



THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION ENGINEERING DISTRICT 2-0 INTELLIGENT TRANSPORTATION SYSTEM BULLETIN

THE MISSION -

To identify local transportation needs and enhance the economic vitality of the region through ITS deployment.

Volume 1 Issue 2

Regional ITS Architecture Development Program

WHAT IS NEW? THE NATIONAL ITS ARCHITECTURE UPDATE

The Maintenance & Construction Operations (MCO) User Service was recently developed and will be incorporated in the next update of the National ITS Architecture, which is scheduled for January 2002.

This new user service addresses specific maintenance and construction activities such as monitoring, operating, maintaining, improving, and managing the physical condition of the roadway, associated infrastructure equipment, and the resources required to carry out these activities.

The inclusion of the MCO user service in the National ITS Architecture is a significant development for this region because it will address the needs of the maintenance and construction operations community, which plays a vital role in transportation operations across the region.

For more information on the Maintenance and Construction Operations User Services, please review the electronic document EDL#13465 at www.itsdocs.fhwa.dot.gov/jpodocs/repts_pr/13465.pdf.

NATIONAL 511 EFFORT

On July 21, 2001, the Federal Communications Commission (FCC) assigned 511 as the nationwide telephone number for traveler information. Today, a 511 system is operational in Kentucky and Ohio as the multi-state ARTIMIS System (www.artimis.org). Other transportation agencies across the nation are in the final stages of implementing 511 systems at the local level.

There are several issues to be resolved and many challenges to be faced to ensure successful 511 deployments across the nation. The 511 Deployment Coalition was established by the USDOT and is comprised of more than 30 state/local agencies as well as private sector companies. This coalition is

charged with the responsibility of addressing technical and institutional issues as well as future challenges. Although the guidelines, content and quality of 511 operations are under development, the basic information to be provided by this service will include traffic congestion, road conditions, incidents, transit routes, schedules, and fares.

For more information on 511 Effort, please review ITE Journal - August 2001 Issue (www.nawgits.com/ite/JB01HA32.pdf) and for discussions with Jim Wright, 511 Executive Director for AASHTO, visit the web site at www.nawgits.com/idcn/511_wright.html.

PROJECT GOALS

Identify needs and opportunities for integration

Develop a coherent plan to improve the region's transportation systems over time

Produce real benefits that can be identified by all the stakeholders

Get Involved

Whatever your involvement is with transportation, whether it be as a transportation professional, or as a local resident who uses a form of transportation in your day to day activities, we want to hear from you!

Please visit our ITS project web site at www.PennDOT2ITS.org and click on the "Get Involved" icon. Fill out the contact form and click on the "Submit" button.

You may also complete the On-line Survey or download additional surveys by clicking on "Surveys". Fill out the survey that applies to you or your agency and fax or mail your response to:

Orth-Rodgers & Associates, Inc.
ITS Services
230 South Broad Street
16th Floor
Philadelphia, PA 19102
Fax: (215)735-5954

The project web site also provides links to other transportation organizations, National ITS Architecture, as well as other ITS related sites. Project related links include Metropolitan Planning Organizations (MPOs), Transit Authorities, Law Enforcement, Economic Development Organizations, Emergency Management Services, and State Parks, just to mention a few.

In addition, regular updates on the program will be available on the project web site.

DID YOU KNOW? DISTRICT 2-0 ITS UPDATE

BELOW IS A SUMMARY OF MAJOR ITS INITIATIVES (EXISTING/PLANNED) IN THE REGION:

- There are currently eight (8) Road Weather Information Systems (RWIS) stations in the following counties: Centre (1), Clinton (2), Clearfield (1), Elk (1), Mifflin (1), McKean (1), and Potter (1).
- There are eight (8) Closed Circuit Television (CCTV) cameras currently deployed across the region.
- Highway Advisory Radio (HAR) system covers a 100-mile corridor on the I-80.
- There are 12 HAR transmitter sites located in Centre, Clearfield, and Clinton Counties.
- There is one (1) permanent Dynamic Message Sign (DMS) in the region. Twenty (20) portable DMS are currently deployed and forty (40) are planned for the region.
- ITS Traffic Operation Center (TOC) is planned for 2002-2003.
- The proposed I-99 Fiber Optics Trunk line will serve as a "hook-on" for planned ITS devices such as CCTV cameras, HAR, Bridge Sprayers, Weigh-In-Motion (WIM), and DMS. A feasibility study is currently being carried out for the I-99 Fiber Optics Trunk line.
- I-99 full scale ITS deployment/PSU Research.
- The GIS/ITS Initiative is a cooperative technology project between the counties of Cameron, Clearfield, Elk and Jefferson; the Area Transportation Authority and the North Central Pennsylvania Regional Planning and Development Commission (NCPRPDC). The project began in the spring of 1997 and is being conducted in 4 phases.
- Mayday System - 911/Automatic Vehicle Location (AVL).
- Collision Countermeasure System (CCS) - Activated warning signs and pavement loop detectors, which provide drivers with advance warning of crossing traffic. This will be deployed in the near future.

TRANSPORTATION PROJECTS WITH PLANNED ITS INITIATIVES/DEPLOYMENTS:

- Lewistown Narrows & Bypass
- Corridor O

- Johnsonburg Bypass
- Bradford Bypass
- S.R. 80/B09
- State College Pedestrian Study
- Dynamic Incident Management Program for Centre County

INCIDENT MANAGEMENT PLAN - NATIONAL GOVERNORS ASSOCIATION CONFERENCE

The benefits of ITS in incident management operations was demonstrated at the NGA Conference that was held in State College from July 8-11, 2000. A contingency incident management plan was implemented and this involved a coordinated application of personnel and equipment resources from multiple agencies to monitor and regulate traffic flow, disseminate traveler information, and ensure safety of the conference attendees and the traveling public.

PennDOT personnel monitored and regulated traffic flow by using various ITS applications including DMS and HAR, which provided information on road closures and detour routes. Representatives from the Pennsylvania State Police, State College Police Department, Federal Bureau of Intelligence, and Presidential Secret Service played vital roles in integrating surveillance operations, coordinating traffic operations, and facilitating communication among the participating agencies.

ACRONYMS

- AVL** - Automatic Vehicle Location
- CCS** - Collision Countermeasure System
- CCTV** - Closed Circuit Television
- DMS** - Dynamic Message Sign (VMS - Variable Message Sign)
- FHWA** - Federal Highway Administration
- GIS** - Geographic Information Systems
- HAR** - Highway Advisory Radio
- MCO** - Maintenance and Construction Operations
- NGA** - National Governors Association
- PSU** - Penn State University
- RWIS** - Roadway Weather Information Systems
- TOC** - Traffic Operations Center
- WIM** - Weigh-In-Motion

TIER I WORKSHOP OVERVIEW

The Tier I Workshop was held on February 28, 2001 at the Days Inn Penn State, State College, PA. PennDOT District 2-0 and FHWA organized this workshop in conjunction with Orth-Rodgers & Associates, Inc.



Opening remarks by George Khoury, District Engineer, PennDOT 2-0

This workshop was a 1-day gathering of local transportation professionals and non-transportation stakeholders, to introduce participants to the basic steps and concepts necessary for developing PennDOT District 2-0's ITS Architecture. This workshop was the official start of the architecture development process: the big kickoff.

The Tier I Workshop was facilitated by the FHWA through the National ITS Architecture Team. Several agencies (public and private) within and outside the region participated in this workshop and part of the workshop activities included a group session. This provided a forum to educate workshop participants on preliminary procedures and activities required for creating a regional architecture. These activities included:

- Identifying stakeholders
- Creating an inventory of ITS deployments
- Reviewing interagency cooperation across jurisdiction
- Identifying User Services for the region



Dr. Jaffe, National Architecture Committee

The Tier I Workshop also provided an opportunity to review the National ITS Architecture CD-ROM-Version 3.0 and defined the relationship between constituent elements of the National Architecture and real-life examples of ITS elements, as they exist in the region. A demonstration of the use of the Turbo Architecture software, which is a tool for creating regional and project-specific ITS architectures, was carried out using existing ITS elements in the region.

At the end of the workshop, the significance of stakeholder input to the success of the regional ITS architecture program was affirmed. In addition, stakeholders were implored to maintain a strong interest and keep lines of communication open throughout the entire ITS architecture development process.



Denny Prestash, PennDOT ITS Administrator, addresses the workshop participants

The Tier I Workshop was a success based on the high stakeholder turnout, active participation by workshop attendees, and the level of information exchange. The workshop also provided the ideal starting point for the Tier II Workshop, which was held from July 17 to July 19, 2001.

PROGRAM TIMELINE

DATE	Event	LOCATION
May 15, 2000	Kick-Off Meeting	State College, PA
September 26, 2000	Steering Committee Meeting	Philipsburg, PA
January 24-25, 2001	Public Sector Course	State College, PA
February 28, 2001	Tier I Workshop	State College, PA
May 22-23, 2001	Field view for I-99 ITS Equipment and Fiber Optics Communications Network	State College, PA
July 17-19, 2001	Tier II Workshop	State College, PA
August 15, 2001	Steering Committee Meeting	Philipsburg, PA

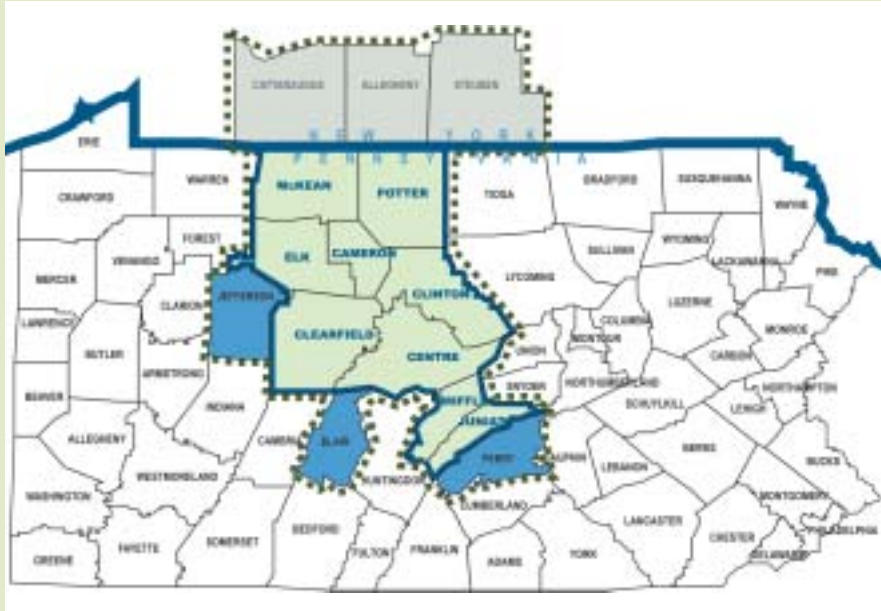
IN THE NEXT ISSUE...

- Tier II Workshop Overview
- ITS User Services for the Region
- ITS Market Packages for the Region



For more information please visit the project web site at www.PennDOT2ITS.org

STUDY AREA



FEEDBACK

Your input and comments are very important to the success of this program. If you would like more information about the ITS program, or if you have any questions, please contact:

Dennis M. Prestash, ITS Administrator
Pennsylvania Department of Transportation

Engineering District 2-0

Clearfield, PA 16830

Tel: (814) 765-0402

Fax: (814) 765-0487

Email: dpresta@dot.state.pa.us



V. Kivanc Caglar, P.E., Director, ITS Services
Orth-Rodgers & Associates, Inc.

230 South Broad Street

Philadelphia, PA 19102

Tel: (215) 735-1932

Fax: (215) 735-5954

Email: kcaglar@orth-rodgers.com





The Pennsylvania Department of Transportation
Engineering District 2-0
Clearfield, PA 16830

INSIDE THIS ISSUE...

- The National ITS Architecture Update
- National 511 Effort
- PennDOT 2-0 ITS Update
- Tier 1 Workshop Overview
- Program Timeline