

Federal Report to the ITS America Board of Directors Meeting

April 22, 1999
Washington, D.C.

This Report....

This report includes updates from the following range of ITS issues:

- ITS Provisions in TEA-21
- Intelligent Vehicle Initiative
- ITS National Architecture
- ITS Standards
- Program Assessment
- Rural ITS
- Transit
- Commercial Vehicle Information Systems and Networks
- Professional Capacity Building
- ITS Outreach and Communications
- **See attached standards milestone chart!**

ITS Provisions in TEA-21

TEA-21 ITS Update
(Updated as of 4/19/99)

ITS Deployment Program
Sec. 5208

Status

The ITS deployment program authorized in TEA-21 includes two components: integration and CVISN. The ITS Integration component provides Federal ITS funding for the integration of multimodal ITS components in a variety of settings, including large regional or multi-state areas, metropolitan areas, and rural areas. It is defined in Sec. 5208.

Project proposals from areas identified in the 1999 appropriation to participate in the ITS integration program are due April 30. These proposals include project descriptions specifying the use of these funds and showing how TEA-21 criteria will be met.

Also, preliminary applications to assess the qualifications of public/public or public/private partnerships to participate in the fiscal year 2000 ITS integration program are due May 7. This request was published in the Commerce Business Daily on April 1, and is also available on the Internet at <http://www.its.dot.gov>. The preliminary applications/ statements of qualifications will be reviewed by a high level, independent panel of experts convened by ITS America in their role as a utilized Federal Advisory Committee to the Department of Transportation.

The panel will assess the applicants' qualifications to participate in the ITS Deployment Program based on the specific criteria contained in TEA-21. Those applications that demonstrate an ability to meet the criteria established by TEA-21 will be considered as potential candidates for funding in FY 2000. The number of applications funded, if any, will depend on the availability of funding in FY 2000.

The Commercial Vehicle Intelligent Transportation Infrastructure Deployment component is defined in Section 5209. It supports complete deployment of Commercial Vehicle Information Systems and Networks (CVISN) in a majority of states by September 30, 2003.

See the CVISN section of this TEA-21 update.

**Architecture Consistency
Sec. 5206(e)**

Status

TEA-21 contains a provision requiring ITS projects implemented with funds from the Highway Trust Fund (including the mass transit account) to conform to the national architecture, applicable or provisional standards, and protocols.

After the initial "Train the Trainer" session in January, three additional training sessions were conducted with USDOT field staff in March for the course titled, An Introduction: National ITS Architecture and Interim Guidance on Conformity with Architecture and Standards. Other training sessions are planned through June to reach all FHWA field offices, enabling them to use and present the course materials.

Work progressed on developing a final policy to implement the TEA-21 legislation requiring conformity with the National ITS Architecture and Standards, with a goal of issuing rulemaking (i.e., Notice of Proposed Rulemaking) in the summer or early fall.

**Critical Standards
Sec. 5206(b)**

Status

TEA-21 requires the ITS program to develop, implement, and maintain a national architecture and supporting standards and protocols to promote the widespread use and evaluation of ITS technology as a component of the surface transportation systems of the United States.

The US DOT proposed criteria and list of critical standards were opened to public comment in Federal Register Notice 63 FR 70836, published Dec. 22, 1998. Comments received by the Federal Register docket were either technical and related to specific standards or procedural and related to the process.

Specifically, not later than June 1, 1999, the Department shall submit a report to Congress identifying which standards are critical to ensuring national interoperability or critical to the development of other standards and specifying the status of the development of each standard identified.

An ITS America-sponsored Critical Standards Advisory Group led a series of four meetings and a two-day public workshop to develop a consensus on the critical standards issue within the ITS community. The process of engaging stakeholders has brought about agreement on criteria and a resulting list of seventeen critical ITS standards. A draft of the report to Congress, that the Secretary must submit by June 1, 1999, has begun the internal approval process.

**Evaluation Guidelines
Sec. 5204(j)**

Status

TEA-21 tasks the Secretary of Transportation to issue guidelines and requirements for the evaluation of operational tests and deployment projects carried out under Subtitle C which addresses the ITS program. TEA-21 further requires the guidelines to establish funding evaluation levels, based on the size and scope of evaluated projects, to ensure adequacy of evaluation activities.

A version of TEA-21 Evaluation Guidelines has been coordinated with affected Headquarters offices, and approved by the Deputy Director of the ITS Joint Program Office. The document has been submitted to the Office of General Counsel for review prior to submission to the Office of the Federal Register. Upon approval by Office of General Counsel, the TEA-21 Evaluation Guidelines will be posted as a notice in the Federal Register in anticipation of distribution to FHWA and FTA field offices in time for FY 2000 projects.

**CVISN Deployment Program
Sec. 5209**

Status

TEA-21 requires the Secretary to carry out a comprehensive program to deploy ITS that improve the safety and productivity of commercial vehicles and drivers; and reduce costs associated with commercial vehicle operations

and Federal and State commercial vehicle regulatory requirements. The purpose, priority areas and Federal share are described.

As reported last quarter, Maryland, Virginia, and Kentucky -- are expected to complete development of CVISN Level I by December 1999. Seven additional states are expected to reach completion by December 2000. In total, over 40 states are in several stages of CVISN deployment.

A detailed update is included in the CVISN section of this report.

**Eligibility B STP, CMAQ, NHS
Sec. 1108(a)(7); Sec. 1110(b)(6); etc**

Status

STP funding includes infrastructure-based ITS capital improvements. CMAQ funding qualifies if the program or project improves traffic flow, including projects to improve signalization, construct high occupancy vehicle lanes, improve intersections, and implement ITS strategies and such other projects.

Planning efforts revealed that action on eligibilities will follow completion of the architecture consistency policy.

**Life Cycle Cost Analysis and Financing and Operations Plan
Sec. 52108
[Sec. 1201(a)(18)(A)]**

Status

The Secretary requires that those applying for ITS funding under the integration and CVISN programs (Sec. 5208 and Sec. 5209) submit an analysis of the life-cycle costs of operation and maintenance of ITS elements, if the total initial capital costs of the elements exceed \$3 million. In addition, a multi-year financing and operations plan is required describing how the project will be cost-effectively operated and maintained.

The JPO is looking at developing technical guidance on life cycle cost and planning for operations and maintenance. However, this effort will be initiated after the procurement requirements are underway. There has been no change in status since the last quarter.

**Procurement Methods for ITS Projects
Sec. 5204 (l)(1)**

Status

The Secretary must develop appropriate technical assistance and guidance to assist State and local agencies in evaluating and selecting appropriate methods of procurement for ITS projects carried out using funds made available from the Highway Trust Fund, including innovative and non-traditional methods, such as the Information Technology Omnibus Procurement.

The task force has met and decided on the course of action defining several tasks to assist in the procurement of ITS. These tasks started on April 1, 1999 and will be completed by year's end.

**National ITS Program Plan
Sec. 5205 (a)(1) & (a)(2)**

Status

TEA-21 requires the US DOT to update the National ITS Program Plan as developed by the Department and ITS America. US DOT's approach breaks down the requirement for the development of the National ITS Program Plan into three distinct parts: 1) Program Plan: Five-year horizon; 2) Program Plan: Ten-year horizon; and 3) the National ITS Deployment Strategy.

The five-year plan is in draft form and currently undergoing revisions based on a report from US DOT stakeholders. It is on schedule. The ITS Deployment Strategy is also on schedule and is being led by ITS America. The first draft is out for review among the ITSA committees and the comment period will last until May 15. The 10-year plan has not yet begun.

Intelligent Vehicle Initiative

- **IVI Broad Area Announcement** -- Several proposals were received under each IVI platform -- Heavy Vehicle, Specialty Vehicles, Transit, and Light Vehicle. The selection panels for each platform have completed their review of the proposals. It is anticipated that the selection process will be completed in June. The notice was issued on the ITS JPO Web Site on December 9, 1998. The closing date for applications was March 11, 1999.

Other IVI Activities

- **The Heavy Vehicle Platform** -- The PERCLOS Conference is scheduled for April 26-27 at the Hyatt Dulles, in Northern Virginia. The purpose of this conference is to serve as a venue to present and learn the most recent research and technological developments in eye-based measures of driver alertness. Discussion topics will include in-vehicle alertness technology, concepts for feedback of alertness information to drivers and others, and concepts of successful user-acceptance of this type of technology. Also, the findings from a recently completed FHWA/NHTSA study regarding PERCLOS (an automated camera --drowsy driver detection device) will also be presented. Other ongoing activities include Drowsy Driver, Rearward Amplification, Electronically Controlled Braking System (ECBS), Truck Manufacturers Association (TMA) Partnership.
- **The Specialty Vehicles Platform** -- The Advanced Law Enforcement and Response Technology (ALERT) strategic plan is under development. The ALERT program will be integrated into the IVI program to advance the ALERT capabilities into other vehicle types.
- **The Light Vehicle Platform** -- The Crash Avoidance Metrics Partnership (CAMP) work, including rear-end collision warning alert algorithms and development and validation of procedures, was completed in March 1999. It is anticipated that a final publication will become available soon.
- **The Transit Vehicle Platform** -- Four activities are underway in this area. They include the following: The Transit IVI Needs Assessment Study which has a draft report due in May. The following three efforts will produce a performance specifications documents: The Change/Merge Collision Avoidance System for which research will start this month. Beginning in May are the Rear Impact Collision Warning and Mitigation work and the Rear End (Forward) Collision Warning and Mitigation.

ITS National Architecture

- **Archived Data User Service** -- The Archived Data User Service has been added as the 31st user service in the National ITS Program Plan. Its integration into the National ITS Architecture began with a kickoff meeting and the first program review. Both were well-attended by the stakeholder community (more than 35 representatives present). There is greater understanding by the stakeholders, and the architecture team has already incorporated additional stakeholder ideas into their integration effort. The task is on schedule with an expected completion this fall.
- **Turbo Architecture** -- A kickoff meeting was held to address the Turbo Architecture software tool, to be designed to assist in project and regional ITS architecture development. The principal focus of the meeting was to focus on capabilities and system requirements for the tools, and to solicit user comments and input. The meeting was well-attended and resulted in the gathering of many constructive comments. The task is expected to be completed by December 1999.

ITS Standards

- **Update on Critical Standards - See TEA-21 Update.**
- **Standards Development** -- To date, there are about 25 ITS standards that are either published or in the prepublication process. Another 26 are undergoing balloting by standards development committees, while more than 30 others continue under development. Even more standards, such as standards for the new ITS services that were recently added to the architecture, will begin development soon.
- **Standards Testing** -- The Battelle Memorial Institute was chosen to lead a comprehensive standards testing program. The program will investigate the performance of the standards and "prove" them in realistic transportation settings under realistic conditions. The approach is to leverage ongoing and planned ITS deployments, such as the FY 1999 earmarks, by including standards testing and evaluation in the projects. Information on the results of the tests will be widely disseminated to public transportation agencies and to commercial suppliers of transportation products and services. The test results will also provide feedback to the standards development organizations so that they can improve or update the standards.
- **ITS Education and Outreach** - Reference information about the standards is being developed for transportation officials. Training opportunities will be available soon. These activities will provide

understanding and guidance about the importance of achieving interoperability. A portion of an improved and expanded ITS standards Web site is up and running at <http://www.its.dot.gov>. Other activities underway or planned include:

- A standards reference "notebooks" that will contain one-page fact sheets and procurement specifications on each standard;
 - User guides for the standards: "lessons learned" reports;
 - A non-technical outreach campaign for managers; a peer-to-peer program to provide technical assistance to public agency standards implementers;
 - A "train-the-trainer" course for FHWA officials; and course modules for other courses, such as National ITS Architecture training courses.
- Transit Standards Consortium -- The Transit Standards Consortium, Inc. (TSC) is promoting standards development activities intended to improve the efficiency of the transit industry; supporting the efforts of on-going standards activities; identifying and prioritizing additional standards activities that would enhance the effectiveness of on-going standards activities; and funding high-priority standards activities using pooled funds from public and private industry stakeholders. The Transit Standards Consortium seeks to help set the agenda for the transit industry's standards efforts, and work with existing standards organizations to achieve the industry's goals.
 - Background: TSC is a member organization of transit industry operators, vendors, public interest groups, technical societies, standards development organizations, government agencies, and individuals. The mission of TSC is to serve as a transit industry forum for comprehensive and integrated identification, research, development, testing, training and maintenance of transit standards in order to improve cost effectiveness, customer service and employee satisfaction.

Program Assessment

- Evaluation Guidelines - See TEA-21 Update.

Metropolitan Model Deployment Initiative and CVISN Evaluations

- MMDI Evaluation -- Efforts at synthesizing several areas of evaluation, including safety, customer satisfaction, throughput, energy and emissions, and integration are continuing.
- MMDI Customer Satisfaction Evaluation -- Efforts in this area have focused on evaluation response to in-vehicle navigation and kiosks in San Antonio; cable TV in Phoenix, and traffic web sites in Seattle.
- MMDI Energy and Emissions Evaluation -- A major part of this effort has been the development of an energy and emissions module that can be used with a traffic simulation tool called INTEGRATION. A crash risk analysis module designed to be used with INTEGRATION, or as a stand-alone application, will be completed by the end of April 1999.
- CVISN Evaluation The recent focus of CVISN evaluations has been concentrated on collecting baseline cost data in Kentucky and Connecticut in anticipation of implementing electronic credentialing. Virginia and Maryland will also participate in baseline cost collection efforts even though their implementation schedules for credentialing vary.
- Field Operational Tests. Field Operational Test evaluation activities were concentrated in three areas: (1) For the commercial vehicle operations safety-related operational test in the I-95 Corridor, surveys and focus groups of State DOT and law enforcement commercial vehicle inspectors were under development; (2) In the evaluation of advanced rural transportation systems' traveler information service in tourism areas, draft evaluation reports are under review; (3) The Foretell Consortium operational test of weather information for surface transportation completed the evaluation strategy and worked on delivery of a draft evaluation plan.

ITS Benefits/Cost Tracking

- Benefits Analysis - Over the last five years, the ITS Joint Program Office (JPO) has been collecting and distributing information regarding the benefits of ITS investments. The latest report entitled "ITS Benefits:1999 Update" is available on the ITS Electronic Document Library (EDL) on the DOT's ITS web page. A paper version will be available by summer 1999.
- As part of the JPO's effort to track progress toward meeting ITS program goals, a report entitled "Working Paper: Estimating Target Values for ITS Goal Measures" has been prepared, and is now available.
- ITS Cost Analysis - As part of the JPO's effort to track and report ITS costs, a report entitled "Working Paper: The ITS Cost Data Repository at Mitretek Systems" has been prepared, and is now available. Also, as part of

the JPO's effort to track and report ITS costs, a report entitled "Working Paper: National Costs of the Metropolitan ITS Infrastructure: Update to the FHWA 1995 Report" has been prepared, and will soon be available.

- The Benefits Report: Some Brief Highlights - In previous versions of the report, the ITS JPO has identified "a few good measures" to track progress toward meeting ITS program goals. Those measures include the following: safety of travel, reducing delays or travel time savings, operating costs, increasing the effective capacity of the transportation system, customer satisfaction, and environmental benefits. The following are some data highlights from the report:
 - Traffic Signal Systems Data: Estimated values of time saved appear to range between 8% and 20%. Likewise reductions in delay due to adaptive control may range between 15% and 44%.
 - Freeway Management Systems: The range of crash reduction due to ramp metering for the reported data is from 15% to 50%. The study revealed that the range in speed increase due to ramp metering is from 8% to 60%.
 - Electronic Toll Collection: A recent study (cited by the report) has shown that ETC can reduce the cost of staffing toll booths by 43%, money handling by 9.6%, and roadway maintenance by 14.4%
 - Multimodal Traveler Information: Surveys in Seattle, Washington and Boston Massachusetts indicate that when provided with better traveler information, 50% of travelers change route of travel and 45% will change time of travel. In addition, 5%-10% of travelers will change travel mode based on traveler information.
 - Integrated Metropolitan ITS: The report states that Houston TranStar's system provides time savings ranging from 5 minutes on average and 30 minutes for major freeway incidents. Total annual delay savings is estimated at 572,095 vehicle-hours, resulting in about \$8.4 million in savings per year.

Rural ITS

- Tourism and Traveler Information Systems Field Operational Test Initiative - Interim Results -- The Rural ITS program leveraged limited resources to partner with two State DOTs to fund two Tourism and Traveler Information System field operational tests: the Arizona I-40 Traveler and Tourist Information System and the Branson, Missouri Travel and Recreational Information Program (TRIP) project. The project evaluation team is currently reviewing interim evaluation results which document early finding and lessons learned regarding the five data collection and project evaluation activities. A final report for each project will be published in mid-1999. Project evaluation results will be presented at the 1999 ITS America Annual Meeting in Washington DC.
- National Park Field Operational Test Status -- The three parks under consideration, Acadia, Yosemite, and Zion, have each submitted strategy documents outlining a possible ITS field operational test in their park. A technical review panel made up of staff from the National Park Service and the U.S. DOT have received and reviewed these "proposals" and have developed a recommendation which will be presented to selecting officials from DOT and NPS for final selection. FHWA will then work with the selected park and NPS through the life of this project to develop a more detailed project design, system design, installation, operation and evaluation.
- Foretell Field Operational Test -- The system was demonstrated to the participating states from April 12 -13. This included a demonstration of the road condition modeling and other advanced weather prediction capabilities, as well as the reporting system that will be used to disseminate this information to state DOTs, travelers, and other users.
- Development of Rural Requirements for Input to the USDOT's National ITS Architecture -- A task has been initiated under the Rural ITS Research Support Contract. The task, "Development of Rural Requirements for Input to the USDOT's National ITS Architecture," is well underway. Its objective is to define rural ITS requirements and to work with the National ITS Architecture team to incorporate these requirements into the Architecture where appropriate. The requirements definition process is based on rural needs; and the contractor is currently in the process of developing a compendium of these needs. A stakeholders workshop was held on April 18, where a broad range of users and operators were brought together to aid in this needs definition process.

Transit/ITS

- APTS ITS Stakeholders' Forum and Benefits Matrix - In 1998, FTA, in cooperation with the ITS Joint Program Office, the American Public Transit Association and ITS America, created the APTS Stakeholders' Forum, a dedicated group tasked with providing input to the development and implementation of transit ITS research

and programs. The Forum meets quarterly and is composed of 35 professionals from transit properties, equipment manufacturers, system integrators, professional and industry associations, and US DOT.

- In coordination with the APTS Committee, the Stakeholders' Forum is currently developing a Transit ITS Benefits Matrix as a tool for transit planners and operations personnel to assist them in highlighting the impacts and costs of transit ITS in ways understandable to the transit industry. The first version of the matrix is complete, pending industry review. Following the review, the next phase will develop a more detailed and quantitative layer, expanding on the framework developed so far.
- APTS Mobile Showcase - Proposals in negotiation The APTS Mobile Showcase is a 40-foot bus that will demonstrate state-of-the-art APTS technologies such as automatic vehicle location, electronic fare payment, automatic passenger counters, traveler information, annunciators, traffic signal priority and other systems. The showcase will also demonstrate the importance of systems integration by using available transit ITS standards such as the Transit Communications Interface Profiles (TCIP). Cooperative partnerships with the transit and ITS vendors, operators and manufacturers will be advanced.
- On March 15, proposals were received from the industry, both consortia and individual vendors, with cooperative partnership offers in the development of the Showcase. Negotiations are expected to be concluded by July, with agreements outlining partnership arrangements.
- The Showcase will tour the country and will be on display at major transportation and transit conferences, individual transit operator locations, USDOT regional and divisional offices and other venues in the continental United States. The Showcase will promote the benefits of using APTS technologies to improve safety and operational efficiency and attract new riders. Finally, the Showcase will provide FTA with a mechanism for education and consensus building among the transit community and general public. A variety of outreach materials (e.g. web site, CD, handouts, and other items) will also be developed. The plan is to unveil the Showcase at the January, 2000 TRB Annual Meeting in Washington, DC.
- Electronic Payment Activities - US DOT is managing a coordinated effort to facilitate the development of seamless transportation payment systems. The objective of current research is to identify the technical, legal and institutional issues that arise in multi-application payment systems involving transportation and to provide an example, through an operational test, of the resolution of some of these issues. The effort is comprised of two parts: developing guidelines and specifications for multi-application electronic payment systems, and evaluating an operational test of a multi-application payment system. The guidelines and specifications effort is focused on for the following electronic payment systems partnerships (modules):
 - Transit Regional Fare Integration
 - Transit - Financial Services (Bank)
 - Transit - University
 - Transit - Employer
 - Transit - Parking
 - Transit - Human Services
 - Transit - Electronic Toll Collection
- The operational test RFP is scheduled to be released this month, and is a follow-on to a Federal Register Notice released last November, "Request for Letters of Interest in an Operational Test of an Electronic Payment System for Transit and Other Applications." In response to that notice, FTA received 28 responses. Proposed projects included bus, paratransit, ferry, electronic toll collection, parking, human service agency, university and employer components. Award of the operational test is expected by the end of FY99.

Commercial Vehicle Information Systems and Networks (CVISN) Update

- CVISN Deployment Benefit/Cost Assessment -- A study by the National Transportation Center at Morgan State University in Baltimore, Maryland, found that it is economically beneficial for the State of Maryland to deploy Commercial Vehicle Information Systems and Networks (CVISN). The benefits of CVISN far outweigh the costs of deployment, as seen in the net present value ranging from \$76 million to \$123 million. The benefit cost range is 1.45 to 6.67. The benefits to carriers and related state agencies are due to automated credential processing; time saved due to weigh in motion and pre-clearance of legal and safe vehicles and drivers; and the identification of high risk carriers.
- The study reported that the benefits of CVISN for commercial motor carriers far outweigh the costs. The benefit/cost ratio and NPVs are higher for commercial motor carriers when compared with Maryland State regulatory agencies. Based on a discount rate of 7%, the NPV range is from \$66 million to \$109.7 million. The benefit/cost ratio is from 6.67 to 10.41. The key factors contributing to these values includes timesaving gained by commercial motor carriers due to the implementation of CVISN solutions by the state regulatory

agency and the synergy achieved by the use of a transponder unit by motor carriers and weigh-in-motion (WIM) by state agencies.

- CVISN combined with WIM provides large roadside safety and carrier efficiency benefits. The study reported that, in theory, WIM will weigh substantially more motor carriers, resulting in long-term cost savings to the State from extended physical lives of highways.
- Meeting on Key CVISN Issues - The project managers and system architects from the Commercial Vehicle Information Systems and Networks (CVISN) prototype and pilot States met with Federal representatives on March 30, 1999, in Washington, DC. The group discussed several key issues including: the timeframe for deployment of CVISN Level 1 capabilities; the need for Federal funding for the remaining pilot States which have yet to be fully funded and a discussion of the FY 2000 ITS Deployment Program; interoperability for ITS/CVO electronic screening systems in the areas of hardware, systems/software, operations, and programs; the upcoming rulemaking addressing Federal funding and architectural standards; safety and credentialing software; update on CVISN evaluation; the Federal strategy for expanding CVISN Level 1 deployment to new States; and the FHWA's field and headquarters reorganization.

Office of Technology Evaluation and Deployment
FY 1999 Funding in Support of CVISN Pilot projects

State

Funding To Complete CVISN Level 1 deployment

Expected Date of Completion

Kentucky

Areas: safety information exchange, credentials administration, and electronic screening

By December 31, 1999.

California

Helpful to the State

By December 31, 2000.

Colorado

Will enable the State to continue its efforts to successfully demonstrate CVISN Level 1 capabilities.

The Office is hopeful that Colorado will receive the remaining funds necessary during FY 2000 to complete CVISN Level 1 deployment by December 31, 2001.

States Selected to Participate in the Commercial Vehicle
ITS Infrastructure Deployment Component of the TEA-21 Deployment Program

States

FY 1999 Funds for Completion of CVISN Level 1 Deployment

Date of Completion

Maryland

Areas: Safety information exchange, credentials administration, and electronic screening. Awards expected 4/99.

By December 31, 1999

Minnesota

Awards expected 4/99.

By December 31, 2000.

Washington

Awards expected 4/99.

By December 31, 2000.

Rail Activities

- On March 15th, US DOT Secretary Slater presided over a ceremony to mark the Full Operational capability of the Maritime Differential GPS network and to activate the expansion of it into the Nationwide Differential GPS network. In the President's FY2000 budget request, there is \$10.4 million in the Federal Railroad Administration's budget for the third year of the 5-year program to convert Air Force Ground Wave Emergency Network (GWEN) sites into NDGPS sites. FRA will transfer the funds to the Coast Guard for actual implementation.
- The ITS JPO, FRA, and ITS America are convening a workshop on July 22 and 23 in Arlington, VA to initiate the development of standards for Highway-Rail Intersections, User Service #30.

Professional Capacity Building

- This quarter, two new courses have come on line: ITS Software Acquisition and the National ITS Architecture: An Introduction for FTA Senior Staff. FHWA and FTA field personnel in the four Resource Centers have been trained to present the seminar on the National Architecture Consistency. That effort will be completed by June 1999. Those individuals will then present the seminar to State and local partners.
- A comprehensive education and training needs assessment has been completed and model criteria is being distributed for discussion with partners. A distance learning initiative is in the process of being formulated.
- Efforts reported last quarter regarding an interactive workshop to prepare senior FTA regional staff for the national architecture consistency effort have been completed. On January 7, 1999, a pilot was given. On March 11, the first presentation was made to Region I.
- Since March 1997, the Professional Capacity Building courses have been presented about 250 times to over 6,500 people.

Outreach and Communications

- Year 2000 Effort - The Office of Operations continues to provide Y2K outreach. Since the January 13 meeting with the ITS Y2K Partners at the Transportation Research Board, there have been a number of significant outreach meetings. In February, this included briefing the World Bank staff at their Roads & Highways meeting. In March, the Office met with FHWA Division and Resource Center staff to discuss Y2K outreach efforts. As a result of the meeting, FHWA will develop tabletop exercises that focus on the local perspectives. The exercises will build on the DOT/RSPA contingency planning scenarios/exercises which are designed to address federal concerns. The PTI tabletop exercises will be held in mid-May. Also in March, the Connecticut Division office hosted the Northeast Y2K (Year 2000) Traffic Control System Workshop and FHWA and MARAD staff gave a joint presentation on Y2K of the Inland Rivers, Ports and Terminals, Inc.
- The National Associations Working Group for ITS, now in its fourth year, in partnership with the U.S. Department of Transportation, is composed of national associations of state and local officials with a common interest in being informed and educated on the concepts, practices, and applications of ITS. During the first quarter of 1999, the Working Group has met three times addressing such issues as electronic fare payment integration, the National ITS Deployment Strategy, and freight movement and ITS.

New Publications and CDs

- Newly published ITS documents are regularly included in the ITS Electronic Document Library located at www.its.dot.gov. They can be printed in part or in whole immediately. Hard copies can be ordered by sending an electronic order from the JPO web site. Detailed distribution plans are also being created to ensure wide access to these publications.
- Hot Documents! TEA-21 Critical Standards: Proposed Criteria and List of Critical Standards (Oct. 29, 1998, 15 pages, 81.9 KB). See the attached chart of new publications added to the EDL.
- ITS Architecture CD - "A Framework for Integrated Transportation Into the 21st Century" is now available on CD-ROM. It can be ordered on the web via www.odetics.com/itsarch. A copy of the Version 2.0 CD-ROM can also be obtained by faxing your name and address to (202) 426-9355.

- Version one of the ITS Awareness CD-ROM was previewed at the Transportation Research Board annual meeting in January 1999 and copies were disseminated to the Federal Highway Administration field offices. Version two is available, and includes the following four modules: (a) Module 1-What are Intelligent Transportation Systems?, (b) Module 2--Success Stories, (c) Module 3-Strategic Considerations, and (d) Module 4-Planning and Intelligent Transportation Systems.
- Successful Approaches to Deploying A Metropolitan Intelligent Transportation System - This CD is designed to assist elected and appointed officials, senior decision makers, transportation managers, and technical experts. Nine approaches are used at the four metropolitan Model Deployment Initiative sites to successfully implement ITS products and services. There are tables to point the way towards a successful deployment of a metropolitan ITS. There is an extensive appendix that includes policy and contract documents that can be used and modified to suit individual deployment efforts. There is also a broad set of references and resources.

ITS Web Information Resources

- The ITS Electronic Document Library (EDL) is on line and houses more than 900 ITS documents from a diverse field of sources. The system is based on a search command which helps to find documents quickly using key words and other information. This library can be found at the ITS JPO Web site at www.its.dot.gov.
- The ITS Cooperative Deployment Network (ICDN), located on the World Wide Web, is integrated with each National Associations Working Group member's web site. It is accessible, useable, and responsive to the needs of its members and eager to attract new ones. The ICDN can be reached at the ITS JPO web page (www.its.dot.gov) or at www.nawgits.com/icdn. There are over 900 documents in the EDL most of which are available to the general public.