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Florida Department of Transportation

1 GC: First generation control, UTCS

1.5 GC: First and a half generation control, UTCS

AA:
1- Alternatives Analysis
2- Automobile Association; a British motoring organization.

AAA: American Automobile Association

AADT: Average Annual Daily Traffic; normalizes traffic data to 24 hours and a standard day.

AAMA: American Automobile Manufacturers Association

AAMVA: American Association of Motor Vehicle Administrators

AAR: Association of American Railroads

AASHTO: American Association of State Highway and Transportation Officials

ABS: Antilock Braking System

ABZ: Alternativroutenwahl, Bereichs-, und Zweckorientiert; alternative route choice, area and reason oriented in Oberhausen, Germany.

ACA&VSS: Advanced Collision Avoidance and Vehicle Safety System

ACC: Adaptive Cruise Control; a cruise control system that maintains a safe distance from the vehicle ahead.

ACN: Automated Collision Notification

ACS:
1- Automatic Clearance Sensing; used in CVO to help large vehicles negotiate low/limited-clearance objects such as bridges and viaducts.
2- Adaptive Signal Control System

ACTS: Guidestar project; centralized integration of traffic control of freeway and urban streets to allow multiple highway jurisdictions to coordinate ramp meters and street signals; will provide traffic responsive signal control to accommodate traffic surges during peak periods.

ADA: Americans with Disabilities Act

ADIS: Advanced Driver Information Systems; renamed as advanced traveler Information system; ADIS features of Trav/Tek system include route planning and guidance, real-time traffic information, navigation assistance and onboard services and attractions database.

ADUS: Archived Data User Services

ADVANCE: Advanced Driver and Vehicle Advisory Navigation Concept; partners of Illinois DOT, Motorola Inc., Illinois Universities Transportation Research Consortium (IUTRC), FHWA, Chicago.

ADVANTAGE I-75: Commercial vehicle operations sponsored by FHWA, Florida, Georgia, Tennessee, Kentucky, Ohio, Michigan, and Ontario Motor Carrier Industry.

AEI: Automatic Equipment Identification

AHAR: Automatic Highway Advisory Radio; U.S. traffic information broadcasting system whose transmissions are received through car radios which automatically interrupt other radio reception and tune to the correct station.

AHMT: Advanced Highway Maintenance Technology; Caltrans/UC Davis program to increase safety reliability and efficiency in highway maintenance.

AHS: Automated Highway System through the use of automated vehicle control technology. German's O-Bahn system; the Chunnel repair vehicle operates on both normal and automated roadways; Washington D.C. Metro Subway System with automated speed control manual control option. Project to research and demonstrate fully highway-controlled vehicles mandated for initial implementation by 1997 by the Intermodal Surface Transportation Efficiency Act (ISTEA).

AHUA: American Highway Users Alliance

Al: Artificial Intelligence; a computer software programming technique in which a computer "learns" from past experience, allowing it to make more intelligent decisions with greater program use.

ALERT:
1- DRIVE I project which developed the European pre-standard for the RDS-TMS. DRIVE II analog is ATY-ALERT.
2- Advanced Law Enforcement Response Technology by FHWA, the Texas Transportation Institute (TTI), AT&T Wireless, Kodak, Epson America, and other industries to provide police cars with advanced police traffic enforcement and public safety applications. ALERT is the successor to Technicar 2000, run by the TTI in the early 1990s.

ALI-SCOUT: Auto-Leit und Informatios system (IVHS system being tested in Berlin for three years); a route-guidance system that uses infrared beacons to transfer navigation information from the roadside to an on-board display in appropriately equipped vehicles. Developed in Germany by Bosch/Blaupunkt and Siemens. Earlier version EURO-SCOUT.

AMBER: America's Missing: Broadcast Emergency Response

AMTICS: Advanced Mobile Traffic Information and Communication System (under development in Japan); a Japanese traffic control system.

AMTM: Advanced Metropolitan Travel Management

ANI: Automatic Number Identification

ANNTS: Automatic Network Travel Time System

ANSI: American National Standards Institute; umbrella organization for U.S.-based consensus standards setting; U.S. representative on the International Standards Organization.

APA: American Planning Association

APC: Automated Passenger Counting

APCO: Associated Public Safety Communications Officers, Inc.

API:
1- American Petroleum Institute
2- Automatic Personal Identification
3- Applications Programming (Programmer) Interfaces; a set of calling conventions defining how a service is invoked through a software package.

APO: Average Passenger Occupancy

APTA: American Public Transit Association

APTS: Advanced Public Transportation Systems
1- Technology aimed at improving public transportation.
2- Committee of ITS America
3- FTA program to focus R&D and funding efforts on ITS technologies composed of four main areas: vehicle operations and communications, high-occupancy vehicles, customer interface, and market development. Presently sponsored by Mobility Manager, Smart Vehicle programs.

ARC: Atlanta Regional Commission, created in 1971; (404) 364-2635

ARI: Autofahrer Rundfunk Information; a German traffic information broadcasting system whose transmissions are received through car radios after drivers are alerted to turn the radio to a specific frequency. Analogous to the American "HAR" system. Also see ARIAM.

ARIAM: Advanced version of ARI.

ARMS: Advanced Roadway Management System; includes Roadway Weather Information Systems (RWIS), video traffic detection, live color video surveillance, variable message signs, internet web sites, and integration with local- and wide-area networks (LAN/WAN). Alert via e-mail and page activation.

ARTBA: American Road and Transportation Builders

ARTS: Advanced Rural Transportation System
1- Technology aimed at improving rural transportation. (see TravelAid).
2- An ITS America committee.

ASCE: American Society of Civil Engineers

ASD: Automated Systems Development; research area of Advanced Vehicle & Automated Systems Department (AVASD) of Caltrans.

ASII: Advanced Systems Integrations and Implementation; Caltrans department researching new systems concepts and architecture, CVO, and institutional and implementation issues.

ASN.1: Abstract Syntax Notation One

ASP:
1- Agency Strategic Plan
2- Application Service Provider(s)
3- Active Server Pages

ASPEN: A roadside inspection tool used for CVISN safety information exchange.

ASTM: American Society for Testing and Materials

ASTRA: Integrated System of Assistance Services for Travel and Traffic. DRIVE II project occurring in Denmark. Objective is to investigate the feasibility of an interactive integrated system of assistance service for travel and traffic.

ATA: American Trucking Association

ATC:
1- Automated (electronic) Toll Collection
2- Advanced Transportation Controller

ATCS: Advanced Train Control System; interacts with the Central Dispatch System, the On-Board Locomotive System, the On-Board Work Vehicle System, and the Field System. These subsystems are interconnected by a Data Communications System.

ATDC: Automatic Traffic Data Collection

ATIS: Advanced Traveler Information Systems
1. Vehicle features which assist the driver with planning, perception, analysis and decision-making.
2. An ITS America committee.
3. An $8.5 million, five-year project to provide pre-trip information on traffic conditions. Part of EUREKA.

ATLAS: Early Renault advanced vehicle electronics project

ATM: Asynchronous Transfer Model

ATMIS: Advanced Transportation Management & Information Systems. Caltrans department involved in ATIS and ATMS.

ATMS: Advanced Traffic Management Systems
1- An array of institutional, human, hardware, and software components designed to monitor, control, and manage traffic on streets and highways.
2- An ITS America committee.

ATS: Advanced Transportation Systems

ATSAC: Automated Traffic Surveillance and Control System (Los Angeles)

ATSSA: American Traffic Safety Services Association, Inc.; a national trade association representing traffic control and safety industry. Address - 5440 Jefferson Davis Highway, Fredericksburg, VA 22407-2673. Phone (540) 898-5400, Fax (540) 898-5510. E-mail: general@atssa.com, Internet: http://www.atssa.com

ATT: Advanced Transport Telematics. Official name of the DRIVE II program.

ATT-ALERT: Advanced Transport Telematics-Advice and Problem Location for European Road Traffic. DRIVE II project. Builds on DRIVE I's RDS ALERT to continue the standardization and enhancement of the current RDS-TMS protocol, as well as developing a suite of compatible protocols for other bearers such as digital audio broadcasting and radio paging.

AUTOGUIDE: A planned, but largely unimplemented, British route guidance system that uses infrared transceivers to transmit information between roadside beacons and on-board displays in appropriately equipped vehicles.

Autoscope: A product patented by the University of Minnesota which uses a video camera and computer software to analyze roadway images and extract traffic flow information. Now being tested on I-394 under a $1.4 million grant from the FHWA and Minnesota DOT. Expected to become the centerpiece of the traffic communications network for monitoring 300 miles of freeways and major arterials in the Twin-Cities area.

AUTOSTRADE: Highway and Telematic Network; an Italian national highway surveillance network. Constructed by Maxconi and ABL, Inc., its main objectives are improving internal communications of the AUTOSTRADE organization and providing better service and security to drivers.

AVASD: Advanced Vehicle & Automated Systems Development. Caltrans division involved in AVCS, Advanced Vehicle Development (AVD), and Automated Systems Development (ASD). Also working on Advanced Highway Maintenance Technology (AHMT).

AVC: Automatic Vehicle Classification; used in CVO to identify vehicles by type in order to reduce the necessity for record-keeping by drivers and interstate travel speed.

AVCS: Advanced Vehicle Control Systems
1- Vehicle and/or roadway-based electro-mechanical and communications devices that enhance the control of vehicles by facilitating and augmenting driver performance. Will ultimately relieve the driver of most tasks on designated, instrumented roadways.
2- An ITS America committee.

AVCS-I: The first level of AVCS, referred to as autonomous driver-vehicle systems.

AVCS-II: The second level of AVCS, referred to as cooperative driver-vehicle-highway systems.

AVCS-III: The third level of AVCS, referred to as automated vehicle-highway systems.

AVHT:
1- Advanced Vehicle & Automated Systems Development.
2- Advanced Vehicle and Highway Technologies.
3- Task force of the Transportation Research Board, now the ITS committee.

AVI: Automatic Vehicle Identification System; a system that transmits signals from an on-board tag or transponder to a roadside receiver for the automated identification of vehicles. AVI systems are used in electronic toll collection. Typically consists of a vehicle-mounted transponder, a roadside reader unit with antenna, and a transmission system to a data analysis and storage center. Used for electronic toll collection (ETC), stolen vehicle recovery, etc.

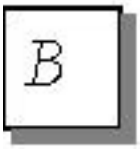
AVID: Advanced Vehicle Development; research area of Advanced Vehicle & Automated Systems Development (AVASD); department of Caltrans.

AVL: Automatic Vehicle Location; a computerized system that tracks the current location of vehicles, buses, etc., enabling fleets to function more efficiently.

AVLS: Automatic Vehicle Location System
1- Computerized system which tracks the current location of fleet vehicles, to assist dispatching, etc.
2- The installation of devices on a fleet of vehicles (e.g. buses, trucks or taxis) to enable the fleet manager to determine the level of congestion in the road network. AVL is also used to enable the fleet to function more efficiently by knowing vehicle locations.

AVM: Automatic vehicle monitoring

AWACS: Automatic Weight and Classification System



BACS: Bay Area Commuter Services; coordinates Transportation Demand Management activities for Hillsborough, Pinellas, Pasco, and Hernando Counties in Florida.

BART: 1- Bay Area Rapid Transit. See Translink
2- Binocular Autonomous Research Team

BBS: Bulletin Board System; a database accessible to multiple users via computer, modem, and phone lines.

Beacons: Short-range roadside transceivers for communication between vehicles and the traffic management infrastructure. Common transmission technologies include microwave and infrared.

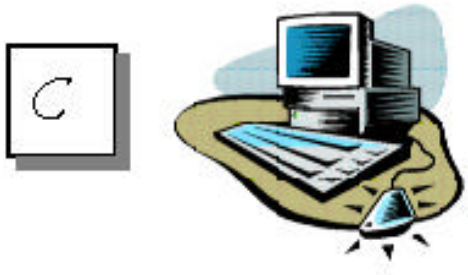
BER: Basic Encoding Rules

BESTEA: Building Efficient Surface Transportation and Equity Act (H.R. 2400) House ISTEA reauthorization proposal.

BIS: Bus Arrival and Information System

BMS: Bridge Management System

BSP: Base Standards and Protocol



CAAA: Clean Air Act Amendments of 1990

CACS: Comprehensive Automobile Control System

CAD: 1- Computer-Aided Dispatching
2- Computer-Aided Design

CAFE: Federal Fuel Efficiency Standards for Cars

CalPoly: California Ploytechnic State University; involved in INRAD; also known as CalPoly.

CalTrans: California Department of Transportation. Has departments for Advanced Transportation Management and Information Systems (ATMIS), Advanced Vehicles and Automated Systems Development (AVASD), and Advanced Systems Integration and Implementation (ASII).

CAPRI: Carrier Automated Performance Review Information

CAPTS: California Advanced Public Transportation Systems. Encompasses ATIS, ATMS, AVCS, and Fleet Management and Control Systems for the improvement of transit, paratransit, and ride-sharing. Funded by FTA and Caltrans.

CAR-GOES: DRIVE I project investigating links between dynamic route guidance and traffic control.

CARAT: Congestion Avoidance and Reduction for Automobiles and Trucks; ATIS/ATMS system in Charlotte, NC. Includes a subscription-based advanced traveler information system (ATIS) that will provide incident location and response, as well as, consumer information to its users, and an advanced traffic management center (ATMS). Relies on visual monitoring and in-pavement sensors to detect incidents.

CARIN: Car Information and Navigation System; autonomous route guidance system developed by Philips Electronics. Uses spoken directions and visual pictogram display. Includes dead-reckoning and map matched dead-reckoning. See SOCRATES.

CAT: Carrier Automated Transaction

CB: Citizen's Band Radio; a band of radio frequencies designated by the FCC for civilian use.

CC: Control Center

CCATS: Camera and Computer-Aided Traffic Sensor; commercial video image analysis system launched in 1988 in Belgium by Devionics Control NV. Also being used and evaluated in Spain, Italy, Luxembourg, UK, Germany, France and the US.

CCD: Charge-Coupled Device; an optical-electrical sensor.

CCIR: International Consultative Committee for Radio

CCITT: International Consultative Committee for Telegraph and Telephone

CCTV: Closed-Circuit Television

CD-CRAFT: CD and CRRT Applied Format; a software standard for in-vehicle information and application programs stored on CD-ROM. Developed by Toyota, Nissan, Nippondenso and Sumitomo Electric.

CD-ROM: Compact Disc - Read Only Memory

CDL: Commercial Driver License

CDLIS: Commercial Driver License Information System

CDPD: Cellular Digital Packet Data

CEC: Commission of the European Community

CEI: Commission Electrotechnique Intenationale; see International Electrotechnical Commission

CEN:
1- Committee European Normalization.
2- Committee for European Standards; goal is to eliminate differences in national standards so that there are no technical barriers to trade. Includes a technical committee (TC278) devoted to RTI issues.

CENELEC: European Committee for Electrotechnical Standardization; European standards body for electrical systems and telecommunications.

CERCO: Consortium of European Cartographic Organizations

CETE: Contre d'Etudes Techniques de l'Equipment du Sud-Ouest

CFR: Code of Federal Regulations

CHART: Chesapeake Highway Advisories Routing Traffic; provides traffic information to motorists traveling between the Baltimore-Washington metropolitan area and Maryland's Eastern Shore.

CI: Credentialing Interface

CIA: Community Impact Assessment

CIDER: Communication Infrastructure for Drive on European Roads; a DRIVE program with the objective of recommending the optimum communications infrastructure. Concluded that DRIVE should not have a dedicated communication infrastructure, but instead employ a mixture of public and private networks. Created the Drive Normalized Transmission (DNT) protocol.

CIG: The Crescent Implementation Group; consists of Government and industry members from each state on the Crescent route to guide the planning and implementation of HELP.

CITIES: Cooperation for Integrated Traffic Management and Information Exchange Systems; one of five POLIS/DRIVE II projects. Involves Paris, Brussels, and Gothenberg (Sweden). Focused on traffic and travel information, data exchange, and route guidance.

CITRAC: Centrally Integrated Traffic Control system

CMAQ:
1- Congestion Management and Air Quality improvement program; a federal program that funds air quality improvement projects, some of which includes components of the Intelligent Transportation Infrastructure.
2- Congestion Mitigation for Air Quality.

CMS:
1- Changeable Message Signs (also variable message signs, VMS); used in ATIS and ATMS. Europeans prefer variable message sign (VMS).
2- Congestion Management System; highway signs which can change the message they display in a finite number of messages.

CMSA: Consolidated Metropolitan Statistical Area

CO: Carbon Monoxide

CO_2: Carbon Dioxide

COACH: CVISN Operational and Architectural Compatibility Handbook

COBS: England's Control Office Vase System

COM-TV: Commuter-TV system

COMPASS: 100% fiber optic communication network and multi-color clustered LED changeable message signs located on Highway 401 in Ontario. The system incudes a vehicle detection system and closed-circuit television, all controlled by a central facility in Canada. Canadian ATMS system focused on incident detection and management. In-pavement sensors transmit traffic information to the central facility, which notifies the appropriate incident management personnel and adjusts local changeable message signs (CMS) accordingly. Sponsored by the Ontario Ministry of Transportation (OMT).

Configuration Management: A process developed to control change in complex information technology-based systems.

CORBA: NTCIP - Application Profiles for Common Object Request Broker Architecture, AASHTO 2305

Corridors:
1- Cooperation on Regional Road Informatics Demonstration on Real Sites; DRIVE program which assists inter-urban consortia in dealing with inter-urban initiatives. Acts as a complement to POLIS.
2- In a transportation context, roadways identified as highly congested, and, therefore, targeted for federal research and funding. See Corridors programs, DATIS, INFORM, ISTEA, Smart Corridor, TRANSCOM, etc.

Corridors Program: Research and development projects provided for under the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 to address the relief of particularly congested urban highway systems.

CORSIM: Corridor Simulation Model

COTR: Contracting Officer's Technical Representative

COTS: Commercial Off-The-Shelf (software, hardware)

CPAs: Critical Program Areas

CPT: Common Public Transportation

CPU: Central Processing Unit; the part of the computer or computer system which performs core processing functions.

Crescent Demonstration: Multi HELP demonstration from British Columbia along I-5 through Washington, Oregon, and California and I-10 through Arizona, New Mexico, and Texas. Program testing heavy commercial vehicles equipped with transponders in an integrated systems environment.

CRM: Customer Relationship Management

CSA: Canadian Standards Association

CTCS: Central Traffic Control System, Ottawa-Carleton, Canada.

CTCSS: Continuous Tone Coded Squelch System

CTIA: Cellular Telephone Industry Association

CTPP: Comprehensive Transportation Planning Package

CUTA: Canadian Urban Transit Association; involved in the ITS Roundtable.

CUTR: Center for Urban Transportation Research at the University of South Florida

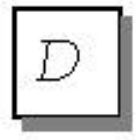
CVIEW: Commercial Vehicle Information Exchange Window

CVISN: Commercial Vehicle Information Systems and Networks; has been called the internet for trucks and buses. http://www.jhuapl.edu/cvo

CVO: Commercial Vehicle Operations; intelligent transportation technology used to improve the flow of commercial vehicles over long distances, and minimize truck stops at weigh stations and ports of entry. Fewer stops reduce travel time, increase productivity, save fuel, and reduce emissions..
1- The application of ITS technology to commercial vehicles.
2- An ITS America Committee.

CVSA: Commercial Vehicle Safety Alliance

CWS: Collision Warning Systems. Eaton Vorad has a partnership with Volvo and Hitachi which will produce 60GHz radar for trucks.



DACS: Department of Agriculture and Consumer Services

DAR: Digital Audio Radio

DARC: Data Radio Channel

DART: 1- Dallas Area Rapid Transit. Involved in a $17 million CPS fleet management application which uses GPS (Global Positioning Satellite), AVL (Automatic Vehicle Location), and CAD (Computer-Aided Dispatching).
2- Diversion Advice Recommendation Technology. Term used to identify the common focus of ADVANCE, TravTek, and Fast-Trac on dynamic route guidance-incident diver.

Data mining: Data mining as a methodology, is a set of techniques used to uncover previously obscure or unknown patterns and relationships in very large databases. The ultimate goal is to arrive at comprehensible, meaningful results from extensive analysis of information.

DATEX: NTCIP-Applications Profile for Data Exchange ASN.1. AASHTO 2304

DATIS: Dulles Area Travel Information System; a Dulles International Airport Corridor project. Testing techniques for collecting and disseminating traffic information, including highway accidents, transit service delays, and parking availability at selected sites. Information will be provided at home, office and malls.

DCE: Distributed Computing Environment

DCEA: Direct Current Electric Association; an international association representing manufacturers of the direct current industry. Address - P.O Box 6840, Arlington, VA 22206-0840. Phone - 703.820.7428, Fax - 703.820.7495, e-mail - jollymick@aol.com

Dead-Reckoning: Vehicle Positioning

DEIR: Draft Environment Impact Report

DEIS: Draft Environment Impact Statement

DEMETER: Digital Electronic Mapping of European Territory; EUREKA project started by Bosch and Philips in 1986 with the objective of creating a standardized European digital road map at 1:10,000 scale. Resulted in the development of GDF, a proposed standard for the acquisition and representation of highly detailed digital map data required for navigation systems.

DEN: Data Exchange Nodes

DG XIII: Directorate-General 8 of the European Commission; covers telecommunications, information industries and innovation; involved with DRIVE.

DHSMV: Department of Highway Safety and Motor Vehicles

Differential Correction: Technique for overcoming GPS selective availability by placing a receiver at a precisely known control point from which corrections can be broadcast for an area

DIRECT: Driver Information Radio Experimenting with Communication Technology; U.S. operational field test sponsored by the FHWA, Michigan DOT, and several automobile and electronic component manufacturers. Will deploy four alternate low-cost methods of communicating advisory information to motorists and evaluate impact on driver behavior, benefits and costs, and technical feasibility.

DIS: Driver Information Systems

DIVCOM: Division of Communications; State of Florida Department of Management Services (DMS) Division of Communications.

DLG: Digital Line Graphs; geographic computer plots produced by U.S. Geological Survey, available on CD-ROM. Includes data on political and administrative boundaries, water bodies, roads and trails, railroads and points of interest. Drawn from 1:2,000,000 scale maps of the National Atlas of the U.S. Last updated in 1979.

DLL: Windows Dynamic Link Library

DMV: Division of Motor Vehicles

DNA: Distributed interNet Architecture

DNT:
1- Dallas North Tollway
2- Drive Normalized Transmission; a DRIVE communications protocol. Follows the Open System Interconnection (OSI) framework. Developed by CIDER.

DOC: Department of Communications, Canada

DOR: Department of Revenue

DOT: Department of Transportation; either local, state or federal transportation agency, e.g. Florida DOT, Los Angeles DOT, U.S. DOT, etc.

DRIPs: Dynamic Route Information Panels

DRIVE: Dedicated Road Infrastructure for Vehicle Safety in Europe; a European community program to find ways to alleviate road transportation problems through the application of advanced information and telecommunications technology. DRIVE is a program to develop ATMS, APTS, and ATIS technologies. DRIVE spent $170 million to develop initial technologies designed to manage traffic and information systems throughout large metropolitan areas. In January, 1994, the group spent $240 million on testing these systems in Phase Two of the program. One goal is to standardize technology throughout the EC and introduce standard ways of transmitting information between vehicles and roadside information collecting system.

DRL: Daytime Running Light

DRPA: Delaware River Port Authority

DRS: Dead-Reckoning System

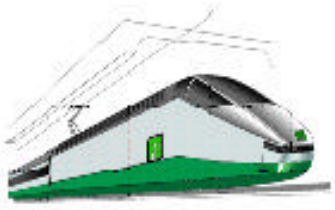
DSAP: Data Security and Privacy Task Force and its activities, please contact Pete Costello (202) 484-4668 or pcostello@itsa.org

DSRC: Dedicated Short Range Communications

DSS: Direct Broadcast Satellite System

DSTG: Database Standards Task Group; a subcommittee of SAE's ITS Division. The task group's purpose is to develop standards for digital street map databases. That includes standardization of terms and the use of nomenclature to facilitate evaluation and comparison of the completeness and content level of various databases.

DVD: Digital Video Disc



EAR: Evaluation and Appraisal Report of a community's comprehensive plan

EC: European Community

ECMT: European Committee of Transportation Ministries

ECO(P): Employee Commute Options (Program)

ECPA: Electronic Communications Privacy Act

EDI: Electronic Data Exchange

EDRM: European Digital Road Map Project; DRIVE project consortium which created the Geographic Data File (GDF) specification. Includes Daimler Benz, Bosch, Blaupunkt, Philips, Renault, SAGEM, TeleAtlas and Integraph. Continued in DRIVE II.

EGT: European Geographical Technologies B.V.; European consortium formed to create and manage digital street map databases in Europe, focusing initially on the needs of the traffic and transport-related applications. Participants include Philips Electronics (Netherlands), Renault (France), QC Data (Ireland), Institut Geographique Nationale (France), Navigation Technologies (U.S.) and Automobile Association (UK).

EIA: Electronics Industries Association (703) 907-7571

EIS: Environment Impact Statement

ELECTRANS: Electronic Highway Transportation Association of America; the name initially proposed for IVHS America which is now ITS America.

Electro Multi Version: Toyota-Nippondenso information system; displays vehicle and map information on an LCD screen. Uses GPS and CD-CRAFT technology.

ELED: Edge Emitting LEDs

ELMS: Environmental Land Management Study

EMC: Emergency Management Center

EMS:
1- Emergency Medical Service
2- Emergency Management Systems
3- Emergency Message Systems

ENTERPRISE: Evaluating New Technologies for Roads Program Initiative in Safety and Efficiency; North American ITS cooperative initiative to facilitate the rapid development and deployment of ITS technologies; a consortium of public and private organizations with compatible ITS goals which will identify and exploit opportunities for cooperative ventures.

ERDIS: En-Route Driver Information System

ERGS: Electronic Route Guidance System; a 1968 to 1971 route guidance project sponsored by the FHWA. The system provided in-vehicle directional guidance to the driver. Although it was not implemented in the U.S., the Japanese CACS project established the feasibility of ERGS technology.

ERM: Event Report Message

ERP:
1- Electronic Road Pricing; use of smart card technology, or simple tags, to charge motorists for road use based on demand, congestion, day and time, miles traveled, and other flexible criteria.
2- Effective Radiated Power; term referring to aggregate power radiated by a transmitter and antenna system, including all losses and gains.
3- European Radio navigation Plan
4- Enterprise Resource Planning

ERTICO: The European ITS Organization

ERTIS: European Road Transport Information Systems; a $2.7 million, three-year project to develop a common road information and communications system for motor carriers across Europe; part of EUREKA. Has the objective of applying systems for automatically communicating motor freight information.

ESCOTA: Société des Autoroutes Estérel, Côte d'Azur, Provence Alps; motorway network covering 430km in southeast France.

ET-NET: European traveler information network developed under the INTERCHANGE project of DRIVE II.

ETC: Electronic Toll Collection

ETR(P): Employee Trip Reduction (Program)

ETSI: Institut Européen des normes de telecommunication; European Telecommunications Standards Institute; includes both public and private sectors.

ETTM: Electronic Toll and Traffic Management

EU: European Commission

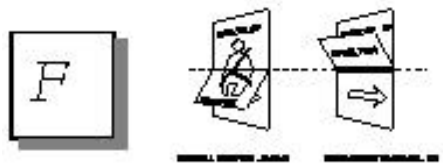
EUREKA: European Research Coordination Agency; a 19-country program that fosters cooperative research and development between industries and governments in Europe.

EURO-SCOUT: Second generation infrastructure-based route guidance system; successor to ALI-SCOUT.

EUROPOLIS: A $150 million, seven-year, Danish/French/Spanish/Italian research project to design automated road systems and develop technologies to automate driver functions; part of EUREKA. Other objectives include environmental control and fleet management.

EUTELTRACS: European satellite-based messaging and positioning system

EZ-PASS: The electronic toll collection system to be used in the New York/New Jersey/Pennsylvania area.



FAE: Federal Aid Eligible

FAME: Freeway Arterial Management Effort; includes the Incident Management and Integrated Systems project which will develop a framework for establishing and implementing an incident management system, as well as demonstrate the benefits of an integrated system by designing and implementing a control system for I-5, that automatically modifies arterial timing and ramp metering in response to freeway conditions.

FAST-TRAC: Forum for Advanced Safe (faster and safer) Travel Through Traffic Routing and Advanced Control (or Faster and Safer Travel-Traffic Routing and Advanced Controls); Oakland County, Michigan uses SCATS technology. This project was a three-phase, six year test. Project partners include the Road Commission of Oakland County, Siemens. FHWA, Rockwell the University of Michigan (Ann Arbor), Michigan State University (East Lansing), Chrysler, Ford and General Motors. A demonstration project that integrated ATMS and ATIS, Fast-Trac utilizes the SCATS adaptive, coordinated traffic control system with video image processing for vehicle detection and is linked with the Siemen's ALI-SCOUT technology. Field tested in Oakland County, Michigan.

FAX: Facsimile machine

FC: Fare Collection

FCC: Federal Communications Commission; the federal agency which regulates telecommunications in the U.S for all services except federal government agencies.

FDOT: Florida Department of Transportation

FEDICS: England's Forth Estuary Driver Information and Control System

FEIS: Final Environment Impact Statement

FFN: Florida Fiber Network

FHP: Florida Highway Patrol

FHWA: Federal Highway Administration (U.S. DOT)

Fiber (optical fiber): A medium used to transmit information via light impulses rather than through the movement of electrons. A single strand of optical fiber, the approximate size of a human hair, can carry thousands of digital voice conversations or data transmissions at the same time.

FIP: Federal Implementation Plan

FISTA: Federation Internationale des Societes d'lngenieurs des Techniques de l'Automobile International; Federation of Automobile Engineering Societies; interested in international databases and vehicle research systems; sponsors international conferences.

FLAMINGO: Florida Motorist Information Network for Guidance and Operations (Miami)

FLEET: Freight and Logistics Efforts for European Traffic; DRIVE project investigating the potential of new information and communications technologies for use in establishing an integrated pan-European freight and fleet management system. Defining and assessing alternative system concepts.

FMCSA: Federal Motor Carrier Safety Administration

FOCCS: German-made flexible Operation Command and Control System; integrates fix-route transit, dial-a-ride minibus and contract taxi services.

FOCUS: Focus on Community Understanding and Solution; a Florida League of Cities program designed to promote partnership between state and municipal governments for enhanced service delivery to Florida residents.

FOT: Field Operational Test

FRA: Federal Railroad Administration

FSK: Frequency Shift Keying (as in 1200 bps FSK modem interface)

FSS: Fixed satellite service

FSU: Florida State University, Tallahassee, Florida

FTA: Federal Transit Administration (formally UMTA) U.S. DOT

FTMS: Freeway Traffic Management System

FTP: File Transfer Protocol

FY: Fiscal Year

GANET: Georgia Net Authority online connection (404) 651-8690

GAUDI: Generalized and Advanced Urban Debiting Innovation; one of five POLLS projects under DRIVE II involving Marseille, France; Barcelona, Spain; Dublin, Ireland; Trondheim, Norway; and Bologna, Italy. Focused on automatic toll and fare debiting, demand management, and smart cards.

GCM: Gary-Chicago-Milwaukee ITS Priority Corridors program providing federal funding to test, evaluate, and demonstrate the benefits of ITS technologies.

GEMINI: Generation of Messages in the New Integrated Road Transport Environment; a DRIVE II project to develop an integrated driver information system based on RDS-TMC and variable message sign (VMS) networks.

GENEGIS: Generator for Geographical Information Systems. A EUREKA project to develop a platform for the integration of spatial, economic, and statistical data in geographic information systems (GIS). Partners include European Geographic Technologies (EGT), Feblac Data Systems, Institute Geographique National, and SAGEM Navigation and Defense Division.

Genesis: A Guidestar project; a personal traveler information system that will provide real-time route specific vehicle and transit travel times. Traffic data will come from transit vehicles and used as probes and conventional data sources.

Geocode: A code representing a political or geographical unit (for example, a city, county or zip code area) incorporated into a GIS.

Geodetic Coordinates: A system of geographic position referencing; angular measurements of latitude and longitude projected onto a well-defined reference ellipsoid that approximates the earth's irregular shape.

GEOSTAR: A satellite system which was used for determining vehicle location. Pioneered satellite-based commercial truck tracking and communications services. No longer operating.

GFI: Ground Fault circuit Interruption

Ghz: Giga hertz

GIS: Geographic Information System; computerized data management system designed to capture, store, retrieve, analyze, and report on geographic/demographic information. See TRANSCOM.

GIST: Geographic Information System in Transportation

GLONASS: Global Positioning System similar to Global Positioning System (GPS); may be integrated with GPS.

GLIDE: Green LIght DEtermining traffic signal control system; Singapore's 1,295 intersection adaptive control operations which reverts to a fixed-time system when communications break down. GLIDE includes a faut monitoring system which detects the problems without waiting for the public to alert operators.

GM: General Motors Corporation

GPRA: Government Performance and Results Act

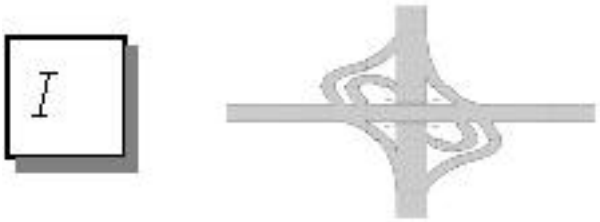
GPS: Global Positioning System; a system that determines real-time positioning using communications with a satellite; government owned system of 24 Earth-orbiting satellites which transmit data to ground-based receivers. Provides extremely accurate latitude/longitude ground position in WGS-84 coordinates for the military called Precise Positioning Service (PPS). Deliberate error (selective availability) is introduced into the civilian service for defense purposes.

GSM: Groupe Specials Mobile

Guidestar: An ITS program of the University of Minnesota Center for Transportation Studies/Minnesota Department of Transportation

HAR: Highway Advisory Radio; the transmission of localized traffic advisory messages using the AM broadcast frequencies. Frequencies are licensed by the FCC and the service is now called TIS (Traveler Information Systems).

HARTline:	Hillsborough Area Regional Transit; the public transit provider for Hillsborough County, Florida.
HAT:	Highway Advisory Telephone
HAZMAT:	HAZardous MATerial(s)
HC:	Hydrocarbons
HDLC:	High-Level Data Link Control
HELP:	Heavy vehicle Electronic License Plate Program; automatically weighs and identifies heavy vehicles at strategic locations.
HEROs:	Highway Emergency Response Operators
HHI:	Highway-Highway Intersection
HITS:	Houston Intelligent System; project aimed at improving the mobility of people and goods and includes Smart Commuter.
HOV:	High Occupancy Vehicles; any vehicle containing more than one person, such as buses, carpools, and vanpools.
HPMS:	Highway Performance Monitoring System
HPR:	Highway Planning and Research
HRI:	Highway-Rail Intersection
HSGT:	High Speed Ground Transportation
HSIS:	Highway Safety Information System
HSR:	High Speed Rail
HUD:	Heads-Up-Display; display of instrument readings which appears (usually by reflection) on the inside of a vehicle's windshield
HUF:	Highway User's Federation
HUFSAM:	Highway Users Federation for Safety and Mobility
HVCO:	See CVO
HVUT:	Heavy Vehicle Use Tax



I/M: Inspection and Maintenance Program for Emissions Testing
1- Inspection and Maintenance Program (for motor vehicles)
2- Intermodulation Term describing interference caused by two or more radio signals that combine through non-linear external mixing

IBC: International Border Clearance

IBTTA: International Bridge, Tunnel and Turnpike Association

ICE: Intergovernmental Coordination Element in a comprehensive plan

ICOP: Wisconsin's Integrated Corridor Operations Project; uses monitor system to integrate signal operations between freeway and arterial roadways.

ICR: Intelligent Character Recognition

ICS: Intelligent Corridor System

ICTM: Integrated Corridor Traffic Management system

ICVTAID: DRIVE project dealing with the use of computer vision techniques for incident detection.

IDAS: ITS Deployment Analysis System; a software tool for integrating ITS into the planning process.

IDE: Integrated development environment

IDEA: ITS Ideas Deserving Exploratory Analysis; program for innovations deserving exploratory analysis.

IEC: International Electrotechnical Commission; sets standards in the electrical and electronics industries.

IEE: The Institute of Electrical Engineers

IEEE: Institute of Electrical and Electronics Engineers

IEEE SCC32: Standard Coordinating Committee for ITS America; Chair: John May. Vice Chair: Spiro Demopolis. Secretary: Robert Gottschalk. IEEE Liaison: Luigi Napoli

IFTA: International Fuel Tax Agreement

IHSDM: Interactive Highway Safety Design Model; interacts CAD package with Benefit-Cost Module, Consistency Module, Policy Review Module. Accident Predictive Module, Roadside Safety Structure, Vehicle Dynamics Module, Driver Module, and Traffic Module by feeding design alternatives and produces revised alternatives.

ILD: Inductive loop detectors

ILD: Injection Laser Diodes

IM: Incident Management

IMAURO: Integrated Model for the Analysis of Urban Route Optimization; DRIVE project dealing with urban traffic simulation.

IMMS: Incident Management Message Sets

IMPACT: Implementation Aspects Concerning Planning and Legislation; DRIVE project to propose international planning procedures for standardization and identify areas for change in legislation to facilitate RTI.

IMPS: The Integrated Multi-Pass Systems; developed by Singapore-based firm Optasia Systems for vehicle license plate recognition system.

IMS: Intermodal Management System; Incident Management System

INCH: Integrating NTCIP Compliant Hardware

Internet: A collection of computer networks, all connected using a common set of protocols and rules on sharing and directing messages. The internet is now the fastest-growing connection of networks known to humanity.

Info-mobility: A Japanese term for ITS

INFORM: Information for Motorists

INRAD: Caltrans-sponsored project to demonstrate the use of short-range, two-way communications between vehicles and the roadway using inductive radio.

INRETS: Institut National de Recherche sur les Transport et leur Sécurité; French Transport and Safety Research Institute.

IntelliTag: Radio Frequency Identification (RFID) system for electronic toll applications; allows two-way information transfer.

INTERCHANGE: DRIVE II project to develop a network for the real-time exchange of ATT information between national travel/traffic information centers. Network is to be called ET-NET.

IPC: Interprocess Communication

IR: Infrared

IRDs: Integrated Receiver Decoders

IRF: International Road Federation

IRP: International Registration Plan; a base state program which provides apportioned registration for interstate carriers.

IRTE: Integrated Road Transport Environment; ultimate goal of the DRIVE and DRIVE II programs.

ISATA: International Symposium on Automotive Technology and Automation; annual meeting held in Florence on ITS and other automotive technology.

ISDN: Integrated Services Digital Network

ISO: International Organization for Standardization; an international standards umbrella organization; includes a Technical Committee (TC-204) on ITS/RTI.

ISO 9000: International Standards Organization for overall quality business process (actual products or services).

ISP: Internet (Information) Service Providers

ISTEA: Intermodal Surface Transportation Efficiency Act of 1991

1- Legislation, passed in 1991, providing primary federal funding for highways and other surface transportation programs in the U.S. ISTEA is unusual in that it allows transportation funds to be spent on nontraditional uses, such as the ITS program.
2- An act (FHWA-PI-92-008) to develop a National Intermodal Transportation System that is economically efficient, environmentally sound, provides the foundation for the nation to enter into the global economy, and will move people and goods in an energy-efficient manner. In 1991, the U.S. Congress authorized $155 billion in transportation projects over six years. The law expired Sept. 30, 1997. Provides primary federal funding for highway and other surface transportation programs in the U.S. Contains the IVHS Act. Directs the establishment of a national ITS program which is to include a strategic plan for ITS in the U.S., implementation and evaluation of ITS technologies, the development of standards and protocols, clearinghouse.

ISTEA-2: ISTEA reauthorization proposal (Senate Bill S. 1173); set new spending levels, created formulas for ISTEA 1997-2002. ISTEA 2 provided a total $214.3 billion in transportation spending over a six-year period. Spending on highways would total $171 billion; transit spending would total $41 billion for the six years.

ISTEA Works!: Defender of existing ISTEA program, 15 recipient states, Clinton administration and leaders of the House Transportation and Infrastructure Committee support this ISTEA-2 Option.

ISTHA: Illinois State Toll Highway Authority

ITC: International Telecommunications Convention

ITE: Institute of Transportation Engineers

ITI: Intelligent Transportation Infrastructure; the computer, communications, and control systems required to support a variety of intelligent transportation products and services in urban and rural areas.

ITP: Intermodal Transportation Program

ITS: Intelligent Transportation System; the application of advanced technologies to improve the efficiency and safety of transportation systems.

ITS System Architecture: The framework that describes how system components interact and work together to achieve total system goals and objectives. It describes the total system's operation, each component's function, and the information exchange among the components. An architecture is similar to the flowchart for a computer program. The ITS System Architecture should have an open architecture which allows for flexibility and innovation so that hardware and software products from multiple vendors can be provided to meet system needs.

ITS (IVHS) Roundtable: Ad hoc organization for the coordination of ITS development in Canada. Seeks to broaden ITS interests throughout Canada and encourage active Canadian involvement through strategic planning and partnership. Provides a forum for new developments rather than acting as a funding organization. Includes the Transportation Association of Canada, reps from the federal, Ontario and Quebec governments, etc.

ITS America:

1- Intelligent Transportation Society of America (formerly IVHS America). Address - 400 Virginia Ave., S.W., Suite 800, Washington DC 20024, Phone - (202) 857-1202, FAX - (202) 296-5408.
2- Institute for Transportation Studies; transportation research and development organization of the University of California. Faculty, staff and graduate students conduct multi-disciplinary research. Operates Path. http://www.itsa.org E-Mail:rgilroy@itsa.org.

ITS Focus: British ITS Organization

ITS JPO: Intelligent Transportation Systems Joint Program Office; coordinates the direction of several related programs managed by FHWA, NHTSA, and FTA, so that they may be combined into the IVI.

ITU: International Telecommunications Union. ITU-Region II includes North America, Central America and South America.

IUTRC: Illinois Universities Transportation Research Consortium

IVHS America: Now renamed ITS America; a nonprofit, public/private scientific and educational corporation which works to advance a national program for safer, more economical, energy efficient, and environmentally sound highway travel in the U.S. Advisory committee to U.S. DOT. See IVHSA, ITS America.

IVHS: Intelligent Vehicle Highway System (now referred to as ITS); application of advanced technologies to improve the efficiency and safety of transportation systems.

IVHS Act: See ISTEA (Intermodal Surface Transportation Efficiency Act)

IVHSA: Intelligent Vehicle Highway Society of America; advisory committee to the USDOT on IVHS and is chartered to establish goals, plans, and programs for development of IVHS. Address - 1776 Massachusetts Avenue NW, Washington, DC 20036-1993, Phone - (202) 857-1202

IVI: Intelligent Vehicle Initiative

IVS: In-Vehicle Signing

IVSAWS: In-Vehicle Safety and Advisory Warning System. Developed by Hughes. Being tested with FHWA funding.

JDRMA: Japan Digital Road Map Association

JETSUN: Jacksonville Electronic Transportation System for Urban Navigation

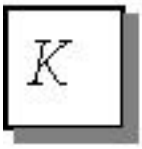
JIT: Just-in-time delivery of freight by trucking companies.

JPL: Jet Propulsion Laboratory

JPO: ITS Joint Program Office

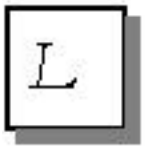
JSEA: Japanese Society of Automotive Engineer

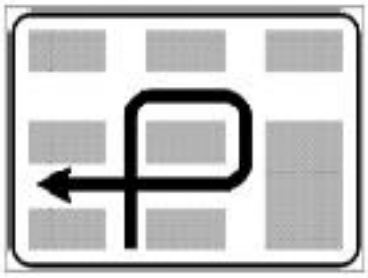
JSK Foundation: Japanese Association of Electronic Technology for Automotive Traffic and Driving; formed to disseminate information from the CACS project. Worked on the SSVS project.



Kiosk: In the transportation context, an interactive computer center for traffic- or travel-related information. Usually located in shopping malls, hotels, airports, business, and transit terminals, kiosks provide pre-recorded and real-time information using text, sound, graphics, and video chips; an information center for traffic or travel data located in shopping malls, parking decks, hotels, airports, businesses, transit terminals, etc., usually with interactive computer capability.

KSC: Kennedy Space Center





LACTC: Los Angeles County Transportation Commission

LADGPS: Local Area Differential GPS

LAN: Local Area Network; a method of connecting several computers together using either high- or low-bandwidth communications media.

LCD: Liquid Crystal Display

LCS: overhead Lane Control Signs

LDD: Local Development District

LDOTD: Louisiana Department of Transportation and Development

LED: Light-Emitting Diode

LEO: Low Earth Orbit

Liaison Council for ITS/RTI: Formed by representative members of the ITS community in Japan to carry out information interchange smoothly inside and outside of Japan. Membership includes personnel from the Japan Traffic Management Technology Association, Highway Industry Development Organization, and the Association of Electronic Technology for Automobile Traffic and Driving (JSK Foundation).

Lincoln Tunnel Project: An ETTM system operated by the Port Authority of New York and New Jersey. 2,800 buses are equipped with tags.

LISB: Leit and Information System Bedin

LLAMD: London, Lyon, Amsterdam, Munich and Dublin; one of five POLIS projects of DRIVE II. Focused on traffic control and route guidance.

LOS: Level of Service; a rating between A and F as a measure of freeway congestion with density and signalized intersection with stop and delay.

LPHAR: Low Powered Highway Advisory Radio; traffic information broadcasting system. Requires the traveler to manually tune to a traffic message channel after being alerted by flashing roadside lights.

LPI: Lightning Protection Institute

LPO: Lead Planning Organization

LPRS: License Plate Reading System; a product manufactured by Computer Recognition Systems, Inc., which automatically reads the license plates of moving vehicles.

LRP/LRTP: Long Range (Transportation) Planning

LRT: Light Rail Transit

LTL: Less Than Truckload

LTR: Local Traffic Responsive

LYNX: Central Florida Regional Transit Authority

MARTA: Metropolitan Atlanta Rapid Transit Authority. Phone - (404) 848-5117

MAGIC: Metropolitan Area Guidance, Information and Control; New Jersey incident detection and traffic management system. Uses variable message signs (VMS), closed-circuit television (CCTV), highway advisory radio (HAR), loop detection, and ramp metering to help relieve congestion in several New Jersey counties. Operated by New Jersey DOT.

Maglev: Magnetic Levitation Trains

MAPS: Multi-jurisdictional Automated Preclearance System

MAS: Motorist Aid (call box) System; a system of digital push-button call boxes along the Interstates throughout Florida. Constructed by FDOT and operated by the FHP, this system is supported by a statewide microwave communications infrastructure constructed with both state and FHWA funds. Construction began in 1990 and was scheduled for completion in 1997.

MBTA: Massachusetts Bay Transit Authority; the public transit authority of the Boston metropolitan area.

MBTS: Market-Based Transportation Strategies

MCCO: Florida DOT Motor Carrier Compliance Office

MCMIS: Motor Carrier Management Information System

MCS: Motor Carrier Services

MCSAP: Motor Carrier Safety Assistance Program

MCSIP: Motor Carrier Safety Improvement Process

MDSS: Maintenance Decision Support System; uses advanced weather prediction capabilities within the context of the transportation network.

MDTRS: Mobile Digital Trunked Radio Systems; standard for pan-European public and private digital trunked mobile voice and data networks.

Memory Card: A plug-in computer memory card containing prerecorded information. May function as mass storage for on-board navigation systems. Also called IC card and Flash Memory.

MHz: Megahertz

MIDAS: Motorway Incident Detection and Automatic Signaling

MINERVE: Part of CARMINAT

MIS: Major Investment Study

MIST: Management Information System for Traffic; a software package used for converting low-level traffic count data to high-level congestion reports; written by Farradyne Systems, Inc., and distributed by Traffic Control Technologies.

MITI: Japanese Ministry of International Trade and Industry

MMI: Man-Machine Interface (or Interaction); the interface between system hardware and the person using the system. This general term includes touch (for example, buttons, levers or touch screens), vision (such as lights or various displays), and auditory effects (such as chimes, beeps, voice sysnthesis and voice or speech recognition).

MNA: Mobil Navigation Assistant; an in-vehicle guidance system from Motorola that uses a database developed for Nav/Tech by SFI Information Technology. These cars act as traffic probes providing real-time data to traffic information centers. The information is processed and sent back to the driver in the form of route instructions.

MOBILITY 2000: A precursor of IVHS America; an informal assembly of individuals, government agencies, automotive companies, electronics suppliers, communications companies, consultants, large fleet operators, and universities which served to define and promote ITS.

Mobility Manager: FTA-sponsored APTS project testing an experimental information clearinghouse aimed at integrating and coordinating transportation services offered by multiple providers. Combines Smart Traveler and Smart Vehicle technology with the integration of communications and billing systems. Currently being tested in Norfolk, VA, and Central Point (or Rouge Valley). Uses ETTM and computer-based systems.

MOC: Japanese Ministry of Construction

MOE: Measure of Effectiveness; delay, queue, stop, etc., used to evaluate results of operational field tests.

MoVER: Motor Vehicle Emergency Response

MPCs: Multi-Purpose Controllers

MPEG-2: Motion Picture Experts Group-2

MPO: Metropolitan Planning Organization

MSA: Metropolitan Statistical Area

MS/ETMC2: Message Set for External Traffic Management Center Communications

MS/ETMCC: Message Set for External Traffic Management Center Communications

MTA:
1- Mass Transit Administration (in Baltimore)
2- Metropolitan Transportation Authority, the public transit authority of the Los Angeles metropolitan area.

MTC: Metro Traffic Control; a private company which collects and disseminates traffic information through radio and television spot announcements.

MTCS: Metropolitan Traffic Control System; a software package used for controlling the timing of traffic signals in an urban road network; written and distributed by Computran Corporation; compatible with, and extends the capabilities of UTCS.

MTIPS: Metropolitan Transportation Information Production System

MTS: Metropolitan Transportation System

MULTI: Mark-Up Language for Transportation Information

Multi AV: Nissan-Sumitomo navigation system; uses microwave beacon receivers for the transmission of static information. Applies RACS communications technology and protocols.

NAAQS: National Ambient Air Quality Standards

NADICS: English National Driver Information and Control Systems

NADS: NHTSA National Advanced Driving Simulator

NAE: National Academy of Engineering

NAFTA: North American Free Trade Agreement

NAHSC: National Automated Highway Systems Consortium. Address - 3001 West Big Beaver Rd. Suite 500, Troy, Michigan 48084. Phone - (810) 816-3400.

NAP: Network Access Point; NAPs act as major hubs for internet traffic, routing data across the nation and the world.

NARC: National Association of Regional Councils

NAS: 1- National Academy of Sciences
2- Network Attached Storage

Navigable Database: A digital streetmap database containing sufficient detail and scope to support driver and vehicle guidance applications (e.g., the generation by computer of a high-quality driving route between two stated addresses).

NAVIGATOR: Georgia's Intelligent Transportation System. Address - 935 East Confederate Ave. Wayne Shackelford Bldg, Atlanta Georgia 30316 Phone - (404) 624-1300. www.georgia-navigator.com.

Navigator: The first commercially available self-contained map-matching navigation system. Introduced by Etak in 1985 in California. Used dead-reckoning in combination with stored digital maps and map-matching software to track vehicle location. See TravelPilot.

NavMate: A prototype autonomous, in-vehicle route guidance system developed by Zexel Corporation. Includes route determination, vehicle positioning and route guidance.

Navstar: See Global Positioning System

NCHRP: National Cooperative Highway Research Program

NCHRP G3-51: Committee-Communications Mediums for Signal, IVHS, and Freeway Surveillance Systems, Ray Derr, NCHRP Staff Consultant-Kimley-Horn, PI-Bruce Abernethy, P.E., Ph.D.Committee-C.Perry, CALTRANS; R.Gottschalk,Fl DOT; T.Jeffreys, Behe&Umholtz; A.Kosik, Texas DOT; J.Landsman, FHWA; E.Lopez, Consultant; B.Smith, VATRC; J.Marsh, ITSA; M.Zezeski, Maryland State Hwy Admin.

NCIC: National Crime Investigation Center

NCSL: National Conference of State Legislatures

NEC: National Electrical Code

NEMA: National Electronic Manufacturers' Association

NEXTEA: 1997 National Economic Crossroads Transportation Efficiency Act; increased transportation spending by $17 billion from the $157 billion authorized in the 1991 ISTEA. NEXTEA built on the original ISTEA legislation, making only marginal changes where needed.

NFPA: National Environment Policy Act of 1969

NHS: National Highway Systems; a federal program which funds transportation projects.

NHTSA: National Highway Traffic Safety Administration (U.S. DOT)

NII: National Information Infrastructure

NIMC: National Incident Management Coalition; created to serve as a focus for consensus building and for promotion and wider implementation of incident management programs. Sponsors include AASHTO, American Trucking Association and FHWA.

NMCS2: England's National Motorway Communication System

NMS: Network Management System

NMVITIS: National Motor Vehicle Title Information System

NNCC: English National Network Control Center on Glasgow

Nox: Oxides of Nitrogen

NPA: Japanese National Police Agency

NRC: National Research Council

NRTL: Nationally Recognized Testing Laboratory; certified by OSHA in accordance with federal regulations.

NTCIP: National Transportation Communications for ITS Protocol. National Transportation Control/ITS Communications Protocol. 1-NTCIP Committee for the protocol standard development. 2-NTCIP Steering Group. Primary mission is to develop a protocol standards for traffic control devices for ITS applications. http://www.ntcip.org

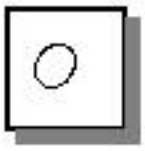
NTCIP Steering Group: Group created to develop a family of standards that provides both the rules for communicating (called protocols) and the vocabulary (called objects) necessary to allow electronic traffic control equipment from different manufacturers to operate with each other as a system.

NTIA: National Telecommunications and Information Administration of the United States

NTS: National Transportation System

Nulti AV: Nissan-Sumitomo navigation system; uses microwave beacon receivers for the transmission of static information; applies RACS communications technology and protocols.

NVF: New Vehicle Fleet; all of the new vehicles sold in the U.S. during a particular year.



O-Bahn System: German AHS System, wherein buses' steering control is taken over by an automated system in narrow tunnels.

O&M: Operation and Maintenance

O3: Ozone

OB: Onboard

OBC: On-Board Computer

OCR: Optical Character Recognition

ODISSEY: A flexible freeway management and control system from Spain; also operating in China.

OEM: Original Equipment Manufacturer; in the ITS context, a vehicle manufacturer, etc.

OER: Octet Encoding Rules based on byte-level encoding.

OIC: Operation Information Center

Oklahoma Turnpike System: ETTM system installed in January 1991, which uses dedicated lanes and covers all vehicle classifications; allows users to continue at highway speeds with a 25% reduction in traffic accidents; uses Pikepass to charge for miles driven.

OLTP: Online Transaction Processing

OMB: Office of Management and Budget

OnStar: The OnStar system, a GM subsidiary, uses the satellite-based GPS and embedded cellular connection to offer two levels of telematics service and new services for hands-free cellular phone calls and internet-based information. The basic level of service, called Safety and Security Services, includes automatic notification of air bag deployment, emergency services, stolen vehicle tracking, remote diagnostics, roadside assistance with location, remote door unlock, OnStar Mednet - personal or medical information that can be stored and provided to a hospital emergency room, and AccidentAssist - step-by-step guidance after a minor traffic incident. Premium Services adds routing and location assistance, information/convenience services, and concierge services. Concierge services include vacation planning, business assistance, and getting ticket to events.

OOCEA: Orlando-Orange County Expressway Authority

Open Systems Interconnection: A standard communications architecture, adopted by the International Standards Organization in 1983.

ORNL: Oak Ridge National Laboratory

OS: Ordnance Survey; a British mapping agency, equivalent to the USGS in the U.S.

OSI: Open Systems Interconnection

OS/OW: Oversize/Overweight

OST: Office of the Secretary of Transportation for the U.S. Department of Transportation.

OTIS: On-Line Travel Information System; a microcomputer-based system which helps agents to respond to telephoned requests for travel information. Used by the New York City Transit Authority. Also displays a map of the area around the caller's origin or destination, faxes or mails itineraries, displays a description of the bus stop or train station and reports service delays.

P/PP: Public/Private Partnerships

PAMELA: Pricing And Monitoring Electronically of Automobiles; a DRIVE project which investigates two-way microwave communications between vehicles and roadside equipment for automatic toll collection using smart cards.

PASS: Oregon Port-of-Entry Advanced Sorting System

PATH: Partners for Advanced Transit and Highway; a CalTrans, Institute of Transportation Studies of the Univ. Of California at Berkeley Program on Advanced Technology for the Highway including ATMS, ATIS, AVCS, APTS, CVO etc.

PAYD: Pay As You Drive; company formed to promote private introduction and operation of electronic toll collection (ETC) using prepaid tags for Automatic Vehicle Identification (AVI); under license from the Hong Kong Government.

PC: Personal Computer

PCB: U.S. DOT Professional Capacity Program (PCB) courses address ITS standards in the context of various applications. Available courses covering ITS standards can be found in the PCB course catalog available on-line at: http://www.its.dot.gov/pcb/98catalg.htm

PCD: Personal Communication Device; a small portable device used for communications, such as pagers and cellular phones.

PCS: Personal Communications Service; a next generation mobile telephone service which associates an individual with a universal telephone number.

PER: Packed Encoding Rules

PGI: Parking Guidance and Information

PI: Passenger Information

PIARC: Permanent International Association of Road Congresses; the oldest international association concerned with roads. Objective is to foster progress in the construction, maintenance, operation and economic development of roads. Organizes a World Road Congress every four years. Has an ITS working group interested in ATMS, ATIS and AVCS.

PICS: Protocol Implementation Conformance Statement

Pikepass: Electronic toll collection (ETC) card used in the Oklahoma Turnpike toll collection system.

PIN: Personal Identification Number

Platooning: Linking cars closely together in small groups for high-speed, high-density freeway travel under control of an Automatic Vehicle Control System (AVCS).

PLCs: Programmable Logical Controllers

PM 10: Small Particulate Matter less than 10 micros in size

PMPP: Point-to-Multi-Point Protocol

PMS: Pavement Management System

POE: Port-of-Entry

POLIS: Promoting Operational Links with Integrated Services; an organization of European cities with an agreement to work together in developing RTI technologies to help with urban transport problems. Now organized under DRIVE II as an urban complement to CORRIDORS and administered by the cities involved. Divided into five projects: GAUDI, QUARTET, SCOPE, LLAMD and CITIES.

PPP: Point-to-Point Protocol

PPS: Precise Positioning Service; military version of Global Positioning System (GPS)

Predictive Data Fusion: Technique used in ATMS for combining traffic data from multiple sources into a single model of traffic behavior.

PRIMAVERA: Priority Management for Vehicle Efficiency, Environment and Road Safety on Arterials; a DRIVE II project. Objective is to identify and implement strategies for public transport priority using adaptive urban traffic control techniques. Participants include Peak Traffic Limited, Institute of Transportation Studies at Leeds University, the Cities of Leeds and Turin, and Mizar Ltd.

PRISM: Performance and Registration Information Systems Management

PROMETHEUS: Program for European Traffic with Highest Efficiency and Unprecedented Safety. An 8-year project (1986-1994) emphasizing new vehicle technologies. It was a cooperative effort by the European automotive industry that focused on advancing such ATIS and AVCS technologies as onboard navigation systems and collision warning systems. PROMETHEUS was part of the European Research Coordination Agency (EUREKA).

PROMISE: PROmetheus Mobile and portable Information Systems in Europe; a DRIVE II project in Sweden. Objective is to develop a multimodal traveler information system incorporating open architecture and mobile and portable terminals. Interested in standardization between DRIVE and PROMETHEUS.

PROMPT: DRIVE II project in Sweden. Objective is to develop and evaluate methods of giving active priority to buses, trams and emergency vehicles in urban traffic control systems.

PTMS: Public Transportation Management System

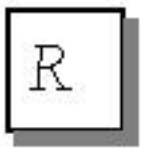
PVEA: Petroleum Violation Escrow Account; a fund administered jointly by the State of California and the U.S. Department of Energy into which companies pay compensation for environmental pollution.

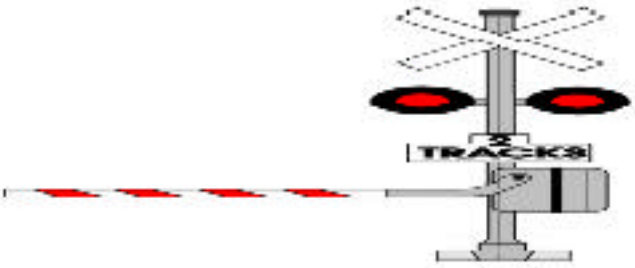
PVS: Personal Vehicle System; a Japanese program coordinated by the Ministry of International Trade and Industry (MITI).

QASPR: Qualcomm Automatic Satellite Position Reporting; uses existing civilian communications satellites for vehicle tracking. Introduced by Qualcomm in February 1990.

Quad Sheets: A series of maps produced by the U.S. Geological Survey (USGS) at scales of 1:24,000 and 1:62,000. Available to the general public. Covers the entire U.S.

QUARTET: Quadrilateral Advanced Research on Telematics for Environment and Transport. One of five POLIS/DRIVE II projects. Involves Stuttgart, Germany; Birmingham, England; Torino, Italy; and Athens, Greece. Focused on travel and traffic information and data exchange.





R&D: Research and Development

RACS: Road Automobile Communication System; an experimental Japanese ATMS effort. Now integrated with AMTICS and VICS under the Ministry of Posts and Telecommunications.

RAID: Redundant Array of Independent Disks

Ramp Metering: Traffic-responsive regulation of vehicle entry to a freeway, typically via sensor-controlled freeway ramp stoplights.

RCE: IVHS Research Centers of Excellence established at Texas A&M University, University of Michigan, and Virginia Polytechnic Institute.

RDP: Ramp Data Processors

RDS: Radio data system; a use of FM sideband radio for wide area transmission of digital information, program information, radio control, etc. Standardized in 1984, by European Broadcasting Union (CEBU). One application is the Traffic Message Channel (TMC).

RDS ALERT: DRIVE I project which developed the European pre-standard for the RDS-TMS. DRIVE II analog is ATY-ALERT.

RDS-TMC: Radio Data System-Traffic Message Channel. See RDS.

RDSS: Radio determination satellite services.

RDV: Remote Driven Vehicle. Mn/DOT has been working on an unmanned tele-operated shadow vehicle.

RESPONSE™: Real-time Emergency Signal Pre-emption Operating in a Network Signal Environment installed in Ottawa-Carleton Regional Municipality.

RF: Radio frequency

RFID: Radio Frequency Identification; a type of electronic identification that uses radio frequency signals to read on-vehicle tags for Automatic Vehicle Identification and Classification (AVI and AVC).

RFP: Request for Proposals

RGS: Electronic route guidance system

Rijkwaterstaat: Netherlands (Dutch) Ministry of Transport

RIMES: Road Information and Management Eurosystem. DRIVE I project aimed at studying and developing standards for construction of road databases for the use of administrations managing a road network.

RMS: Ramp Metering System

RNS: Radio Navigation System

Road KIT: Mobile satellite communications and positioning service designed and developed by Ontario private sector participants with 50% research and development funding from the Ontario government. Allows vehicle fleet dispatch centers to automatically track

the position of each vehicle in a fleet, acquire data and send/receive messages to/from individual vehicles. A result of the WAVM project.

ROADACOM: En Route Applied Data Communications; EUREKA project to create an integrated system for on-board electronic data collection and processing, and bi-directional exchange of data between commercial vehicles and their home bases.

Roadstar I: Guidestar feasibility test of a driverless tractor trailer

ROG: Reactive Organic

ROI: Return On Investment

ROM: Read-Only Memory

Route Builder: A service implemented in 1990 by Guidestar in Minnesota which enables truckers to use phone and fax machines to obtain permits and computer-developed routings appropriate for their trucks' size, weight, etc., without stopping at a center.

Route Guidance: See ALI-SCOUT.

Route Guidance Database: The detailed information that is required to enable a computer to generate a high quality driving route between two locations. The information includes such items as road geometry, street names, addresses, speed limits, turn restrictions, one-way restrictions, road levels and roadway connections.

RPTA: Regional Public Transportation Authority

RSPA: Research and Special Programs Administration

RTAP: Regional Transportation Assistance Program

RTCCs: UK Highway Agency's Regional Traffic Control Centers

RTI: Road Transport Informatics (what the Europeans call IVHS)

RTMS:
1- Road Traffic Microwave Sensor; Canadian pole-mounted traffic sensor with multi-zone and multi-target capability for all-weather operation at intersections and for freeway surveillance. Funded by Ontario Ministry of Transportation through EIS, a Canadian company.
2- Radar Traffic Monitoring System

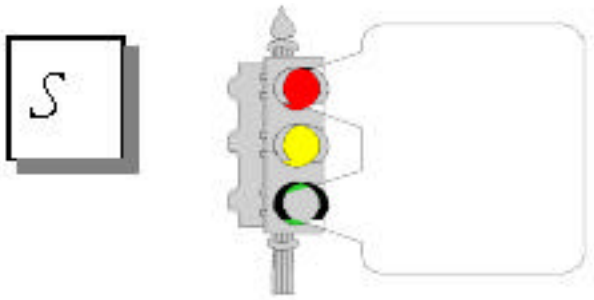
RTP: Regional Transportation Plan

RTTRACS: Real Time Traffic-Adaptive Control System

RTTASC: Real-Time Traffic Adaptive Signal Control

RWI: Radio Wire Interface

RWIS: Road Weather Information System



SAE: Society of Automotive Engineers

SAFE: San Diego Service Authority for Freeway Emergencies; operates a system of solar powered cellular phones installed along San Diego freeways to facilitate incident reporting.

SAFER: Safety and Fitness Electronic Records

SafeStat: Safety Status Measurement System

SAGACE: An in-vehicle system providing traffic related information such as parking availability, along with on-board vehicle diagnostics. Parking information is relayed by RDS. Developed by SAGEM for CARMINAT.

SAIC: Science Applications International Corporation, San Diego, California

SAN: Storage-Area Network

SAS: Subscriber Authorization System

SAW: Surface Acoustic Wave

SC&C: Surveillance and Control System; a traffic management system proposed in the Tampa, Florida Interstate Master Plan.

SCA:
1- Subsidiary Carrier Authorization; an additional FM signal(s) included in regular commercial broadcasts for transmission of data. May be used for some ITS applications. Also called FM subcarrier and Multiplex in Europe and Japan.
2- Subsidiary Communications Allocation. Obsolete term as of 1984.
3- SubChannel Area, also obsolete.

SCANDI: Surveillance, Control and Driver Information System; a Michigan DOT program started in 1978 which now covers parts of four Detroit freeways. Surveillance from a traffic operations center is accomplished via video cameras and traffic detector loops. Variable message signs (VMS) provide drivers with delay/backup warnings, locations of accidents, suggested bypasses and alternate routes.

SCATS: Sydney Coordinated Adaptive Traffic System; Australian computer-based real-time traffic signal control system; Australia's ATMS. Over 1,000 intersections are equipped with SCATS for automated traffic control and 200 beacons are communicating with

up to 5,000 vehicles for total ATMS and ATIS integration. The project uses Siemens AliScout technology, which employs infrared beacons for route guidance to provide infrastructure-based real-time route information. Centrally controlled guidance system uses Nav/Tech databases with beacons placed in densely traveled areas to micro-manage traffic flow.

SCC: Standards Coordinating Committee

SCH: Scheduling/Runcutting

SCOOT: British Split Cycle and Offset Optimization Technique; traffic signal control system which allows dynamic signal response to traffic flow. Presently in use in several countries.

SCOPE: Applications of ATT in Southampton, Cologne and Pineus. One of five POLIS projects of DRIVE II. Involves Southampton, UK; Cologne, Germany; and Piraeus, Greece. Focused on Urban Traffic Control.

SCS: Surveillance and Control System; a software package which collects traffic information and manages traffic flow on the Howard Franklin Bridge in Tampa, Florida.

SDOs: Standards Development Organizations

SDTS: Spatial Data Transfer Standard; U.S. federal database information interchange standard for geographic databases. Provides specifications for digital spatial data transfer, data transfer encoding and definition of spatial features and attributes. Divided into subschemas called profiles.

SEB: State Entry Beacon was designed for HELP located at or near state lines to provide a means of electronically determining when and where a vehicle has crossed a state border.

SECFO: Systems Engineering and Consensus Formation Office; part of DRIVE I. Coordinated issues among the DRIVE projects. Succeeded by CORD in DRIVE II

SHRP: Strategic Highway Research Program; a $35 million research program on highway materials, pavement performance, structures and operations funded by FHWA and AASHTO, and administered by TRB.

SIBs: State Infrastructure Banks

SIP: State Implementation Plan for air quality management. A statewide air pollution abatement plan required by the CAAA.

SMART: Suburban Mobility Authority for Regional Transportation in Detroit, Michigan

Smart Bus: Transit vehicle equipped with ITS applications; a software enhanced cable.

Smart Commuter: Demonstration project in Houston. Testing HOV and ATIS, especially ride-sharing along the I-45 North and I-10 West corridors. Coordinated with Houston Intelligent System (HITS). Sponsored by the U.S. Department of Transportation.

Smart Corridor: Santa Monica Smart Streets Corridor Demonstration Project.

Smart Vehicle: FTA-funded APTS projects occurring in Ann Arbor, Michigan; Chicago, Illinois; Portland, Oregon; Denver, Colorado; and Baltimore, Maryland. Focus is on applying ITS technologies directly to transit vehicles. Technologies being tested include AVL, automatic demand-responsive dispatching, HOV verification and automatic guidance equipment.

SmarTraveler: FTA funded APTS projects occurring in Bellevue, CA, Houston, TX, and St. Paul, MN. Focus is on providing information more conveniently to transit users. Technology being tested includes Smart Cards, ATIS and mobile communications for HOV and ride-sharing applications; part of CAPTS. (617) 372-1234.

SMIS: Surveillance and Motorist Information System on I-4, Florida DOT WPI No. 5140023

SMR: Special Mobile Radio; FCC licensed, private-owned 900 MHz shared repeater systems, not cellular.

SMS: 1- Safety Management System
2- Subscriber Management System

SNMP: Simple Network Management Protocol

SOAP: Simple Object Access Protocol

SOCRATES: System Of Cellular Radio for Traffic Efficiency and Safety. DRIVE project which is developing the techniques for using digital cellular telephony as the basic communications medium for transmitting traffic information within Europe's Integrated Road Transport Environment (IRTE). Includes the West Sweden Field Trial in 1991. Will supply CARIN and TravelPilot systems with traffic information. Continued DRIVE II

SOCRATES Kernel: Name for DRIVE I SOCRATES consortium in FRIVE II. Has overall responsibility for coordinating SOCRATES developments in pilot projects.

SOFIA: State of Florida Internet Access

SONET: Synchronous Optical Network

SOV: Single-Occupant Vehicle

SP: Spatial Representation

SPAM: Unsolicited commercial e-mail

SPR: State Planning and Research

Spread Spectrum: Specific type of radio transmitter modulation. Signal is spread over a large part of the radio spectrum rather than using one discrete frequency. A coded modulation system and demodulation system spreads and recollects the signal without loss of intelligence. Claim is reduced interference and a many-user environment. Developed by the military. May or may not require FCC licensing.

SPS: Standard Positioning Service. Civilian version of the Global Positioning System (GPS).

SSR: 1- Spread-Spectrum radio
2- Standard Speed Rail

SSTP: Streamlined Surface Transportation Program that allows state and local governments the flexibility to respond to their specific surface transportation needs.

SSVS: Super Smart Vehicle Systems

State DOT: State Department of Transportation

STEP: Streamlined Transportation Efficiency Program for the 21st century-Federal transportation funds.

STEP 21: Streamlined (Surface) Transportation Efficiency Program for the 21st Century. STEP 21 wants to maintain the current level of federal involvement in transportation planning, but also wants to make sure that each state receives back as formula funds at least 95 cents for every gas tax revenue it contributes to the federal government. STEP 21 also wants to greatly reduce the categories for grants to increase states' flexibility in spending. Senator Bob Graham, D-Fla., is the Senate's chief cosponsor. Florida got back 77 cents on the dollar; Massachusetts got back $2.49; Rhode Island $2.06; Connecticut $1.68; and New York $1.07.

STIC: Subcarrier Traffic Information Channel

STIP: State Transportation Improvement Program

STMF: Simple Transportation Management Framework

STMP: Simple Transportation Management Protocol

STO: State Technology Office

STOP: Speeding Truckers Offensive Program

STP: Surface Transportation Program; a federal program which funds transportation projects.

STRAHNET: Strategic Highway Network

STTF: Florida State Transportation Trust Fund

SunPass: Florida $38.6 million electronic toll collection system equipped with Amtech's read-write 91.5 MHz Intellitag product and 327000 Type II and Type III (audio / visual) SunPass vehicle tags. The new system will be integrated into existing coin and manual collection equipment on 347 lanes. SunPass is expected to begin operation in south Florida in late 1997, with statewide completion set for the year 2000. (850) 488-5687 (Suncom 278-5687)

Tabasco: Telematic Applications in Bavaria, Scotland and Others.

TAC: 1-Transportation Association of Canada;
2-Traffic Advisory Center;
3-Transportation Advisory Center. Used in DIRECT.

TARDIS: Traffic and Roads-DRIVE Integrated Systems; a DRIVE project to establish common functional specifications for systems that are not wholly vehicle-based and that depend on communications between vehicles and roadside infrastructures. Includes investigating the possibility of combining communications for route guidance with that for automatic debiting. Also see IRTE.

TBTA: Triborough Bridge and Tunnel Authority (New York)

TCC: Traffic Control Center

TCIP: Transit Communications Interface Profiles of Advanced Public Transportation Systems (APTS); a common set of data elements and message sets that would be used to facilitate data exchange between and among applications. See www.tcip.com.

TCP/IP: Transmission Control Protocol/Internet Protocol

TCM: Transportation Control Measure

TCSU: London's Traffic Control System Unit

TDM:
1- Transportation Demand Management. An attempt to reduce demand for transportation through various means, such as encouraging the use of high occupancy vehicles, alternative work hours, telecommuting, and improvement of jobs/housing balance.
2- A modulation technique used in microwave systems that facilitates transporting many signals over one wide band base channel.

TDMA: "slotted Aloha TDMA" Time Division Multiple Access devised as a protocol for handling multiple communications between the islands of Hawaii and then applied in the military to provide hard to jam, secure, and multi-channel tactical communications for soldiers in the field. Hughes developed the system for ITS applications and it has become a standard for federally supported truck clearance projects.

TEA: Transportation Enhancement Activity, government purchases of scenic historic sites, takes down billboards or preserves railway corridors.

TEA2: Transportation Empowerment Act. The third group of ISTEA 2 would gradually lower the portion of the gas tax used for highways from 14 cents a gallon to 2 cents a gallon to pay for maintenance of interstate and federal highways. State would have the option of replacing the lost 12 cents-a-gallon federal tax with state gas taxes. Sen. Connie Mack is the bill's Senate sponsor, Graham is one of its cosponsors.

TEA-21: The Transportation Equity Act for the 21st Century. (Refer to www.dot.state.fl.us)

Team Florida: Association of Turnpike, Miami Dade Expressway, Tampa Hillsborough, and consultants

TELEATLAS: Dutch/Belgian EUREKA project concerned with the development and electronic publishing of digital map databases including geographic and economic, as well as traffic related information. Coordinated with DRIVE and PROMETHEUS.

TeleMAP: Traveler information system providing information via telephone and fax. Offered by Wayfinder Systems in cooperation with the American Auto Association (AAA).

Telematics: Telematics services for mobile applications include automatic collision notification, location-based emergency response and roadside assistance, stolen vehicle tracking, navigation, and other location-based information services.

Teletrac: AVL system for emergency, corporate vehicle, and stolen vehicle location. Communications is limited to location and status information. Being tested by Los Angeles Rapid Transit. See DART.

TFTP: Trivial File Transfer Protocol

TIA: Telecommunications Industries Association

TICS: Transport Information and Control Systems

TIGER (files): Topologically Integrated Geographic Encoding & Referencing.; computer-based map files built by the Census Bureau to help support the 1990 census process. Contains DIME information and information for new suburbs and small cities as of 1987.

TIME: Traffic Incident Management Enhancement Program

TIP: Transportation Improvement Program (Plan); a metropolitan planning organization (MPO) program for transportation projects, developed jointly with the state for a 3-7 year period.

TiRN: Florida DOT Traveler Information Radio Network

TISC: TravTek Information Service Center

TM: Traffic Management

TMA: 1-Transportation Management Area;
2-Transportation Management Association

TMC:	1-Traffic Message Channel (radio). See RDS; 2-Transportation (Traffic) Management Center.
TMDD:	Traffic Management Data Dictionary
TMICS:	Traffic Management and Information Centers
TMOC:	Traffic Management Operations Center
TMS:	Traffic Management System, Adelaide, Australia
TOC:	Traffic Operations Center; used in Pathfinder to collect, analyze and disseminate dynamic traffic information for rapid incident detection and response. Other TOCs have been implemented in San Diego, Sacramento, San Bernadino, Orange County, and San Francisco, California.
TOD:	Time-of-Day
Tolltag:	Electronic toll collection (ETC) device used on the Dallas North Tollway
TOP:	Transportation Outreach Program
TQM:	Total Quality Management
TRANSCOM:	Transportation Operations Coordinating Committee; an ETTM project for managing a heavily traveled corridor between northern New Jersey and New York City. A consortium of 15 transportation and public safety agencies in the New York, New Jersey, and Connecticut area.
TRANSIMS:	Transportation Analysis and Simulation
Translink:	Debit card that can be used on bus and rail in San Francisco's Bay Area Rapid Transit System (BART). Will be used for parking payment and fare payment on other modes, such as ferries.
TRANSMIT:	TRANSCOM's System for Monitoring Incidents and Traffic
Transport Canada:	Canadian Federal Ministry of Transportation
TRANSYT-7F:	Traffic Network Study Tool, version 7F, Federal
TRARDIS:	Traffic And Roads-DRIVE Integrated Systems
TRASSIS:	Traffic Situation Actuated Signalplan Selection
TravelAid:	Traffic surveillance and roadway condition warning system for the Snoqualmie Pass in Washington State. Includes variable message signs (VMS) and in-vehicle displays. Focus is on safety in rural corridors, rather than congestion reduction. Participants include Washington DOT, Farradyne Systems, Inc., Westinghouse, FHWA and NHTSA. Will involve up to 200 vehicles. Est. cost $4.5 million.

TravelMatch Express: Prototype self-service traveler information terminal. Developed by the American Automobile Association (AAA). Includes information on hotels, restaurants and tourist attractions. Provides point-to-point driving directions using technology from Navigations Technologies. Exists for telephone and fax as TeleMap.

TravelPilot: An enhanced version of the Etak Navigator marketed by Bosch using CD-ROM for map storage. Used in PANDORA and Pathfinder. See SOCRATE.

TravTek: Travel Technology sponsored by the City of Orlando, FDOT, FHWA, General Motors /Hughes, and the American Automobile Association. IVHS pilot project in Orlando, FL

TrayLink: A Guidestar project; interrelated AVL and ATIS system to be used in the Twin Cities in Minnesota. Will allow pre-trip planning from home or office. Audiotex and videotex systems using real-time data will be tested.

TRB: Transportation Research Board; part of the National Academy of Science, National Research Council. Serves to stimulate, correlate, and make known the findings of transportation research. See NCHRP.

TRC: Transportation Research Center (University of Florida)

TRI: Transportation Research Institute. (Michigan State University)

TRIPS: Transportation Resources Processing System; an audiotex/videotex-based ATIS in suburban California. Gives information on traffic delays and alternate routes, as well as public transportation. Being tested in California's Smart Traveler Program. Sponsored by Caltrans.

TRRL: Transport and Road Research Laboratory. A UK organization for RTI research.

TRSP: Traffic responsive

TS1: NEMA Traffic Standards Number 1, dated 1989

TSIS: Traffic Software Integrated Systems

TSM: Transportation Systems Management

TSWS: Test Site West Sweden; operated by the Swedish National Road Administration in Gothenberg, Sweden and its environs. Its mission is to create a system environment for testing RTI in a realistic traffic context. Testing includes in-vehicle signing systems and automatic debiting. Used as primary test bed for SOCRATES.

TURNBACK: Continue a portion of the existing federal gas tax to maintain the 40-year federal investment in the interstate highway system. The remainder would be eliminated and states given the option of passing a full or partial replacement state gas tax. The plan is also known as The Transportation Empowerment Act.

TVC: Traffic Vision Center; the integrated traffic management and traveler information system for the Tampa Bay, Florida metropolitan area.

TVMS: Toll Verification Management System

UCR:	Unified Carrier Register
UDDI:	Universal Description, Discovery, and Integration
UDP/IP:	User Datagram Protocol/Internet Protocol
U.S. DOT:	United States Department of Transportation
USB:	Universal Serial Bus; the bus which could be called a special purpose local area network is 12 megabits per second and automatically detects, configures, supports 127 peripherals like printer, scanners telephony, and audio devices
UF:	University of Florida, Gainesville, Florida
UMTA:	Urban Mass Transportation Administration, now FTA, (U.S. DOT)
UMTRI:	University of Michigan Transportation Research Institute. Conducts research on motor-vehicle injury and other transportation-related topics.
UPWP:	United Planning Work Program
U.S. DOD:	United States Department of Defense
U.S. EPA:	United States Environment Protection Agency
USCAR:	United States Council for Automotive Research; umbrella consortium formed by Chrysler, Ford, and General Motors to oversee the activities of existing research consortiums.
User Services:	Services available to users (drivers) of an ITS equipped roadway, as set forth by ITS America. The 29 services are arranged in 7 groups: See User Services 1-7.
User Services 1:	Travel and Transportation Management: En-Route Driver Information; Route Guidance; Traveler Services Information; Traffic Control; Incident Management; and Emissions Testing and Mitigation.
User Services 2:	Travel Demand Management: Pre-Trip Travel Information; Ride Matching and Reservation; Demand Management; and Operations.
User Services 3:	Public Transportation Operations: Public Transportation Management; En-Route Transit Information; Personalized Public Transit; and Public Travel Security.
User Services 4:	Electronic Payment: Electronic Payment Services.

User Services 5: Commercial Vehicle Operations: Commercial Vehicle Electronic Clearance; Automated Roadside Safety Inspection; On-Board Safety Monitoring; Commercial Vehicle Administrative Processes; Hazardous Materials Incident Response; and Commercial Fleet Management.

User Services 6: Emergency Management: Emergency Notification and Personal Security; and Emergency Vehicle Management.

User Services 7: Advanced Vehicle Control and Safety Systems: Longitudinal Collision Avoidance; Lateral Collision Avoidance; Intersection Collision Avoidance; Vision Enhancement for Crash Avoidance; Safety Readiness; Pre-Crash Restraint Deployment; and Automated Highway Systems.

USGS: United States Geological Survey

UTCS: Urban Traffic Control System; a software package used for controlling the timing of traffic signals in an urban road network; developed by the Federal Highway Administration and used by most local traffic engineering departments in the United States.

UTHP: Unified Transportation Infrastructure Investment Program

UTMS: Universal Traffic Management System

UTRC: University Transportation Research Center

V/C: Volume/Capacity Ratio

VDM: Vehicle Detectors, Mainline

VDS: Vehicle Detection Systems

Vehicle to Roadside Communications: Used in ETTM, AVI, CVO and ATMS. Technologies include transponders, readers, cellular telephone and beacons, etc.

VES: Violation Enforcement System of FTC, ETTM as applied in SunPass and Epass. It must be able to capture images of vehicles traveling at high speeds at toll plazas. It must also be able to verify that vehicles being photographed haven't switched lanes.

VIC: Vehicle Inter-communications; DRIVE project. Objective is to specify protocols for real-time vehicle-to-vehicle communications, with possible AVCS applications.

VICS: Vehicle information and Communication System

VIDS: Video Imaging Detection System

VIGIL: An automatic incident and congestion detection system that uses video monitoring on selected sections of roadway to project traffic conditions over the entire roadway. Developed at the University of Valencia. To be tested as part of INVAID II in DRIVE II.

VITA: Vehicle Identification and Transactions Aid; European specifications for electronic toll collection (ETC).

VME: Vehicle Motion Environment Measure System

VMS: Variable Message Sign; used in ATMS and ATIS. European choice over U.S. selection of term (CMS, or changeable message sign). See COMPASS, GEMINI, INFORM, MAGIC, CANDI, TravelAid. Highway signs which can change the message they display in an infinite number of ways. May include graphics.

VMT: Vehicle Miles Traveled

VNTSC: Volpe National Transportation System Center

VOC: Volatile Organic Compound

Volpe Center: The AHS home page is at http://www.volpe.dot.gov/ahs. (617) 494-2450

VORAD: Vehicle On-Board Radar; experimental low-powered radar unit to support collision avoidance. May be connected to a vehicle's cruise control as part of a platooning system or to maintain a safe driving interval when following a slower vehicle. Greyhound has purchased 2,500 units to equip its entire intercity bus fleet, the first large-scale commercialization of AVCS. See AVCS.

VPAS: Vehicle Proximity Alerting System; a potential communication system between trains and special classes of vehicles (e.g., school buses, large trucks, hazardous materials haulers, and emergency vehicles)

VPN: Virtual Private Network; similar to wide area networks (WAN) or a securely encrypted tunnel, but the key feature of VPNs is that they are able to use public networks like the internet rather than relay on expensive, private leased lines.

VRC: Vehicle-to-Roadside Communication

VRTC: NHTSA Vehicle Research and Test Center

VSAT: Very Small Aperture Terminal satellite

VSSs: Variable Speed Signs

VTDS: Video Traffic Detection System

WADGPS: Wide Area Differential GPS.

WADS: Wide Area Detection Systems for freeway incident detection

WAN: Wide Area Network; a method of connecting computers together spacially located over a wide geographic area using wide band media such as fiber optic cable.

WAP: Wireless Application Protocol

WARC: World Administrative Radio Conference

WAVM: Wide Area Vehicle Monitoring; an application of satellite communications and navigation technologies for automatic vehicle location (AVL), automatic vehicle identifications (AVI) and two-way communications. Originated by Ontario Ministry of Transportation and produced in cooperation with the private sector. Introduced commercially as Road KIT.

Way-to-Go: A hand-held ATIS device

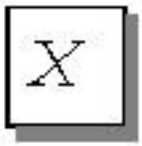
WCC: Westchester Commuter Central; a traffic management center operated by Metro Traffic Control in Westchester County, New York.

WGS-84: World Geodetic System 1984; standard, widely accepted scheme for laying out longitude and latitude lines on the globe that attempts to compensate for the earth's irregularities of shape. Used by GPS systems.

WIM: Weigh-in-motion

WSDL: Web Services Description Language

WTI: Western Transportation Institute; established in 1994 by the Montana and California DOT in cooperation with Montana State University-Bozeman Campus. WTI began a two-year, US$1.25 million study into the potential of ITS technology in the Greater Yellowstone rural ITS Corridor by applying ATIS and mayday systems.



XML: Extensible Markup Language

ZELT: Zone Experiment et Laboratoire de Trafic de Toulouse.