

INSIDE THIS ISSUE

[Learning From Others](#)

[FDOT Equipment Certification](#)

[ITS Design/Build/Operate/Maintain
in Pensacola](#)

[Announcements](#)

[Newest ITS Device Specification Covers Vehicle
Detection Systems](#)

[FDOT ITS Contacts](#)

[Gearing Up for Transpo2006](#)

The *SunGuide Disseminator*
is a publication of:

November 2006 Edition

Florida Department of Transportation (FDOT)
Traffic Engineering and Operations Office
605 Suwannee Street, M.S. 36
Tallahassee, Florida 32399-0450
(850) 410-5600
www.dot.state.fl.us.com

[Link to Florida's Statewide ITS
General Consultant](#)

Learning From Others

I recently had the opportunity to attend Georgia's Metro Atlanta TIME (Traffic Incident Management Enhancement) Task Force Conference in Pine Mountain, Georgia. This is the second annual conference the task force has held and it was a real benefit to all the attendees. The theme of this



year's conference was "Open Roads for a Faster Future" and showcased information from multiple disciplines and states to all that were present. The presentations ranged from live photogrammetry demonstrations to the medical examiner's role in maintaining an open roadway.

The live photogrammetry demonstration was definitely something to see. The Florida Highway Patrol started using photogrammetry last year and is reducing the time to process fatality crashes. But what made this demonstration unique was that the Utah Highway Patrol is now using remote-controlled helicopters with a digital camera to take the pictures used in the photogrammetry process. This allows for better scene angles since the camera is elevated and gives a better overview of the scene. It also allows for processing of larger scenes in an expedited fashion. Instead of taking a picture and moving to get the rest of the scene, the elevated photos encompass a greater area.



Ingrid Birenbaum, with PBS&J, presented on the Florida Turnpike Enterprise's Incident Management Program. One of the main focuses of the presentation was the Rapid Impact Scene Clearance (RISC) Program. This program is recognized nationally as an innovative solution for clearing the road of major incidents. Several metropolitan areas are looking at ways to adapt this program to meet their needs and metro Atlanta is one of those areas.

Another excellent session was "Managing Freeway Incidents – Dallas, Texas" presented by Major Gary Lindsey, Dallas County Police Department. Texas has taken great steps to ensure that the staff is trained in incident management. This is a great benefit because everyone knows that the goal is to open the road as quickly and as safely as possible. They have also identified areas for increased enforcement on their freeways; they have an average of one officer per mile in these areas. These additional federally funded officers have decreased their average response time and incident clearance times tremendously and they have a zero tolerance for speeding, which also helps decrease their accident rates.

It is always invigorating to attend these types of conferences because you realize that other states are facing the same issues that we are. But what is really great is seeing that there are already some solutions out there and there is no need to reinvent the wheel. By applying these solutions to our systems and learning from our partners in other states, we can strive to make Florida's roadways a safer place for our traveling public and our first responders.

This article was provided by Paul Clark, FDOT Traffic Engineering and Operations Office. For more information, please contact Mr. Clark at (850) 410-5631 or email Paul.Clark@dot.state.fl.us.

* * * *

[Return to top](#)

ITS Design/Build/Operate/Maintain in Pensacola

As part of its strategy to implement congestion mitigation efforts in northwest Florida, FDOT has issued a Request for Proposal (RFP) that includes the delivery of ITS services within a long-term regional asset maintenance contract for Escambia County. Procurement of ITS services via an RFP should result in a contract with a qualified team of private firms headed by an Asset Maintenance Contractor. The selected Asset Maintenance Contractor will manage and perform all routine maintenance activities associated with roadway, structures, drainage, roadside, vegetation and aesthetics traffic services, structure inspection and incident management for highway asset maintenance in Escambia County. In addition to the aforementioned maintenance responsibilities, the selected Asset Maintenance Contractor will be required to provide services for the design, deployment, integration, and testing as well as the continued operation and maintenance of a regional transportation management center (RTMC) and freeway management system (FMS) in Escambia and Santa Rosa Counties, Florida.

The ITS scope of work includes:

- Preparing deployment plans and specifications,
- System hardware and software procurement,
- Hardware compatibility testing,
- System communications testing,
- Coordinating system deployment,
- Performing system integration,
- Providing system documentation and training,
- Performing system evaluation,
- Data management, and
- Providing on-going operation and maintenance in support of a comprehensive FMS.

This asset maintenance system will be deployed along approximately 32 miles of I-10 starting at the Florida/Alabama state line and ending approximately one mile east of State Road 87. The entire length of I-110 will also be incorporated in the FMS.

District Three realized that an extensive and restrictive requirements package could have been developed for the Pensacola ITS deployment; however, it would have also limited the Asset Maintenance Contractor's opportunity for creativity and the flexibility needed to keep up with the latest technological advances. Therefore, critical features and aspects desired by District Three ITS staff were specified in the RFP package prior to its distribution and a balance was established to ensure that a reliable, cost-effective, and maintainable ITS solution was deployed in the Pensacola metropolitan area.

An appropriate, yet innovative, procurement method was desired for the Pensacola ITS services. Project, agency, and environment characteristics and systems engineering and project management principles are all key inputs into the process utilized to identify an appropriate procurement approach for a project such as the Pensacola ITS deployment. The use of appropriate procurement methods for ITS helps to minimize project cost-overruns, final designs that do not satisfy functional requirements, and long-term maintenance failures. It was recognized that an appropriate method of procuring these ITS services needed to be flexible enough to accommodate the uncertainties of complex system acquisitions, while at the same time rigid enough to ensure that the responsibilities of the participants were fully defined and their interests protected.

Performance-based contracting was the methodology selected for procuring the Pensacola ITS services. Performance-based contracting utilizes a form of contractor incentive, or disincentive, in that payments are made based on the outcomes resulting from the system installation. The contract documents will place special emphasis on what the FDOT wants performed by the Asset Maintenance Contractor (outcomes), versus the manner in which the work should be performed. The task/project objectives are translated into measurable/quantifiable specifications and successful completion of the task/project is gauged by these measurable/quantifiable specifications.

The goal of the Pensacola ITS deployment is to provide a RTMC for the operation of a I-10 / I-110 FMS in order to provide early detection and accurate verification of incidents and traffic congestion, and to formulate the appropriate response to minimize delay to motorists. This goal will be achieved by the use of dynamic message signs (DMSs), closed-circuit television (CCTV) cameras, road weather information systems (RWIS), traffic detection units, and voice/data communications with Road Rangers service patrols and responding agencies to restore traffic flow to normal conditions.

This project will require the selected Asset Maintenance Contractor to deploy ITS field devices that comply with the standard specifications developed by FDOT for the various field devices. The Asset Maintenance Contractor will also have to act in accordance with the standard drawings of the ITS devices that were recently developed for publication in the *FDOT Design Standards*. Road Rangers service patrols will be included within the asset maintenance portion of the contract. The project will also involve the development of a Web site, monthly and annual reports, and public information outreach materials. Plans also call for the selected Asset Maintenance Contractor to provide an automated data feed to an information service provider (ISP) who will be selected in the future for District Three. The term of the asset maintenance contract will be for ten years with a ten-year renewal period.

Asset Maintenance Contractor selection will proceed according to the following timeline:

- RFP advertisement distributed – September 5, 2006
- Pre-Proposal Meeting - September 27, 2006
- Technical Questions due – October 20, 2006
- Technical Proposals due - November 2, 2006
- Review of Technical Proposals by Proposal Evaluators – November 3-17, 2006
- Oral Presentations – November 9, 2006
- Question and Answer Session – November 15, 2006
- Price Opening – November 21, 2006
- Posting Period - December 4 to 7, 2006
- Contract Award – December 8, 2006
- Contract Execution – December 28, 2006

This article was provided by Chad Williams, FDOT District 3. For more information, please contact Mr. Williams at (850) 638-0250, ext. 1504 or email Chad.Williams@dot.state.fl.us.

* * * *

[Return to top](#)

Newest ITS Device Specification Covers Vehicle Detection Systems

Vehicle detection devices have long been one of the basic tools in ITS deployments where data is needed from a segment of highway to make informed traffic management decisions. Beginning January 1, 2007, a new chapter takes effect that spells out the specifications for four types of detection systems.

Section 786 will address the material and performance requirements for microwave, video, magnetic, and acoustic detection systems. These types are regarded as being noninvasive because their installation does not require cutting or otherwise disturbing the pavement. Microwave, video, and acoustic detectors can be mounted on poles at the roadside and aimed at passing traffic. Magnetic detection involves boring underneath the highway and inserting a conduit that holds a sensor in place under each lane.

Each detection system is required to produce vehicle presence, traffic volume, vehicle speed, and occupancy data for each detected lane. Once this data is collected at the detection site, the system must be capable of transmitting this information across an Ethernet network back to the TMC in a format that can be used by the state's SunGuideSM software. In function, the detection systems must be able to emulate the contact-closure output of traditional loop detectors that are embedded in the pavement.

New specifications for ITS equipment appeared for the first time earlier this year when the State Specifications Office published the July–December 2006 *Workbook of Implemented Modifications to the Standard Specifications for Road and Bridge Construction*. The printing marked the culmination of a three-year ITS Section project to write standards and specifications for the various devices that are commonly used in Florida's ITS deployments. In addition, standard drawings for the devices are being published in the FDOT *Design Standards* and design criteria for the items are part of a new chapter in the *Plans Preparation Manual*.

Section 786 At A Glance

786-1 Description

786-2 Materials

786-3 Performance

786-4 Installation

786-5 Testing

786-6 System Acceptance Criteria

786-7 Microwave Vehicle Detection System

786-8 Video Vehicle Detection System

786-9 Magnetic Traffic Detection System

786-10 Acoustic Vehicle Detection System

786-11 Guaranty Provisions

786-12 Method of Measurement

786-13 Basis of Payment

The specifications appear in the *Workbook* as sections 780 through 785, and have been grouped according to general categories of devices. The Section 786 being added is entitled “Vehicle Detection & Data Collection” and as new detection technologies are developed, it will be revised and expanded to reflect the latest information. It is the ITS Program’s intent that the specifications reflect the latest technology while emphasizing product reliability, ease of maintenance, and overall performance.

In vehicle detection, the primary performance measure is accuracy and Section 786 contains separate targets for volume, speed, and occupancy. To verify compliance with the accuracy requirements, the system installer is required to perform an evaluation by comparing sample data the detector collects with “ground truth” data collect during the same time by direct observation or other approved means. The detection system’s performance evaluation is to be based on sample data taken over several periods under a variety of traffic conditions. Formulas are provided in the specification for calculating the accuracy levels indicated.

One final goal is interoperability. This is demonstrated by integrating the detection system into the existing ITS network and verifying that operators at the transportation management center (TMC) are able to configure the detector, retrieve the data collected, and perform other functions remotely. For example, volume counts and speed measurements must be verified for each installed detector assembly using test software running on the TMC operator’s workstation. Another important criterion is the detection system’s compatibility with FDOT’s SunGuide Software System.

This article was provided by Gene Glotzbach, FDOT Traffic Engineering and Operations Office. For more information, please contact Mr. Glotzbach at (850) 410-5616 or email Gene.Glotzbach@dot.state.fl.us.

* * * *

[Return to top](#)



Gearing Up for Transpo2006!

Last month the Transpo2006 Steering Committee sent a team to the Innisbrook Golf Resort in Palm Harbor to review plans for Transpo2006 which is coming up November 27-30. Ken



Jacobs of Pinellas County Public Works Traffic Operations Department, Jennifer Bradford with VANUS, Inc., and Diana Carsey with ITS Florida, walked the meeting site with event planners to see the exhibit space, study meeting room options, and consider layout of dining areas that are being assigned to Transpo2006.



We were pleased to confirm again how Innisbrook's beautifully landscaped golf courses and gardens provide lush green spaces for guests to enjoy as they walk between events. We found the overall convenience of the residential areas to the convention hall and banquet hall were well marked and the internal circulation on Innisbrook trams worked very well.

For exhibiting, we were very impressed with the excellent natural lighting available to some exhibitors who will have direct access to private patios through French doors in three of the four exhibit rooms. These spaces will be super spots for conferring with clients and friends over lunch or while enjoying a hot cup of coffee.



On Wednesday evening, at the Awards Banquet, entertainment complements the very serious transportation topics when Dick Burleson brings humor and excellent experience to us as our guest speaker. He will have his book available to autograph for you. This Rose Bowl photo shows Dick at his last game as the head referee for the Southeastern Conference. Be prepared for tears of laughter!

The latest news is that we have live music scheduled by the poolside for Monday evening. This will give golfers a chance to wind down after an exciting day of tournament golfing at the Lansbrook Golf Club.

ITS managers, engineers, and transportation planners will appreciate and enjoy Transpo2006 at Innisbrook this year. We'll see you there!

This article was provided by Diana Carsey, Executive Director. For more information on ITS Florida, please check the ITS Florida Web site at www.itsflorida.org or contact Ms. Carsey at (727) 409-5415 or email CarseyD@verizon.net.

If you wish to contribute an article to the *SunGuide Disseminator* on behalf of ITS Florida, please contact Erika Ridlehoover at (813) 376-0036, or email Erika.Ridlehoover@transcore.com.

* * * *

[Return to top](#)

FDOT Equipment Certification

The FDOT Traffic Engineering and Operations Office, through the Traffic Engineering Research Laboratory (TERL), is responsible for approving all traffic control signal devices. Approved devices are kept on the FDOT Approved Products List (APL), a listing of devices that may be relied upon as meeting FDOT specifications, standards, or other criteria.

The APL is a means for the FDOT to meet *Florida Statute 316.0745, Uniform Signals and Devices*, which states, “All official traffic control signals or official traffic control devices purchased and installed in this state by any public body or official shall conform with the manual and specifications published by the Department of Transportation pursuant to subsection (2).”

More information on the FDOT APL may be viewed at www.dot.state.fl.us/TrafficOperations/TERL/APL.htm. Specific approved products in the FDOT APL may be searched at rite.eng.fsu.edu/iapl/page1.php.

For more information, please contact Carl Morse, FDOT Traffic Engineering and Operations Office, at (850) 410-5417 or email Carl.Morse@dot.state.fl.us.

* * * *

[Return to top](#)

Announcements

Congratulations to the Expanding Pierce Family!

Join us in congratulating Randy and Lauren Pierce on the birth their daughter, Catherine Rose. Catherine Rose was born on October 16, at 3:00 a.m., weighing 6 lbs. 11 oz.
Congratulations Randy and Lauren!

* * * *

Transpo2006—Empowering Our Mobile Society

Transpo2006 will be held at the Innisbrook Golf Resort in Palm Harbor, Florida, November 27-30, 2006.

Make sure you register for this MUST ATTEND event!

Transpo2006 is sponsored by ITS Florida, the Florida Section of ITE, FHWA, and FDOT. This conference offers an opportunity to join your peers from all over Florida and the United States to examine developments in ITS and how technology can be used to empower, plan, engineer, manage, and advance our mobile society.

Conference information is posted at the **Transpo2006** Web site at <http://www.itstranspo.org>. Once at the Web site, you may secure your exhibit booth location, register for the conference, or review other conference information as it becomes available.

Transpo2006 offers excellent sponsorship opportunities. This information is also available at the Web site, or you may contact Karen Crawford at 850-224-7775.

Register now!

* * * *



Mark Your Calendars!

FDOT's Annual ITS Working Group Conference will be held on April 2-6, 2007, at the Wyndham Orlando Resort. The conference details are still under development, and plans are once again being made for an Exhibitor Showcase!

Look for further information in the near future to be posted on the [ITS Program Web](#). For more information, please email KarenEngland@pbsj.com.

We hope you will make plans to attend!

* * * *

[Return to top](#)



District 1

L.K. Nandam, DTOE
Chris Birozak, ITS
FDOT District 1 Traffic Operations
PO Box 1249
Bartow, FL 33831
(863) 519-2490

District 2

Jim Scott, DTOE
Peter Vega, ITS
FDOT District 2 Traffic Operations
2250 Irene Street, MS 2815
Jacksonville, FL 32204-2619
(904) 360-5630

District 3

June Coates, DTOE
Chad Williams, ITS
FDOT District 3 Traffic Operations
1074 Highway 90 East
Chipley, FL 32428-0607
(850) 638-0250

District 4

Mark Plass, DTOE
Dong Chen, ITS
FDOT District 4 Traffic Operations
2300 W. Commercial Blvd.
Ft. Lauderdale, FL 33309
(954) 777-4350

District 5

Richard Morrow, DTOE
Michael Smith, ITS
FDOT District 5 Traffic Operations
719 S. Woodland Blvd., MS 3-562
DeLand, FL 32720-6834
(386) 943-5310

District 6

Debora M. Rivera, DTOE
Rory Santana, ITS
FDOT District 6 Traffic Operations
1000 NW 111th Avenue, MS 6203
Miami, FL 33172
(305) 470-5335

District 7

Gary Thompson, DTOE
Bill Wilshire, ITS
FDOT District 7 Traffic Operations
11201 N. McKinley Drive
Tampa, FL 33612
(813) 615-8600

Florida's Turnpike Enterprise

John Easterling, DTOE
Florida's Turnpike Enterprise
PO Box 9828
Ft. Lauderdale, FL 33310-9828
(954) 975-4855

Elizabeth Birriel

Deputy State Traffic Engineer
ITS Program Manager
(850) 410-5606

Gene Glotzbach

ITS Deployments
(850) 410-5616

Trey Tillander

ITS Software, Architecture,
and Standards,
(850) 410-5617

Randy Pierce

ITS Telecommunications
(850) 410-5608

Physical Address

Rhyme Building
2740 Centerview Dr.
Suite 3-B

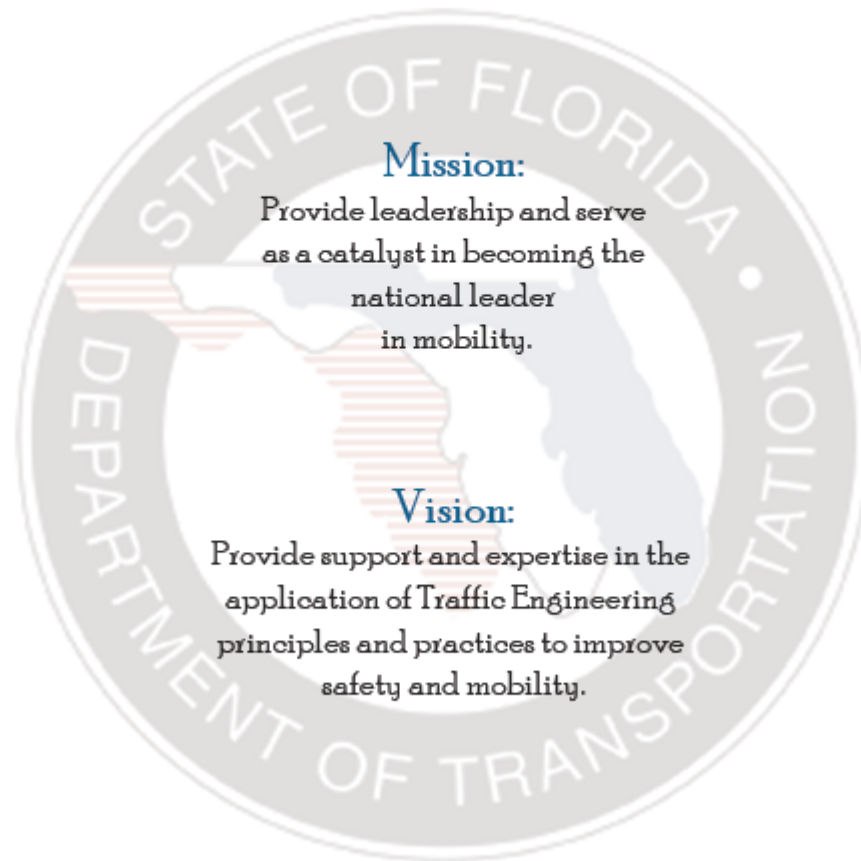
Mailing Address

Burns Building
605 Suwannee St.
M.S. 90

Tallahassee, FL
32301Tallahassee, FL
32399

* * * *

FDOT Traffic Engineering and Operations Mission and Vision Statements



[Return to top](#)

SunGuide Disseminator

November 2006

PBS&J QCAP Document Control Panel	
Created by:	England
Reviewed by:	England
Date:	November 1

