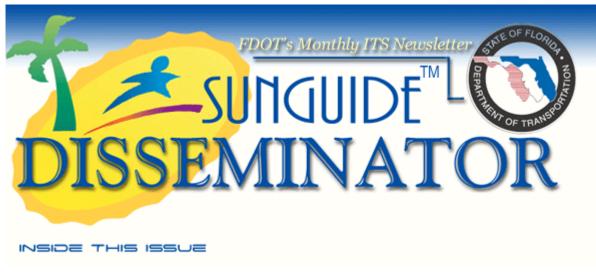
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Link to Florida's Statewide ITS
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Transpo 2006 Program Highlights

In November, the Transpo 2006 Conference will offer a group of speakers with diverse topics and a thought provoking perspective on many critical issues facing the industry. From successful traffic management practices to advancements in the field, you are sure to come away with new ideas and insight.



Our speakers include partners, colleagues, and pioneers who will share lessons learned and successes that promote innovation, quality, service and teamwork. Here is just a sample of what you can expect.

Gail Holley is the Elder Driver Program and Research Manager for the State Traffic Engineering and Operations Office of the Florida Department of Transportation. She, along with co-speakers Sunny Phillips, Chief of Community Relations, Department of Elder Affairs and Selma Sauls, Planner II, Department of Highway Safety and Motor Vehicles for the Florida Grand Driver Program will provide strategies and tools to assist planners and engineers when developing mobility options for more senior residents. Participants will be better equipped to evaluate their communities and promote needed improvements in order to more effectively meet the needs of all drivers.

Collier County's Traffic Operations Director, Robert W. Tipton, PE, PTOE, will discuss their implementation and testing of SCOOT Adaptive Traffic Signal Control. Collier County is in the process of implementing adaptive control along the county's busiest corridor, which consists of 16 traffic signals. The presentation will detail implementation techniques, detection hardware used, measures of effectiveness testing methodology, problems encountered, and results upon project completion.

Sara Olney, Vice President, ITS, VANUS, Inc., will present some of the advantages and disadvantages of design/build from a consultant's perspective while disclosing opportunities for process improvements for the benefit of all stakeholders. In this contractor-controlled delivery method, benefits for the owner, such as direct communication with the design consultant and innovation, are often sacrificed. Determining when design/build is the most appropriate procurement approach and how it may save time and money will be addressed.

The anticipated growth in Florida's population, combined with the tourists and seasonal residents, will continue to increase the demand on our roadways. With the escalating costs for right-of-way and construction, many Districts are evaluating the feasibility of building some roadway projects through toll financing. For bond repayment, the toll revenue should be adequate to cover the costs for right-of-way, environmental mitigation, constructions, and operation and maintenance. Florida's Turnpike Enterprise (FTE) utilizes several feasibility tests before moving forward with a project and frequently evaluates widening, new interchanges, and extension of existing and new corridor facilities. Forecasting the travel demand on a toll facility is one of the most important factors to determine the feasibility of a project. In addition to the travel demand forecasting model, other factors that will impact the toll revenue should also be considered. This presentation will review the process. Presenters will include Yew Song, Senior Transportation Engineer, Florida's Turnpike Enterprise-URS Corporation and Jack Klodzinski, Senior Transportation Engineer, Florida's Turnpike Enterprise-URS Corporation.

The FDOT District 4 (D4) ITS Strategic Business Plan was prepared by Robert Edelstein, Vice President and National ITS Director for DMJM Harris, and his team to provide a roadmap in achieving the D4 ITS vision and mission for the next 5 years. The Strategic Business Plan presents a vision of the advancements in the D4 ITS program in virtually every facet of their business, including: ITS deployment, operations, maintenance, Road Rangers, traffic incident management, systems, partnering, traveler information, public outreach, and new initiatives. The Strategic Business Plan provides specific strategies, policies, and projects, designated on a year-by-year basis, that are required to achieve this

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vision. Furthermore, methods on how to track the accomplishment of these initiatives will be shared.

L.A. Griffin, Manager of Expressway Operations of the Orlando-Orange County Expressway Authority (OOCEA), will share how their fiber optic network has significantly improved the dependability of toll system communications and telephone communications, provided opportunities for revenue generation, and supported the needs for the OOCEA's ITS projects, as well as support for other regional agencies' ITS communications objectives. Today, the OOCEA owns and operates one of the nation's most advanced network wide, route redundant fiber optic communication systems. The OOCEA operates an extensive electronic toll and traffic management (ETTM) system at more than 50 toll plazas throughout 100 miles of limited-access tolled expressways. Mr. Griffin will share, on behalf of the OOCEA, lessons learned from this effort.

In another session, Mr. Griffin will highlight how the OOCEA's Internet Protocol (IP) Video migration project overcame limitations to accomplish objectives via the installation of a resilient Gigabit Ethernet communications network as well as IP-based video compression equipment for the original 50 closed-circuit television cameras. The new Gigabit Ethernet network allows for transmission of multi-cast, IP, MPEG-2 compressed video while maintaining similar fault tolerance to the legacy SONET system. This integration project required close coordination among the project team, OOCEA IT staff, and the FDOT District 5 ITS staff to connect the OOCEA and FDOT networks. The system uses a regional approach for video control and transmission to allow for interoperability with other transportation agencies in central Florida.

Under the four tracks of planning, engineering, managing, and advancing our mobile society, there will be 24 topics with four presenters and a moderator for each. Denver Stutler, Jr., FDOT Secretary, Regina McElroy, Director of Transportation Operations, Federal Highway Administration, and Neil Schuster, President and CEO, ITS America, are the confirmed keynote speakers. No doubt, there will be subject matter with value for every attendee.

For further program information and to register for Transpo, visit www.itstranspo.org.

This article was provided by Jennifer Bradford, VANUS, Inc. For more information, please contact Ms. Bradford at (813) 831-8870 or email <u>JBradford@vanusinc.com</u>.

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Editorial Corner – Top Ten Reasons to Attend Transpo 2006!

As President of ITS Florida, I would like to encourage you to attend Transpo and, so, I am providing the Top 10 reasons why you should attend! They are:



- **No. 10** Visit the Tampa Hillsborough County Expressway Authority's transportation management center and see the operation of the newest ITS facility in the state, the reversible lanes bridge.
- **No. 9** Learn the best practices in the planning, design, and implementation of ITS.
- **No. 8** Hear the Presidents of ITS America and Institute of Transportation Engineers discuss what is happening on a national level.
- **No.** 7 See how adaptive traffic control systems operate in Pasco and Pinellas Counties.
- **No. 6** Hear FDOT Secretary Stutler's insight on the future of transportation in Florida.
- **No. 5** Visit the Exhibit Hall and see the latest in ITS technology.
- **No. 4** Laugh at the banquet about the escapades in football with Dick Burleson, an ex-SEC referee.
- **No. 3** Meet, mingle, and market with 400 of your peers throughout the event.
- **No. 2** Play a round of golf with some of the state's best golfers your fellow transportation engineers.

And the No. 1 reason you should attend Transpo 2006 – Meet the new President of ITS Florida as I become the Past President.

Hope to see you in November.

This editorial was provided by Jay Calhoun, VANUS, Inc. For more information, please contact Mr. Calhoun at (813) 831-8870 or email <u>JCalhoun@vanusinc.com</u>.

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Benefit From Transpo 2006—Register Now!

Someone asked me what I thought are the benefits in attending Transpo 2006 and, particularly, what it means to a toll expressway agency in the state that has a relatively small staff, currently 43 employees. By the way, I am registered for Transpo 2006 and hope you are too. If not, would you please bear with me for just a little of your time.

In a smaller staffed organization often the number of colleagues is limited for discussion and explorations of ideas and experiences on ITS deployment and associated activity. That is one reason why conferences such as Transpo 2006 are so important. It offers the opportunity to expand your knowledge; and network with others to share information and experiences and will lead to greater empowerment professionally. There are unique opportunities attributable to the wide variety and depth of staff attending from public and private organizations. Here is a personal experience from Transpo2004 in Jacksonville. Our agency was working jointly with another public agency on a major ITS deployment, which required much coordination at several staff levels. We were at a key point requiring several people to reach consensus on issues. We were still coordinating calendars for the meeting as Transpo2004 arrived. At the conference we observed that all the people we needed to meet with were present, so a very productive meeting occurred. One of our staff remarked, "We accomplished more here in one meeting than we had in several previous attempts to get together." This one meeting alone was worth our attendance at Transpo2004, but we gained much more.

Transpo 2006 offers a variety of benefits to its participants, whether they are conference attendees, exhibitors, or both. This event happens every two years and is the largest ITS conference regularly offered in Florida. With its educational and exhibit aspects, Transpo 2006 attracts participants from both the public and private sectors in Florida as well as nationwide.

The conference offers an excellent opportunity to hear about the latest ITS technologies, typically offering four tracks to choose from and this year is no exception. Participants will be able to select from four educational program tracks, including: Planning our Mobile Society; Engineering our Mobile Society; Managing our Mobile Society; and Advancing our Mobile Society.

A regional perspective is offered versus the national view obtained at ITS America conferences. Keynote speakers provide an opportunity to gain insight from Florida's leaders and the information taken home from this conference is applicable to the attendee's local area.

There are excellent networking opportunities. This conference is attended by a large audience, including: academic and research development staff; emergency service personnel; federal, regional, state, and local transportation officials; ITS consultants, vendors, and contractors; service developers and providers; transit personnel; ITS professionals from other states; and national ITS and traffic operations experts. Starting with the golf tournament and welcoming reception on the first day, Transpo 2006 provides ample opportunities to make those all-important connections. The exhibit hall is another prime time to connect with vendors, contractors, consultants, and other ITS professionals.

Transpo 2006 offers two tours – one to learn about The State-of-the-art Pinellas County/Pasco County adaptive control signal system software and another to visit the recently completed City of Tampa/Tampa/Hillsborough County Expressway Authority

Traffic Management Center. These tours offer excellent opportunities to see ITS and Traffic Operations Management in action in the Tampa area.

All of this is offered at a relatively low cost in comparison to national conferences such as ITS America, and it is in our own "backyard".

Recapping, Transpo 2006 allows participants to:

- Hear about the latest ITS technologies.
- Exchange ideas/experiences and solutions for effectively deploying ITS technologies in a forum with public and private sector leaders.
- Networking with peers: decision makers and leaders during the educational and social events.
- Gain insight from Florida leaders presenting keynote addresses.
- View the latest industry technology, products and services in the Exhibit hall.
- Learn about Adaptive Control Signal Systems and the operation of the new Tampa Traffic Management Center by attending Conference tours.
- Participate at a relatively low cost as compared to national conferences.

We hope these benefits will encourage you to attend and participate in Transpo 2006. It's easy to register by going to www.itstranspo.org.

This article was provided by Leslie A. Griffin, Orlando-Orange County Expressway Authority. For more information, please contact Mr. Griffin at (407) 316-3800 or email GriffinL@oocea.com.

For more information on ITS Florida, please check the ITS Florida Web site at www.itsflorida.org or contact Diana Carsey, Executive Director, at (727) 409-5415 or email CarseyD@yerizon.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.



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What a Headache!

Everyone hates congestion headaches. But, take a couple of pills and get a good night's rest and you'll be doing just fine in the morning. Or not ... if you're a motorist and the headache starts with the glare of constant brake lights on the road ahead of you.

For Americans stuck in traffic, the nation's congestion headache adds up to 3.7 billion in wasted hours every year, not to mention



the 2.3 billion gallons of fuel used going nowhere. That costs us a collective \$63 billion. If you're in one of the 13 largest U.S. cities – Miami makes the list – you average the equivalent of eight work days each year in traffic delays.



So what's causing all this costly congestion on our roadways across the country and here in Florida? More people, driving more cars? Unconstrained development? Booming tourism? Aging highways, and soaring costs to repair, improve, or replace them?

While this is the start of a good list, former U.S. Secretary of Transportation, Norman Mineta, pointed a finger at a pair of more fundamental causes earlier this year. "Congestion is not a scientific mystery," he said, "nor is it an uncontrollable force. Congestion results from poor policy choices and a failure to separate solutions that are effective from those that are not. We need a new approach, and we need it now."

With those words, the U.S. DOT launched the National Strategy to Reduce Congestion on America's Transportation Network. Congestion is not just an inconvenience; it is robbing our economy of needed productivity. The strategy is aimed at mobilizing the resources of government partners at all levels and in the private sector to tackle congestion relief by concentrating on priority areas that will make the biggest difference. Congestion is robbing our economy of needed productivity

The strategy is outlined in a Six-Point Plan

- 1. Relieve urban congestion
 - Focus on value pricing, bus rapid transit, telework, and bottlenecks
- 2. Unleash private sector investment resources
 - Focus on public-private partnership legislation and formation of public-private partnerships, an area where Florida has taken a leadership position
- 3. Promote operational and technological improvements
 - Focus on traveler information, incident management, work zones, and signal timing.
- 4. Establish a "Corridors of the Future" competition
 - Focus on selected SAFETEA-LU-funded projects and competition to select 3-5 new interstate corridors
- 5. Target major freight bottlenecks and expand freight policy outreach
 - Focus on southern California and borders. Engage freight chief executive officers
- 6. Accelerate major aviation capacity projects and provide a future funding framework

At the national level, the initiative includes the new Surface Transportation Policy and Revenue Commission that is working to find solutions to raising revenue for highway and transit projects, and reducing the cost of congestion by focusing more on system performance.

From the perspective of the Florida Division, Federal Highway Administration, a successful federal-state partnership is already paying off in operational and technical improvements to reduce congestion. The highlights include:

Deployment of technology to support a statewide 511 system

The regional components of an integrated statewide 511 system have been deployed, with major network hubs already serving central and south Florida, soon to be joined in the northeast by Jacksonville. By 2008, travelers, commuters, and truckers should be able to find real-time travel condition information for all major highways and larger metro area routes.

Support for Work Zone safety initiatives and policies

Nationally, almost half of traffic delays are due to work zones and traffic incidents. Work Zone safety in Florida now benefits from both a high-visibility public education campaign and new state guidelines to enhance credibility for work site signage and enforcement.

"Move it" programs

There are important new initiatives to quickly reopen the roadway when traffic incidents occur. They range from publicly and privately funded education encouraging motorists in minor traffic incidents to move their vehicles off the road to state and local agency "Open Road" efforts to clear major traffic incident sites in 90-minutes or less. The Florida Turnpike has heavily-equipped Roadway Incident Scene Clearance Teams under contract to quickly clear even tractor-trailer crash sites, and sells advertising sponsorship of its Road Ranger motorist assistance patrols in an innovative approach to funding.

You can expect to hear more about new initiatives in the fight against congestion, such as the creation of a new **Transportation Technology Forum** to bring innovation and energy into designing transportation solutions; and the **Corridors of the Future** competition, with fast-track development of selected multi-state corridors.

Working together, federal, state and local agencies can offer the citizens of Florida a smarter approach to expanding transportation capacity and improving the productivity of the existing transportation system. Now that's a cure for a congestion headache.

This article was provided by Chung Tran, Florida Division, Federal Highway Administration. For more information, please contact Mr. Tran at Chung.Tran@fhwa.dot.gov. To learn more about the National Strategy to Reduce Congestion on American's Transportation Network, go to http://isddc.dot.gov/OLPFiles/OST/012988.pdf.

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Field Testing For Statewide Procurement For ITS Devices

As part of the statewide procurement for ITS device contract, currently being finalized by the Traffic Engineering and Operations Office, referred to as the ITS-ITB (Invitation-to-Bid), the Traffic Engineering Research Lab (TERL) was asked to evaluate each device listed on the ITS-ITB as a final step to awarding the successful bidder their portion of the contract. Once finalized, this contract will allow the contract price purchase of various intelligent transportation devices for use on projects within the state of Florida.

Fifty bid items were advertised as part of the ITS-ITB. Fifteen vendors were tentatively awarded 48 bid items (2 items did not receive a bid). Currently, there have been two line item withdrawals – due to all bidders for the item failing to pass the TERL's evaluation. At the time of this article, 18 devices have passed the TERL's evaluation and have been listed on the contract. The remaining devices are either under test or are awaiting manufacture, as is the case of the dynamic message sign submittal, which is currently being built by the successful bidder



One category of device being evaluated under this contract is the microwave vehicle detection system (MVDS). TERL is currently testing 2 MVDS devices in the field in District 2. As part of this test, both devices submitted for the ITS-ITB were installed on I-95 in Jacksonville, Florida. The Electronic Integrated Systems (EIS) Remote Microwave Traffic Sensor (RTMS) X3 Sensor and the Wavetronix SS105 SmartSensor were installed on a concrete strain pole located at FDOT Traffic Monitoring Site 171 on I-95. (The Wavetronix SS125 HD Sensor was also installed for future testing purposes.) Both the RTMS and SmartSensor are portable non-intrusive traffic detection systems, which are designed to reduce or eliminate "intrusion" into the roadway, therefore limiting disruption of traffic during installation or

maintenance of the detection system.

Working with Kip Jones of the FDOT Planning (Transportation Statistics) Office, a test site was selected to allow the installation of the MVDS device at an existing FDOT telemetered traffic monitoring site (TTMS). Installation at an active TTMS was desired to allow comparative evaluations of the MVDS detectors using a traditional inductive loop-based system as a baseline. The test site selected also represents a typical installation environment for the MVDS. The section of I-95 at the site is bordered on the outer right-of-way by 20 to 30 foot concrete noise abatement walls, includes travel lanes of traffic in both the northbound (3 lanes) and southbound (3 lanes) direction, and a concrete median barrier.



During the TERL's first and second performance tests, a small camera was temporarily installed on the same pole as the detection devices and real-time video of traffic was recorded across the six lanes of traffic. An accurate determination of volume, occupancy, and speed was the goal as the test was setup. The evaluation purpose is to verify conformance with

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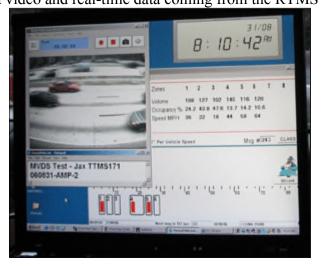


accuracy requirements of the ITS-ITB by comparing sample data collected from the MVDS with ground truth data collected during the same time by human

observation or another method (video and the TMSS data). The performance evaluation is based upon representative sample periods of 15 and 30 minute data sets covering a 24-hour period. This method assures that a variety of traffic conditions are covered and included in the data that is to be analyzed. Both camera video and real-time data coming from the RTMS

was recorded in digital format in a way that presents both data within the same screen-shot (see image).

Testing to-date has covered only the RTMS X3 sensor as it is being evaluated for final award for the ITS-ITB contract. The Wavetronix SS105 SmartSensor (and SS125 HD Sensor) will be evaluated next using the same testing method. Verification of data is currently being performed. Expected completion date is October 2006. A full report will be available upon completion of the test.



Contact ITS-ITB Device Evaluation Manager Jeff Morgan at jeffrey.morgan@dot.state.fl.us for additional information. Additional TERL MVDS evaluation team leaders include Ron Meyer and Sivam Ramalingam.

This article was provided by Jeff Morgan, FDOT Traffic Engineering and Operations. For more information, please contact Mr. Morgan at (850) 921-7354 or email Jeffrey.Morgan@dot.state.fl.us.

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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.

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Announcements

Time is Running Out For Early Registration

Transpo 2006 will be held at the Westin Innisbrook Golf Resort in Palm Harbor, Florida, November 27-30, 2006. **Early registration end on October 15... so register to avoid late fees!**

Mark your calendars for this MUST ATTEND event!

Transpo 2006 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 **Transpo 2006** 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.

Transpo 2006 offers excellent sponsorship opportunities. This information is also available at the Web site, or you may contact Karen Crawford at 850-224-7775.

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Congratulations John Easterling!

Join us in congratulating John Easterling for his appointment as Florida's Turnpike Enterprise District Traffic Operations Engineer. John was chosen to lead the Traffic Operations office to promote motorist safety and mobility through people and technology. John has demonstrated his leadership skills while serving as the interim Traffic Operations Engineer for the past 6 months.

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FDOT Traffic Engineering and Operations Mission and Vision Statements

Mission:

Provide leadership and serve as a catalyst in becoming the national leader in mobility.

Vision:

Provide support and expertise in the application of Traffic Engineering principles and practices to improve safety and mobility.

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