gate access, cargo status, lock status, etc.). |
| on-board vehicle request | Request for on-board vehicle data. |
| parking information | General parking information and current parking availability. |
| parking information_ud | General parking information and current parking availability. |
| 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. |
| parking lot inputs | Instructions for operation of local parking facilities to support regional traffic management objectives (e.g. which parking lot exits to use). Also, includes inputs from traffic sensors to support calculation of parking lot occupancy and support more effective management of parking entrances and exits. |
| parking lot inputs_ud | |
| parking lot reservation confirmation | Confirmation for parking lot reservation. |
| parking reservations request | Reservation request for parking lot. |
| payment | Payment of some kind (e.g., toll, parking, fare) by traveler which, in most cases, can be related to a credit account. |
| payment request | Request for payment from financial institution. |
| payment_ud | Payment of some kind (e.g., toll, parking, fare) by traveler which, in most cases, can be related to a credit account. |
| pollution state data request | Aggregated emissions data information request. |
| preprogrammed traveler information_ud | Preprogrammed traveler information, including announcement information, such as advertisement graphics for onboard displays, sign files, voice annunciation files, announcement trigger information (such as stop points and schedule). |
| rail maintenance status_ud | |
| rail network conditions_ud | |
| rail operations request_ud | |
| railroad advisories | Real-time notification of railway-related incident or advisory. |
| railroad advisories_ud | Real-time notification of railway-related incident or advisory. |
| railroad schedules | Train schedules, maintenance schedules, and other information from the railroad that supports forecast of HRI closures. |
| railroad schedules_ud | Train schedules, maintenance schedules, and other information from the railroad that supports forecast of HRI closures. |
| reconciliation information_ud | Toll payments reconciliation information including status and balance of payments. |
| recorded video_ud | Recorded video (CCTV) images. |
| registration | Registered owner of vehicle and associated vehicle information. |

| Architecture Flow | Description |
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| 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. |
| remote surveillance control_ud | 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 |
| remote vehicle disable | Signal used to remotely disable a transit vehicle. |
| request for bad tag list | Request for list of bad vehicle tag IDs. |
| request for payment | Request to deduct cost of service from user's payment account. |
| request for payment_ud | Request to deduct cost of service from user's payment account. |
| request for permit_ud | Request for commercial vehicle permits. |
| 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 for vehicle measures | Request for vehicle performance and maintenance data collected by onboard sensors. |
| request tag data | Request for tag information including credit identity, stored value card cash, etc. |
| request tag data_ud | Request for tag information including credit identity, stored value card cash, etc. |
| request vehicle security information_ud | Vehicle security and incident-related information, such as silent alarms, audio, and video. |
| resource coordination | Coordination of resource inventory information, specific resource status information, resource prioritization and reallocation between jurisdictions, and specific requests for resources and responses that service those requests.. |
| resource deployment status | Status of traffic management resource deployment identifying the resources (vehicles, equipment, materials, and personnel) available and their current status. General resource inventory information and specific status of deployed resources may be included. |
| resource request | A request for traffic management resources to implement special traffic control measures, assist in clean up, verify an incident, etc. The request may poll for resource availability or request pre-staging, staging, or immediate deployment of resources. |
| road conditions observations_ud | Roadway conditions reported by transit bus drivers. |
| road data | Basic road facility and treatment information that supports road conditions forecasts. |
| road network conditions | Current and forecasted traffic information, road and weather conditions, traffic 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 on diversions and alternate routes, closures, and special traffic restrictions (lane/shoulder use, weight restrictions, width restrictions, HOV requirements) in effect is also included. |
| road network conditions_ud | 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. |
| road network probe information | Aggregated route usage, travel times, environmental conditions, and other aggregated data collected from probe vehicles. |
| road network status assessment | Assessment of damage sustained by the road network including location and extent of the damage, estimate of remaining capacity, required closures, alternate routes, necessary restrictions, and time frame for repair and recovery. |
| road weather information | Road conditions and weather information that are made available by road maintenance operations to other transportation system operators. |
| road weather information_ud | Road conditions and weather information that are made available by road maintenance operations to other transportation system operators. |
| 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. |

| Architecture Flow | Description |
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| 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. |
| 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. |
| 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). |
| roadway maintenance status_ud | |
| roadway treatment system control | Control data for remotely located, automated devices, that affect the roadway surface (e.g. de-icing applications). |
| roadway treatment system status | Current operational status of automated roadway treatment devices (e.g., anti-icing systems). |
| route restrictions | Information about routes, road segments, and areas that do not allow the transport of security sensitive hazmat cargoes or include other restrictions (such as height or weight limits). |
| 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. |
| screening event record | Results of CVO electronic screening activity. |
| secure area sensor control | Information used to configure and control threat sensors (e.g., thermal, acoustic, radiological, chemical), object, motion and intrusion detection sensors. The provided information controls sensor data collection, aggregation, filtering, and other local processing. |
| secure area sensor control_ud | Information used to configure and control threat sensors (e.g., thermal, acoustic, radiological, chemical), object, motion and intrusion detection sensors. |
| secure area sensor data | Data provided by threat sensors (e.g., thermal, acoustic, radiological, chemical), and intrusion, motion, and object detection sensors in secure areas indicating the sensor's operational status, raw and processed sensor data, and alarm indicators when a threat has been detected. |
| secure area sensor data_ud | Data provided by threat sensors (e.g., thermal, acoustic, radiological, chemical, intrusion) indicating the sensor's operational status, raw and processed sensor data, and alarm indicators. |
| secure area surveillance control | Information used to configure and control audio and video surveillance systems used for transportation infrastructure security in secure areas. The provided information controls surveillance data collection, aggregation, filtering, and other local processing. |
| secure area surveillance control_ud | Information used to configure and control audio and video surveillance systems used for transportation infrastructure security in secure areas. The provided information controls surveillance data collection, aggregation, filtering, and other local processing. |
| secure area surveillance data | Data collected from surveillance systems used to monitor secure areas. Includes video, audio, processed surveillance data, equipment operational status, and alarm indicators when a threat has been detected. |
| secure area surveillance data_ud | Data collected from surveillance systems used to monitor secure areas. Includes video, audio, processed surveillance data, equipment operational status, and alarm indicators when a threat has been detected. |
| security field equipment status | Identification of security sensors and surveillance equipment requiring repair and known information about the associated faults. |
| selected routes | Routes selected based on route request criteria. |
| signal control data | Information used to configure and control traffic signal systems. |
| signal control status | Status of surface street signal controls. |

| Architecture Flow | Description |
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| signal control status_ud | |
| storage facility request | Request for information about the equipment and/or materials available at a maintenance storage facility. |
| 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. |
| tag data_ud | Unique tag ID and related vehicle information. |
| tag status_ud | Identifies status of tag. For example, whether valid or not. |
| tag update_ud | Update data held in tag which can be read by another roadside device (Commercial Vehicle Check Subsystem, Toll Collection Subsystem, etc.). |
| tax filing | Commercial vehicle tax filing data. Authorization for payment is included. |
| threat information | Threats regarding transportation infrastructure, facilities, or systems detected by a variety of methods (sensors, surveillance, threat analysis of advisories from outside agencies, etc). |
| threat information coordination | Sensor, surveillance, and threat data including raw and processed data that is collected by sensor and surveillance equipment located in secure areas. |
| 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. |
| 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. |
| toll data | Current toll schedules for different types of vehicles as well as advanced toll payment 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. |
| toll transactions | Detailed list of transactions from a toll station. |
| toll violation information_ud | Toll violation 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. |
| 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. |
| 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). |
| 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. |
| traffic images_ud | 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. |
| 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. |
| traffic sensor control | Information used to configure and control traffic sensor systems. |
| traffic violation notification | Notification to enforcement agency of a detected traffic violation including speed violations and HOV violations. |

| Architecture Flow | Description |
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| transaction status | Response to transaction request. Normally dealing with a request for payment. |
| transit and fare schedules | Transit service information including routes, schedules, schedule adherence, and fare information. Includes transit service information during evacuation. |
| transit and fare schedules_ud | Transit service information including routes, schedules, schedule adherence, and fare information. Includes transit service information during evacuation. |
| 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. |
| 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. |
| transit fare and passenger status | Information provided from the traveler location that supports fare payments, passenger data, and associated record-keeping. |
| transit fare coordination | Fare and pricing information shared between local/regional transit organizations. |
| transit fare information | Information provided by transit management that supports fare payment transactions and passenger data collection. |
| transit incident information | Information on transit incidents that impact transit services for public dissemination. |
| transit incident information_ud | Information on transit incidents that impact transit services. |
| 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. |
| transit information user request | Request for special transit routing, real-time schedule information, and availability information. |
| transit itinerary request and confirmation_ud | Request for information needed to plan an upcoming trip, including schedule and fare information. Calculated itinerary may include check of current road network conditions and real-time transit schedule information. |
| transit request confirmation | Confirmation of a request for transit information or service. |
| transit schedule information | Current and projected transit schedule adherence. |
| transit schedule performance_ud | Estimated times of arrival and anticipated schedule deviations. |
| transit schedules_ud | Current and projected transit schedule adherence. |
| transit service coordination | Schedule coordination information shared between local/regional transit organizations. |
| transit traveler information | Transit information prepared to support transit users and other travelers. It contains transit schedules, real-time arrival information, fare schedules, alerts and advisories, and general transit service information. |
| transit traveler information coordination | Transit schedules, real-time arrival information, fare schedules, and general transit service information shared between transit organizations to support transit traveler information systems. |
| transit traveler information_ud | Generally, fare and schedule information, but may include information on transit incidents, construction, service changes, etc. |
| transit traveler request | Request by a Transit traveler to summon assistance, request transit information, or request any other transit services. |
| transit trip request_ud | |
| transit trip status_ud | |
| transit vehicle conditions | Operating conditions of transit vehicle (e.g., engine running, oil pressure, or mileage). |
| transit vehicle location data | Current transit vehicle location and related operational conditions data provided by a transit vehicle. |
| transit vehicle operator authentication information | Information regarding on-board transit operator authentication |
| transit vehicle operator authentication update | Results of authentication process or update of on-board authentication database. |
| transit vehicle operator instructions | Transit service instructions, traffic information, road conditions, and other information for both transit and paratransit operators. |

| Architecture Flow | Description |
|--|---|
| transit vehicle passenger and use data | Data collected on board the transit vehicle pertaining to availability and/or passenger count. |
| transit vehicle schedule performance | Estimated times of arrival and anticipated schedule deviations reported by a transit vehicle. |
| transit vehicle schedule performance_ud | Estimated times of arrival and anticipated schedule deviations reported by a transit vehicle. |
| transportation system status | Current status and condition of transportation infrastructure (e.g., tunnels, bridges, interchanges, TMC offices, maintenance facilities). In case of disaster or major incident, this flow provides an assessment of damage sustained by the surface transportation system including location and extent of the damage, estimate of remaining capacity and necessary restrictions, and time frame for repair and recovery. |
| 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. |
| 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. |
| travel time_ud | Measured or computed value of travel time between destination and origin points. |
| traveler card update | Information updated concerning traveler's personal data including items such as address, trip records, and profile data. |
| traveler information | Traveler information comprised of traffic and road conditions, advisories, incidents, payment information, transit services, and many other travel-related data updates and confirmations. |
| traveler information_ud | |
| traveler profile | Information about a traveler including equipment capabilities, personal preferences and recurring trip characteristics. |
| traveler request | Request by a traveler to summon assistance, request information, make a reservation, or initiate any other traveler service. |
| trip confirmation | Acknowledgement by the driver/traveler of acceptance of a route. |
| 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). |
| trip log request | Request for trip log. |
| 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. |
| trip request | Request by a driver/traveler for special routing. |
| vehicle probe data | Vehicle probe data indicating identity, route segment identity, link time and location. |
| vehicle security information_ud | Incident-related information, including silent alarms, video and audio. |
| video surveillance control | Information used to configure and control video surveillance systems. |
| 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. |
| weather information | Accumulated forecasted and current weather data (e.g., temperature, pressure, wind speed, wind direction, humidity, precipitation, visibility, light conditions, etc.). |
| widearea statistical pollution information | Aggregated region-wide measured emissions data and possible pollution incident 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. |

Architecture Flow**Description**

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| 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. |
| 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. |
| 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. |
| work zone warning status_ud | |
| workzone information_ud | |
| 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. |