

ITS Acronyms

1 GC: First generation control, UTCS.

1.5 GC: First and a half generation control, UTCS.



AA: Alternatives Analysis

AA: 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: Automatic Clearance Sensing used in CVO to help large vehicles negotiate low/limited-clearance objects such as bridges and viaducts.

ACS: 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 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, 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.

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

ALERT: Advanced Law Enforcement Response Technology by FHWA, the Texas Transportation Institute (TTI) and 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 on-board display in appropriately equipped vehicles. Developed in Germany by Bosch/Blaupunkt and Siemens. Earlier version EURO-SCOUT.

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: American Petroleum Institute.

API: Automatic Personal identification.

API: Application Program Interface

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

ARTBA: American Road and Transportation Builders

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

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 (AVASD) department of Caltrans

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

ASP: Agency Strategic Plan.

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: Automated (electronic) Toll Collection.

ATC: Advanced Transportation Controller

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.

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.

ATSAC: Automated traffic Surveillance and Control System (Los Angeles).

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.

ATSAC: Los Angeles Automated Traffic Surveillance and Control Operations Center. (<http://www.rgb.com>)

ATSSA: American Traffic Safety Services Association, Inc. is a national trade association representing traffic control and safety industry. 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>

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. 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 speed interstate travel.

AVCS: Automatic Vehicle Control Systems.

AVCS: Advanced Vehicle Control Systems. 1-Vehicle and/or roadway-based electromechanical and communications devices that enhanced 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 system are used in electronic toll collection. Typically consists of a vehicle-mounted transponder, a roadside reader unit with antenna and a transmission system to data analysis and storage center. A system which combines an on-board tag or transponder with roadside receiver for the automated identification of vehicles. Used for electronic toll collection (ETC), stolen vehicle recovery, etc.

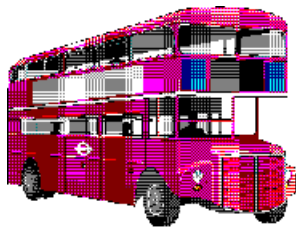
AVID: Advanced Vehicle Development. Research area of Advanced Vehicle & Automated Systems Development (AVASD) department of Caltrans.

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.

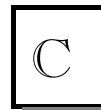
BBS: Bulletin Board System. A database accessible to multiple users via computer, modem and phone lines.

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

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

BIS: Bus Arrival and Information System.

BMS: Bridge Management System.



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 Polytechnic 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).

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. 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's License.

CEC: Commission of the European Community.

CEI: Commission Electrotechnique Intenationale. See International Electrotechnical Commission

CEN: Committee European Normalization. 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: Comite' European De Normalisation Electrotechnique. 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 include 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

CO₂: Carbon Dioxide

COBS: England's Control Office Vase System.

COM-TV: Commuter-TV system.

COMPASS: Located in Ontario on Highway 401 use 100% fiber optic communication network and multi-color clustered LED changeable message signs. The system includes a vehicle detection system, 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).

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

Corridors: In a transportation context, roadways identified as highly congested, and, therefore, targeted for

federal research and funding.

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.

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-Roadways identified as highly congested and therefore a focus of federal research and funding. See Corridors programs, DATIS, INFORM, ISTEA, Smart Corridor, TRANSCOM, etc.

CORSIM: Corridor Simulation model.

COTR: Contracting Officer's Technical Representative.

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 1-10 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.

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 will produce 60GHz radar for trucks.



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 CPS (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.

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

DATIS: Dulles Area Travel Information System. 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 is an international association representing manufacturers of the direct current industry. 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 article.

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.

DG XIII: Directorate-General 8 of the European Commission. Covers Telecommunications, Information Industries and Innovation. Involved with DRIVE.

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.

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.

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. DRIVE is a program to develop ATMS, APTS and ATIS technologies for IVHS. DRIVE spent 170 million to develop initial technologies designed to manage traffic and information systems throughout large metropolitan area. Now, (January, 1994), in phase two, the group is spending \$240 million on testing these systems. One goal of the object is to standardize technology throughout the EC and introduce standard ways of transmitting information between vehicles and roadside information collecting system. A European Community program to find ways to alleviate road transportation problems through the application of advanced information and telecommunications technology.

DRL: Daytime Running Light.

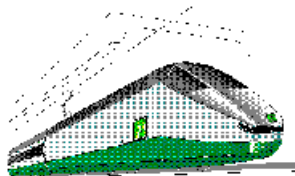
DRPA: Delaware River Port Authority.

DRS: Dead Reckoning System.

DSRC: Dedicated Short Range Communications.

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 that 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 Federal Highway Administration. 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.

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 Radionavigation Plan.

ERP: 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 covers 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 Europeen des normes de telecommunication. European Telecommunications Standards Institute. Includes both public and private sectors.

ETTM: Electronic Toil and Traffic Management.

EU: European Commission

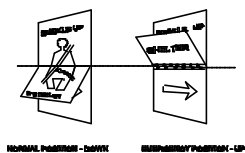
EUREKA: European Research Coordination Agency, a 19-country program that fosters cooperative research and development between industries and governments in Europe.

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 Routint 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.

FHA: Federal Highway Administration. Authorized by the ISTEA legislation to spend \$660 million on ITS projects from FY1992 through FY1997.

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'Ingenieurs 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 that integrates fix-route transit, dial-a-ride minibus and contract taxi services.

FOCUS: Focus on Community Understanding and Solution is 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

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. Involves 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 provides federal funding to test, evaluate, and demonstrate the benefits of ITS technologies.

GEMINI: Generation of Messages in the New Integrated Road Transport Environment. DRIVE II project. Objective is 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. Objective is 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, Institut 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 are 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.

Ghz: Gigahertz.

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.

GIS: Geographic Information System.

GLIDE: Green Light DEtermining traffic signal control system. Singapore's 1295 intersections adaptive control operation which reverts to a fixed time system when communications break down. GLIDE includes a fault 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

GPS: Global Positioning System - A system that determines the real-time position of vehicles 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.

HAZMAT: HAZardous MATerial(s).

HC: Hydrocarbons

HELP: Heavy Vehicle Electronic Plate Program automatically weigh and identify heavy vehicles at strategic locations.

HELP: Heavy vehicle Electronic License Plate program.

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: Head-Up Display.

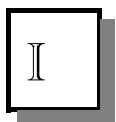
HUD: Heads-Up-Display. Display of instrument readings which appears (usually by reflection) on the inside of a vehicle's windshield.

HUF: Highway User's Federation.

HUFSAM: Highway Users Federation for Safety and Mobility.

HUFSAM: Highway Users Federation for Safety and Mobility.

HVCO: See CVO.



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.

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, integrates 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.

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

IEEE: Institute of Electrical and Electronics Engineers.

IFTA: International Fuel Tax Agreement.

IHSDM: Interactive Highway safety Design Model interact 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.

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. Objective is 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

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

ISATA: International Symposium on Automotive Technology and Automation. Annual meeting on ITS and other automotive technology. Held in Florence.

ISDN: Integrated Services Digital Network.

ISO 9000: International Standard for Overall quality business process (actual products or services)

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

ISP: Internet Service Providers.

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.

ISTEA: Intermodal Surface Transportation Efficiency Act of 1991- Legislation, passed in 1991, providing primary federal funding for highway and other surface transportation programs in the United States. ISTEA is unusual in that it allows transportation funds to be spent on nontraditional uses, such as the intelligent transportation systems program.

An act to develop a National Intermodal Transportation System that is economically efficient, environmentally sound, provides the foundation for the nation to come in the global economy and will move people and goods in an energy efficient manner FHWA-PI-92-008. In 1991, the U.S. Congress authorized \$155 billion in transportation projects over six years. The law expires 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, create formulas for ISTEA 1997-2002. ISTEA II would provide 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.

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 ITIS 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). 400 Virginia Ave., S.W., Suite 800, Washington DC 20024, Phone: (202) 857-1202, FAX: (202) 296-5408. 2-Institute for Transportation Studies. Transportation R&D 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 is coordinating 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.

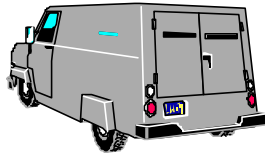
IVHS Act: See ISTEA (Intermodal Surface Transportation Efficiency Act).

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. 1776 Massachusetts Avenue NW Washington, DC 20036-1993 (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 (Florida DOT District 2 ITS Office, Marc Bounds, 904 381-8807)

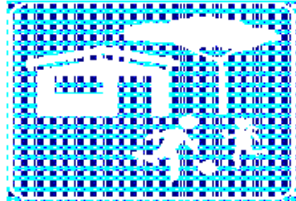
JIT: Just-in-time delivery of freight by trucking companies.

JPL: Jet Propulsion Laboratory.

JPO: ITS Joint Program Office.

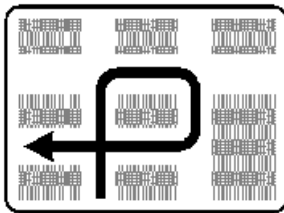
JSEA: Japanese Society of Automotive Engineers

JSK Foundation: Japanese Association of Electronic Technology for Automotive Traffic and Driving.
Formed to disseminate the 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: Japan. 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. 2800 buses are equipped with tags.

LISB: Ieit 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.

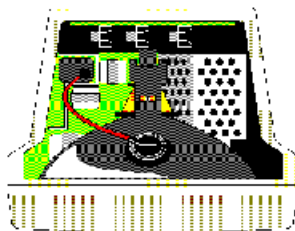
LRP/LRTP: Long Range (Transportation) Planning.

LRT: Light Rail Transit.

LTL: Less Than Truckload.

LTR: Local Traffic Responsive

LYNX: Central Florida Regional Transit Authority.



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

MAGIC: Metropolitan Area Guidance, Information and Control. New Jersey incident detection and traffic management system. Will use 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 is scheduled for completion by 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

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 Signalling.

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 the system hardware and the person who is 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 synthesis and voice or speech recognition).

MNA: Mobil Navigation Assistant from Motorola, an In-vehicle guidance system 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 center. The information is processed and sent back to the driver in the form of route instructions.

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 ETMM and computer based systems.

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.

MOC: Japanese Ministry of Construction.

MOE: Measure of Effectiveness. Delay, queue and 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/ETMCC: Message Set for External TMC Communication.

MTA: Mass Transit Administration in Baltimore. 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 a 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 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 System Consortium

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

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

NARC: National Association Of Regional Councils.

NAS: National Academy of Sciences.

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. 935 East Confederate Ave. Wayne Shackelford Bldg, Atlanta Georgia 30316 (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, FI DOT; T.Jeffreys, Behe&Umholtz; A.Kosik, Texas DOT; J.Landsman, FHWA; E.Lopez, Consultant; B.Smith, VATRC; J.Marsh, ITSA; MZezecki, Maryland State Hwy Admin.

NCHRP: National Cooperative Highway Research Program

NCSL: National Conference of State Legislatures.

NEC: National Electrical Code.

NEMA: National Electronic Manufacturers' Association.

NEXTEA: 1997 National Economic Crossroads Transportation Efficiency Act would increase transportation spending by 17 billion from the 157 billion authorized in the 1991 ISTEA. NEXTEA wants to build 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. NIMC was 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

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 Steering Group: Group made up of Emmanuel dla Hostria Rockwell, Richard Denney Barton-Aschman, Bruce Eisenhart-Loral Federal Systems, Michael Forbis, Washington DOT, Robert Gottschalk Florida DOT, Shawn Morrissey- Intersestion Develpment, Ian Mulholland-ANSTEC, Anson Nordby, LA DOT, Tim Pagano-Virginia DOT, Raman Patel-NY City DOT, Chuck Perry-California DOT, Al Santiago-FHWA, Ed Seymour-TTI, K Vaughn.

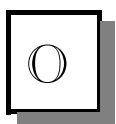
NTCIP: National Transportation Communications for ITS Protocol. National Transportation Control/ITS Communications Protocol. 1-NTCIP Committee for the protocol standard development. 2-NTCIP Steering Group. Primary mission is to develop a protocol standard for traffic control devices for ITS applications.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

NTIA: National Telecommunications and Information Administration of the United States.

NTS: National Transportation System.

Multi 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's AHS System, 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 is now also operating in China.

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

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.

OMB: Office of Management and Budget

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

ORNL: Oak Ridge National Laboratory.

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

OSI: Open Systems Interconnection.

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

OTIS: On-Line Travel Information System. 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 is investigation 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 is 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 that is available on-line at: <http://www.its.dot.gov/pcb/98catalog.htm>

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

PCD: (Portable digital) Personal communications device.

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

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.

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

PMS: Pavement Management System

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.

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. DRIVE II project. Objective is to identify and implement strategies for public transport priority using adaptive urban traffic control techniques. Participations include Peak Traffic Limited, Institute of Transportation Studies at Leeds University, the Cities of Leeds and Turin and Mizar Ltd.

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

PROMISE: PROMetheus Mobile and portable information Systems in Europe. DRIVE II project occurring 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 occurring 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.

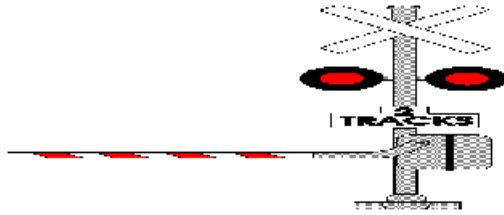
PVS: Personal Vehicle System. A Japanese program coordinated by the Ministry of International Trade and Industry (MITI).



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

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-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.

RESPONSETM: 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.

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).

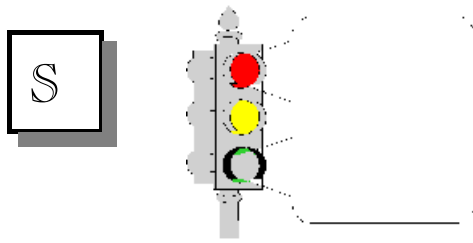
RTMS: Road Traffic Microwave Sensor. Canadian pole-mounted traffic sensor with multi-zone and multi-target capability for all-weather operation at intersections and for free-way surveillance. Funded by Ontario Ministry of Transportation through EIS, a Canadian company.

RTP: Regional Transportation Plan.

RTTRACS: Real Time Traffic-Adaptive Control System.

RTTASC: Real-Time Traffic Adaptive Signal Control.

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 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.

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 alt. routes....

SCATS: Sydney Coordinated Adaptive Traffic System. Australian computer-based real-time traffic signal control system. Australia's ATMS. Over 1000 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 use 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 Piraeus. 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, Tampa, Florida.

SDO: Standards Development Organization

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 mean of electronically determining when and where a vehicle has crossed a state border.

SECF: 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 Vehicle: FTA-funded APTS projects occurring in Ann Arbor, Michigan; Chicago, Ill.; Portland, Oregon; Denver, CO.; and Baltimore, MD. Focus is on applying ITS technologies directly to transit vehicles. Technology being tested includes AVL, automatic demand-responsive dispatching, HOV verification and automatic guidance equipment.

Smart Corridor: Santa Monica Smart Streets Corridor Demonstration Project.

Smart Bus: 1-Transit vehicle equipped with ITS applications. 2-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: Suburban Mobility Authority for Regional Transportation in Detroit, Michigan.

SmarTraveler: FTA funded APTS projects occurring in Bellevue, CA, Houston, TX, and St. Paul, Minn. 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: Safety Management System.

SMS: Subscriber Management System.

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

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

SOV: Single-Occupant Vehicle.

SP: Spatial Representation.

SPAM: Unsolicited commercial e-mail.

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 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: Spread-Spectrum radio.

SSR: 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 at contributes to the federal government. STEP 21 also wants to greatly reduce the categories for grants to increase the states' flexibility in spending. Sen. 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.

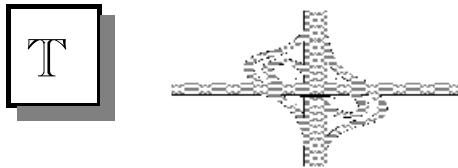
STMF: Simple Transportation Management Framework.

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.

TCC: Train 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. Contact: Eva Lerner-Lam, TCIP project Director Tel: (201) 567-0088, Fax: (201) 567-8066 or email:elernerlam@palisadesgroup.com or www.tcip.com.

TCP/IP: Transmission Control Protocol/Internet Protocol.

TCM: Transportation Control Measure.

TCSU: London's Traffic Control System Unit

TDM: Transportation Demand Management

TDM: Travel Demand Management. 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 preserve 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)

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).

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.

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.

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 Dan 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 corridor, 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 City of Orlando, Florida DOT, FHWA, General Motors /Hughes,

American automobile



Association. IVHS Pilot Project in Orlando Florida.

TrayLink: A Guidestar
the Twin Cities in
office. Audiotex and

project. Interrelated AVL and ATIS system to be used in
Minnesota. Will allow pri-trip planning from home or
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 U)

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

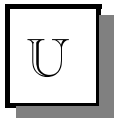
TSM: Transportation Systems management.

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

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

US DOD: United State Department of Defense

US EPA: United State 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 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.

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 4: Electronic Payment: Electronic Payment Services.

User Services 3: Public Transportation Operations: Public Transportation Management; En-Route Transit Information; Personalized Public Transit; and Public Travel Security.

User Services 2: Travel Demand Management: Pre-Trip Travel Information; Ride Matching and Reservation; Demand Management; and Operations.

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.

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

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 vehicle being photo-graphed 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.

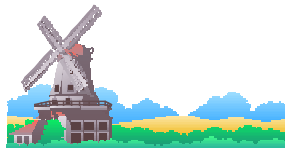
VRC: Vehicle-to-Roadside Communication.

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.

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.

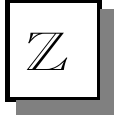
WCC: Westchester Commuter Central. A traffic management center operated by Metro Traffic Control in Westchester County, New York.

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.

WTI: Western Transportation Institute was established in 1994 by the Montana and California DOT in cooperation with Montana State University-Bozeman Campus. WTI begun 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 system.

XML: Extensible Markup Language.



ZELT: Zone Experiment et Laboratoire de Trafic de Toulouse.