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Sources of Information in Intelligent Transportation SystemsA Bibliography, 2006

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FOREWORD

This bibliography is intended to serve as a guide to the major sources of information in Intelligent Transportation Systems (ITS). While the focus is on the United States, some international materials have been included. Emphasis is on current materials, although publications of historical interest have also been included. Resources listed include print and electronic materials, as well as websites on the Internet.

This bibliography is based primarily on the holdings of the Harmer E. Davis Transportation Library at the Institute of Transportation Studies, University of California at Berkeley. References for electronic documents and resources, and websites, are current as of November 2006.

The electronic version of this bibliography is a component of the 6th edition of Sources of Information in Transportation, a collaborative effort by members of the Transportation Division of the Special Libraries Association.

BASIC REFERENCES

Adeli, Hojjat and Asim Karim. *Wavelets in Intelligent Transportation Systems*. Boston, MA: Artech House, 2005. 224 pages. ISBN: 100470867426.

Focuses on the application of advanced computational techniques for ITS.

Barfield, Woodrow and Thomas A. Dingus. *Human Factors in Intelligent Transportation Systems.* Mahwah, NJ: Lawrence Erlbaum Associates, 1998. 458 pages. ISBN: 0805814337.

Discusses human factors issues that relate to the design and use of ITS.

Bekiaris, Evangelos and Yuko J. Nakanishi, eds. *Economic Impacts of Intelligent Transportation Systems: Innovations and Case Studies*. Amsterdam: Elsevier JAI, 2004. 640 pages. ISBN: 0762309784.

Presents concept papers and case studies on technology assessment strategies and evaluation techniques related to ITS.

Bishop, Richard. *Intelligent Vehicle Technology and Trends*. Boston, MA: Artech House, 2005. 344 pages. ISBN: 1580539114.

Presents a comprehensive overview of intelligent vehicle systems and the issues involved with their introduction into road vehicles. Discusses electronics and electronic systems and how they work within automobiles, heavy trucks, and buses.

Braess, Hans-Hermann and Ulrich Seiffert, eds. *Handbook of Automotive Engineering*. Warrendale, PA: Society of Automotive Engineers, 2005. 635 pages. ISBN: 0768007836.

This is a technical reference book on automotive design and construction. Comprised of a series of contributions from over 40 authors, it covers all areas of automotive research, including state-of-the-art developments.

Cambridge Systematics. *IDAS User's Manual. Version 2.3*. Electronic resource accessed November 2006: http://idas.camsys.com/documentation.htm

This User's Manual is designed to assist in determining the benefits and costs of various ITS deployments. It defines the conceptual framework, system design specifications, and takes the user through the steps of using the Intelligent Transportation Systems Deployment Analysis System (IDAS).

Catling, Ian, ed. *Advanced Technology for Road Transport: IVHS and ATT*. Boston, MA: Artech House, 1994. 376 pages. ISBN: 0890066132.

Presents a detailed historical overview of topics related to Intelligent Vehicle Highway Systems. Although focus is on European developments and programs, U.S. and Japanese efforts are also included.

Chowdhury, Mashrur A. and Adel Sadek. *Fundamentals of Intelligent Transportation Systems Planning.* Boston, MA: Artech House, 2003. 190 pages. ISBN: 1580531601.

Introduces the fundamentals for successful planning of ITS operations, with emphasis on traffic flow and control. Also covers ITS user services, applications, regional architecture, standards, planning, and evaluation.

Diebold Institute for Public Policy Studies. *Transportation Infostructures: The Development of Intelligent Transportation.* Westport, CT: Praeger, 1995. 207 pages. ISBN: 0275951553.

Presents a series of essays offering a policy-oriented overview of ITS, discussing potential benefits and obstacles to development. Covers ITS experiences in the U.S., Europe and Japan.

Drane, Chris R. and C. Rizos. *Positioning Systems in Intelligent Transportation Systems***.** Boston, MA: Artech House, 1998. 369 pages. ISBN: 0890065365.

Examines the role of positioning systems in ITS, the major types of positioning systems, the relationships between them, and methods for evaluating their performance.

Elliott, Scott D. and Daniel J. Dailey. *Wireless Communications for Intelligent Transportation Systems.* Boston, MA: Artech House, 1995. 405 pages. ISBN: 0890068216.

Presents a comprehensive review of wireless communications systems and their applications to ITS. Covers mobile, microwave, satellite, meteor burst, and personal communication systems.

ERTICO Annual Report 2005. Brussels: ERTICO, 2005. 48 pages. Electronic document accessed November 2006: http://www.ertico.com/download/publications/AR2005.pdf

Presents a recap of the past year's activities of ERTICO, a multi-sector public/private partnership representing the interests of ITS in Europe.

ERTICO. *ITS for Europe: Keeping Goods and People Moving*. Brussels: ERTICO, 2006. 12 pages. Electronic document accessed November 2006: http://www.ertico.com/download/publications/ERTICO_CorpBroch_FINAL.pdf

Describes ERTICO, its activities, partners and focus areas, and its vision for the future as it promotes the deployment of ITS in Europe.

Euler, Gary. ***"****Intelligent Transportation Systems,****"*** in Traffic Engineering Handbook. Washington, DC: Institute of Transportation Engineers, 1999. 5th ed. Pages 642-688. ISBN: 0935403329.

This chapter provides an excellent overview of ITS. It discusses the history of the national ITS program, describes ITS concepts in four broad areas, and discusses major considerations in the implementation of the technologies.

Foy, Dennis. *Automotive Telematics: The One-Stop Guide to In-Vehicle Telematics and Infotainment Technology and Applications*. Cheshire, UK: Red Hat, 2002. 196 pages. ISBN: 0954334000.

Examines the history, current state, and future trends for the transportation telematics industry, ranging from route navigation and traffic information to automated highway systems and remote diagnostics.

French, Robert L. *A Comparison of IVHS Progress in the United States, Japan and Europe through 1993.* Washington, DC: IVHS America, 1994. 1 v.

Presents a comparative historical analysis of IVHS progress in Europe, Japan and the U.S. Compares key initiatives and accomplishments from the1960s through 1993.

Fuchs, Axel. *Automotive Telematics: An Introduction to the Technical Aspects of Automotive Telematics with Reference to Business Model and User Needs.* Warrendale, PA: Society of Automotive Engineers, 2002. 107 pages. ISBN: 0768009766.

Presents a technical discussion of automotive telematics, focusing on the business model and user value.

Garrison, William L. and Jerry D. Ward. *Tomorrow's Transportation: Changing Cities, Economies, and Lives.* Boston, MA: Artech House, 2000. 316 pages. ISBN: 1580530966.

Real-world case studies are used to show how ITS technologies are solving problems and how emergent technologies can lead to further ITS success.

Ghosh, Sumit and Tony Lee. *Intelligent Transportation Systems: New Principles and Architectures.* Boca Raton, FL: CRC Press, 2000. 177 pages + CD-ROM. ISBN: 0849300673.

Focuses on the design of distributed algorithms for the control and coordination of ITS.

Gillen, David and David M. Levinson, eds. *Assessing the Benefits and Costs of ITS: Making the Business Case for ITS Investments*. Boston, MA: Kluwer Academic Publishers, 2004. 372 pages. ISBN: 1402076770.

Examines the costs and benefits of ITS in an economic and business policy context. Contains 18 contributions that evolved from a conference on measuring the contributions of ITS.

Hartman, Katherine and Jennifer Strasser. *Saving Lives through Advanced Vehicle Safety Technology: Intelligent Vehicle Initiative Final Report.* Washington, DC: U.S. Department of Transportation, Federal Highway Administration, 2005. 12 pages. Electronic document accessed November 2006: http://www.itsdocs.fhwa.dot.gov/JPODOCS/REPTS_PR/14153_files/ivi.pdf

Provides an overview of the accomplishments of the Intelligent Vehicle Initiative (IVI) program that closed in 2005. Authorized by TEA-21 legislation, the goal of the IVI was to prevent highway crashes and their resulting fatalities and injuries.

Hwang, Mimi, et al. *Advanced Public Transportation Systems: The State-of-the-Art Update 2006*. Washington, DC: U.S. Department of Transportation, Federal Transit Administration, 2006. Electronic document accessed November 2006: http://www.fta.dot.gov/documents/APTS_State_of_the_Art.pdf

Latest in a series of State-of-the-Art reports and last published in December 2000, provides up-to-date information on the current deployment status of transit ITS technologies, lessons learned from deployment experiences, and what the future holds for Advanced Public Transportation Systems (APTS).

Institute of Transportation Engineers. *Intelligent Transportation Primer*. Washington, DC: The Institute, 2000. 1v. ISBN: 0935403450.

Produced through a partnership representing academia, industry and the government. Presents a comprehensive review of ITS, with a range of topics, such as traffic and vehicle control, standards, system architecture, telecommunications, and traveler information. Appendices contain a glossary and a list of acronyms.

Institute of Transportation Engineers. *Management and Operations of Intelligent Transportation Systems*. Washington, DC: The Institute, 1999. 39 pages. ISBN: 0935403396.

This is a "Recommended Practice", containing guidelines for ITS operations and management needs and practices.

Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), Title VI, Part B, Section 6054(b). Washington, DC: U.S. Government Printing Office, December 1991.

This legislation officially established a federal program to research, develop, and operationally test Intelligent Transportation Systems (ITS) as well as promote their implementation.

ITS America Annual Report. Washington, DC: Intelligent Transportation Society of America. Annual.

Annual report from the "foremost advocate on development and deployment of ITS in the U.S." Reflects on past accomplishments and achievements, and provides an overview of current major activities.

ITS America. *Homeland Security and ITS: Using Intelligent Transportation Systems to Improve and Support Homeland Security*. Washington, DC: Intelligent Transportation Society of America, 2002. 30 pages.

Serves as a supplement to the "National ITS Program Plan: A Ten-Year Vision". Provides an analysis of the role of ITS in ensuring the surface transportation requirements of homeland security.

ITS America. *ITS Market Data & Forecast: Infrastructure ITS*. Washington, DC: Intelligent Transportation Society of America, 2006. 120 pages.

First in a series of ITS market data and forecast reports, presents estimate of the current size, and two-year forecasts, of the Infrastructure ITS market by region and for the U.S. as a whole.

ITS America. *National Intelligent Transportation Systems Program Plan: A Ten-Year Vision.* Washington, DC: Intelligent Transportation Society of America, 2002. 146 pages.

Offers an in-depth study of the policies, programs and players driving the future of ITS.

ITS America. *Primer on Vehicle-Infrastructure Integration: VII White Paper Series.* Washington, DC: Intelligent Transportation Society of America, 2005. 8 pages. Electronic document accessed November 2006: http://www.itsa.org/itsa/files/pdf/VIIPrimer.pdf

Gives an overview of the Vehicle Infrastructure Integration (VII) program, a major initiative of the U.S. Department of Transportation. The initiative has as its objective the deployment and enabling of a communications infrastructure that supports vehicle-to-infrastructure, as well as vehicle-to-vehicle communications, for a variety of vehicle safety applications and transportation operations.

ITS Handbook, Japan: 2003-2004. Tokyo: Highway Industry Development Organization, 2004. 91 pages.

Gives an overview of ITS activities, applications and deployment, and system architecture.

ITS Strategy in Japan: Report of the ITS Strategy Committee, ITS Japan, Summary Version. 2003. 15 pages. Electronic document accessed November 2006: http://www.its-jp.org/english/topics_e/doc/strategy_e.pdf

Discusses Japan's vision for ITS, applications of ITS technologies, recommendations to government ministries and agencies, and the recommended role for ITS Japan.

IVHS America. *Strategic Plan for Intelligent Vehicle-Highway Systems in the United States.* Washington, D.C.: IVHS America, 1992. 1v.

This is one of the first documents designed to guide the development and deployment of IVHS in the U.S. Considered to be a blueprint, the plan covers goals and objectives, deployment, suggested roles for participants, a course of action, and cost estimates for a 20-year time period.

Jurgen, Ronald K., ed. *Navigation and Intelligent Transportation Systems*. Warrendale, PA: Society of Automotive Engineers, 1998. 340 pages. ISBN: 0768002648.

Contains a selection of papers dealing with the technical and functional aspects of ITS and navigation systems. This volume, no. 72 of SAE's Progress in Technology (PT) series, covers SAE papers dating from 1992 through 1998.

Kachroo, Pushkin and Kaan Ozbay. *Feedback Ramp Metering in Intelligent Transportation Systems.* New York, NY: Klewer Academic/Plenum, 2003. 333 pages. ISBN: 0306478013.

Discusses the use of feedback or adaptive control in ramp metering, providing traffic theory fundamentals as well as the design of feedback controllers for isolated and coordinated ramp metering problems.

Khattak,Asad J. *Intelligent Transportation Systems: Planning, Operations, and Evaluation.* Boca Raton, FL: CRC Press, 2006. 330 pages. ISBN: 084933120X.

Addresses the impact of information and communications technology on transportation. Reviews the literature, and discusses issues of measurement, research design, data reliability, and validity.

Klein, Lawrence A. *Sensor Technologies and Data Requirements for ITS.* Boston, MA: Artech House, 2001. 549 pages. ISBN: 158053077X.

Examines intrusive and non-intrusive traffic sensors and related technologies measuring traffic flow and assisting in congestion management.

Maccubbin,Robert, et al. *Intelligent Transportation Systems Benefits, Costs, and Lessons Learned: 2005 Update.* Washington, DC: U.S. Department of Transportation, Federal Highway Administration, 2005. 190 pages. Electronic document accessed November 2006: http://www.itsdocs.fhwa.dot.gov/jpodocs/repts_te/14073_files/14073.pdf

Continuation of a series of reports providing a synthesis on the impact that ITS projects have on the surface transportation network, including the costs of ITS deployment and operations. New to this edition are summaries of lessons learned from ITS planning, deployment, operations, and evaluation experiences.
This is a print companion to the "ITS Benefits, Costs, and Lessons Learned Databases" cited under Statistical Sources.

McQueen, Bob and Judy McQueen. *Intelligent Transportation Systems Architectures*. Boston, MA: Artech House, 1999. 467 pages. ISBN: 089006525X.

Presents a non-technical introduction, using a "cooperative development approach", to ITS. Covers areas dealing with system architecture, standards, finance, and procurement.

McQueen, Bob, Rick Schuman, and Kan Chen. *Advanced Traveler Information Systems.* Boston, MA: Artech House, 2002. 241 pages. ISBN: 1580531334.

Examines the entire traveler information supply chain, covering needs analysis, data collection, information processing, and dissemination.

Miles, John Collingwood and Kan Chen, eds. *ITS Handbook – 2nd Edition: Recommendations from the World Road Association (PIARC).* Kent, UK: Route 2 Market, Ltd., 2004. 380 pages. ISBN: 2840601745.

Contains recommendations and charts the progress of ITS. Covers concepts, operation, standards and architecture, benefits, planning, implementation future prospects, human factors, and unit costs. Includes 39 case studies, 33 dedicated country profiles, and a comprehensive bibliography. Also available in CD-ROM and website format.

Mobility 2000 Presents Intelligent Vehicles and Highway Systems: 1990 Summary. College Station, TX: Texas Transportation Institute, 1990. 20 pages.

This document, stemming from the Mobility 2000 National Workshop on IVHS, is considered to be one of the first "most effective succinct descriptions of IVHS". Describes 11 action items that established the backbone of the national program.

Mosse, Olivier (ed). *ITS Highlights.* Brussels: ERTICO Public Authorities Platform, 2003. 52 pages.

Features the wide variety of ITS initiatives and programs undertaken by the ERTICO Public Authorities Platform. Describes ITS activities in 21 European countries.

Neudorff, Louis J., et al. *Freeway Management and Operations Handbook.* Washington, DC: U.S. Department of Transportation, Federal Highway Administration, 2003. 564 pages. Electronic document accessed November 2006: http://www.ops.fhwa.dot.gov/freewaymgmt/freeway_mgmt_handbook/fmoh_complete_all.pdf

This resource document provides an overview of the different institutional and technical issues associated with the planning, design, implementation, operation, and management of a freeway network. Focuses on the impact that ITS have had on freeway traffic operations and management.

Njord, John, et al. *Safety Applications of Intelligent Transportation Systems in Europe and Japan.* Washington, DC: U.S. Department of Transportation, Federal Highway Administration, 2006. 52 pages. Electronic document accessed November 2006: http://www.international.fhwa.dot.gov/ipsafety/ipsafety.pdf

Presents the results of a scanning study of ITS applications deployed in Europe and Japan to mitigate traffic safety problems.

Nwagboso, Christopher O., ed. *Advanced Vehicles and Infrastructure Systems: Computer Application, Control, and Automation.* New York, NY: John Wiley & Sons, 1997. 502 pages. ISBN: 0471956457.

Contains presentations on intelligent vehicles and automated traffic systems, from an international panel of experts in the transportation industry and academia.

Ozbay, Kaan and Pushkin Kachroo**.** *Incident Management in Intelligent Transportation Systems.* Boston, MA: Artech House, 1999. 267 pages. ISBN: 0890067740.

Presents a review of incident management support tools and models as they are applied to ITS.

Pickford, Andrew T. W. and Philip T. Blythe. *Road User Charging and Electronic Toll Collection*. Boston, MA: Artech House, 2006. 370 pages. ISBN: 1580538584.

Describes state-of-the-art technologies, systems, regulatory pricing schemes for electronic toll collection and road user charging. Includes case studies and best practice examples for successful tolling, road us pricing, and traffic demand management.

Radi, Sari. *Advanced Public Transportation Systems Deployment in the United States: Year 2004 Update*. Washington, DC: U.S. Department of Transportation, Federal Transit Administration, 2005. v.p. Electronic document accessed November 2006: http://www.itsdocs.fhwa.dot.gov//JPODOCS/REPTS_TE//14169_files/14169.pdf

Updated every two years, this report documents work performed under the Federal Transit Administration's Advanced Public Transportation Systems (APTS) Program, which is designed to promote research and development of ITS applications beneficial to public transportation.

Riley, Robert Q. *Alternative Cars in the 21st Century – A New Personal Transportation Paradigm.* 2nd edition. Warrendale, PA: Society of Automotive Engineers, 2003. 514 pages. ISBN: 0768008743.

Examines ITS, alternative fuels, electric and hybrid vehicles, and personal mobility.

Rupert, Bob, et al. *Traveler Information Systems in Europe.* Washington, DC: U.S. Department of Transportation, Federal Highway Administration, 2003. 100 pages. Electronic document accessed: November 2006: http://www.international.fhwa.dot.gov/travelinfo/traveler_information.pdf

Presents results of a scanning study examining established advanced traveler information products and services in Europe, with potential ITS applications for the U.S.

Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Title V, Subtitle C, Sec. 5301-5310. Washington, DC: U.S. Government Printing Office, 2005.

This legislation authorized continued funding for ITS programs for FYs 2005-2009. Areas covered include the National ITS program plan, infrastructure development, research and development, national architecture and standards, road weather research and development, and centers for surface transportation excellence.

Shibata, Jun and Robert L. French. *A Comparison of Intelligent Transportation Systems Progress Around the World Through 1996*. Washington, DC: Intelligent Transportation Society of America, 1997. 174 pages.

Provides an international comparison of ITS through 1996. Designed as a supplement and update to the original assessment published by French in 1994. ITS activities in both established and emerging countries are described.

Sussman, Joseph. *Introduction to Transportation Systems*. Boston, MA: Artech House, 2000. 508 pages. ISBN: 580531415.

Designed as a graduate level introduction to transportation systems in general, their context, concepts, and characterizations. A chapter gives a solid overview of ITS by examining history, legislation, the functional areas of ITS, institutional issues, and future visions.

Sussman, Joseph M. *Perspectives on Intelligent Transportation Systems*. New York: Springer, 2005. 232 pages. ISBN: 0387232575.

Comprised of a series of articles written between 1995-2004, this book offers an historical perspective on the development and deployment of ITS, as well as addressing the important organizational challenges of ITS.

Sussman, Joseph M., ed. *What Have We Learned About Intelligent Transportation Systems?* Washington, DC: U.S. Department of Transportation, Federal Highway Administration, 2000. 188 pages. Electronic document accessed November 2006: http://www.itsdocs.fhwa.dot.gov//JPODOCS/REPTS_TE//13316.pdf

Examines which ITS technologies and applications have been successful, which have not, and those for which more information is needed to make a judgment. Identifies the characteristics distinguishing successful applications from unsuccessful ones. Assesses ITS deployment and the barriers it is encountering, and offers some future views.

Transportation Efficiency Act for the 21st Century (TEA-21), Title V, Subtitle C, Sec. 5201-5213. Washington, DC.: U.S. Government Printing Office, 1998.

This legislation authorized continued funding for ITS programs for FYs 1998-2003. Promotes the National ITS Program Plan, architecture and standards, research and development, integration, and infrastructure deployment.

United States. Federal Highway Administration. Office of Operations Technology Services. *Intelligent Transportation Systems Awareness CD-ROM*. Washington, DC.: U.S. Federal Highway Administration, 1999. 1 CD-ROM.

Gives an overview of ITS to meet state and local transportation planning efforts. Examines strategies and plans for implementation, and presents examples of successful deployment. Provides links to further Internet resources.

United States. Federal Highway Administration. *Traveler Information Systems: A Primer: Navigating into the Future.* Washington, DC: U.S. Department of Transportation, Federal Highway Administration, 2001. 45 pages.

Discusses the elements, operation, benefits, and users in traveler information systems. Offers examples of a variety of traveler information systems.

United States. Government Accountability Office. *Highway Congestion: Intelligent Transportation Systems' Promise for Managing Congestion Falls Short, and DOT Could Better Facilitate Their Strategic Use*. GAO-05-943. Washington, DC: The Office, 2005. 64 pages. Electronic document accessed November 2006: http://www.gao.gov/new.items/d05943.pdf

Describes the federal role in deployment of ITS, assesses ITS goals and measurement efforts, identifies what ITS studies have found in terms of impacts of ITS deployments, and identifies barriers to ITS deployment and use.

United States. Joint Program Office for Intelligent Transportation Systems. *ITS/Operations Resource Guide 2006*. Washington, DC: U.S. Department of Transportation, Federal Highway Administration, 2006. Electronic document accessed November 2006: http://www.resourceguide.its.dot.gov/

Offers a comprehensive listing of over 400 documents, websites, training courses, software tools, and points of contact related to ITS.

United States. Joint Program Office for Intelligent Transportation Systems. *ITS User Services Document*. Washington, DC: U.S. Department of Transportation, Federal Highway Administration, 2005. Electronic document accessed November 2006: http://www.itsdocs.fhwa.dot.gov//JPODOCS/REPTS%5FTE/14113.htm

ITS user services are transportation services that can be provided by ITS technologies. This document consolidates the descriptions of all 33 current user services into a single document in which all user services are described in a consistent manner.

United States. Joint Program Office for Intelligent Transportation Systems. *National ITS Architecture, Version 5.1* Electronic resource accessed November 2006: http://www.iteris.com/itsarch/html/menu/documents.htm

Provides a common framework for planning, defining, and integrating Intelligent Transportation Systems. Defines the functions required for ITS, the physical entities or subsystems where these functions reside, and the information and data flows that connect the functions into an integrated system. The National ITS architecture is organized into a suite of documents covering the following categories: User Services, Executive Summary, Architecture Definition, Evaluation, Implementation Strategy, Standards, Security, and Regional ITS Architecture Guidance.

United States. Joint Program Office for Intelligent Transportation Systems. *National ITS Architecture: Executive Summary*. 2003. Electronic document accessed November 2006: http://www.iteris.com/itsarch/documents/zipped/execsum.zip

Provides an overview of the most important aspects of the National ITS Architecture, with focus on the Logical and Physical Architectures.

United States. Joint Program Office for Intelligent Transportation Systems. *U.S. Department of Transportation's Summary of ITS Integration Projects.* Washington, DC: U.S. Department of Transportation, Federal Highway Administration, 2006. Electronic document accessed November 2006: http://www.itsdocs.fhwa.dot.gov//JPODOCS/REPTS_TE//14264_files/14264.pdf

Provides summarized information on Intelligent Transportation Systems (ITS) projects initiated as a result of the enactment of the ITS Integration Component of the ITS Deployment Program as defined in Section 5208 of the Transportation Equity Act for the 21st Century (TEA-21). Arranged alphabetically by state.

Vlacic, Ljubo, Michel Parent, and Fumio Harashima, eds. *Intelligent Vehicle Technologies: Theory and Applications.* Warrendale, PA: Society of Automotive Engineers, Inc., 2001. 498 pages. ISBN: 0768007801.

Provides a series of contributions by experts on intelligent vehicle sensor technologies, intelligent vehicle decision and control technologies, and a case study of the ARGO intelligent vehicle prototype.

Walker, John, ed. *Advances in Mobile Information Systems*. Boston, MA: Artech House, 1999. 468 pages. ISBN: 0890069514.

Provides an in-depth overview of mobile information systems, covering GSM, cellular radio, mobile data, and ITS.

Whelan, Richard. *Smart Highways, Smart Cars.* Boston, MA: Artech House, 1995. 231 pages. ISBN: 0890067651.

Provides a non-technical history and overview of the IVHS initiative in the U.S., including details of IVHS activities and developments in Europe and Japan.

Yokota, Toshiyuki, et al. *ITS Technical Notes for Developing Countries*. Washington, DC: World Bank, 2004.Electronic document accessed November 20006: http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTTRANSPORT/EXTROADSHIGHWAYS/0,,contentMDK:20688447~menuPK:1157552~pagePK:148956~piPK:216618~theSitePK:338661,00.html

This is a series of five technical notes and an appendix, designed to provide a high-level introduction to ITS for decision makers and planners in developing countries. Includes an introduction, decision-making model, innovative approaches, standards, system architectures, and case studies.

Zhao, Yilin. *Vehicle Location and Navigation Systems.* Boston, MA: Artech House, 1997. 345 pages. ISBN: 0890068615.

Focuses on the principles and practices of vehicle location and navigation systems and their application to ITS.

STATISTICAL SOURCES

United States. Joint Program Office for Intelligent Transportation Systems. *ITS Benefits, Costs, and Lessons Learned Databases.* Electronic resource accessed November 2006: http://www.benefitcost.its.dot.gov/

Information is available for sixteen types of technology-based systems by national and state levels. Links are given to the following databases:

ITS Benefits Database: http://www.itsbenefits.its.dot.gov/

Provides access to information regarding the impacts of ITS deployments.

ITS Costs Database: http://www.itscosts.its.dot.gov/

Provides access to costs data to be used in developing costs estimates for ITS deployments.

ITS Deployment Statistics Database: http://www.itsdeployment.its.dot.gov/

Provides access to data measuring the level of ITS deployment in 108 metropolitan areas and the 50 states. Links are included to the printed versions of National Summary Reports, Survey Summary Reports, and 78 Metropolitan Areas Reports are also available.

Lessons Learned Knowledge Resource: http://www.itslessons.its.dot.gov/

Provides access to lessons learned from others' experiences

Applications Overview: *http://www.itsoverview.its.dot.gov/*

Provides an overview of ITS applications and has links to various information resources useful in the planning and deployment of ITS.

STANDARDS

ITS Standards Outreach, Education & Training Resource Documents. Washington, DC: Institute of Transportation Engineers, 2001.1 CD-ROM.

Contains guide documents, fact sheets, case studies, ITE articles, NTCIP Newsletter, and other references.

National Research Council (U.S.) Committee for Review of the U.S. Department of Transportation's Intelligent Transportation Systems Standards Program. *Development and Deployment of Standards for Intelligent Transportation Systems: Review of the Federal Program.* Special Report 280. Washington, DC: Transportation Research Board, 2004. 94 pages. ISBN 0309094534. Electronic document accessed November 2006: http://fermat.nap.edu/html/SR280/SR280.pdf

Presents a review of the national ITS program, concentrating on the U.S. DOT's longer-term role in encouraging widespread adoption of ITS standards in practice. Focuses on emerging obstacles to effective standards deployment, and offers specific recommendations for improving the standards program.

NTCIP 9001: National Transportation Communications for ITS Protocol, Updated Version 3, v.03.02b. Washington, DC: AASHTO/ITE/NEMA, 2002. Electronic document accessed November 2006: http://www.ntcip.org/library/documents/pdf/9001v0302b.pdf

The National Transportation Communications for ITS Protocol (NTCIP) standards define protocols and profiles that are open, consensus-based data communications standards. This guide is an educational tool, designed to assist decision makers, planners, specification writes, and implementers in understanding the various NTCIP standard publications and how to use them.

Patel, R.K. and E. Rowe. *"An Overview of ITS Standards and Protocols"*. Washington, DC: Institute of Transportation Engineers, 1995. Electronic resource accessed November 2006: http://www.ite.org/standards/ITS_stdp.asp

Provides a overview on ITS standards and the process for their development. Discusses the importance of standards, the concepts behind them, objectives and criteria, standards development organizations, the role of organizations, and the National ITS Architecture

United States. Joint Program Office for Intelligent Transportation Systems. *ITS Standards: A Brief Stroll Through the Different Document Types*. Washington, DC: U.S. Department of Transportation, Federal Highway Administration, 1999. 7 pages. Electronic document accessed November 2006: http://www.standards.its.dot.gov/Documents/stddef.pdf

ITS standards are developed and published by standards development organizations (SDOs). This report identifies the SDOs supported by the U.S. Department of Transportation ITS Standards Program and describes the various types of ITS Standards documents.

United States. Joint Program Office for Intelligent Transportation Systems. *ITS Standards Acquire a New Mission: Transitioning the ITS Standards Program to Align with the USDOT's New ITS Research Initiatives*. Washington, DC: U.S. Department of Transportation, Federal Highway Administration, 2005. 9 pages. Electronic resource accessed November 2006:
http://www.its.dot.gov/arch/StandardsMar05.htm

> Describes the history and importance of ITS standards, the transition that is refocusing how the ITS Standards Program supports the U.S. Department of Transportation's (USDOT's) vision, and future USDOT commitments to ITS standards development and deployment.

Further information on ITS standards developed by Standards Development Organizations is available at the following websites:

American Association of State Highway Transportation Officials (AASHTO)
http://archive.transportation.org/programs/its/standards.nsf/homepage/overview

American National Standards Institute (ANSI)
http://web.ansi.org/

American Public Transportation Association (APTA)
http://www.aptastandards.com/APTAStandards/tabid/36/Default.aspx

American Society for Testing and Materials (ASTM) International
http://www.astm.org/cgi-bin/SoftCart.exe/index.shtml?E+mystore

Institute of Electrical and Electronics Engineers (IEEE)
http://standards.ieee.org/

Institute of Transportation Engineers (ITE)
http://www.ite.org/standards/

International Organization for Standardization (ISO)
http://www.iso.ch/iso/en/ISOOnline.frontpage

National Electrical Manufacturers Association (NEMA)
http://www.nema.org/stds/

National Transportation Communications for ITS Protocol (NTCIP)
http://www.ntcip.org/

Society of Automotive Engineers (SAE)
http://www.sae.org/standardsdev/

PERIODICALS

Automotive Telematics Bulletin. London: ABOUT Publishing Group. Monthly
Provides news and in-depth coverage, as well as commentaries, from leading experts in the telematics industry.

ERTICO eNewsletter. Bi-weekly. Electronic document accessed November 2006: http://www.ertico.com/en/news_and_events/newsletter_archive/newsletter_archive.htm
E-mail newsletter from ERTICO, a Brussels-based, public private-partnership pursing the development and deployment of ITS in Europe. Provides updates on ERTICO activities and events, as well as news from its Partners.

*GPS World***.** Newton, MA: Questex Media Group, Inc. Monthly. ISSN: 10485104. Electronic document accessed November 2006: http://www.gpsworld.com/gpsworld/
International journal focusing on Global Positioning Systems (GPS) and related technologies and their applications to ITS.

IEE Proceedings Intelligent Transport Systems. Quarterly. Stevenage, UK: Institution of Electrical Engineers. Quarterly. ISSN: 17480248. Electronic document accessed November 2006: *http://www.ietdl.org/IP-ITS*
Interdisciplinary journal covering research into the practical applications of ITS and infrastructures. Beginning in 2007, the journal will be published as *IET Intelligent Transport Systems*.

IEEE Intelligent Transportation Systems Society Newsletter. Quarterly. Electronic document accessed November 2006: http://www.ewh.ieee.org/tc/its/newsletter.html
Electronic newsletter highlighting the Society's activities, features articles, book reviews, and academic opportunities.

IEEE Transactions on Intelligent Transportation Systems. Piscataway, NJ: Institute of Electrical and Electronics Engineers, Inc. Intelligent Transportation Systems Society. Quarterly. ISSN: 15249050. Electronic document accessed November 2006: http://ieeexplore.ieee.org/
Focuses on the design, analysis, and control of information technology as it is applied to transportation systems. Abstracts only available at: http://www.ewh.ieee.org/tc/its/transactions/trans_abstracts.html

*IEEE Transactions on Vehicular Technology***.** Piscataway, NJ: Institute of Electrical and Electronics Engineers, Inc. Bimonthly. ISSN: 00189545. Electronic document accessed November 2006: http://ieeexplore.ieee.org/
Features articles on vehicle technology, automotive systems, and communications and control technologies.

Inside ITS. Wellesley, MA: BCC Research. Bi-weekly. ISSN: 1082071X. Electronic document accessed December 2006: http://www.insideits.com/ITS/ITSinfo.asp

This newsletter chronicles recent ITS-related activities in North America. Provides industry news perspectives and current government issues. Article summaries only for current issue are available with free registration.

Intelligent Highway. Wellesley, MA: BCC Research. Bi-weekly. ISSN: 09596631. Electronic document accessed December 2006: http://www.intelligenthighway.com/ITS/TIHinfo.asp

This newsletter chronicles recent activities in ITS in Europe. Provides industry news perspectives and current government issues. Article summaries only for current issue are available with free registration.

Intellimotion. Richmond, CA: California PATH Publications. Quarterly. ISSN: 10614311. Electronic document accessed November 2006: http://www-path.eecs.berkeley.edu/PATH/Intellimotion/

This newsletter covers research in ITS taking place at the California PATH (Partners for Advanced Transit and Highways) Program. Each issue contains articles discussing current areas of research, or may focus on a specific theme.

International Journal of Vehicle Autonomous Systems. Milton Keynes, UK: Inderscience Enterprises Ltd. Quarterly. ISSN: 14710226. Electronic document accessed November 2006: http://www.inderscience.com/browse/index.php

Focuses on vehicle autonomous systems, covering topics such as driver assistance systems, intelligent vehicle systems, collision avoidance, and active suspension and steering systems

International Journal of Vehicle Design. Milton Keynes, UK: Inderscience Enterprises Ltd. Monthy. ISSN: 01433369. Electronic document accessed November 2006: http://www.inderscience.com/browse/index.php

Focuses on engineering, design, and research in the development of self-propelled vehicles and their components.

International Journal of Vehicle Information and Communication Systems (IJVICS). Milton Keynes, UK: Inderscience Enterprises Ltd. Quarterly. ISSN: 14710242. Electronic document accessed November 2006: http://www.inderscience.com/browse/index.php

Covers vehicle networking, information and communication systems.

ITE Journal. Washington, DC: Institute of Transportation Engineers. Monthly. ISSN: 01628178. Electronic document accessed November 2006: http://www.ite.org/itejournal/

Features articles dealing with the safe and efficient movement of people and goods. Frequently contains articles on applications of ITS technologies to traffic operations.

ITS America News. Washington, DC: Intelligent Transportation Society of America. Bi-monthly. Electronic document accessed November 2006: http://www.itsa.org/

Members-only newsletter highlighting recent news and activities of ITS America, the leading advocate for ITS development and deployment in the U.S.

ITS International. Kent, UK: Route One Publishing Ltd. Bi-monthly. ISSN: 14636344. Electronic document accessed November 2006: http://www.itsinternational.com/latest_issue/index.cfm

Covers developments and deployments of ITS technologies on an international level. Offers in-depth features, news, and product round-ups. A bi-weekly electronic newsletter is also available.

ITS Solutions. London: Hemming Information Services. Monthly. Electronic document accessed November 2006: http://www.tecmagazine.com/index.cfm?fuseaction=itss.latest

Issued as a supplement to the journal Traffic Engineering and Control, this publication is presented as a magazine for ITS practitioners in the European ITS community.

ITSinpractice. London: Hemming Information Services. Irregular. Electronic document accessed: November 2006: http://www.itsinpractice.com/index.cfm?fuseaction=home.journal

A bi-weekly peer-reviewed online journal published by Traffic Engineering and Control in association with ITS United Kingdom. Contains papers discussing recent research and projects as well as the practical issues relating to the procurement and deployment of ITS.

Ivsource.net. Bi-monthly. Electronic resource accessed November 2006: http://www.ivsource.net.

Designed as a news service covering the latest intelligent vehicle developments for cars, trucks, buses, and specialty vehicles.

Journal of Advanced Transportation. Calgary, Alberta: Institute for Transportation. Three issues per year. ISSN: 01976729.

Articles deal with advances in the analysis, design, economics, engineering, operations, planning and technology of all modes of transportation. Abstracts only available at: http://www.advanced-transport.com/toc.htm

*Journal of Intelligent Transportation Systems: Technology, Planning and Opera*tions. Philadelphia, PA: Taylor & Francis Inc. Quarterly. ISSN: 15472450. Electronic document accessed November 2006: http://journalsonline.tandf.co.uk

Covers scholarly research on the development, planning, management, operation and evaluation of ITS.

*Journal of Transportation Engineering***.** Reston, VA: American Society of Civil Engineers. Bi-monthly. ISSN: 0733947X. Electronic document accessed November 2006: http://www.pubs.asce.org/journals/jrns.html

Frequently contains articles dealing with ITS applications to traffic management technologies.

NTOC Talks, A Newsletter of the National Transportation Operations Coalition. Bi-monthly. Electronic resource accessed November 2006: http://www.ntoctalks.com/icdn/index.php3

Electronic newsletter serving as a resource on transportation operations and management (M&O) and ITS from an alliance of national associations, practitioners, and private sector groups.

*Public Roads***.** Washington, DC: U.S. Department of Transportation, Federal Highway Administration. Bi-monthly. ISSN: 00333735. Electronic document accessed November 2006: http://www.tfhrc.gov/pubrds/pubrds.htm

Describes advances and innovations in federal highway issues, policies, programs, and research and technology.

*Telematics Update Magazine***.** London: EyeForAuto First Conferences. Quarterly. Electronic document accessed November 2006: http://www.telematicsupdate.com.

Covers wireless intelligence for the auto industry and information on telematics products and services.

Traffic Engineering and Control (TEC). London: Hemming Information Services. Monthly. ISSN: 00410683. Electronic document accessed November 2006: http://www.tecmagazine.com/

Covers traffic control and management, transportation planning policy and research, new technologies and products, and road safety.

*Traffic Technology International***.** Surrey, UK: UK & International Press. Bi-monthly. ISSN: 13569252.

Contains feature articles, technology profiles, and current news related to ITS on an international basis.

Traffic Technology International. Surrey, UK: UK & International Press. Annual. ISSN: 13528548.

Annual publication featuring articles, reviews, technology profiles and news coverage of ITS, with a focus on the technology of advanced traffic control systems. International in scope, it is supplemented by a bi-monthly periodical of the same title.

*Transportation Communications Newsletter***.** Daily. ISSN: 15291057. Electronic resource accessed November 2006: http://finance.groups.yahoo.com/group/transport-communications/

This electronic newsletter offers news and information related to all aspects of communications in the area of transportation industry. Typically covers topics such as ITS, public relations and outreach, traveler information, and transportation operations. Also available as a daily e-mail publication.

Transportation Management & Engineering. Des Plaines, IL: Scranton Gillette Communications, Inc. Quarterly. ISSN: 15370259. Electronic document accessed November 2006: http://www.tmemag.com

Focuses on technology, systems and products directed at improving traffic and transit system operations and safety. Issued as a quarterly supplement to Roads and Bridges Magazine.

Transportation Research. Part C: Emerging Technologies. New York, NY: Elsevier Science Ltd. Bi-monthly. ISSN: 0968090X. Electronic document accessed November 2006: http://www.sciencedirect.com/science/journal/0968090X

Scholarly journal addressing the implications of emerging technologies on the planning, design, operation, control, management, maintenance, and rehabilitation of transportation systems, services, and components.

Transportation Research Record: Journal of the Transportation Research Board. Washington, DC: Transportation Research Board. Annual. ISSN: 03611981.

Contains papers presented at the annual TRB conference. Papers from each year on the topic of ITS are typically published in a Transportation Research Record titled "Intelligent Transportation Systems and Vehicle-Highway Automation".

Vehicle System Dynamics. Abbingdon, UK: Taylor & Francis. Monthly. ISSN: 00423114. Electronic document accessed November 2006: http://www.tandf.co.uk/journals/titles/00423114.asp

Features articles emphasizing the theoretical background on the research and development of road, rail, and other ground based vehicles.

World Highways. Swanley, Kent: Route One Publishing. Bi-monthly. ISSN: 09644598. Electronic document accessed November 2006: http://www.worldhighways.com/

Covers all aspects of highway design, construction, maintenance, operation, financing and management.

CONFERENCE PROCEEDINGS

American Control Conference. *Proceedings*. Evanston, IL: American Automatic Control Council. Annual. 1982- .

Location varies. Focus is on topics relevant to advanced control and automation, such as robotics, guidance and control, intelligent control, and modeling and advanced simulation.

Applications of Advanced Technologies in Transportation (AATT). *Proceedings*. Reston, VA: American Society of Civil Engineers. Irregular. 1989- .

Location varies. Contains papers on technical innovations for improving transportation infrastructure and providing more efficient transportation operations.

IEEE Conference on Intelligent Transportation Systems (ITSC)**.** *Proceedings*. Piscataway, NJ: Institute of Electrical and Electronics Engineers. Annual. 1997- .

Title varies. Held annually at different sites. Focus is on cutting-edge electronics technologies and their applications to ITS.

IEEE Intelligent Vehicles Symposium. *Proceedings*. Piscataway, NJ: Institute of Electrical and Electronics Engineers. Annual. 1989- .

Title varies. Held annually at different sites. Papers address vehicle-centered intelligent systems.

IEEE Vehicular Technology Conference. *Proceedings***.** Piscataway, NJ: Institute of Electrical and Electronics Engineers. Semi-annual. 1950- .

Held in Spring and Fall. Conferences address various topics related to ITS, such as vehicle electronics, navigation, control, guidance, sensors, and communication.

International Association for Vehicle System Dynamics Symposium. *Proceedings*. London: Taylor & Francis. Biennial. 1975- .

Location varies. Focus is on current state-of-the-art in ground vehicle dynamics and related fields.

International Congress on Transportation Electronics: Convergence. *Proceedings.* Warrendale, PA: Society of Automotive Engineers. Biennial

Covers emerging technologies as well as the process and business aspects of automotive technologies.

International Federation of Automatic Control. *Proceedings of the IFAC Symposium on Control in Transportation Symposium.* Oxford, UK: Pergamon. Triennial. 1970- .

Hosted by the Technical Committee on Transportation Systems. Covers recent developments on aspects of the role of automatic control in traffic and transportation systems.

International Symposium on Advanced Vehicle Control (AVEC*). Proceedings*. Tokyo: Society of Automotive Engineers. Biennial. 1992- .

Location varies. Focuses on advanced control of vehicles, covering topics such as: advanced steering and suspension systems, intelligent vehicles, driver assistance systems, human factors, sensors, and vehicle dynamics.

ITS America. Meeting. *Conference Proceedings*. Washington, DC: Intelligent Transportation Society of America. Annual. 1991- .

Contains papers from the foremost gathering of academia, government, and industry in the U.S, covering research, development, and deployment of ITS.

ITS in Europe. *Conference Proceedings*. Brussels: ERTICO. Irregular. 1999- .

Location varies. Originally convened to "fill in the gap" with European-focused events during the years that the World Congress takes place outside of Europe.

Smart Moving: International Conference on Intelligent Transport System. London: ITS UK. Biennial. 2003- .

Focus is on new technologies for urban, regional travel, and worldwide travel. Hosted by ITS UK, in conjunction with ITS Canada and ITS America, as well by some of the European national ITS associations. The conference is held alongside the Traffex Exhibition, the leading traffic technology exhibition in the U.K.

Society of Automotive Engineers. *World Congress & Exhibition.* Warrendale, PA: Society of Automotive Engineers. Annual.

Published in the SP (Special Paper) series, this is an annual collection of SAE Technical Papers focusing on Intelligent Vehicles and ITS technologies from one or more sessions at an SAE event.

Transportation Research Board. Annual Meeting. *Preprints*. Washington, DC: National Academy Press. Annual. 1921- .

Annual conference converging engineers, scientists, and researchers, supported by state transportation departments and federal agencies. Published papers have been issued on CD-ROM since 1998. Papers are also categorized by subject and published in the Transportation Research Record series (also known as the Journal of the Transportation Research Board since 1999).

World Congress on Intelligent Transport Systems. Annual. 1994- .

Title and location vary. Convenes every three years in Europe. Considered to be one of the foremost annual events focusing on ITS research and applications worldwide. Sponsored by the three premiere ITS organizations in the world: ITS America, ITS Japan, and ERTICO.

INDEXING/ABSTRACTING SERVICES AND DATABASES

Compendex
http://www.ei.org/databases/compendex.html

Indexes over 5,000 journals, conferences, technical reports and other materials related to engineering and technical literature.

Inspec
http://www.iee.org/publish/inspec/

Indexes over 4,000 scholarly journals, conference proceedings, books, reports, and dissertations in physics, electrical engineering and electronics, computers and control, and information technology.

Intelligent Transportation Systems Electronic Document Library (ITS EDL)
http://www.its.dot.gov/library.htm

The ITS EDL is an electronic repository of documents on ITS topics published or sponsored by the U.S. Department of Transportation. Features a catalog searchable by author, title, topic, or full-text. Most of the documents are available in PDF. Also includes an archive of recently added documents.

International Transport Research Documentation (ITRD) Database
http://www.itrd.org/database.htm

Contains more than 350,000 records covering the transportation literature since 1972 of 23 countries, including most of the European countries, Australia, Latin America, Canada, China, and Japan.. Sources include over 500 journals, series, books, reports, conferences, dissertation, patents, standards and specifications.

NTIS (National Technical Information Service) Library
http://www.ntis.gov

Database containing over 750,000 titles for U.S. government-sponsored publications issued since 1990. Searching capabilities are limited to titles and topics. Abstracts, links to full text, and fee-based downloadable capabilities are available. More detailed searching capabilities are available through the fee-based Government Research Center's databases at grc.ntis.gov

SAE Digital Library
http://www.elecpubs.sae.org/

Provides access to thousands of SAE technical publications covering research and advances in engineering, including ground vehicles and manufacturing technologies. Includes technical papers, journal articles, books, standards, and reports.

Transport
http://www.silverplatter.com

This is the most comprehensive source for bibliographic information in transportation. Includes nearly 700,000 records from the TRIS Database produced by the Transportation Research Board (TRB), the International Transport Research Documentation (ITRD) produced by the Organization for Economic Cooperation and Development (OECD), and TRANSDOC from the European Conference of Ministers of Transport (ECMT). Coverage is from 1968 to present. Available in web-based format or CD-ROM from Ovid's WebSPIRS platform.

Transportation Research Information Services (TRIS)
http://tris.trb.org/about/

TRIS is produced and maintained by the Transportation Research Board (TRB). It contains over 640,000 records of published and ongoing research, as well as journal citations, with most records containing abstracts. Records are indexed using the Transportation Research Thesaurus (TRT). Available commercially through Dialog and Ovid, and free on the Internet as TRIS Online via the National Transportation Library (NTL) at: http://ntlsearch.bts.gov/tris/index.do Searches can be limited to TRIS Online or the NTL Catalog, which includes the NTL Digital Repository (digital collection) or other transportation websites (portal collection).

TRANweb
http://tran.library.northwestern.edu/

Produced by the Northwestern University Transportation Library, this is a database of magazine articles and conference paper citations. Catalog is searchable by author, title, subject, or keyword.

TRB Publications Index
http://pubsindex.trb.org/

Provides access to over 30,000 papers, articles, and reports published by the Transportation Research Board, Highway Research Board, Strategic Highway Research Program, or the Marine Board from 1923 to date. Searchable by author, title, abstract, index term, conference, and series.

TRB Research in Progress (RiP)
http://rip.trb.org/

Describes over 8800 current or recently completed federal-, state-, or university-funded transportation research projects.

Web of Science
http://isiknowledge.com/wos

Indexes over 8,000 of the leading journals in the arts, humanities, sciences and social sciences, providing searching of footnoted citations. Includes the Arts & Humanities Citation Index, Science Citation Index, and Social Sciences Citation Index.

DICTIONARIES AND GLOSSARIES

"Appendix B: Glossary and Appendix C: Acronyms," in Intelligent Transportation Primer. Washington, DC: Institute of Transportation Engineers, 2000. Pages B-1-B-10, C-1-C-6.

Provides definitions of ITS terminology and acronyms.

Intelligent Transportation Systems Glossary. Electronic resource accessed November 2006: http://www.sanewsletters.com/ITS/glossary4.asp#V

Offers a detailed glossary of ITS terms compiled by the publishers of Inside ITS and The Intelligent Highway.

WEBSITES - GOVERNMENT, ASSOCIATIONS, ACADEMIC/RESEARCH

(all accessed November 2006)

Government

Intelligent Transportation Systems Joint Program Office (ITS JPO)
--see
United States. Joint Program Office for Intelligent Transportation Systems (ITS JPO)

National Transportation Library (NTL)
http://ntl.bts.gov/

Administered by the Bureau of Transportation Statistics, the NTL features links to a number of resources, including its digital collection of technical, research and policy documents, TRIS Online, the Transportation Research Thesaurus (TRT), and the TranStats statistical database.

Oak Ridge National Laboratory. Center for Transportation Analysis. ITS Research Program
http://cta.ornl.gov/cta/ITS.shtml

Describes the Center's ITS research program focusing on the environment, safety, and security of the traveling public.

Transitweb
http://www.its.dot.gov/transit_dev/introduction.asp

Provides resources to help transit agencies better communicate with their customers through websites and ITS-related technologies. Lists guidelines, best practices, reports and publications, and links to other resources.

Turner-Fairbank Highway Research Center
http://www.tfhrc.gov/its/its.htm

As the Office of Operations Research and Development, conducts research supporting the Federal Highway Administration's key goals of improved mobility and improved safety though applications of ITS. Links are provided to related publications, articles, and other resource sites.

United States. Department of Transportation. Federal Highway Administration. ITS Architecture Implementation Program
http://www.ops.fhwa.dot.gov/its_arch_imp/index.htm

The ITS Architecture Implementation Program provides ITS practitioners with he guidance and resources necessary for implementing the Final Rule on Architecture and Standards Conformity issued on January 8, 2001. This program is part of the Facilitating Integrated ITS Deployment Program within the FHWA Office of Operations.

United States. Department of Transportation. Federal Transit Administration
http://www.fta.dot.gov/assistance/technology/research_4594.html

Provides links to reports produced or sponsored by the Federal Transit Administration on applications of ITS for transit.

United States. Joint Program Office for Intelligent Transportation Systems (ITS JPO)
http://www.its.dot.gov/index.htm

The Federal ITS program supports the advancement of ITS through investments in initiatives, studies and deployment. This website features links to current news, federal initiatives, technical assistance resources, other U.S. DOT programs activities supporting ITS, and decision-making resources. Provides numerous links, including the Electronic Document Library, major initiatives, architecture, standards, telecommunications, and deployment support (statistics, databases, and lessons learned). Additional links are included for websites to the various Federal Government modal programs, associations and working groups, and university programs.

Associations – Domestic

Institute of Electrical and Electronics Engineers (IEEE) Intelligent Transportation Systems Society
http://www.ewh.ieee.org/tc/its/

Describes the scope and activities of the Society, a professional association focusing on technical issues related to communications and control issues dealing with ITS. Features links to publications, conferences, meetings, and related organizations.

Institute of Transportation Engineers (ITE)
http://www.ite.org/

ITE is international educational and scientific association of transportation professionals. It promotes professional development and research, and develops public awareness programs. ITE has 11 councils, of which the ITS Council (http://www.ite.org/councils/ITS/default.asp) coordinates different application areas and develops products and services necessary to advance the deployment of ITS.

Intelligent Transportation Society of America (ITS America)
http://www.itsa.org/

Serves as the leading advocate for the development and deployment of ITS in the U.S. Members include private corporations, public agencies, academic institutions, and research centers. Website provides links to events, forums, government affairs, resources, member services, and news. Certain features are available only to members. Links to over 25 State Chapters affiliated with ITS America are available at:
http://www.itsa.org/State_Chapters/c21/Inside_ITSA/State_Chapters.html

National Transportation Operations Coalition (NTOC)
http://www.ntoctalks.com/index.php

Provides information and resources on news, meetings, documents, and products related to transportation management and operations and ITS. Serves as an alliance of national associations, practitioners, and private sector groups.

Society of Automotive Engineers (SAE)
www.sae.org

Organization of international engineers and scientists promoting the advancement of automotive engineering and mobility. The SAE Store website provides access to information on books, technical papers, conference proceedings and standards.

Associations – International

ERTICO
http://www.ertico.com/

ERTICO-ITS Europe is a multi-sector, public/private partnership pursuing the development and deployment of Intelligent Transport Systems and Services (ITS). Website includes links to activities, partners, glossary, publications, news and events, congresses, ITS associations in Europe and worldwide, European Commission sites, and other ITS-related websites.

IBEC
http://www.ibec-its.org/

International Benefits, Evaluation and Costs (IBEC) is a cooperative working group set up to coordinate and expand international efforts, to exchange information and techniques, and evaluate benefits and costs of ITS.

ITS Australia
http://www.its-australia.com.au

Australia's only organisation focused on facilitating the development and deployment of advanced technologies across all modes of transportation.

ITS Canada
http://www.itscanada.ca/

ITS Canada is recognized as the most knowledgeable source for information and advice on intelligent transportation systems in Canada.

ITS Japan
http://www.its-jp.org

Formerly known as Vehicle, Road and Traffic Intelligence Society (VERTIS), this is the premier organization in Japan promoting research, development, and deployment of ITS. Website includes an overview of the ITS program in Japan, events, system architecture, and related links.

ITS Nationals – Network of National ITS Associations
http://www.itsnetwork.org/

Hosted by ERTICO, this is a network of over twenty international member organizations. Links to other national ITS associations are included.

ITS Netherlands
http://www.connekt.nl/

ITS-NL is primarily directed toward implementing ITS in The Netherlands, creating public support for ITS, disseminating ITS knowledge, and addressing issues such as standardization and system architecture.

ITS Sweden
http://www.its-sweden.com

ITS Sweden is the national organization promoting the development, support, and coordination of ITS in Sweden.

ITS UK
http://www.its-uk.org.uk/

Association representing 150 UK organizations, comprised of government departments, local authorities, police forces, consultants, manufacturing and service companies, and academic and research institutions.

Transport Canada, Intelligent Transportation Systems
http://www.its-sti.gc.ca/

The ITS Branch of Surface Transportation Policy leads Transport Canada's planning, development, and implementation of a comprehensive policy framework in support of the Intelligent Transportation Systems Plan for Canada.

Academic/Research

California Partners for Advanced Transit and Highways (PATH)
http://www.path.berkeley.edu/

One of the first academic research programs focusing on ITS in the U.S. Administered by the Institute of Transportation Studies, University of California, Berkeley, in collaboration with the California Department of Transportation (Caltrans). Website provides links to various research program and other resources. Includes a publications link to the PATH Publications Database, a searchable database of PATH research reports and working papers, many of which are available full-text.

ITS Decision
http://www.calccit.org/itsdecision/

A project of the California Center for Innovative Transportation, a unit of the University of California, Berkeley's Institute of Transportation Studies, and the California Department of Transportation (Caltrans). Website provides objective information on ITS services, technologies, and their performance. Resources range from brief summaries to detailed reports to articles and research from government and trade sources.

Mitretrek Systems
http://www.mitretek.org/IntelligentTransportationSystemsITS.htm

Mitretek is a non-profit scientific research and engineering corporation providing independent, objective, and technical analysis and expertise to ITS applications, issues, and technologies. Website for Mitretek's Intelligent Transportation Systems Division provides links to publications, special projects, and technology assessments.

Transport Research Laboratory (TRL)
http://www.trl.co.uk/

As the United Kingdom's independent research laboratory, TRL conducts research and testing on all aspects of transportation. Website includes a link to reports published by TRL on Intelligent Transport.

Further information on the major academic programs in the U.S. focusing on ITS is available at the following websites:

Iowa State University, Center for Transportation Education and Research
http://www.ctre.iastate.edu/index.html

Massachusetts Institute of Technology (MIT), Intelligent Transportation Systems Program
http://web.mit.edu/its/

Ohio State University, College of Engineering, Center for Automotive Research
http://car.eng.ohio-state.edu/

University of Florida, Center for Urban Transportation Research (CUTR) ITS Traffic Operations and Safety Program
http://www.cutr.usf.edu/its/Default2.htm

University of Idaho, National Institute for Advanced Transportation Technology
http://www.webs1.uidaho.edu/niatt/

University of Maryland, Center for Advanced Transportation Technology (CATT) Laboratory
http://www.cattlab.umd.edu/

University of Michigan, Transportation Research Institute (UMTRI)
http://www.umtri.umich.edu/news.php

University of Minnesota, Center for Transportation Studies, Intelligent Transportation Systems Institute
http://www.its.umn.edu/

University of Washington, Intelligent Transportation Systems Research Program
http://www.ivhs.washington.edu/