APPLICATION AREA MATRIX

Document Number	Document Name	Center to Center						Center to Roadside							Center to Vehicle /Traveler			Roadside to Roadside	Roadside to Vehicle	
		Data Archival	Incident Management	Rail Coordination	Traffic Management	Transit Management	Traveler Information	Data Collection/ Monitoring	Dynamic Message Signing	Environmental Monitoring	Ramp Metering	Traffic Signaling	Vehicle Sensing	Video Surveillance	Mayday/ Site Surveillance	Transit Vehicle Communications	Traveler Information	HRI	Signal Priority	Toll/Fee Collection
ANSI TS285	Commercial Vehicle Safety and Credentials Information Exchange	●																		
ANSI TS286	Commercial Vehicle Credentials	●																		
ASTM AG	ADMS Standard Guidelines	●																		
ASTM DD	ADMS Data Dictionary Specifications	●																		
N/A	Standard Specification for 5.9 GHz Data Link Layer																		●	●
ASTM E2213-02	Standard Specification for Telecommunications and Information Exchange between Roadside and Vehicle Systems: 5.9 GHz Physical Layer: Data Link Layer																		●	●
ASTM PS 105-99	Standard Provisional Specification for Dedicated Short Range Communication (DSRC) Data Link Layer																		●	●
ASTM E2158-01	Standard Specification for Dedicated Short Range Communication (DSRC) Physical Layer using Microwave in the 902-928 MHz																		●	●
CEA/EIA-794	Data Radio Channel (DARC) System																●			
CEA/EIA-795	Subcarrier Traffic Information Channel (STIC) System																●			
IEEE Std 1512-2000	Standard for Common Incident Management Message Sets (IMMS) for use by EMCs	●	●																	
IEEE P1512.1	Standard for Traffic Incident Management Message Sets for Use by EMCs		●		●															

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IEEE P1512.2	Standard for Public Safety IMMS for use by EMCs		●																	
IEEE P1512.3	Standard for Hazardous Material IMMS for use by EMCs		●																	
IEEE P1556	Standard for Security and Privacy of Vehicle/Roadside Communications Including Smart Card Communications																		●	●
IEEE P1570	Standard for Interface Between the Rail Subsystem and the Highway Subsystem at a Highway Rail Intersection																	●		
IEEE Std 1455-1999	Standard for Message Sets for Vehicle/Roadside Communications																			●
ITE TM 1.03	Standard for Functional Level Traffic Management Data Dictionary (TMDD)	●	●		●	●	●													
ITE TM 2.01	Message Sets for External TMC Communication (MS/ETMCC)	●	●		●	●	●													
ITE TS 3.TM	TCIP - Traffic Management (TM) Business Area Standard					●														
NTCIP 1101	NTCIP - Simple Transportation Management Framework (STMF)							●	●	●	●	●	●	●						
NTCIP 1102	NTCIP - Octet Encoding Rules (OER)	●	●	●	●	●	●	●	●	●	●	●	●	●						
NTCIP 1103	NTCIP - Transportation Management Protocol (TMP)							●	●	●	●	●	●	●						
NTCIP 1201	NTCIP - Global Object Definitions							●	●	●	●	●	●	●	●					

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NTCIP 1202	NTCIP - Object Definitions for Actuated Traffic Signal Controller Units											●								
NTCIP 1203	NTCIP - Object Definitions for Dynamic Message Signs								●											
NTCIP 1204	NTCIP - Object Definitions for Environmental Sensor Stations							●		●										
NTCIP 1205	NTCIP - Object Definitions for CCTV Camera Control							●					●	●	●					
NTCIP 1206	NTCIP - Object Definitions for Data Collection							●		●			●							
NTCIP 1207	NTCIP - Object Definitions for Ramp Meter Controller Objects										●									
NTCIP 1208	NTCIP - Object Definitions for Video Switches							●					●	●	●					
NTCIP 1209	NTCIP - Object Definitions for Transportation Sensor Systems							●			●	●	●							
NTCIP 1210	NTCIP - Objects for Signal Systems Masters				●							●								
NTCIP 1211	NTCIP - Objects for Signal Control Priority																		●	
NTCIP 1301	NTCIP - Weather Report Message Set for ESS		●		●	●	●													
NTCIP 1401	TCIP – Standard on Common Public Transportation (CPT) Objects	●	●			●	●									●	●			

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NTCIP 1402	TCIP - Standard on Incident Management (IM) Objects		●			●									●	●				
NTCIP 1403	TCIP - Standard on Passenger Information (PI) Objects	●				●	●									●	●			
NTCIP 1404	TCIP - Standard on Scheduling/Runcutting (SCH) Objects					●	●									●				
NTCIP 1405	TCIP - Standard on Spatial Representation (SP) Objects		●			●	●								●	●	●			
NTCIP 1406	TCIP - Standard on On-Board (OB) Objects	●													●	●				
NTCIP 1407	TCIP - Standard on Control Center (CC) Objects	●				●										●				
NTCIP 1408	TCIP - Standard on Fare Collection (FC) Objects	●				●										●	●			
NTCIP 2101	NTCIP - Subnetwork Profile for Point to Multi-Point Protocol using RS 232							●	●	●	●	●	●	●						
NTCIP 2102	NTCIP - Subnetwork Profile for Point to Multi-Point Protocol using FSK Modems							●	●	●	●	●	●	●						
NTCIP 2103	NTCIP - Subnetwork Profile for Point-to-Point Protocol using RS232							●	●	●	●	●	●	●						
NTCIP 2104	NTCIP - Subnetwork Profile for Ethernet	●	●	●	●	●	●	●	●	●	●	●	●	●						
NTCIP 2201	NTCIP - Transportation Transport Profile							●	●	●	●	●	●	●						

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NTCIP 2202	NTCIP - Transport Profile for Internet (TCP/IP and UDP/IP)	●	●	●	●	●	●	●	●	●	●	●	●	●						
NTCIP 2301	NTCIP - Application Profile for Simple Transportation Management Framework (STMF)							●	●	●	●	●	●	●						
NTCIP 2302	NTCIP - Application Profile for Trivial File Transfer Protocol							●		●			●	●						
NTCIP 2303	NTCIP - Application Profile for File Transfer Protocol (FTP)	●	●	●	●	●	●	●	●	●			●	●						
NTCIP 2304	NTCIP - Application Profile for Data Exchange ASN.1 (DATEX)	●	●	●	●	●	●													
NTCIP 2305	NTCIP - Application Profile for Common Object Request Broker Architecture (CORBA)	●	●	●	●	●	●													
NTCIP 2501	NTCIP - Information Profile for DATEX	●	●	●	●	●	●													
NTCIP 2502	NTCIP - Information Profile for CORBA	●	●	●	●	●	●													
SAE J1746	ISP-Vehicle Location Referencing Standard																●			
SAE J2313	On-Board Land Vehicle Mayday Reporting Interface														●					
SAE J2353	Data Dictionary for Advanced Traveler Information System (ATIS)	●			●	●	●									●	●			
SAE J2354	Message Set for Advanced Traveler Information System (ATIS)	●			●	●	●									●	●			

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SAE J2369	Standard for ATIS Message Sets Delivered Over Bandwidth Restricted Media																●			
SAE J2529	Rules for Standardizing Street Names and Route IDs	●			●	●	●									●	●			
SAE J2540	Messages for Handling Strings and Look-Up Tables in ATIS Standards	●			●	●	●									●	●			
Foundation and General Standards Documents																				
IEEE Std 1488-2000	Trial-Use Standard for Message Set Template for Intelligent Transportation Systems				●						●					●		●	●	
IEEE Std 1489-1999	Standard for Data Dictionaries for Intelligent Transportation Systems				●						●					●		●	●	
ITE 9603-1	Advanced Transportation Controller (ATC) - Application Program Interface (API)										●									
ITE 9603-2	Advanced Transportation Controller (ATC) Cabinet										●									
ITE 9603-3	Advanced Transportation Controller (ATC)										●									
NTCIP 1104	NTCIP - CORBA Naming Convention Specification				●															
NTCIP 1105	NTCIP - CORBA Security Service Specification				●															
NTCIP 1106	NTCIP - CORBA Near-Real Time Data Service				●															

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NTCIP 1400	TCIP - Framework Standard				●											●				
NTCIP 8003	NTCIP - Profile Framework				●						●									
SAE J2374	National Location Referencing Information Report				●						●					●				

The following ITS standards documents are not included in the Application Area Matrix. These standards documents are either: 1) mapped to the National ITS Architecture, but are assigned to application areas that are not included in the matrix, or 2) not mapped to the National ITS Architecture.

Document Number	Document Name
ANSI TS284	Commercial Vehicle Safety Reports
IEEE Bk. 1-6: SH94633-SH 94638	Survey and Analysis of Existing Standards and Communications Technologies
NTCIP 9001	NTCIP Guide
SAE J1663	Truth-in-Labeling Standard for Navigation Map Databases
SAE J1708	Serial Data Comm. Between MicroComputer Systems in Heavy-Duty Vehicle
SAE J1760	ITS Data Bus Data Security Services Recommended Practice
SAE J1761	Information Report on ITS Terms and Definitions
SAE J1763	A Conceptual ITS Architecture: An ATIS Perspective
SAE J2256	In-Vehicle Navigation System Communication Device Message Set Information
SAE J2352	Mayday Industry Survey Information Report
SAE J2355	ITS Data Bus Architecture Reference Model Information Report
SAE J2364	Standard for Navigation and Route Guidance Function Accessibility While Driving
SAE J2366-1	ITS Data Bus Protocol - Physical Layer Recommended Practice
SAE J2366-2	ITS Data Bus Protocol - Link Layer Recommended Practice
SAE J2366-4	ITS Data Bus Protocol - Thin Transport Layer Recommended Practice
SAE J2366-7	ITS Data Bus Protocol - Application Layer Recommended Practice
SAE J2367	ITS Data Bus Gateway Recommended Practice
SAE J2372	Field Test Analysis Information Report
SAE J2373	Stakeholder's Workshop Information Report
SAE J2395	ITS In-Vehicle Message Priority
SAE J2396	Measurement of Driver Visual Behavior Using Video Based Methods
SAE J2399	Adaptive Cruise Control: Operating Characteristics and User Interface
SAE J2400	Forward Collision Warning: Operating Characteristics and User Interface
SAE J2539	Comparison of GATS Messages to SAE ATIS Standards Information Report