



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 I Issue I

Regional ITS Architecture Development Program

DISTRICT 2-0 AND ITS

The PennDOT Engineering District 2-0 encompasses a surface area as large as the State of New Jersey and it includes the following counties: Cameron, Centre, Clearfield, Clinton, Elk, Juniata, McKean, Mifflin and Potter counties, with a population of almost half-a-million. The setting is primarily rural, with few urban locations, and the roadway system is generally efficient.

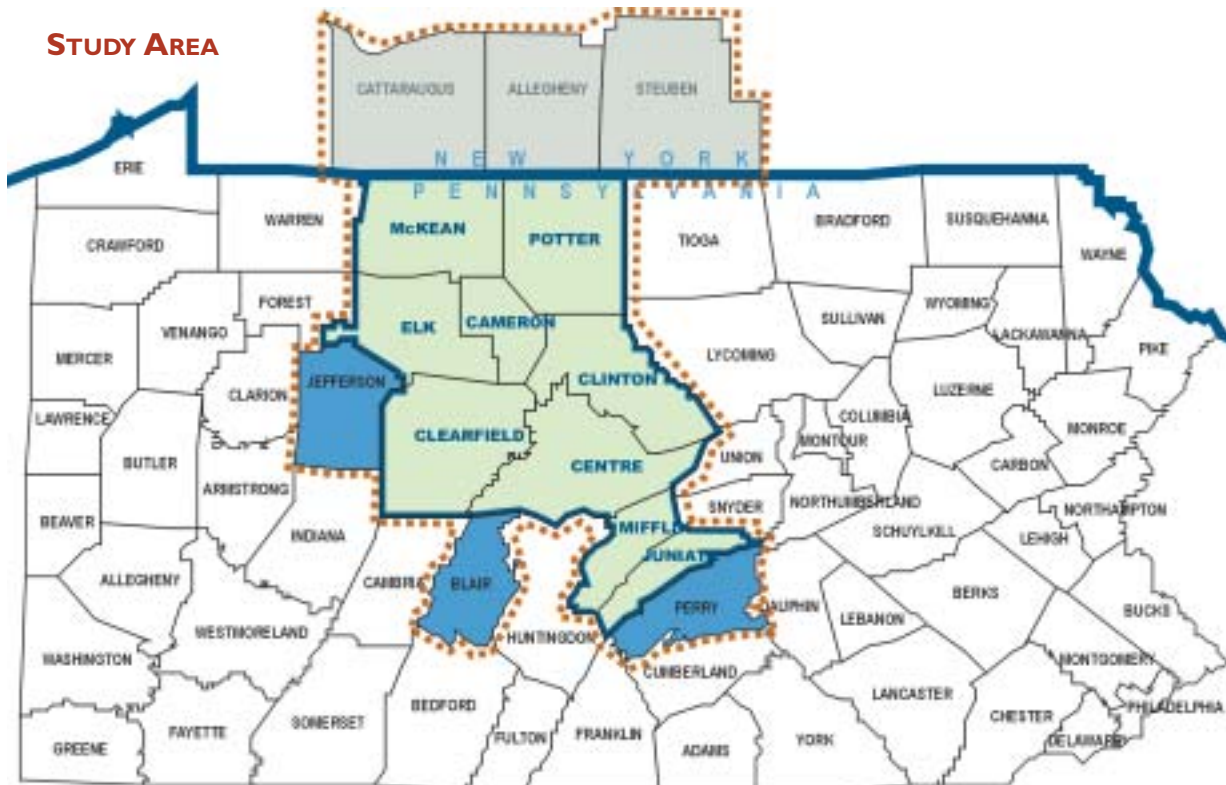
PennDOT Engineering District 2-0 currently has on of the largest construction programs in the Commonwealth. Some of these projects include: South Central Centre County Transportation Study, Northern Lewistown Bypass Project, Interstate I-99 Corridor Project from Bald Eagle to I-80, the Corridor O Study encompassing Route 322 from the interchange with I-99 in Port Matilda to I-80 near Woodland, Johnsonburg Bypass, Route 219 in Elk County, the Bradford Bypass Extension, and the Route 219 in McKean County. Information about these projects can be found on the District's web site at www.PennDOT2.org.

Some of the current projects in the region present major opportunities to utilize ITS technologies. Several ITS technologies along I-80 in the District are already in place or are in the

process of being deployed. They include road weather information stations, highway advisory radio, dynamic message signs, automatic anti/icing of select bridges. The incident management needs study for the proposed I-99 Corridor is also looking at the needs and problems of the region from the ITS perspective. There are two proposed ITS Integration Components of the ITS Deployment Program that address particular aspects of ITS Deployment. These are the GIS/ITS Initiative in North Central region and the E911/MAYDAY demonstration project in the Centre Valley area.

However, there is no Regional ITS Architecture that would ensure the integration of all existing and proposed ITS implementations in the region to work with each other in an efficient manner. Such a plan is needed to address the region's transportation problems. As a result, PennDOT Engineering District 2-0 commissioned this program aimed at addressing major transportation issues in the region, creating a framework to identify components and interconnections, identifying institutional challenges, improving communications, and identifying integration opportunities as defined in the National ITS Architecture.

STUDY AREA



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

YOUR OPINION COUNTS

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 'Surveys'. Fill out the On-line Survey and submit your response.

You may also download additional surveys by clicking on 'Surveys for Stakeholders'. Please fill out the survey that applies to you or your agency and fax it or mail it 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.

RURAL ITS

Most ITS efforts in the past have focused on the need to address congestion and safety problems in urbanized metropolitan areas to the detriment of rural areas, despite the fact that rural areas make up 80% of the nation's land. In addition, rural areas account for approximately four (4) million miles or 80% of the nation's highway network. The significance of rural roads cannot be emphasized enough. They are the backbone of the nation's freight movement operations; they improve local vitality through residents and tourists, and they connect most urban and metropolitan areas. Rural ITS needs are quite distinct from those of metropolitan/urban areas. However, there is great diversity among rural settings across the nation, which invariably defines local/regional transportation needs. Some of the major transportation problems associated with most rural areas include the following:

- Rugged terrain in remote conditions (mountains passes and steep grades)
- Higher frequency of crash and greater proportion of crash fatalities
- Slower emergency response time
- Dispersed system with high unit costs for service delivery, operation and maintenance
- More erratic or unpredictable weather conditions and corresponding effects on roadways
- Inadequate or obsolete telecommunications infrastructure
- Limited or non-existence public transportation system

Several ITS applications such as incident notification (Mayday), advanced warning systems, advanced traveler information systems, and in-vehicle crash avoidance systems, are being deployed to address some of these problems.

Visit our Project Web Site at: www.PennDOT2ITS.org

NATIONAL ITS ARCHITECTURE - PUBLIC SECTOR COURSE

The Public Sector Course was held on January 24 and 25, 2001 at the Penn Stater Conference Center Hotel, State College, PA. This course was designed to present The National ITS Architecture as a set of tools with a particular emphasis on the application of the architecture to the development of regional architectures for ITS planning and the definition of integrated projects. The target audience for this course included: traffic engineers, transportation planners, transit planners, transit operators, emergency service providers, commercial vehicle operators, and other transportation-related professionals who are involved in planning, designing or implementing ITS-related projects.

The USDOT (FHWA), PennDOT District 2-0, and Orth-Rodgers & Associates, Inc. facilitated this 2-day event. The following agencies participated in the workshop with at least one representative: PennDOT District 2-0, PennDOT-BHSTE, PennDOT District 9-0, CATA, ATA, NCPRPDC, SEDA-COG, Penn State University, Penn State University Police Department, county emergency management

services, county planning organizations, and other private sector organizations.

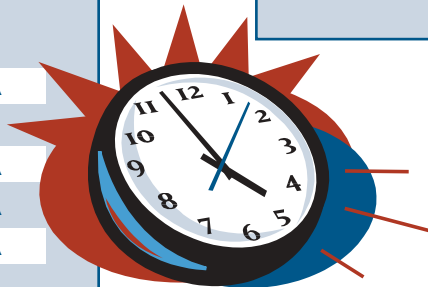
At the end of the 2-day event, participants were awarded certificates of training in "Using the National ITS Architecture." The course was a success based on the information exchange and active participation by all attendees, which served as a good starting point for the Tier I Workshop.



Mr. George Khoury, District Engineer, PennDOT 2-0 giving opening remarks to the attendees of the National ITS Architecture Public Sector Course.

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 |
| July 17-19, 2001 | Tier II Workshop | State College, PA |



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:

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ACRONYMS

- GIS** - Geographic Information Systems
- ITS** - Intelligent Transportation Systems
- CATA** - Centre Area Transportation Authority
- ATA** - Area Transportation Authority
- NCPRPDC** - North Central Pennsylvania Regional Planning and Development Commission
- SEDA-COG** - SEDA Council of Governments

IN THE NEXT ISSUE...

- Tier I Workshop Overview
- Preparation for the Tier II Workshop
- District 2-0 ITS - an update

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

JOIN THE EFFORT!

Stakeholders vary widely in their level of ITS awareness, intent to implement ITS and region-wide interest. The representation of key agencies having a stake in the improvement of transportation infrastructure within the region is crucial to the success (i.e. reliability and longevity) of the program.

This program incorporates several measures to bring participating agencies' ITS awareness to a level of competency for the development of the regional ITS architecture.

The program has established a process to keep the stakeholders informed throughout the study about the progress; solicit their feedback and participation during the process through surveys, interviews, meetings, and presentations.

STEERING COMMITTEE MEMBERS

The Steering Committee acts as the governing body for the ITS program and oversees the development of the Regional ITS Architecture.

The following is the list of Steering Committee Members:

| | |
|------------------|--------------------------------------|
| Steve Bergman* | FHWA-Harrisburg |
| George Khoury | PennDOT 2-0 |
| Bert Kisner | PennDOT 2-0 |
| Denny Prestash* | PennDOT 2-0 |
| Yvonne Buck* | PennDOT 2-0 |
| Steve Koser | PennDOT BHSTE |
| Dan Leonard* | PennDOT BHSTE |
| Brenda Murphy | PennDOT BHSTE |
| Mike Pastore | PennDOT 9-0 |
| Paul P. Jovanis* | Penn State University |
| Amy Kessler | NCRPRD |
| Tom Zilla | Centre Regional Planning Agency |
| Bill Tobin* | Centre Area Transportation Authority |
| Jim McAllister | SEDA-COG |
| Steve Bolt | Orth-Rodgers & Associates, Inc. |
| Kivanc Caglar* | Orth-Rodgers & Associates, Inc. |

* Also, serves as a member of the Technical Advisory Committee



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